



<https://www.biodiversitylibrary.org/>

**Transactions of the Cambridge Philosophical Society**  
<https://www.biodiversitylibrary.org/bibliography/2348>

**Vol. 6:** <https://www.biodiversitylibrary.org/item/49446>

Page(s): Page 523, Page 524, Page 525, Page 526, Page 527, Page 528, Page 529, Page 530, Page 531, Page 532, Page 533, Page 534, Page 535, Page 536, Page 537, Page 538, Page 539, Page 540, Page 541, Page 542, Page 543, Page 544, Page 545, Page 546, Page 547, Page 548, Page 549, Page 550, Page 551

Holding Institution: Natural History Museum Library, London  
Sponsored by: Natural History Museum Library, London

Generated 13 April 2024 2:30 AM  
<https://www.biodiversitylibrary.org/pdf4/1691179i00049446.pdf>

This page intentionally left blank.

XXVII. *Novitiae Floræ Maderensis: or Notes and Gleanings of Maderan Botany.* By the Rev. R. T. LOWE, M.A.

---

[Read May 28, 1838.]

FILICES.

1. *ACROSTICHUM paleaceum*, Hook. et Grev. Icon. Fil. t. 235.

Identical I apprehend with *A. squamosum* of Swartz. Although his character of "frondes 1—2-pedales" certainly exceeds the average of Maderan specimens, I have lately seen some fully 18 inches long, without the stipes: and I am informed by my friend J. I. Bennett, Esq., that in "the Banksian Herbarium are barren fronds of 15 or 16 inches in length, in addition to the stipes (as by Swartz described) of 3 or 4; and some of them, which are abruptly mutilated, would, I think, justify the describing them as "1—2-pedales." In every other particular Swartz's description perfectly agrees; and was, I have little doubt, drawn up from the Maderan plant.

2. *Polypodium drepanum*, nob.

*Aspidium drepanum* Sw. (*Aspidium?* *drepanum* nob. *Primit.* p. 6. No. 3.), proves, as I have already stated in the *Botanical Miscellany* (New Series, I. p. 26.), to be a genuine *Polypodium*; not having the slightest trace of an indusium in any stage of growth. The following description of the fructification is derived both from abundant wild specimens, and from others cultivated in my garden, and watched carefully for several years.

Indusia nulla. Sori nudi, globosi, valde convexi, tumidi, distinctissimi, subconferti, biseriati, purpureo-nigri, capsulis nitidissimis; demum (sporis effusis) pallide ferruginei, minuti, punctiformes. *Polypodii* species vera.

3. *Asplenium productum*, nob.

*A.* fronde deltoidea, apice caudata s. longe acuminata, glaberrima, lucida, quadripinnatifida: pinnis primariis productis, acuminatis; ultimis oblongo-cuneatis, apice inciso-dentatis: soris confertis, mox confluentibus: stipite fusco, laevi, basi hirsutiusculo.

Aspl. acutum, Höll's List of Mad. Plants in Hook. Bot. Misc. New Series, I. p. 15; haud Bory!

Aspl. *Adiantum nigrum* var. nob. Ibid. p. 24; haud Linn.

Hab. in Madera, ab altitudine 1000 ad 3000 pedum ubique vulgatissimum.

This very common fern, the *Asplenium Adiantum nigrum* of most former lists of Maderan plants, I would now admit to be sufficiently distinct from the European species properly so called; the characters above enumerated proving permanent and uniform. With Höll and others I had long imagined it identical with *Aspl. acutum* Bory: but to my surprise, a specimen so ticketed, and obligingly communicated to me by its author the Baron himself, is a very different plant indeed: being undistinguishable from large narrow-leaved fruit-bearing Maderan specimens of my *Asplen. canariense* W.

*Asplen. productum* is distinguished from the true *Aspl. Adiantum nigrum* L. by its more compound, finely divided frond; the contour of which, as my friend Mr Arnott has well observed, is triangular or deltoid; while in the European plant, the shape is rather that of a rectangle or oblong, terminated by a triangle; the sides being parallel for some length from the base. But the chief character of the Maderan plant is found in the caudate or produced extremities of the primary divisions. The apex of the frond especially is gracefully attenuated.

With *Asplen. canariense* W. as understood at least by me, (*Asplen. acutum* Bory!) *Aspl. productum* has very little indeed in common.

4. *Nephrodium fœniseii* β. *productum*, Primit. p. 7.

A plant certainly bordering very closely upon the true *Aspidium spinulosum* W. and Sm. in Eng. Flora; but which, on account of the less degree of parallelism in the sides of the ultimate divisions, the smaller punctiform sori, and above all the fragrant scent, I still think best referred to *Nephrodium fœniseii*. However this, rather than *Aspi-*

*dium elongatum* Sw., as formerly supposed, (See Hook. Bot. Misc. New Series, I. pp 25, 26.), may very possibly be *Aspidium spinulosum* of Herr Höll's List.

5. *Nephrodium affine*, nob. in Bot. Misc., New Series, I. 25.

*N.* fronde subtus hirsutiusculo, bipinnatifido; pinnis inferioribus brevioribus: pinnulis approximatis oblongis, subintegris; apice truncato-rotundatis, minutissime eroso-denticulatis; basi tota adnatis: incisuris deorsum acuminatis, sursum latoribus: pinnulis superioribus confluentibus: soris biseriatis distinctis: stipite rhachibusque densissime paleaceis.

Hab. rarer in Maderæ umbrosis, ab alt. 1500 ad 3500 pedum.

Fronds two or three feet long, disposed in a coronet or circle; beneath with scattered hairs, of a chaffy nature, at the margins and on the nerves of the pinnules. Stipes and rhachis throughout most densely chaffy; the chaffs or scales remarkably large as well as copious. Lower two to six pair of pinnæ smaller and shorter than the middle ones; the lowest very much so. Pinnules closer together than in *N. Filix mas*: all of them, even the uppermost rounded (not merely obtuse) at the apex; the lowest even truncate. In *N. Filix mas* the uppermost are acute, and the lower sometimes scarcely obtuse. The sides of all in *N. affine* are nearly entire, or with distant, scarcely perceptible, shallow teeth upwards; not in the least incised, or with any tendency to a higher degree of decomposition, like those of *N. Filix mas*, or of *N. elongatum*; their rounded apex irregularly notched with very minute shallow teeth, quite different from the obvious *serrated* teeth of *N. Filix mas*, and without a lens, scarcely perceptible; the pinnules appearing entire. *Incisures* (i. e. the spaces between the pinnules) acute at the bottom, i. e. towards the nerve, and widening upwards or rather outwards; evidently not reaching to the nerve or midrib, as they appear to do in *N. Filix mas*, though really they do not. Hence the base of all the pinnules is in no degree incised on either side, as in *N. elongatum*; but the pinnules are adnate by the entire breadth of their base: neither is their lower side arcuato-decurrent as in *N. Filix mas*; but the base is truncate and the opposite sides or margins of each pinnule are parallel to each other down to its very bottom, where they

are both at right angles to the rhachis: whilst in *N. Filix mas*, the lower or inner margin, i. e. that towards the main rhachis, quits its condition of parallelism with its opposite upper or outer one towards the base, and forms a curve downwards towards the pinnule next below it; which is what I have called arcuato-decurrent. Thus the incisure in *N. Filix mas* is either irregular, or abrupt, open, and broad at the base; not regularly acuminate; so that the spaces between the pinnules being larger, or at least not regularly narrower downwards, these last appear more remote and distinct than in *N. affine*. In fact the incisures (not at all the pinnules) of *N. affine* rather resemble those of *Nephrodium (Aspidium Auct.) Oreopteris* than of *N. Filix mas*. The pinnules of the lower pinnæ, instead of having any tendency by incision to a farther degree of decomposition, as they have both in *N. Filix mas* and *N. elongatum*, are quite simple, and even more entire than the upper ones. Sori precisely similar in their arrangement and indusia to those of *N. Filix mas*.

I possess specimens of *N. affine* from various localities, differing in exposure, shadiness, and elevation; but all agree in the foregoing characters. By these, this fern approaches nearer to *N. elongatum* than to any other Maderan species: the true European *N. Filix mas* being the connecting link; from which it is curious to observe, these two Maderan ferns reciprocally recede in opposite directions: *N. elongatum* having the serratures much more aristate, and the stipes and rhachis, especially the latter, less chaffy than the European *N. Filix mas*; while *N. affine* has the serratures much less developed, but the stipes and rhachis much more copiously chaffy than the same.

The specimens of *N. Filix mas*, which I have particularly examined for comparison with *N. affine*, are British only: but my friend Mr J. Bennett has also compared specimens in the Banksian Herbarium, and noticed the same differences. Indeed his observations, exactly corresponding with my own, here made before and apart, have led me with considerable confidence to the conclusions and results here stated.

I subjoin, for facility of comparison, the specific characters of *N. Filix mas* and *elongatum*; eliminated however solely in reference to the three present species.

*Nephrodium Filix mas.*

*N.* fronde glabro, bipinnato: pinnis inferioribus brevioribus: pinnulis subremotis, oblongis, obtusis, serratis, adnatis, basi inferiore arcuato-decurrentibus; inferioribus serrato-incisis; superioribus confluentibus: soris biseriatis distinctis: stipite paleaceo; rhachibus sparsim paleaceo-hirtis.

*Aspidium filix mas*, Auct; Linn. Sm. Hook. &c. From English specimens, gathered at Dale Abbey in Derbyshire.

Main rhachis sparingly hairy rather than chaffy, and the nerves and margins of the pinnules beneath are not at all hairy. Pinnules subremote; so that the incisures are truncate or oblique at the base, or as wide at the bottom as at the top in the lower pinnules.

6. *Nephrodium elongatum.*

*N.* fronde rigido, glaberrimo, bipinnato: pinnulis oblongis, spinuloso-serratis; superioribus apice rotundatis, confluentibus; inferioribus sublanceolatis, acutiusculis, crenato-incisis, distinctis, subpetiolatis s. basi utrinque incisis; incisuris triangulari-decurrentibus: soris biseriatis, confertis, subimbricatis nervo approximatis; indusiis glanduloso-scabris: stipite elongato rhachibusque pallidis, paleaceis; paleis rhachidum rariss, sparsis, distinctis, squamiformibus.

*N. elongatum*, Hook. et Grev. Icon. Fil. t. 234.

*Aspidium elongatum*, Sw., &c.

Hab. in Madera ab alt. 1500 ad 5000 ped. vulgaris.

Fronds not growing in a circle, of a much lighter and brighter green than in the two preceding species, and of a rigid brittle texture: with a greater tendency to a farther degree of decomposition than even *N. Filix mas*. Pinnae, in full-sized specimens of 3 or 4 feet long, more remote and distinct; the lower ones not shorter than the rest, but rather the contrary. Upper pinnules close together; so that their edges often touch or even overlap each other, concealing the incisure; except at the base, where, by the incisure being produced downwards into the substance of the pinnule next below, and similarly, though in a less degree and sometimes not at all, into the pinnule next above, there is formed in all a kind of triangular hole, or open space, quite

different from any thing in the two preceding species; though of the two, most like *N. Felix mas*. Hence the incisures, not the pinnules, are decurrent: the lower base of the pinnules, as well as the upper in a less degree, being notched by the incisure, and their margins being parallel at the base.

7. *Cheilanthes maderensis*, nob. in Bot. Misc. New Series, I. 26.

*C. fronde oblongo-lanceolato vel ovato, bipinnato, glabro: pinnulis (s. laciniis secundi ordinis) oblongis, obtusissimis, adnatis, decurrentibus, sinuatis; inferioribus basi pinnatilobatis; superioribus confluentibus; omnibus vel omnino vel superne indivisis, foliiformibus, crenatis; lobis fructiferis rotundatis: indusiis interruptis, incisis; lobis rotundatis vel truncatis, margine integro: stipite rhachibusque paleaceo-hirtis.*

Hab. in fissuris rupium prope urbem Funchalensem Maderæ; etiam in muris ipsius urbis.

Species cum aliis quibusdam diu confusa, revera distincta videtur. A *Ch. suaveolente* Sw. (*Polypod. fragrans* Desf. Fl. Atl. ii. 248. t. 257) prima facie differt fronde multo minus tenuiter diviso, nec leptophyllo; divisionibus sc. magis foliaceis, confluentibus nec distinctis; pinnulis oblongis, sinuatis crenatisve, multo majoribus, foliiformibus, omnino vel superne saltem indivisis; summis confluentibus; omnibus basi tota adnatis decurrentibusque, nec puncto tantum centrali baseos s. petiolulo rhachi affixis: soris indusiisque incisis, interruptis, nec continuis ut in figura 1<sup>ma</sup>. iconis jam citatae delineantur. A *Ch. odora* Sw., planta sc. Helvetica et Pedemontana (*Adiantum pusillum* All.), iisdem characteribus, necnon fronde bipinnato nec tripinnato, indusiisque margine integris, nec "laceris, subciliatis" Sw., satis superque distincta videtur: huic vero speciei procul dubio, monente amico J. I. Bennett, affinitate proxima. *Ch. fragrante* Sw., stirpe Indiæ Orientalis, cui cl. Swartzius olim dubio animo conjunxit, "forsan speciem diversam" tamen monens, magis ac magis recedit: quum ne alia dicam, illa pinnulis "oppositis, ovatis, subpetiolatis, lacinulis 2—3-partitis," tenuibus; earum "segmentis subacutis, apice soriferis" (monosoris); "soris minutissimis;" indusiisque dentiformibus distinctissima est. In stirpe Maderensi pinnulæ haud raro alternæ; in tribus supra indicatis potius oppositæ videntur.

## PHANEROGAMÆ.

## GRAMINEÆ.

8. *Phragmites congesta*, nob.

*P.* panicula lanceolata, stricta, contracta, densa, subsecunda; spiculis 4—6-floris, glumis multo longioribus: culmis basi decumbentibus, ramosis; foliis planis mox convolutis, strictis, cuspidatis, glaucis.

Hab. in Maderæ ora maritima rariss.

Obs. *P. communi* Trin. (*Arundini Phragmitæ* L.) proxima, et forsitan varietas tantum. Culmi basi ramosi, frutescentes, nudi, tenacissimi, late procumbentes; apice foliosi, ascendentibus 2—4-pedales: foliorum margine subserrulato; vaginis apice, nodisque plerumque barbatis. Gluma inferior brevis, acuta, superior inferiore duplo longior, remota, acuminata. Paleæ inferiores florum inferiorum productæ, flores superiores longitudine subæquantes; omnes lanceolatæ, acuminatæ, glabræ. Rhachis supra florem inferiorem longissime sericeo-pilosa. Palea superior brevis, oblonga, plana, binervis, subciliata. Panicula erecta, arctissime glomerata, congesta, densissima, multiflora, 3—6-pollicaris longa, 1—2-lata, pallida, flavescens; demum albo-sericea. Radices repentes.

9. *Deschampsia argentea*, nob. (*Airæ argentea* nob. olim Prim. in Trans. Cam. Phil. Soc. IV. I. p. 9. No. 8.) Species distinctissima, *D. cespitosæ* Beauv. (*Airæ cespitosæ* L.) proxima. *Deschampsia* Beauv. species legitima. Pedicelli, floresque basi dense pilosi. Palea inferior apice 3—4-dentata.10. *Avena marginata*, nob.

*A.* glaberrima, lœvis: panicula simpliciuscula, coarctata, subsecunda; spiculis 4—5-floris, glumis sublongioribus; rhachi pedicelloque floris alterius superioris abortientis villosis; floribus omnino glabris s. nudis, scabriusculis; palea inferiore apice quadriseta; s. bifida, laciniis bifidis in setulas productis; dorsi medio arista geniculata: foliis distichis, brevissimis, obtusis, carinatis, marginatis, rigidis, glaucis; ligula lanceolata, producta: radice fibrosa, subcespitosa, perenni.

In rupibus Maderæ excelsis nuperrime invenit am. Car. Lemann,  
M. D.

Culmi bipedales et ultra, 2—3 ex uno cespite, vaginisque rhachique ramisque primordialibus paniculæ omnino lævibus, glabris. Pedicelli floresque scabriusculi. Panicula 4—5-pollicaris, suberecta, apice subnudante, subpauciflora. Spiculæ nitentes, semipollicares. Glumæ carinatæ, trinerviæ; nervis prominentibus. Flos summus spicularum minor, masculus, neuter, abortiensve, et ad pedicellum villosum reductus. Palea inferior nervosa, sulcato-striata; apice bifida; laciniis bifidis in setulas albidas hispidiusculas productis: arista dorsali, fusca, subsemipollicari, i. e. flore duplo longiore, infra medium tortili. Folia radicalia plano-carinata, arescentia conduplicata, lævia, margine elevato, conspicuo, discolore, serrulato-scabro, deorsum sæpe undulato-plicata, s. corrugata; apice mirandum in modum obtusa, 2—3-pollicaria; caulina superiora vix semi-pollicaria. Vaginarum ora omnino nuda. Ligula elongato-triangularis, acuminata, arcte amplexicaulis, integerrima.

11. *Cynosurus brizoides*, nob.

*C.* panicula lanceolata, gracili, coarctata; spiculis neutris amentaceis, distinctis; bracteis setaceis, aristisque confertis, rigidis, scabris.

Hab. in graminosis convallium Maderæ rarer.

Gramen annum, exile, subinconspicuum. Culmi plures ex eodem radice, tenues, 1—2-pedales. Folia flaccida, brevia. Panicula parva, secunda, subpollicaris, simpliciuscula, æqualis; fructifera arcte contracta, sæpe violaceo-purpurascens; spiculis neutris spiculas *Festucæ*, *Poæ*, aut *Brizæ* referentibus. Bracteæ aristæque rectæ, floribus multo longiores.

12. *Festuca jubata*, nob.

*F.* cespitosa: culmo superne paniculæque lanceolatæ, abbreviatæ, subcoarctatæ, subsecundæ, rhachi ramulisque pedicellisque puberulis, haud scabris: spiculis lanceolatis, 3—5-floris, glabris; flosculis aristatis, sursum aristisque scabris: foliis culmos superantibus subsetaceis, subcanaliculatis, vaginisque striatis, glabris; ligula brevissima, abrupta: radice perenni.

Hab. rariss. in rupibus convallium Maderæ, cum *Deschampsia argentea* nob., cui habitu simillima, nascens. Primus invenit Car. Lemann M. D.

*F. geniculatæ* Willd. (*Bromo geniculato* L., *Festucæ stipoidei* Desf.) proxima. Differt radice perenni; culmis haud geniculatis, dense cespitosis; pedunculis subsimplicibus, &c.

Culmi pedales, tenues, teretes, erecti, glabri, paullo infra paniculam contractam puberuli, foliis breviores, haud geniculati, nodis demum fuscis. Folia numerosa, conferta, elongata, omnia subsetacea, tenuia, gracilia, rigidiuscula, glabra, striata; superiora sursum subplanata, subcanaliculata. Glumæ inæquales, læves; altera spiculæ subæquans, altera brevior. Flores glabri; basi tantum læves, sursum aristisque scabri; arista flore longior. Pedicelli simpliciusculi, sc. sursum vix subdilatati, cuneati, ancipites; haud vero magis quam in multis aliis,

13. *Festuca Donax*, nob. Prim. in Trans. Cam. Phil. Soc. iv. I. p. 9. No. 9.

(Character auctus, emendatus).

*F.* paniculæ glabræ, largæ, laxæ, diffusæ, subsecundæ, nutantis ramis elongatis, flexuosis: spiculis trifloris, linear-lanceolatis, compressis, glomeratis; flosculis muticis linearibus, angulatis, scabris; glumis subæqualibus, spiculam æquantibus: paleis apice membranaceis, obtusis, abruptis, subbifidis, nervis prominentibus; exteriore quinquenervia, nervis æquidistantibus; interiore binervia, dorso canaliculata: foliis omnibus planis, elongatis, acuminatis, striatis, marginibus serrulato-scabris; culmis vaginisque lævibus, glabris; ligula exserta, ovata: radice fibrosa, perenni.

The nearest ally of the species is *F. sylvatica* Vill. (*F. calamaria* Sm.)

14. *Festuca albida*, nob. Prim. in Cam. Trans. iv. I. p. 10. No. 10.

a. *longifolia*; foliis culmum æquantibus.

β. *brevifolia*; foliis culmo multum brevioribus. In rupibus nuper invenit C. Lemann, M. D.

### CYPERACEÆ.

15. *Carex sagittifera*, nob.

*C.* spica solitaria, androgyna, (♀, superne ♂), subpauciflora: stigmatibus duobus: fructibus oblongis, utrinque attenuatis s. fusiformibus, planatis, glabris, nitidis, reflexis, squama acuta, oblonga, persistente longioribus: culmo subtereti, superne subpresso, hinc subcanaliculato: foliis angustissimis, elongatis, superne canaliculatis, inferne carinatis; carina marginibusque serrulato-scabris.

Hab. in sylvis Convallium Maderæ, in declivibus prope rivulos rarer.

Dense cespitosa. Folia numerosa, conferta, culmos subæquantia s. excedentia, fere (pro latitudine) setacea s. filiformia. Fructus nitidissimi, magni, subremoti, squamisque fuscis, deflexis; inde sagittarum quasi cuspides plures, filo consertas, spica refert.

Cum *C. decipiente* Gay et La Perouse, monente am. Fr. Boott, M. D., conferenda. *C. pulicari* L. proxima, sed abunde distincta.

#### JUNCEÆ.

##### 16. *Luzula elegans*, nob.

*L.* foliis lanceolatis, pilosis: corymbi erecti, supradecompositi ramis capillaribus, mox divaricatis, deflexis: pedunculis unifloris: bracteis sepalisque setaceo-acuminatis, capsula obtusa, mucronata longioribus: seminibus simplicibus, exappendiculatis.

Hab. in rupibus convallium Maderæ murisque rarer.

4—10-pollicaris; corymbo fructifero elongato, oblongo-angustato, semi-pedali; ramis ramulisque inferioribus elongatis, plerisque divaricato-refractis, tenuissimis, hinc inde pilosis. Flores solitarii, rufo-castanei, lucidi.

#### AMENTACEÆ.

##### 17. *Quercus mitis*, Herb. Banks.

Since the publication of this, as a species, in the Cambridge Transactions (Vol. iv. I. p. 15. No. 21.), from the specimen preserved in the Banksian Herbarium, I am quite satisfied, from observation of two growing trees, evidently identical with the above, that it is nothing but a slight variety of *Q. Suber* L., with broader, more entire leaves than usual; such as might be expected in trees, growing like these, in cool, shady situations, at a considerable elevation. Both these trees are the inmates of gardens: and it is quite certain that Madera possesses no indigenous species of *Quercus* whatever.

#### URTICACEÆ.

##### 18. *Parietaria gracilis*, nob. Prim. in Trans. Camb. Phil. Soc. iv. I. p. 16. No. 23. (Character emendatus).

*P.* lucida, pubescens, ramosa: caule ramisque gracilibus, erectis: foliis rhombeo-ovatis, rotundatis, abbreviatis, obtusis, trinerviis, petiolatis; petiolis filiformibus, folia æquantibus: glomerulis axillaribus; floribus pedicellatis; pedicellis glomeratis, aliquando subcymosis, apice tribracteatis: bracteis (*involuti foliolis* Auct.) unifloris, lanceolato-linearibus, obtusis, calyce (quadrifido, glabro) brevioribus, glanduloso-pubescentibus; post anthesin inæqualibus, uno duobusve dilatatis, foliaceis, calycem superantibus, adpressis.

Hab. in Maderæ rupestribus declivibus umbrosis rariss.

#### EUPHORBIACEÆ.

19. *Euphorbia refracta*, nob.

*E.* annua, ramosa, pilosiuscula: ramis pubescentibus humifusis prostratisve, suffrutescentibus, geniculatis, flexuosis, refractis, alternis, apice dichotomis, ad genicula nodosis: foliis oppositis, oblique-oblongis, subrhomboideis, inæquilateralibus, argute serratis, hinc deorsum integerimis, basi illinc auritis, semicordatis, subsexnerviis, brevissime petiolatis, utrinque pilosis: floribus pedicellatis, in dichotomia ramulorum solitariis, ad apices aggregatis; bracteis bracteolisque foliis conformibus, angustioribus: glandulis quatuor albidis, exappendiculatis, transverse ovalibus: capsulis triquetris, lœvibus, glabris: seminibus minutis, nigrescentibus, subtetrahedris, ovalibus, punctato-rugulosis s. corrugatis.

Hab. in Maderæ regione inferiore et intermedio a mare usque ad 1800 ped. rario.

#### CHENOPODEÆ.

20. *Suaeda laxifolia*, nob.

*S.* fruticosa, glabra: ramis patulis, decumbentibus, laxis: foliis laxis, patentibus, linearibus, obtusiuseulis, subcarnosis; supra depresso-planatis: floribus sessilibus, axillaribus, sub-solitariis; stigmate trifido, ante anthesin exerto; calycibus post anthesin clausis.

α. *tenuifolia*; foliis tenuibus; ramis debilibus, elongatis.

β. *crassifolia*; foliis carnosis obtusissimis, glaucescentibus; ramis validioribus.

Hab. in rupibus locisque saxosis maritimis Mad. et Portū S<sup>n</sup>; a vulgatiss.; ab incolis "Barilla" dicta.

Calyx simplex, *Suædæ* Mert. veræ.

21. *Suæda tomentosa*, nob.

*S. fruticosa*, ramis fragilibus, superne foliisque carnosis, subteretibus, obtusiusculis, fasciculatis, incano-tomentosis.

Hab. in collibus maritimis Promontorii P<sup>ta</sup> Saõ Lourenço dicti Maderæ rariss; etiam in Portu S<sup>to</sup>.—In insulis Canariensis invenit cl. P. B. Webb, arm. In Herbario Banksiano sunt exempla, a cl. Masson olim in "Insula Desertas prope Madeiram" et "Promont. S. Lourenço" sine floribus fructuve lecta, monente amico J. I. Bennett. Hieme (Dec. Jan.) floret. Calyx simplex; nec spinescens, nec membranaceo-dilatatus.

POLYGONEÆ.

22. *Rumex maderensis*, nob.

*R. paniculis amplis, aphyllis, multifloris*: floribus hermaphroditis: valvis nudis, intigerrimis, orbiculatis, reticulato-membranaceis: verticillis paucifloris: foliis hastatis, acutis, succulentis: caule frutescente.

*a. glauca*.

*β. virescens*.

Hab. in rupibus Maderæ ubique, vulgatiss.

Suffrutescens, 1—2-pedalis. Flores mense Junii rupes maritimæ excelsiores colore pulchre lateritio ornantes. A. *R. scutato* L. distinctam primus admonuit Cl. Lemann.

PLUMBAGINEÆ.

23. *Armeria maderensis*, nob.

A. caule suffruticoso, simpliciusculo, humili, parum ramoso, ramisque brevissimis, subcespitosis: foliis fasciculatis, gramineis, latiusculis, lanceolato-linearibus, acuminatis, planiusculis, lœvibus, lucidis, glabris, quinquenerviis, integerrimis: scapis teretibus, lœvibus, glabris, foliis 3—4-plove longioribus: floribus pedicellatis, fastigiato-capitulatis; capitulis oblongis, truncatis, pedunculatis, umbellatis, bracteolatis; umbella

laxiuscula, bracteata: bracteis lanceolatis; exterioribus acuminatis patentibus recurvisque; interioribus pellucido-membranaceo-marginatis: bracteolis magnis oblongo-ovalibus, latis, imbricatis, albo-membranaceis, obtusissimis, apice eroso-dentatis crenatisve, glabris; exteriore basi tantum pubescente: bracteis bracteolisque floribus brevioribus: pedunculis teretibus, scapique vagina striata, granulatis, glabris: pedicellis teretibus, glabris: calycis laciniis brevissimis, latis, acutis; costis pilosis: petalis retusis, subemarginatis: stylis (5) basi pilosis: ovario glabro.

Hab. in cacuminibus rupibusque præruptis montium excelsiorum Maderæ.

*Armeriæ plantagineæ* vel potius *A. scorzoneraefoliæ* Willd. Enum. et *Staticei plantagineæ* All. Fl. Pedem. et Lam. et D. C. Fl. Française videtur proxima. Sed in genere tot nubibus offuscato, confusionem minus nomine novo quam falso augitur.

Leaves bright, shining, rather dark green; not at all glaucous. Scapes from one to two feet high. Flowers rather large, deep rose-colour.

#### LABIATÆ.

24. *Sideritis candicans*, Ait.

- a. *longifolia*. (*S. candicans*, Auct.)
- β. *crassifolia*; foliis incrassatis, subcoriaceo-tomentosis, rotundato-ovatis, abbreviatis, obtusissimis: labio superiore plerumque integro.

Hab. in rupibus apricis maritimis Maderæ et Insularum Desertarum.

25. *Prasium medium*, nob.

*P. hirsuto-pubesens*: foliis ovato-oblongis, ovalibusque, acutis, basi in petiolum attenuatis, crenato-dentatis: dentibus calycis ovatis, acutis, mucronatis: corolla filamentis styloque glabris.

Hab. in Maderæ rupibus maritimis.

*P. majus* L. preserves all its characters in Maderæ; and the present plant appears a genuine species, though in some sort intermediate between *P. majus* and *minus*; having the mucronate calyxes of the former, and hairiness of the latter. In the shape of the leaves it seems to differ from both.

26. *Melissa rotundifolia*, Sol. MSS, Herb. Banks! et Von Buch.

*M. hirsuto-pubescentis*: cymis subsimplicibus, laxis, paucifloris, folia ovato-rotundata, subserrata, superantibus: caule debili, ascendentem, erecti-usculo, hirsuto; basi lignoso, frutescente.

*Thymus Calaminthoides*, Reichb. (in Holl's List) Hook. Bot. Misc. 2d Series I. pp. 19, 38.

Planto 1—2-pedalis, perennis, suffruticulosa. Folia parva, subsemipollicaria, obsolete et remote serrata sive crenata. Cymi vix decompositi, 2—5-flores, floribusque plerumque folia excedentibus; pedunculis folii fere longitudine. Bracteæ minimæ, lineares Flores conspicui, majusculi, pallide purpurei, rarissime albi, pubescentes. Calycis subcylindrici, corolla fere triplo brevioris, fauce pilis inclusis, haud prominentibus, clauso; dentibus ciliato-hirtis; tribus superioribus ovatis, acutis; duobus inferioribus longioribus, linear-acuminatis, porrectis, elongatis. Semina ovoidea vel globosa, saepe triquetra, laevia, obsolete et minutissime punctulata.

Odor totius plantæ gravis, acris, subingratus, quodammodo *Menthæ Pulegii* L.

Cymi foliis longiores, ut in *Thymo Nepeta* L.; subsimplices, pauci-flores, ut in *T. Calamintha* L., cui certæ proxima. Pro mera varietate me diu habentem, summa tandem vincit cl. Solandri auctoritas. Characteres sane plantæ, per totam Insulam pervulgatissimæ, nunquam variantes inveni.

## SOLANEÆ.

27. *Nycterium triphyllum*, nob.

*N. herbaceum*, inerme, viscoso-pubescentis: ramis angulatis petiolisque pedicellisque subtomentosis: foliis utrinque molliter viscoso-pubescentibus, quibusdam simplicibus, plerisque ternato pinnatifidis; foliolis cordatis vel oblongo-ovatis, repando-dentatis, integriusculis: racemis sparsis, folio multum brevioribus, corymbosis; pedicellis secundis, nutantibus: bacca calyce dilatato-foliaceo tecto.

Hab. in Madera rariss: In parte Septentrionali prope *S. Vicente* secus vias invenit Car. Lemann M. D.: in orientali prope *Portella* serius detexit Lippold. Ex insulis Canariensis, in Herbario Lemanniano, siccum quoque vidi.

Flores colore et magnitudine *S. tuberosi* L. Anthera rima longitudinali dehiscentia; 2—3-imis longe productis, cornutis. Bacca cerasi magnitudine, aurantiaca, globosa.

#### CONVOLVULACEÆ.

28. *Convolvulus solanifolius*, Prim. in Trans. Cam. Phil. Soc. supra iv. I. p. 22. No. 35.

In the first place, the discovery of the flowers of this rarest of Maderan plants, authorizes the removal of the mark of doubt before affixed to the generic name. They are white, and truly those of a *Convolvulus*. Hence therefore, no change of the specific name would be necessary on account of *Ipomœa solanifolia* L. But, though unfortunately I am unable to decide the matter by reference to the *Botanical Register*, t. 133, I have very little doubt the plant will prove identical with *Convolvulus Massoni* Dietrich (*C. suffruticosus* Ait., non Desf.)

#### JASMINACEÆ.

29. *Olea Europæa*, L. var.

*Maderensis*: foliis linear-oblongis, angustis, mucronatis, integerrimis, utrinque subconcoloribus s. inferne nudiusculis: drupis subglobosis, purpurascentibus, demum nigris.

Hab. in rupibus apricis Maderæ, præsertim maritimis.

Specimen in Herbario Banksiano, a cl. Masson olim lectum, sub nomine *O. Europæa* a cl. R. Brown in "Von Buch's Catalogue," *O. glabellæ* Herb. Banks. (*O. exasperatæ* Jacq. Hort. Schoenbr. III. t. 1.) "valde simile" dicitur. Panicula vero terminali, ramisque tuberculatis hæc satis differe videtur.

Drupes about the size and shape of a small marble, half an inch in diameter, of a deep shining black, by no means constantly "crowned with the persistent style." Skin and flesh very thin and dry, rather bitter to the taste. Stone very large.

In drying, the plant gives out abundantly a whitish, powdery, granulated, sweetish substance (Manna?); resembling fine powder-sugar.

## CAMPANULACEÆ.

30. *Prismatocarpus scaber*, nob.

P. scabro-pubescent: caule erecto, stricto, simplici, vel imo basi rarius ramoso; foliis radicalibus petiolatis, obovato-spathulatis oblongisve; superioribus sessilibus, lanceolatis; omnibus margine undulato-crenatis; summis integriusculis: floribus sessilibus, solitariis, per totum caulem axillaribus; sepalis linearibus, patentibus, corollam subæquantibus.

Hab. in Maderæ declivibus saxosis, rupestribus. Primus detexit amicus et plantarum indagator oculatissimus ac indefessus Car. Lemann, M. D.

Herba annua, subpedalis. Corolla, præsertim terminalis majuscula, subconspicua, violaceo-cærulea.

## COMPOSITÆ.

31. *Senecio incrassatus*, nob.

S. herbacea, erecta, glaberrima, nitida: foliis auriculato-amplexicaulibus, carnosus, profunde sinuato-pinnatifidis; lobis integriusculis, æqualibus, remotis, obtusissimis: caule ramisque acutissime angulatis: floribus arcte corymbosis; pedicellis abbreviatis, sursum valde incrassatis, multibracteatis; bracteis adpressis, basi tumidis carnosus, apice marcidis, nigris; radio patente 7—8-ligulato: seminibus pubescentibus.

S. crassifolius W. var. D. C. in litt. 1834.

Hab. in collibus apricis aridis maritimis Maderæ rario.

Herba annua, subspithamæa, ramosa, corymbo amplio, conspicuo, multifloro: sed magnitudine pro situ, aquæ copia, &c. valde varians; sc. caule saepe 2—3-pollicari tantum, simplici, uni-pauci-floro. Flores aurei, conspicui, sat magni, diametro semipollicari, radio marcescenti modo revoluto.

32. *Helichrysum? obconicum*, D. C.

In the Botanical Miscellany, 2d Series, Vol. I. p. 35, I have very erroneously spoken of the common Maderan plant called by Holl and Reichenbach *Antennaria leucophylla*, and abounding on the rocky sea-cliffs and

islets of these shores, as if it were *Gnaphalium crassifolium* L. Neither must it be confounded, I am advised by the Chevalier De Candolle, with the European (Majorca) plant, *Gn. crassifolium* Lam.: nor yet with a third species similarly named, *Gn. crassifolium* Willd. Its real affinity, the Professor writes, is with a fourth plant, which has also been confounded with *Gn. crassifolium* L., viz. *Gn. ovatum* Desf.; and with this, he is disposed to unite it into a genus, or at least a group, co-ordinate with the other Gnaphalian sections, or subgenera. That it is no true *Antennaria* either in characters or habit is most certain. Speaking strictly, it is perhaps intermediate between *Helichrysum* and *Gnaphalium*: though I could be well content to refer it simply to the former genus.

33. *Chrysanthemum dissectum*, nob.

*C. fruticosum*, glaberrimum: foliis profunde pinnatifidis; pinnis remotis, parallelis, æqualibus, linearibus, rectis, argute inciso-dentatis; laciinis omnibus acutis: floribus subsolitariis, vix corymbosis s. corymbo irregulari, paucifloro.

*C. grandiflorum* (W.) Spr. Syst iii. 584. No. 6?

Hab. in rupe quadam excelsa maritima Maderæ, Cabo Giram dicta.

Species habitu seminibusque *C. pinnatifidi* L. in Madera ubique obvii, sed distinctissima, floribusque minoribus.

34. *Calendula maderensis*, nob.

*C. biennis* subperennansve, basi suffrutescens, ramosa, viscosa: foliis semiamplexicaulibus, obovato-oblongis, repando-dentatis; junioribus ramulisque tomentosis: seminibus arcte inflexis, muricatis; exterioribus cymboideis, late triquetro-alatis; alis duabus dorsalibus expansis, inciso-dentatis.

*C. maritima*, nob. Bot. Misc. New Series, I. p. 36; haud Gussone.

*C. amplexifolia*, Reichb. in Holl's List?

Hab. in littore, rupibusque maritimis oræ præsertim septentrionalis Maderæ.

Flores majusculi, crocei, ligulis paucioribus, longioribus quam in *C. officinali* L. aut *arvensi* L.

Nomen mutavi ob *C. maritimam*, Gussone.

35. *Andryala robusta*, nob.

*A.* foliis crassissime molliterque incano-tomentosis, subintegerrimis; caulinis abbreviatis, lanceolato-ovatis: caule robusto, stricto, paniculæque ramis pedicellisque abbreviatis, anthodiisque magnis, hemisphæricis vel globoso-capitatis, densissime fulvo-glandulosis, villosis.

*A. varia*  $\beta$ . nob. MSS. olim.

Hab. in rupibus maritimis, præsertim oræ septentrionalis Maderæ et Insularum Desertarum: necnon in cacuminibus montium Insulæ Portûs S<sup>ti</sup>.

De *Andryalis* Maderensibus, ad unam speciem (*A. variam* nob.) olim redactis, diu vacillantem, formas tres insigniores (*A. variæ*  $\alpha$ ,  $\beta$ ,  $\gamma$ . nob. olim) pro totidem speciebus melius habendas, observationes protractiores tandem suaserunt. Harum forma typica est *A. varia* nob (*A. varia*,  $\alpha$ . nob. olim); cuius duæ adsunt varietates,  $\alpha$ ) *foliis integriusculis*; planta ubique obvia, vulgatissima, montana: et  $\beta$ ) *foliis plus minus sinuato-pinnatifidis*; indigena, montana, rarer; culta in Europæ hortis subfrequentior (*A. cheiranthifolia* Herit.): hâc ad *A. crithmifoliam* Ait. (*A. variam*  $\gamma$ . nob. olim), illâ ad *A. robustam* nob. (*A. variam*  $\beta$ . nob. olim), utraque maritima, secedente.

36. *Carduus? squarrosus*, D. C. in litt<sup>s</sup>.

*C.* foliis decurrentibus, obovato-oblongis, indivisis, grosse serratis, spinellosis, subtus albo-tomentosis; floribus aggregato-glomeratis; anthodii squamis inermibus, scariosis, squarrosis, apice reflexis: pappo clavulato.

Hab. rariss. in Convallibus interioribus Maderæ.

Planta elatior, conspicua, floribus albis; a *C. clavulato* Link, planta Canariensi affinitate proxima, foliis indivisis, nec semipinnatifidis, squamisque anthodii squarroso-reflexis nec erectis, monente cl. De Candolle, distincta.

Plantas e seminibus a me ipso olim a Madera A. D. 1829, ad amicum Rev. M. J. Berkeley Angliam missis, in horto Barclayano ortas, cl. et am. Alph. De Candolle fil, vidit: ex quibus desiccatis, species characteribus plantæ indigenæ prorsus congruentibus a patre illustri in litteris stabilita est.

*C. clavulatus* Link verus in Maderæ nullibi obvenit.

37. *Cynara horrida*, Ait.

*C.* caule brevi, simplici, unifloro, incano, foliato: foliis pinnatifidis, ferocissime spinosis, subtus incanis: caulinis haud decurrentibus; pinnis distinctis, subremotis, angustis, longe acuminatis s. apice caudatis, inciso-laceris, spinis baseos pinnarum laciniarumque bi-pluri-aggregatis, basi connatis: anthodii squamis erectis, angusto-lanceolatis vel ensiformibus, acuminato-spinosis, rectis.

*C. horrida*, (Ait:) Spr. Syst. iii. 369. No. 3.

Hab. in collibus apricis graminosis Portūs S<sup>ti</sup> sat frequens, A. D. 1828: in Maderæ Promontorio Ponta S. Lourenço dicto solo rariss. nuperrime (A. D. 1837) invenit Lippold.

Radix magnus, crassus, perennis, cum capitulis apud accolas Portūs S<sup>ti</sup> edulis. Caulis subpedalis, strictus, firmus, erectus, rotundus. Capitulum sat magnum, sphæroideum, diametro fere bipollisci. Flosculi "cærulei" (*Lippold*); desiccati in ipso exemplo Lippoldiano purpurei; a me nunquam rite expansi visi, sed albi ab incolis Portūs S<sup>ti</sup> dicti.

Folia elegantissima; sed spinis rigidis, tenuissimis, acutissimis, numerosissimis pallide flavescentibus fulvisve horridissima tectis: radicalibus rosaceo-confertis, subpedalibus.

## RUBIACEÆ.

38. *Galium productum*, nob. Prim. p. 29. No. 50.

An a *G. cinereo* All., Sm., D. C. satis distincta? Confer etiam *G. erectum* Huds., Sm., D. C.

39. *Galium geminiflorum*, nob.

*G. pumilum*: caulis tetragonis, gracilibus, lœvibus, simpliciusculis, diffuso-erectis, dichotomis, subinermibus vel sparsim aculeolatis, aculeis subdeflexis: foliis 4—6-verticillatis, ovato-lanceolatis, cuspidatis, superne margineque aculeatis, aculeis antrorum spectantibus: pedunculis geminatis, axillaribus, simplicibus, rarissime bifidis, unifloris, abbreviatis, s. folia vix superantibus: fructibus densissime uncinato-setosis hispidis.

Hab. in summis cacuminibus Insulæ Portūs S<sup>ti</sup> tantum.

Planta rarissima, parva, inconspicua, tenera, mox evanescens; *G. setaceo* Lam., Desf., D. C. (*G. capillari* Cav.) affinis.

## UMBELLIFERÆ.

40. *Daucus neglectus*, nob.

D. caule superne aspero: foliis bi-tri-pinnatisectis, hirsutiusculis: foliolis (segmentis) omnibus ovatis, incisis; laciniis (segmentis ultimis) lanceolatis, acutis, cuspidatis: bracteis bipinnatifidis, umbella brevioribus; bracteolis pinnatifidis, umbellulas æquantibus: umbellæ amplæ radiis valde inæqualibus; umbellularum floribus externis radiantibus: fructus ovalis aculeis ejus latitudinem æquantibus, ad basin distinctis, apice glochidiatis.—

*a. asperocaulon*: hispidus; caule toto aspero, inferne præsertim retrorsum strigoso: foliis hirsutis.

*β. leiocaulon*: glabriusculus; caule fere nudo.

Hab. in saxosis apricis rupestribus regionis inferioris Maderæ.

Obs. *Dauco hispido* Desf. Fl. Atl. 1. 243. t. 63, præsertim foliorum habitu affinis. Laciniis vero foliorum acutis, imo cuspidatis, nec "obtusis;" bracteis (involueri foliolis) bipinnatifidis, umbellæ amplæ radiis exterioribus longe productis, floribusque albidis, anisopetalis s. exteriorum petalis extimis magnis, dilatatis, nec omnibus "minutis, sub-æqualibus, pallide flavis," mericarpiisque duplo majoribus, ovalibus, planiusculis nec "semiteretibus," satis differre videtur. Foliolis (segmentis) foliorum omnium conformibus a *D. maximo* Desf. distincta.

Planta annua; caule 1—2-pedali, erecto, parum ramoso. Flos umbellæ centralis magnus, carnosus, atropurpureus, abortivus. Umbellæ multiradiatae; radiis defloratis incurvis.

41. *Melanoselinum decipiens*, (Hoffm.) D. C.

Hab. in convallibus umbrosis oræ septentrionalis Maderæ, ad altitudinem 2—3000 pedum.

The native country of this fine umbelliferous plant was unknown, till I discovered it, in the Autumn of the year 1829, growing plentifully high up the main, or central branch, of the Ribeira de São Jorge; both among the rocks and stones, forming the bed of the ravine, and up the steep shady banks on each side. It has since occurred in others of the shady ravines of the North.

42. *Bupleurum salicifolium*, Sol. MSS.

*B.* fruticosum, erectum, ramosum; ramis lævigatis, elongatis, gracilibus, inferne nudis: foliis angustis, linear-lanceolatis, acuminatis, utrinque attenuatis, planis, coriaceis, pallide glaucis, obliquis, sessilibus, integrimis, multinerviis: umbellis 5—10-radiatis; bracteis 4—5, reflexis, brevibus, lanceolatis; bracteolis 4—5 conformibus, umbellula multo breviribus.

*B. salicifolium*, Sol. MSS. et Herb. Banks. (auct. J. I. Bennett.)

Hab. in rupibus convallium Maderæ.

A *B. gibraltarico* foliis multi- (nec uni-) nerviis prima fronte differt. *B. plantagineum* Desf., cui vero species nostra propior, foliis pro longitudine multo latioribus, obtusiusculis cum mucrone (nec acuminatis), concavis (nec planis), bracteisque adpressis (nec, ut in nostra æque ac in *B. gibraltarico*, reflexis) a *B. salicifolio* nob. satis superque distinctum videtur.

Frutex elegantior; ramis in rupibus declivibus sæpe pendentibus.

43. *Bunium brevifolium*, nob.

*B.* (*Conopodium* D. C.) glabrum: radice subgloboso: caule simplici, striato, tereti, glauco: foliis petiolatis, rigidis, deltoideis, abbreviatis, omnibus 2—3-pinnatisectis; laciniis planis, tenuibus, remotis, pectinatis, oppositis; ultimis brevissimis, linear-lanceolatis, acutis, integrimis; vaginis amplis, elongatis, striatis, cum petiolo erecto-patentibus: bracteis bracteolisque nullis: stylopodiis tumidis, planatis; stylis rectis, invicem adpressis, demum subdivergentibus.

Hab. in regionibus excelsioribus graminosis montium Maderæ; jam rarissima, ob puerorum et porcorum prædationes.

A pube Maderensi monticolo sc. in monte “*Pico Grande*” dicto degente, cui tubera escam gratissimam præbent, “*Norsa*” dicitur. Planta vero longe aliena, sc. *Tannus Norsa* nob., ab incolis Portū Caurum versus (Porto Moniz) etiam “*Norsa*” dicitur.

## PARONYCHIEÆ.

44. *Herniaria flavescens*, nob.

*H.* annua, herbacea, hirsuta, humifusa, flavescentia: ramis ramulisque distichis, horizontalibus, cespitosis: foliis oblongo-lanceolatis, ciliatis: glomerulis frequentissimis, axillaribus, multifloris.

Hab. in collibus maritimis Maderæ rariss: Portûs S<sup>t</sup>i frequentior.

Radix tenuis, subtenax, tortuosa, parum ramosa, annua. Caules humifusi, ramis ramulisque flabelliformibus s. concinne et creberrime distichis, horizontalibus, undique terræ arctissime per totam longitudinem adpressis; cespitem diametro 3—6-pollicari densam, pallide viridi-flavescentem, hirsutam formantibus.

### ROSACEÆ.

#### 45. *Poterium megacarpon*, nob.

*P.* herbaceum: caulis angulosus, deorsum hirsutus: rhachi foliorum foliolisque subtus hirtiusculis: foliolis inciso-dentatis; inferioribus subrotundis; superioribus ovalibus oblongisve: capitulum solitariorum floribus omnibus hermaphroditis; inferioribus subabortientibus: filamentis abbreviatis: fructibus maximis, rugosis.

Hab. in collibus apricis graminosis saxosisque præsertim maritimis regionis inferioris Maderæ.

Habitus *P. Sanguisorbæ* L.: sed humilior, subpedalis, totaque insipida, inodora. Capitula longe pedunculata. Filamenta brevia, albida, s. pallide flavescentia, nec purpurascens. Stigmata brevia, parva, læte coccinea. Sepala plerumque 4, lata, ovalia, magna, glabra, persistentia. Fructus quam in *P. Sanguisorba* L. duplo triplo major; pericarpio fungoso, laminoso-scrobiculato.

### LEGUMINOSÆ.

#### 46. *Vicia conspicua*, nob.

*V.* tenuis, gracilis; caulis foliisque cirrosis tenellis, glabriusculis: foliolis subdenis (8—12), angustis, oblongis, mucronatis; foliorum inferiorum spathulatis vel obocordatis; summorum linearibus: stipulis inconspicuis, angustis, semisagittatis, paucidentatis; laciniis acuminatis, subtus ustulato-notatis: floribus subsessilibus, conspicuis, calyce 3—4-plo longioribus; inferioribus solitariis, summis 3—4-nis, plerisque (intermediis) binis: laciniis calycinis duobus superioribus longioribus, angusto-acuminatis tubo subæqualibus: leguminibus subcylindricis, vix compressis, rectis, angustis, puberulis, 9—12-spermis: seminibus parvis, sub-globosis, vix compressiusculis, fuscis, atro marmoratis, glabris.

Hab. ubique vulgatiss. inter vineta, segetes, graminosaque montana Maderæ.

Constantly distinct, and easily distinguished by its large and handsome flowers, delicate smooth foliage, fine narrow leaflets, and graceful habit, from *V. sativa* L., which preserves all its characters and much coarser habit in Madera. Neither is it to be confounded with *V. angustifolia* "Roth. and Willd." (*V. sativa* β. Sm. in E. Fl.); nor again with *V. Bobartii* Forst. (*V. angustifolia* Sm. in E. Fl. non Roth. et Willd.) It differs from the former in the much narrower leaflets of the upper, and inversely heart-shaped ones of the lower leaves: but more strikingly, in the much larger and conspicuous bright rich purple (approaching to crimson) flowers. In both these points it comes much nearer *V. Bobartii*: but still the flowers are larger; and those only which open first, at the beginning of the season, are solitary: later, they are two or three, and even sometimes quite the uppermost are four together: the leaflets are more numerous and smoother; and the whole plant is larger, with the stems from one or two to three feet long.

47. *Vicia capreolata*, nob.

*V. subpubescens*, ramis gracilibus, elongatis, filiformibus: foliis cirrosis; foliolis 5—11; linear-i-olongis, remotis: stipulis parvis, linear-i-oblongis, angustis, semi-sagittatis, simplicibusve, acuminatis vel apice bifidis, coloratis, marcescentibus: pedunculis submultifloris; floriferis folio æquantibus; fructiferis duplo longioribus: calyce puberulo  $\frac{2}{3}$ ; dentibus duobus superioribus inter se arcuato-incurvis; tribus inferioribus longioribus, acuminatis: floribus secundis, subdenis: leguminibus oblongis, subfalcatis, glaberimis, obsolete reticulatis, 4—5-spermis: seminibus 3—4, subtetrahedris, oblongis, subcompressis, glabris, nigrescentibus; funiculo magno hiloque longo.

Hab. in rupibus umbrosis convallium Maderæ. Florentem primus detexit. cl. Car. Lemann, M. D.

Flores eorum *V. Craccæ* L. fere magnitudine, ochroleuci. Videtur *V. ochroleucæ* Ten. affinis. An *V. parviflora* Cav., Brouss?

48. *Biserrula Pelecinus* L.

a. *pubescens*.—B. *Pelecinus* L. D. C. Prodr. ii. 307.

*β. glabra*, nob.

Hab. ambæ varietates in apricis maritimis incultis Maderæ et Portū S<sup>t</sup>i, una nascentes: sed *β.* nostra, quamvis prima fronte valde distincta, nullo modo nisi glabritie differt; an vero species?

49. *Lotus pisifolius*, nob.

*L.* herbaceus, glaucus, glaber: caule flexuoso ramisque divaricatis, crassis, fistulosis, firmis, erectis vel subdeclinatis: foliolis obovatis stipulisque subcordatis maximis: capitulis multifloris, longe pedunculatis: calycibus campanulatis; laciniis ciliato-pilosis, æstivatione stellatis: leguminibus.....seminibus.....

Hab. in humidis graminosis Montis excelsi Pico Grande dicti: semel tantum lecta.

An varietas luxurians monstrosa *L. majoris* Sm. e solo pinguiore orta? Sed habitu, colore, magnitudine toto cœlo differt. Foliola stipitæque 1—2-pollicariae; juniora ad margines pilis rarís sparsa. Pedunculi 4—6-pollicares. Capituli 12—15-flores, basi folio ternato bracteati. Alabastræ floresque ut in *L. majore* Sm. Tota planta eximie glauca 2—3-pedalis, ramis flabellatim expansis, suberecta.

50. *Lotus macranthus*, nob.

*L.* subcinereo-glaucescens, sericeo-pubescentia: radice annua aut bienni; caule basi lignoso, frutescente: ramis diffuso-prostratis, patulisque: stipulis subsessilibus, transverse ovalibus; foliolisque rotundato-obovatis minimis: floribus solitariis, versicoloribus, breviter pedicellatis: leguminibus lomentaceis, cylindricis, longissimis, rectis, glaberrimis, polyspermis: seminibus 30—40 minutis, orbicularibus, compressis, lævibus, glabris, fuscis.

Hab. in apricis maritimis Maderæ et Portū S<sup>t</sup>i rarer.

Habitus *L. glauci* Ait; sed minus incana. Pubescentia totius plantæ brevissima, inconspicua, arctissime adpressa. Flores maximi, pollicares, cernui, pallide citrino-virescentes, mox fusco-purpurei; carinæ apice semper atro-purpureo. Legumina rectissima, subbipollicaria. Species notabilior, distinctissima.

51. *Lotus divaricatus*, Sol. MSS.

*L.* annuus, pilosus, subcespitosus: caulis prostratis, intricatis, numerosis, elongatis, flexuosis, ramosis, pallidis: foliolis obovato-cuneatis stipulisque ovatis subcordatis acutis: capitulis trifloris: leguminibus turgidis, crassis, brevibus.

*L. divaricatus*, Sol. MSS. et Herb. Banks.

Hab. incultis graminosisque montanis Maderæ sat frequens.

*A. Loto diffuso*, Sol., in Madera æque vulgari, capitulis normaliter tri- nec bi-floris, floribus aurantiacis, nec citrinis neque flavis, leguminibusque multo brevioribus, pinguibus, crassis, statim dignoscitur.

52. *Medicago pulchella*, nob.

*M.* subsericeo-pubescent, cinerascens: caulis patulis prostratisve gracilibus: foliolis obcordatis vel obovatis, basi cuneatis, integris, sursum subdentatis, apiceque argute tridentato: stipulis integriusculis, ovato-lanceolatis, inferioribus acuminatis: pedunculis sub-bifloris, abbreviatis: leguminibus cochleatis, villosulis, parvis, inermibus, globosis; cyclis 3—4, angustissimis; margine simplici, angusto, linearis, utrinque costis prominentibus, oblique deflexo-arcuatis, grosse dentato: seminibus compressis, reniformibus, flavis.

Hab. in collibus apricis saxosisque maritimis Maderæ et Portū S<sup>t</sup>i rario.

53. *Ononis micrantha*, nob.

*O.* herbacea, annua, prostrata procumbensve foliosa, glandulosopubescent: foliis (præter summa) trifoliolatis; foliolis ovalibus, argute serratis: stipulis amplis, foliaceis, oblongo-ovatis, mucronatis, subserrulatis integrisve: floribus (purpureis) inconspicuis, sparsis, axillaribus, subsessilibus, solitariis, folio brevioribus: calycibus amplis, foliaceis, post anthesin dilatatis; laciniis æquis, acuminatis, integris, corollam subæquantibus, unicostatis: legumine erecto, turgido, ovali, brevi sc. laciniis calycinis breviore, dispermo: seminibus rufo nigroque marmoratis, compresso-rotundatis, minutissime granulato-scabris s. verruculatis.

“*O. arthropodia* Br. Fl. Lus. 2. 94,” Herb. Banks. quoad exemplar unicum Gibraltaricum, a cl. Broussonet lectum aut communicatum! — haud Broteri in Fl. Lus. l. c.

An. *O. parviflora*, Brot. Fl. Lus. 2. p. 96?

Hab. in collibus apricis maritimis Maderæ et Portus S<sup>ti</sup>.

Ab. *O. villosissima* Desf. Fl. Att. 2. p. 147. T. 192. vix nisi floribus sessilibus, sparsis, nec confertis, nec racemosis, stipulis calycibusque magnis, hirsutieque parciore differt.

54. *Ononis dentata* Sol. (Prim. p. 34. No. 59. t. 4.)

a. *tridentata*: laciniis calycinis 4 superioribus apice plerumque tridentatis.

*O. dentata* Sol. MSS. nob. l. c.

Hab. in Portu S<sup>to</sup> et Insulis Desertis.

β. *simplex*: laciniis calycinis simplicibus, conformibus, acuminatis.

Hab. in Promontorio Maderæ *Ponta São Lourenço* dicto, Dr C. Le-mann; et in Insulis Desertis cum α mixta, Dr Lippold.

Quoad cetera, plantæ omnino conveniunt: quoad imo calycis lacinias, status intermedii, sc. lacinia uni-bi-dentata facile adsunt.

#### HYPERICINEÆ.

55. *Hypericum nubigenum*, nob. in Bot. Misc. 2d Series, I. p. 43.

*H. glabrum*: caulis simplicibus, erectis, strictis, ancipitibus, basi suffrutescentibus: foliis epunctatis, erectis, linearis-oblongis, obtusissimis vel retusis, amplexicaulibus, margine revolutis: panicula terminali, corymbosa: sepalis ovatis, æqualibus, dentato-glandulosis petalisque nigropunctatis: floribus trigynis; antheris epunctatis s. eglandulosis.

*H. angustifolium*, Primit. p. 35. No. 61; haud Lam.

Hab. in Maderæ editioribus.

*H. angustifolium* Lam. jam adest: ideoque nomen mutetur.

#### MALVACEÆ.

56. *Sidæ maderensis*, nob Prim. p. 35. No. 62.

*Sidæ canariensis* W. mera varietas statusve videtur: qualis *Sidæ carpinifoliae* L. est verosimiliter *Sidæ carpinioides*, D. C.

#### CARYOPHYLLEÆ.

57. *Cerastium vagans*, nob.

*C. viscoso-pubescent*, perennis: caulis diffusis, deorsum suffrutescentibus, apice ascendentibus, paniculisque pedicellisque calycibusque

dense fulvo-glandulosis : foliis angustis, sublanceolatis, acuminatis : petalis bifidis, sepalis subduplo longioribus, conspicuis : capsulis ovatis, calyce sublongioribus.

*a. fulva* ; dense fulvo-tomentosa.

*b. subnuda* ; glabriuscula ; foliis inferioribus glabris.

Hab. rarer sparsimque in rupibus siccis excelsioribus Maderæ.

Habitus quodammodo *Stellariæ*. Pedicelli semper erecti. Capsulæ fructiferæ calyce tectæ, abbreviatæ, obovatae vel ovales.

58. *Arenaria serpyllifolia* L.

*γ. depauperata* ; viscida, glanduloso-pubescentia.

Hab. in Portu Sancto : etiam in cacuminibus summis Maderæ.

59. *Silene filiformis*, nob.

*S. annua*, pubescens : caule erecto : ramis divaricatis, filiformibus, gracilibus, strictis ; internodiis saepe viscidis : foliis angusto-lanceolatis, acutis ; infimis obtusiusculis ; summis raris linearibus : floribus solitariis, inconspicuis pedunculatis ; pedunculis glabriusculis ; calycibus oblongis ; petalis linearibus, capsulisque cylindricis, sepala subæquantibus : anthophoro capsulae dimidium vix æquante.

*S. inaperta*, Hort. Reid. quoad saltem stirpem Maderensem : haud Linn.

Hab. in sterilibus apricis, alveisque siccis convallium Maderæ.

Flores inaperti : petala viridi-fusca. *S. inapertæ* L. proxima ; sat vero distincta.

60. *Silene ignobilis*, nob.

*S. annua*, glabriuscula, dichotome ramosa, erecta : foliis inferioribus subciliolatis, spathulatis, superioribus lanceolatis : floribus solitariis, inconspicuis, pedunculatis ; calycibus oblongis, haud inflatis, mox ventricosiusculis basique coarctatis, reticulatis ; petalis inconspicuis, calycem vix superantibus : capsulis ventricosis, doliformibus, calycem æquantibus ; anthophoro brevissimo.

Hab. inter segetes Maderæ rariss.

Viridis, vix glaucescens. Variat plus minus velutino-pubescentia ; plerumque fere glabra. Petala apice purpurascens.

61. *Silene inflata*, Sm., D. C., &c.

Var. *intricata* nob.; vix glaucescens; caulis ramosissimis, dense intricatis, elongatis, pendulis, basi suffrutescentibus.

Hab. in rupibus excelsis declivibus Convallium Maderæ.

#### FRANKENIACEÆ.

62. *Frankenia cespitosa*, nob.

*F.* caulis fruticulosus, ramosissimus, densissime cespitosus, humilis, humifusus, calycibusque basi velutino-pubescentibus: foliis sessilibus, basi connatis, linearibus, glabris, margine revolutis, basi breviter et parce ciliolatis: floribus in capitulos terminales congestis, subcymosis, foliis multo longioribus.

Hab. in collibus maritimis sterilibus aridisque Promontorii Ponta S. Lourenço Maderæ; etium Portūs S<sup>ti</sup>.

*F. ericifoliae* C. Sm., necnon *F. corymbosæ* Desf. nimis forsitan affinis.

#### VIOLARIEÆ.

63. *Viola paradoxa*, nob.

*V.* suffruticosa, e basi ramosa; ramis subproductis, elongatis, simpliciusculis; inferne nudis, stipulisque simplicibus linearibus integris minutis saepe obsoletis, petiolisque elongatis marginatis ternato-fasciculatis, foliisque rotundato-spathulatis crenatis basi abruptis cordatisve, glaberrimis: foliis summis cuneato-elongatis, in petiolum attenuatis, apice subtridentatis, petiolisque caulisque subpuberulis: sepalis oblongis integris, bracteisque pedicelloque pubescentibus: calce obtuso, calyce longiore; nectario.....capsula obsoleta hexagona, glabra; seminibus pallide flavescentibus, paucis (15—20), ovatis.

Hab. rariss. in summis cacuminibus montium excelsiorum Maderæ, in fissuris rupium. Invenit cl. Car Lemann, M. D.

Obs. Cum *V. calcarata* L. conferenda. Flos aureo-flavus. Stylus ab apice ad basin attenuatus. Stigma urceolatum, utrinque fasciculatopilosum, ore magno, expanso dilatato, inferne in labellum producto. Folia ad apices ramorum sterilium conferta. Pedunculi solitarii, axillares, subpollicares. Capsulæ abbreviatæ, obtusæ. Semina, præter colorem, fere ut in *V. tricolore* L.

## CRUCIFERÆ.

64. *Sinapidendron salicifolium*, Prim. p. 37. No. 65.

*Syn.* *Sinapis angustifolia*, D. C. Prodr. I. 220.

Hab. in rupe quadam excelsa maritima, "Cabo Giram" dicta, prope vicum *Camera de lobos* Maderæ, nuperrime ab amico Rev<sup>o</sup>. M. Tucker, botanophilo vel oculatissimo, detecta. Species genuina videtur.

65. *Matthiola maderensis*, nob.

*M.* biennis: caule herbaceo, erecto, elato, ramoso: foliis oblongis, integerrimis, incano-tomentosis; radicalibus densissime rosaceo-confertis: siliquis compressis, glanduloso-muricatis.

Hab. in rupibus maritimis Maderæ et Portus S<sup>t</sup>i. ubique vulg.

Flores pallide violacei, vespere præsertim odori, rarissime albi. Species intermedia, habitu foliisque *M. incanæ* R. Br.; siliquis, 3—5 poll. longis, *M. sinuatæ*, ejusd.

MADERA, October 1837.

## SUPPLEMENTUM.

## CHARACEÆ.

66. *Chara atrovirens*, nob.

*C.* atroviridis, pellucida, lucida, gracilis, fœtens: caule ramisque tenacibus, tenuibus, flexilibus, hinc inde articulatis superne sparsim minutissime retrorsum papilloso-spinellosis, contorto-striatis: ramulis verticillatis, 5—6-articulatis; articulis inferioribus striatis; summis simplicibus, bracteisque 2—4 inarticulatis, cylindrico-setaceis, nucula triplo quadruplove longioribus, lœvibus, haud striatis, glabris.

Hab. in rivulis aquarum fluentium Madera rariss.

*C. vulgari* Ag. proxima. Differt colore, scabritieque ramorum, radicellos nascentes deflexos, sparsos æmulante.

MADERA, May 1838.

**The following text is generated from uncorrected OCR or manual transcriptions.**

**[Begin Page: Page 523]**

XXVII. Novitiae Flora Maderensis: or Notes and Gleanings of Made-  
ran Botany. By the Rev. R. T. Lowe, M.A.

[Read Mail 28, 1838.]

FILICES.

1. *Acrostichum paleaceum*. Hook, et Grev. Icon. Fil. t. 235.

Identical I apprehend with *A. squamosum* of Swartz. Although his

character of " frondes 1 — 2-pedales " certainly exceeds the average of  
Maderan specimens, I have lately seen some fully 18 inches long, without  
the stipes: and I am informed by my friend J. I. Bennett, Esq., that in  
"the Banksian Herbarium are barren fronds of 15 or 16 inches in length,  
in addition to the stipes (as by Swartz described) of 3 or 4 ; and some of  
them, which are abruptly mutilated, would, I think, justify the describ-  
ing them as " 1 — 2-pedales." In every other particular Swartz's descrip-  
tion perfectly agrees ; and was, I have little doubt, drawn up from  
the Maderan plant.

2. *Polypodium drepnum*, nob.

*Aspidium drepanum* Sw. {*Aspidium ? drepanum* nob. *Primit*, p. 6.

No. 3.), proves, as I have already stated in the Botanical Miscellany  
(New Series, I. p. 26.), to be a genuine Polypodium; not having the  
. slightest trace of an indusium in any stage of growth. The following

description of the fructification is derived both from abundant wild specimens, and from others cultivated in my garden, and watched carefully for several years.

Indusia nulla. Sori nudi, globosi, valde convexi, tumidi, distinctissimi, subconferti, biseriati, purpureo-nigri, capsulis nitidissimis ; demum (sporis effusis) pallide ferruginei, minuti, punctiformes. Polypodii species vera.

Vol. VI. Part III 3 X

**[Begin Page: Page 524]**

524 Mr LOWE, ON MADERAN BOTANY.

3. *Asplenium productum*, nob.

A. fronde deltoidea, apice caudata s. longe acuminata, glaberrima, lucida, quadripinnatifida : pinnis primariis productis, acuminatis ; ultimis oblongo-cuneatis, apice inciso-dentatis : soris confertis, mox confluentibus : stipite fusco, Isevi, basi hirsutiusculo.

Aspl. acutum, Holl's List of Mad. Plants in Hook. Bot. Misc. New Series, T. p. 15 ; baud Bury !

Aspl. *Adiantum nigrum* var. nob. Ibid. p. 24; hand Linn.

Hab. in Madera, ab altitudine 1000 ad 3000 pedum ubique vulga-

tissimum.

This very common fern, the *Asplenium Adinntum nigrum* of most former lists of Maderan plants, I would now admit to be sufficiently distinct from the European species properly so called ; the characters above enumerated proving permanent and uniform. With HoU and others I had long imagined it identical with *Aspl. acutum* Bory : but to my surprise, a specimen so ticketed, and obligingly communicated to me by its author the Baron himself, is a very different plant indeed : being undistinguishable from large narrow-leaved fruit-bearing Maderan specimens of my *Asplen. canariense* W .

*Asplen. productum* is distinguished from the true *Aspl. Adiantum nigrum* L. by its more compound, finely divided frond ; the contour of which, as my friend Mr Arnott has well observed, is triangular or deltoid ; while in the European plant, the shape is rather that of a rectangle or oblong, terminated by a triangle ; the sides being parallel for some length from the base. But the chief character of the Maderan plant is found in the caudate or produced extremities of the primary divisions. The apex of the frond especially is gracefully attenuated

With *Asplen canariense* W. as understood at least by me, (*A.iplen. acutum* Bory !) *Aspl. productum* has very little indeed in common.

#### 4. *Nephrodium fcnisecii* /3. *productum*, *Primit.* p. 7-

A plant certainly bordering very closely upon the true *Aspidium spinulosum* W. and Sm in Eng. Flora; but which, on account of the

less degree of parallelism in the sides of the ultimate divisions, the smaller punctiform sori, and above all the fragrant scent, I still think best referred to *Nephrodium fcnisecii*. However this, rather than Aspi-

**[Begin Page: Page 525]**

Mh LOWE, ON MADERAN BOTANY. 525

dinm elongatum Sw., as formerly supposed, (See Hook. Bot. Mise New Series, I. pp 25, 26.), may very possibly be *Aspklium sphmlosum* of Herr Holl's List.

5. *Nephrodmm affine*, nob. in Bot. Misc., New Series, I. 25.

*N. fronde subtus hirsutiusculo. bipinnatifido ; pinnis inferioribus brevionibus: pinnulis approximatis oblongis, subintegris; apice truncato-rotundatis, muiutissime eroso-denticulatis ; basi tota adnatis: incisuris deorsum acuminatis, sursum latioribus : pinnulis superioribus eonfluentibus: soris biseriatis distinctis : stipite rhachibusque densissime paleaceis.*

Hab. rario in Madera umbrosis. ab alt. 1500 ad 3500 pedum.

Fronds two or three feet long, disposed in a coronet or circle- beneath with scattered hairs, of a chaffy nature, at the margins and on the nerves of the pinnules. Stipes and rhachis throughout most densely chaffy; the chaffs or scales remarkably large as well as copious. Lower two to SIX pair of pinna smaller and shorter than the middle ones •

the lowest very much so. Pinnules closer together than in *N. Filifera*: all of them, even the uppermost rounded (not merely obtuse) at the apex; the lowest even truncate. In .V. Fixum max the uppermost

are acute, and the lower sometimes scarcely obtuse. The sides of all  
in A<sup>^</sup> affine are nearly entire, or with distant, scarcely perceptible  
shallow teeth upwards; not in the least incised, or with any tendency  
to a higher degree of decomposition, like those of N. FUix mm; or  
of N. elongatum; their rounded apex irregularly notched with very  
minute shallow teeth, quite different from the obvious serrated teeth  
of N. Filix mas, and without a lens, scarcely perceptible ; the pinnules  
appearing entire. Inckures (i. e. the spaces between the pinnules)  
acute at the bottom, i. e. towards the nerve, and widening upwards  
or rather outwards; evidently not reaching to the nerve or midrib  
as they appear to do in N. Filix mas, though really they do not!  
Hence the base of all the pinnules is in no degree incised on either side,  
as in A', elongatum ; but the pimiules are adnate by the entire breadth  
of their base : neither is their lower side arcuato-decurrent as in A<sup>^</sup>. Filix  
mas; but the base is truncate and the opposite sides or margins of each  
pinnule are parallel to each other down to its very bottom, where they

.i X2

**[Begin Page: Page 526]**

526 Mr LOWE, ON MADERAN BOTANY.

are both at right angles to the rhachis: whilst in N. Filix mas, the  
lower or inner margin, i. e. that towards the main rhachis. quits its  
condition of parallelism with its opposite upper or outer one towards  
the base, and forms a curve downwards towards the pinnule next below  
it; which is what I have called arcuato-decurrent. Thus the incisure

in A<sup>^</sup>. *Filix mas* is either irregular, or abrupt, open, and broad at the base; not regularly acuminate; so that the spaces between the pinnules being larger, or at least not regularly narrower downwards, these last appear more remote and distinct than in *N. affine*. In fact the incisures (not at all the pinnules) of *N. affine* rather resemble those of *Nephrodium* {*Aspidium* Auct.) *Oreopteris* than of iV. *Filia*; mas. The pinnules of the lower pinnaj, instead of having any tendency by incision to a farther degree of decomposition, as they have both in *N. Filix mas* and *N. elongatum*, are quite simple, and even more entire than the upper ones. Sori precisely similar in their arrangement and indusia to those of *N. Filix mas*.

I possess specimens of A<sup>^</sup>. *affine* from various localities, differing in exposure, shadiness, and elevation; but all agree in the foregoing characters. By these, this fern approaches nearer to *N. elongatum* than to any other Maderan species : the true European *N. Filix mas* being the connecting hnk; from which it is curious to observe, these two Maderan ferns reciprocally recede in opposite directions : A<sup>^</sup>. *elongatum* having the serratures much more aristate, and the stipes and rhachis, especially the latter, less chaffy than the European A<sup>^</sup>. *Filix mas*; while *N. affine* has the serratures much less developed, but the stipes and rhachis much more copiously chaffy than the same.

The specimens of A<sup>^</sup>. *Filix mas*, which I have particularly examined for comparison with A<sup>^</sup>. *affine*, are British only : but my friend Mr J. Bennett has also compared specimens in the Banksian Herbarium, and noticed the same differences. Indeed his observations, exactly corresponding with my own, here made before and apart, have led me with considerable confidence to the conclusions and results here stated.

I subjoin, for facility of comparison, the specific characters of A<sup>+</sup>.

Filix mas and elongatum ; eliminated however solely in reference to  
the three present species.

[Begin Page: Page 527]

Mr LOWE, ON MADERAN BOTANY. 527

Nephrodium Filix ma.i.

N. fronde glabra, bipinnato : pinnis inferioribus brevioribus : pinnulis  
subremotis, obloigis, obtusis, serratis, adnatis, basi inferiore arcuato-de-  
currentibus; inferioribus serrato-incisis ; superioribus confluentibus : soris  
biseriatis distinctis : stipite paleaceo; rhachibiis sparsim paleaceo-hirtis.

Aspidium filix mas, Auct; Linn. Sm. Hook. &c. From English  
specimens, gathered at Dale Abbey in Derbyshire.

Main rhaehis sparingly hairy rather than chaffy, and the nerves and  
margins of the pinnules beneath are not at all hairy. Pinnules subre-  
mote; so that the incisures are truncate or oblique at the base, or as  
wide at the bottom as at the top in the lower pinnules.

6. Nephrodium elongatum.

N. fronde rigido, glaberrimo, bipimiato: pinnulis oblongis, spinuloso-  
serratis; superioribus apice rotundatis, confluentibus ; inferioribus sub-

lanceolatis, acutiusculis, crenato-incisis, distinctis, subpetiolatis s. basi  
utrinque incisis; incisuris trianguli-decurrentibus : soris biseriatis, con-  
fertis, subimbricatis nervo approximatis ; indusiis glanduloso-scabris :  
stipite elongate rhachibusque pallidis, paleaceis; paleis rhachidum raris,  
sparsis, distinctis, squamiformibus.

N. elongatum, Hook, et Grev. Icon. Fil. t. 234.

Aspidium elongatum, Sw., &c.

Hab. in Madera ab alt. 1500 ad 5000 ped. vulgaris.

Fronds not growing in a circle, of a much lighter and brighter  
green than in the two preceding species, and of a rigid brittle texture :  
with a greater tendency to a farther degree of decomposition than even  
N. Filix mm. Pinna?, in full-sized specimens of 3 or 4 feet long,  
more remote and distinct; the lower ones not shorter than the rest'  
but rather the contrary. Upper pinnules close together; so that their  
edges often touch or even overlap each other, concealing the incisure;  
except at the base, where, by the incisure being produced downwards  
into the substance of the pinnule next below, and similarly, though in  
a less degree and sometimes not at all, into the pinnule next above,  
there is formed in all a kind of triangular hole, or open space, quite

[Begin Page: Page 528]

528 Mr LOWE, ON MADERAN BOTANY.

different from any thing in the two preceding species; though of the two, most like A<sup>^</sup>. FiUx mas. Hence the incisures, not the pinnules, are decurrent: the lower base of the pinnules, as well as the upper in a less degree, being notched by the incisure, and their margins being parallel at the base.

7. Cheilanths mnderermn, nob. in Bot. Misc. New Series, I. 26.

C. fronde oblongo-lanceolato vel ovato, bipinnato, glabro: pinnulis (s. laciniis secundi ordinis) oblongis, obtusissimis, adnatis, decurrentibus, sinuatis; inferioribus basi pinnatilobatis ; superioribus confluentibus ; omnibus vel omnino vel superne indivisis, foliiformibus, crenatis ; lobis fructiferis rotundatis: indusiis interruptis, incisis; lobis rotundatis vel truncatis, margine integro: stipite rhachibusque paleaceo-hirtis.

Hab. in fissuris rupium prope urbem Funchalensem Maderae; etiam in muris ipsius urbis.

Species cum aliis quibusdam diu confusa, revera distincta videtur.  
A Ch. maveolente Sw. (Polypod. fragrans Desf. Fl. Atl. ii. 248. t. 257)  
prima facie differt fronde multo minus tenuiter diviso, nee leptophyllo ;  
divisionibus so. magis foliaceis, confluentibus nee distinctis ; pinnulis  
oblongis, sinuatis crenatisve, multo majoribus, foliiformibus, omnino vel  
.superne saltem indivisis ; summis confluentibus ; omnibus basi tota ad-  
natis decurrentibusque, nee puncto tantum centrali baseos s. petiolulo  
rhachi afRxis: soris indusiisque incisis, interruptis, nee continua ut in  
figura I<sup>TM</sup>. iconis jam citatae delineantur. A Ch. odora Sw., planta sc.  
Helvetica et Pedemontana (.Idiantum pusillum All.), iisdem characteribus,

necnon fronde bipinnato nee tripinnato, indusiisque margine integris, nee  
"laceris, subciliatis" Siv., satis superque distincta videtur : huic vero  
speciei procul dubio, monente amico J. I. Bennett, affinitate proxima.  
Ch. fragrante Sw., stirpe India Orientalis, cui el. Swartzius olim dubio  
animo conjimxit, "fornan speciem diversam" tamen monens, magis ac  
magis recedit : quum ne alia dicam, ilia pinnulis "oppositis, ovatis, sub-  
petiolatis, IncinuUs 2 — 3-partitis," tenuibus ; earum "segmentis subacutis,  
apice soriferis" (monosoris) ; "soris minutissimis" indusiisque dentifor-  
mibus distinctissima est. In stirpe Maderensi pinnulse baud raro alternae ;  
in tribus supra indicatis potius opposite videntur.

[Begin Page: Page 529]

Mr LOWE, ON MADERAN BOTANY. 529

PHANEROGAMjE.

Gramine^.

8. Phragmitcs congeata, nob

P. panicula lanceolata, stricta, contracta, deiisa, subsecunda; spiculis  
4 — 6-floris, glumis multo longioribus : culmis basi decumbentibus, ra-  
mosis ; foliis planis mox convolutis, strictis, cuspidatis, glaucis.

Hab. in Madera; ora maritima rariss.

Obs. P. commmu Trin. {Ariuidini Phragmltce L.) proxima, et forsitan

varietas tantum. Cuhiii basi raniosi, frutescentes, nudi, tenacissimi, late procumbentes ; apice foliosi, ascendentes 2 — 4-pedales : foliorum margine subserrulato ; vaginis apice, nodisque plerumque barbatis. Glunia inferior brevis, acuta, superior inf'eriore duplo longior, remota, acuminata. Palea inferiores floruni inferiorum productas, Acres superiores longitudine subaequantes ; omnes lanceolatse, acuminatse, glabrae. Rhachis supra florem inferiorem longissime sericeo-pilosa. Palea superior brevis, oblonga, plana, binervis, subciliata. Panicula erecta, arctissime glomerata, congesta, densissima, multiflora, 3 — 6-pollicaris longa, 1 — 2-lata, pallida, flavescens ; demum albo-sericea. Radices repentes.

9. Denchampnia argenteu, nob. {AirtB argentea nob. olim Prim, in Trans. Cam. Phil. Soc. iv. l. p. 9. No. 8.) Species distinctissima, D. cespitosee Beauv. (Airen cespitoscB L.) proxima. Deschampsice Beauv. species legitima. Pedicelli, floresque basi dense pilosi. Palea inferior apice 3 — 4-dentata.

10. Avena marginata, nob.

A. glaberrima, Itevis: panicula simpliciuscula, coarctata, subsecunda; spiculis 4 — 5-floris, glumis sublongioribus ; rhachi pedicelloque floris alterius superioris abortientis villosis ; floribus omnino glabris s. nudis, scabriusculis ; palea inferiore apice quadriseta ; s. bifida, laciniis bifidis in setulas productis ; dorsi medio arista geniculata : foliis distichis, brevissimis, obtusis, carinatis, marginatis, rigidis, glaucis.; ligula lanceolata, producta: radice fibrosa, subcespitosa, perenni.

In rupibus Maderw excelsis nuperrime invenit am. Car. Lemann,

M. D.

530 Mr LOWE, ON MADERAN BOTANY.

Culmi bipedales et ultra, 2 — 3 ex uno cespite, vaginisque rhachique  
ramisque primordialibus paniculag omnino laevis, glabris. Pedicelli  
floresque scabriusculi. Panicula 4 — 5-pollicaris, suberecta, apice subnu-  
tante, subpauciflora. Spicule nitentes, semipollicares. Glumas carinatip,  
trinervise; nervis prominentibus. Flos summus spicularum minor, mas-  
culus, neuter, abortiensve, et ad pedicellum villosum reductus. Palea  
inferior nervosa, sulcato-striata ; apice bifida; laciniis bifidis in setulas  
albidas hispidiusculas productis : arista dorsali, fusca, subsemipoUicari,  
i. e. flore duplo longiore, infra medium tortili. Folia radicalia plano-cari-  
nata, arescentia conduplicata, Itevia, margine elevato, conspicuo, discolore,  
serrulato-scabro, deorsum stepe undulato-plicata, s. corrugata ; apice  
mirandum in modum obtusa, 2 — 3-pollicaria ; caulina superiora vix semi-  
pollicaria. ^aginarum ora omnino nuda. Ligula elongato-triangularis,  
acuminata, arete amplexicaulis, integerrima.

11. *Cynosnrus brizoides*, nob.

C. panicula lanceolata, gracili, coarctata; spiculis neutris amentaceis,  
distinctis ; bracteis setaceis, aristisque confertis, rigidis, scabris.

Hab. in graminosis convallium Maderte rario.

Gramen annum, exile, subinconspicuum. Culmi plures ex eodem  
radice, tenues, 1 — 2-pedales. Folia flaccida, brevia. Panicula parva,  
secunda, subpollicaris, simpliciuscula, a;qualis ; fructifera arete contracta,

saepe violaceo-purpurascens ; spiculis neutris spiculas Festucce, Pocb, aut  
Brixte referentibus. Bractee aristasque rectte, floribus multo longiores.

12. *Festuca juhata*, nob.

*F. cespitosa* : culmo superne paniculaeque lanceolatte, abbreviata?,  
subcoarctatae, subsecundaB, rhacbi ramulisque pedicellisque puberulis, baud  
scabris: spiculis lanceolatis, 3 — 5-floris, glabris; flosculis aristatis, sursum  
aristisque scabris: foliis culmos superantibus subsetaceis, subcanaliculatis,  
vaginisque striatis, glabris ; ligula brevissima, abrupta : radice perenni.

Hab. rariss. in rupibus convallium Maderae, cum Deschanipsin argentea  
nob., cui habitu simillima, nascens. Primus invenit Car. Lemann M. D.

*F. geniculatce* Willd. {*Bromo geniculato* L., *Festucce stipoidei* Desf.)  
proxima. Differt radice perenni ; culmis baud geniculatis, dense cespitosis ;  
pedunculis subsimplicibus, &c.

[Begin Page: Page 531]

Mr LOWE, ON MADERAN BOTANY. 531

Ciilmi pedales, tenues, teretes, erecti, glabri, paullo infra paniculam  
c-tractam puberuli, foliis breviores, baud geniculati, nodis demum fuscis.  
Folia nuinerosa, conferta, elongata, omnia subsetacea, tenuia, gracilia,  
rigidiuscula, glabra, striata; superiora sursum subplanata, subcanallculata!  
Glum« inaquales, ljeves; altera spicule subfequans, altera brevior. Flores  
glabri; basi tantum laves, sursum aristisque scabri ; arista flore longior.

Pedicelli simpliciusculi, sc. sursum vix subdilatati, euneati, ancipites;  
baud vero magis quam in multis aliis,

13. *Festuca Donax*, nob. Prim, in Trans. Cam. Phil Soc. iv. l. p. 9. No. 9.  
(Character auctus, emendatus).

*F. paniculfe glabrse, largie, laxa?, diffusa?, subsecundae, nutantis ramis elongatis, flexuosis : spiculis trifloris, linear-lanceolatis, compressis, glomeratis; flosculis muticis linearibus, angulatis, scabris ; glumis subterminalibus, spiculam aquantibus: paleis apice membranaceis, obtusis, abruptis, subbifidis, nervis prominentibus ; exteriore quinquenervia, nervis aiquidistantibus ; interiore binervia, dorso canalieulata : foliis omnibus planis, elongatis, acuminatis, striatis, marginibus serrulato-scabris ; culmis vaginisque levibus, glabris ; ligula exserta, ovata : radice fibrosa, perenni.*

The nearest ally of the species is *F. sylvatica* Vill. {*F. calamagrostis* Sm.)

14. *Festuca albida*, nob. Prim, in Cam. Trans, iv. l. p. 10. No. 10.  
«. *longifolia*; foliis culmum sequantibus.

/3. *hrevifolia* ; foliis culmo multum brevioribus. In rupibus nuper invenit C. Lemann, M. D.

CyPERACEjE.

15. *Carex sagittifera*, nob.

C. spica solitaria, androgyna, ( ? , superne i ), subpauciflora : stig-  
inatibus duobus : fructibus oblongis, utrin(ue attenuatis s. fusiformibus,  
planatis, glabris, nitidis, reflexis, squama acuta, oblonga, persistent^  
longioribus: culmo subtereti, superne subcompresso, hinc subcanaliculato :  
folus angustissimis, elongatis, superne canaliculatis, inferne carinatis;  
carina marginibusque serrulato-scabris.

Vol. VI. Part III. .j \

**[Begin Page: Page 532]**

532 Mr LOWE, ON MADERAN BOTANY.

Hab. in sylvis Convallium Maderse, in declivibus prope rivulos rario.

Dense cespitosa. Folia numerosa, conferta, culmos subasquantia  
s. excedentia, fere (pro latitudine) setacea s. filiformia. Fructus niti-  
dissimi, magni, siibremoti, squamisque fuscis, deflexis; inde sagittaruni  
quasi ciispides plures, filo consertas, spica refert.

Cum C. decijnente Gay et La Perouse, monente am. Fr. Boott,

M. D., conferenda. C. puUcari L. proxima, sed abunde distincta.

JUNCE^.

16. Lu&iiila elegmis, nob.

Zy. foliis lanceolatis, pilosis : corymbi erecti, supradecompositi ramis  
capillaribus, mox divaricatis, deflexis : pedunculis unifloris : bracteis

sepalisque setaceo-acuminatis, capsula obtusa, mucronata longioribus : se-  
minibus simplicibus, exappendieulatis.

Hab. in rupibus convallium Maderse murisque rario.

4 — IO-pollicaris; corymbo fructifero elongato, oblongo-angustato, senii-  
pedali ; ramis ramulisque inferioribus elongatis, plerisque divaricato-re-  
fractis, tenuissimis. hinc inde pilosis. Flores solitarii, rufo-castanei, lucidi.

Amentace^.

17- Quercus mitts. Herb. Banks.

Since the publication of this, as a species, in the Cambridge Tran-  
sactions (Vol. [V. I. p. 15. No. 21.]), from the specimen preserved in the  
Banksian Herbarium, I am quite satisfied, from observation of two  
growing trees, evidently identical with the above, that it is nothing  
but a slight variety of Q. Stiber L., with broader, more entire leaves  
than usual ; such as might be expected in trees, growing like these;  
in cool, shady situations, at a considerable elevation. Both these trees  
are the inmates of gardens : and it is quite certain that Madera pos-  
sesses no indigenous species of Quercus whatever.

Urticace.iE.

18. Parietaria gracilis, nob. Prim, in Trans. Camb. Phil. Soc. iv. I.

p. 16. No. 23.

(Character emendatus).

[Begin Page: Page 533]

Mn LOWE, ON MADERAN BOTANY.

533

P. lucida, pubescens, ramosa: caule ramisque gracilibus erectis •  
folas rhombeo-ovatis, rotandatis, abbreviatis, obtusis. trinerviis, petiolatis;  
petiohs fiiformibus, folia aequantibus: jrlomerulis axillaribus; floribus  
pedicellatis; pedicellis glomeratis, aliquando subcymosis, apice tribracte-  
atis: bracteis (mvolucri foUolh Auct.) unifloris, lanceolato-linearibus, ob-  
tusis, calyce (quadrifido. glabro) brevioribus, glanduloso-pubescentibus;  
post anthesin in^qualibus, uno duobusve dilatatis, foliaceis, calycem  
superantibus, adpressis.

Hab. in Madera rupestribus declivibus umbrosis rariss.

EUPHORBIACE^.

19. Euphorbia refracta, nob.

E. annua, ramosa, pilosiuscula : ramis pubescentibus humifusis  
prostratisve, sufFrutescentibus, geniculatis, flexuosis, refractis, alternis  
apice dichotomis, ad genicula nodosis: foliis oppositis, oblique-oblongis  
subrhomboideis, insquilateralibus, argute serratis, hinc deorsum integer-  
nis, basi illmc auritis, semicordatis, subsexnerviis, brevissime petiola-  
tis, utrinque pilosis: floribus pedicellatis, in dichotomia ramulorum  
sohtariis, ad apices aggregatis ; bracteis bractgolisque foliis eonformibus

angustioribus: glandulis quatuor albidis, exappendiculatis, transverse ova-  
ibus: capsuhs triquetris, l^vibus, glabris: seminibus minutis, nigre-  
scentibus, subtetrahedris, ovalibus, punctato-rugulosis s. corrugatis.

Hab. in Madera? regione inferiore et intermedio a mare usque ad  
1800 ped. rario.

Chenopodeje.

20. SucBcla laxifolia, nob.

S. fruticosa, glabra: ramis patulis, decumbentibus, laxis : foliis  
laxis, patentibus, linearibus, obtusiusculis, subcarnosis; supra depresso-  
planatis: floribus sessilibus, axillaribus, sub-solitariis ; stigmate trifido,  
ante anthesin exerto; calycibus post anthesin clausis.  
«. tenuifolla; foliis tenuibus ; ramis debilibus, elongatis.

ii. crusxlfouUu ; foliis carnosis obtusissimis. glaucescentibus ; ramis validi-  
oribus.

SYS

**[Begin Page: Page 534]**

534 Mr LOWE, ON MADERAN BOTANY.

Hab. in rupibus locisque saxosis maritimis Mad. et Portus S" ; « vul-  
gatiss. ; ab incolis " Barilla " dicta.

Calyx simplex, Sucedte Mert. verse.

21. Sucedo tomentosa, nob.

S. fruticosa, ramis fragilibus, superne foliisque carnosus, subteie-  
tibus, obtusiusculis, fasciculatis, incano-tomentosis.

Hab. in collibus maritimis Promontorii P" Sao Louren<sup>90</sup> dicti Ma-  
derse rariss ; etiam in Portu S". — In insulis Canariensis invenit cl.  
P. B. Webb, arm. In Herbario Banksiano sunt exempla, a cl. Masson  
dim in "Insula Desertas prope Madeirain ' et " Promont. S. Louren<sup>^o</sup>"  
sine floribus fructuue lecta, monente amico J. I. Bennett. Henie  
(Dec. Jan.) floret. Calyx simplex ; nee spinescens, nee membranaceo-  
dilatatus.

Polygon E<sup>^</sup>.

22. Rumex maderensis, nob.

R. paniculis amplis, aphyllis, multifloris : floribus hermaphroditis :  
valvis nudis, intigerrimis, orbiculatis, reticulato-membranaceis : verticillis  
paucifloris : foliis hastatis, acutis, succulentis : caule frutescente.

a. glauca.

ji. virescens.

Hab in rupibus Madera; ubique, vulgatiss.

Suffrutescens, 1 — 2-pedalis. Flores mense Junii rupes maritimas

excelsiores colore pulchre lateritio ornantes. A. R. scutato L. distinctam  
primus admonuit Cl. Lemann.

Plumbagine^.

23. Armeria maderensis, nob.

A. caule suffiuticoso, simpliclusculo, humili, parum ramoso, ramis-  
que brevissimis, subcespitosis : foliis fasciculatis, gramineis, latiusculisj  
lanceolato-linearibus, acuminatis, planiusculis, leevibus, lucidis, glabris,  
quinquenerviis, integerrimis : scapis teretibus, Isevibus, glabris, foliis  
3 — 4-plove longioribus : floribus pedicellatis, fastigiato-capitulatis : capi-  
tulis oblongis, truncatis, pedunculatis, umbellatis, bracteolatis ; umbella

[Begin Page: Page 535]

Mr LOWE, ON MADERAN BOTANY. 535

laxiuscula, bracteata: bracteis lanceolatis; exterioribus acuminatis paten-  
tibus recurvisque ; interioribus pellucido-membranaceo-marginatis : bracte-  
olis magnis oblongo-ovalibus, latis, imbricatis. albo-membranaceis, obtu-  
sissimis, apice eroso-dentatis crenatisve, glabris ; exteriore basi tantum  
pubescente: bracteis bracteolisque floribus brevioribus : pedunculis tere-  
tibus, scapique vagina striata, granulatis, glabris: pedicellis teretibus.  
glabns: calycis laciniis brevissimis, latis, acutis ; costis pilosis: petalis  
retusis, subemarginatis : stylis (5) basi pilosis : ovario glabro.

Hab. in cacuminibus rupibusque prsruptis montiuin excisionun

Madera.

Armerica planifaginate vel potius A. acorzoneraefoli^ Willd. Enuin.  
et Statkei pUmtaginea All. Fl. Pedem. et Lam. et D. C. Fl. Fran9aise  
videtur proxima. Sed in genere tot nubibus ofFuscato, confusioneni  
minus nomine novo quam fal.so ailio-itur

Leaves bright, shining, rather dark green; not at all glaucous.

Scapes from one to two feet high. Flowers rather large, deep rose-  
colour.

Labiatae.^

24. Sideritw candicuns. Ait.

a. tongifoJa. (S. candicans, Auct.)

/3. crassifolia; foliis incrassatis, subcoriaceo-tomentosis, rotundato-ovatis,  
abbreviatis, obtusissimis : labio superiore plerumque integro.

Hab. in rupibus apricis maritimis Maderte et Insularum Desertarum.

25. Pran'mm medium, nob.

P. hirsuto-pubescentia : foliis ovato-oblongis, ovalibusque, acutis, basi  
in petiolum attenuatis, crenato-dentatis : dentibus calycis ovatis, acutis,  
mucronatis: corolla filamentis styloque glabris.

Hab. in Maderte rupibus maritimis.

P. majus L. preserves all its characters in Maderse; and the present plant appears a genuine species, though in some sort intermediate between P. majus and inm.u.s ; having the mucronate calyxes of the former, and hairiness of the latter. In the siiaje of the leaves it seems to differ from both.

**[Begin Page: Page 536]**

336 Mr LOWE, ON MADERAN BOTANY.

26. *Melissa rotundifolia*, Sol. MSS, Herb. Banks ! et Von Buch.

*M. hirsuto-pubescent* : cyniis subsimplicibus, laxis, paucifloris, folia ovato-rotundata, subserrata, superantibus : caule debili, ascendente, erecti-  
iisculo, hirsuto ; basi lignoso, frutescente.

*Thymus Calaminthoides*, Reichb. (in HoU's List) Hook. Bot. Misc.

2d Series I. pp. 19, 38.

Planto 1 — 2-pedalis, perennis, suffruticulosa. Folia parva, subsemi-pollicaria, obsolete et remote serrata sive crenata. Cymi vix decompositi, 2 — 5-flores, floribusque plerumque folia excedentibus ; pedunculis folii fere longitudine. Bractese minimae, lineares Flores conspicui, majusculi, pallide purpurei, rarissime albi, pubescentes. Calycis subcylindrici, corolla fere triplo brevioris, fauce pilis inclusis, baud prominentibus, clauso; dentibus ciliato-hirtis ; tribus superioribus ovatis, acutis ; duobus inferioribus longioribus, linear-i-acuminatis, porrectis, elongatis. Semina ovoidea vel globosa, saepe triquetra, lasvia, obsolete et minutissime punctulata.

Odor totius plantae gravis, acris, subingratus, quodammodo Menthce

Pulegii vj.

Cymi foliis longiores, ut in Thijmo Nepeta L ; subsimplices, pauci-flores, ut in T. Calamintha L, cui certe proxima. Pro mera varietate me diu habentem, summa tandem vincit cl. Solandri auctoritas. Characteres sane plantae, per totam Insulam pervulgatissima, nunquam variantes inveni.

SOLANE^.

27. *Nycterium triphyllum*, nob.

*N. herbaceum*, inerme, viscoso-pubescentis : ramis angulatis petiolisque pedicellisque subtomentosis : foliis utrinque molliter viscoso-pubescentibus, quibusdam simplicibus, plerisque ternato pinnatifidis ; foliolis cordatis vel oblongo-ovatis, repando-dentatis, integriusculis : racemis sparsis, folio multum brevioribus, corynibosis ; pedicellis secundis, nutantibus : bacca calyce dilatato-foliaceo tecto.

Hab. in Madera rariss: In parte Septentrionali prope S. Vicente securus vias invenit Car. Lemann M. D. : in orientali prope Portella serius detexit Lippold. Ex insulis Canariensis, in Herbario Lemanniano, siccum quoque vidi.

Flores colore et magnitudine .S\*. tuberosi L. Aiithera rinia loiitudinali  
dehiscentia; 2 — 3-imis longe productis, cornutis. Bacca cerasi magni-  
tudine, aurantiaca, globosa.

CoNVOLVUI.ACEvE.

li8. Convolvidux solanij'oliu.s. Prim, in Trans. Cam. Phil. Soc. supra iv. I.  
p. 22. No. .^5.

In the first place, the discovery of the flowers of this rarest of Maderan  
plants, authorizes the removal of the mark of doubt before affixed to  
the generic name. They are white, and truly those of a Convolvulus.  
Hence therefore, no change of the specific name would be necessary  
on account of Ipomeea solanifolia L. But, though unfortunately I am  
unable to decide the matter by reference to the Botanical Register, t. 133,  
I have very little doubt the plant will prove identical with Coiwolvulus  
Massoni Dietrich (C. siiff'ruticosus Ait., non Desf.)

Jasminace.^.

29. Olea Europeea, L. var.

Maderensis: foliis linear-oblongis, angustis, mucronatis, integerrimis,  
utrinque subconcoloribus s. inferne nudiusculis: drupis subglobosis,  
purpurascensibus, demum nigris.

Hab. in rupibus apricis Maderse, prffisertim maritimis.

Specimen in Herbario Banksiano, a cl. Masson olim lectum, sub  
nomine O. Europæ (B a cl. R. Brown in " Von Buch's Catalogue,"  
O. glabella Herb. Banks. (O. exasperatæ Jacq. Hort. Schoenbr. iii. t. 1.)  
" valde simile " dicitur. Panicula vero terminali, ramisque tuberculatis  
hanc satis differe videtur.

Drupes about the size and shape of a small marble, half an inch in  
diameter, of a deep shining black, by no means constantly " crowned  
with the persistent style." Skin and flesh very thin and dry, rather  
bitter to the taste. Stone very large.

In drying, the plant gives out abundantly a whitish, powdery, gran-  
ulated, sweetish substance (Manna?); resembling fine powder-sugar.

[Begin Page: Page 538]

538 Mr LOWE, ON MADERAN BOTANY.

Campanulaceæ.

30. Prismafocarpus schaefer, nob.

P. scabro-pubescent : caule erecto, stricto, siniplici, vel imo basi  
rarius ramoso ; foliis radicalibus petiolatis, obovato-spatulatis oblongisve ;  
.superioribus sessilibus, lanceolatis; omnibus margine undulato-crenatis ;  
•summis integriusculis : floribus sessilibus, solitariis, per totum caulem  
axillaribus ; sepalis linearibus, patentibus, corollam subsequentibus.

Hab. in Maderte declivibus saxosis, rupestribus Primus detexit  
amicus et plantarum indagator oculatissimus ac indefessus Car. Lemann,  
M.D.

Herba annua, subpedalis. Corolla, praesertim terminalis niajuscula,  
subconspicua, violaceo-CEerulea.

Composite.

31. *Senecio incrassatus*, nob.

*S. herbacea*, erecta, glaberrima, nitida: foliis auriculato-amplexicauli-  
bus, carnosis, profunde sinuato-pinnatifidis; lobis integriusculis, Eequalibus,  
remotis, obtusissimis : caule ramisque acutissinie angulatis : floribus arete  
corymbosis ; pedicellis abbreviatis, sursum valde incrassatis, multibracteatis ;  
bracteis adpressis, basi tumidis carnosis, apice marcidis, nigris ; radio pa-  
tente 7 — 8-ligulato : seminibus pubescentibus.

*S. crassifolius* W. var. D. C. in litt. 1834.

Hab. in coUibus apricis aridis maritimis Maderae rario.

Herba annua, subspithamea, ramosa, corymbo ampio, conspicuo,  
multifloro : sed magnitudine pro situ, aqua copia, &c. valde varians ;  
sc. caule saspe 2 — 3-pollicari tantum, simplici, uni-pauci-floro. Flores  
aurei, conspicui, sat magni, diametro semipollicari, radio marcescenti  
niodo revoluto.

32. *Helichrysum ? obconicum*, D. C.

In the Botanical Miscellany, 2d Series, Vol. i. p. 35, I have very erroneously spoken of the common Maderan plant called by Holl and Reichenbach *Antennaria leucojihylla*, and abounding on the rocky sea-cliffs and

**[Begin Page: Page 539]**

Mr LOWE, ON MADERAN BOTANY. .539

islets of these shores, as if it were *Gnajhalium crassifolium* J. Neither must it be confounded, I am advised by the Chevalier De Candolle, with the European Majorca plant, *Gn. crassiifolium* Lam.: nor yet with a third species similarly named, *Gn. crassifolium* Willd. Its real affinity, the Professor writes, is with a fourth plant, which has also been confounded with *G. crassifolium* L., viz. *Gn. ovatum* Desf. ; and with this, he is disposed to unite it into a genus, or at least a group, co-ordinate with the other Gnaphalian sections, or subgenera. That it is no true Antennaria either in characters or habit is most certain. Speaking strictly, it is perhaps intermediate between *Helichrysum* and *Gnaphalium*. - though I could be well content to refer it simply to the former genus.

S3. *Chrysanthemum dissectum*, nob.

*C. fruticosum, glaberrimum* : *foliis profunde pinnatifidis* ; *pinnis renotis, parallelis, aequalibus, linearibus, rectis, argute inciso-dentatis* ; *lacinias omnibus acutis* : *floribus subsolitariis, vix corymbosis s. corymbo*

irregulari, paucifloro.

C. grandiflorum (W.) Spr. Syst iii. 584. No. 6?

Hab. in rupe quadam excelsa maritima Maderse, Cabo Giram dicta.

Species hal)itu seminibusque C. pinnatifidit \a. in Madera ubique obvii,  
sed distinctissima, floribusque minoribus.

34. *Calendula maderensis*, nob.

C. biennis subperennansve, basi sufFrutescens. ramosa, viscosa: foliis  
semiamplexicaulibus, obovato-oblongis, repando-dentatis ; junioribus ra-  
niulisque tomentosis : seminibus arete inflexis, muricatis ; exterioribus  
cymboideis, late triquetro-alatis ; alis duabus dorsalibus expansis, inciso-  
dentatis.

C. maritima, nob. Bot. Misc. New Series, I. p. 36 ; baud Gussone.

C. amplexifolia, Reichb. in Holl's List?

Hab. in littore, rupibusque maritimis oreo preesertim septentrionalis  
Maderte.

Flores majusculi, crocei, ligulis paucioribus, longioribus quam in

C. officinali l.i. aut arvensi l^.

Nomen mutavi ob C maritimnm, Gus.sone.

Vol.. VI. Part III. 3 Z

[Begin Page: Page 540]

S40 Mr LOWE, ON MADERAN BOTANY.

S5. *Andryala robusta*, nob.

A. foliis crassissiine molliterque incano-tomentosis, subinteyerriniis ;  
caulinis abbreviatis, lanceolato-ovatis : caule robusto, stricto, paniculseque  
laniis pedicellisque abbreviatis, anthodiisque magnis, heniispheericis vel  
globoso-capitatis, densissime fulvo-glandulosis, villosis.

A. varia /-J. nob. MSS. olim.

Hab. in rupibus maritimis, præsertim orae septentrionalis Madere et  
Insularum IJesertaruin : necnon in cacuminibus montiuni Insula; Por-  
tus S".

De Andryalis Maderensibus, ad unam speciem (A. variam nob.) olin  
redactis, diu vacillantem, formas tres insigniores {A. varies a, f, y. nob.  
olim) pro totidem speciebus melius habendas, observationes protractiores  
tandem suaserunt. Harum forma typica est A. variu nob {A. varia, a.  
nob. olim); cuius dute adsunt varietates, a) J'oliis integrisctiUs ; planta  
ubique obvia, vulgatissima, montana: et ji) J'oliis phis miwus sitmato-  
pinnatijidis ; indigena, montana, rarior; culta in Europffii hortis sub-  
frequentior [A. cheiranthifolia Herit.) : hae ad A. cHtimifoliam Ait.  
{A. variam 7. nob. olim), ilia ad A. robiistam nob. {A. variam fi. nob.  
olim), utraque maritima, secedente.

36. *Carduus? squarromis*, D. C. in litf.

C. foliis decurrentibiis, obovato-oblongis, indivisis, grosse serratis,  
spinellosis, subtus albo-tomentosis ; floribus aggregato-gloemeratis ; anthodii  
squamis inermibus, scariosis, squarrosis, apice reflexis : pappo clavulato.

Hab. rariss. in Convallibus interioribus Maderse.

Planta elatior, conspicua, floribus albis ; a *C. clavulata* Link,  
planta Canariensi affinitate proxima, foliis indivisis, nee semipinnatifidis.  
squamisque anthodii squarroso-reflexis nee erectis, monente cl. De Can-  
dolle, distincta.

Plantas e seminibus a me ipso olim a Madera a. d. 1829, ad  
amicum Rev. M J. Berkeley Angliam missis, in horto Barclayano  
ortas, cl. et am. Alph. De Candolle fil, vidit: ex quibus desiccatis,  
species characteribus plants indigence prorsus congruentibus a patre  
illustri in litteris stabilita est.

*C. clavulatus* Link varus in Maderas nullibi obvenit.

[Begin Page: Page 541]

Mr LOWE, ON MADERAN BOTANY. 541

ii7. *Cynara horrida*. Ait.

C caule brevi, siniplaci, unifloro, incano, foliato : foliis pinnatifidis,

ferocissime spinosis, siibtus incanis : caulinis hand decurrentibus ; pinnis  
distinctis, subremotis, aiugustis, longe acuminatis s. apice caudatis, inciso-  
laceris, spinis baseos pinnarum laciniarumque bi-pluri-aggregatis, basi  
connatis: anthodii squamis erectis, angusto-lauceolatis vel ensiformiibus,  
acuminato-spinosis, rectis.

C. horrida, (Ait:) Spr. Syst. iii. 369. No. 3.

Hab. in collibus apricis graminosis Portus S" sat frequens, a. d.  
1828: in Madera? Promontorio Ponta S. Lourencj-o dicto solo rariss. nu-  
perrime (a. d. 1837) invenit Lippold.

Radix inagnus, crassus, perennis, cum capitulis apud accolas Portus  
S" edulis. Caulis subpedalis, strictus, firnius, erectus, rotundu.s. Capi-  
tulum sat magnum, sphaeroideum, diametro fere bipollicari. Flosculi  
" cserulei" {Lippold); desiccati in ipso exemplo Lippoldiano purpurei ;  
a me nunquam rite expansi visi, sed albi ab incolis Portus S" dicti.

Folia elegantissima ; sed spinis rigidis, tenuissimis, acutissimis, nu-  
merosissimis pallide flavescentibus fulvisve horridissima tectis : radicalibus  
rosaceo-confertis, subpedalibus.

RuBIACE.iE.

38. Galium prodtictum, nob. Prim. p. 29. No. 50.

An a G. cinereo AIL, Sm., D. C. satis distincta? Confer etiam  
G. erectum Huds., Sm., D. C.

39- *Galium geminijlorum*, nob-

*G. pumilum* : caulis tetragonis, gracilibus, levibus, simpliciusculis. difuso-erectis, dichotomis, subinermibus vel sparsim aculeolatis, aculeis subdeflexis : foliis 4 — 6-verticillatis, ovato-lanceolatis, cuspidatis, superne niagineque aculeatis, aculeis antrorsum speetantibus : pedunculis geminatis, axillaribus, similiibus, rarissime bifidis, unifloris, abbreviatis, s. folia vix superantibus : fructibus densissime uncinato-setosis hispidis.

Hab. in summis cacuminibus Insula; Portus S" tantum.

Planta rarissima, parva, inconspicua, tenera, mox evanescens ; *G. setaceo* Lam., Desf., D. C. {*G. capillari* Cav.) affinis.

3z 2

**[Begin Page: Page 542]**

542 Mb LOWE, ON MADERAN BOTANY.

Umbellifer^.

40. *Daucus neglectus*, nob.

*D. caule* superne aspero : foliis bi-tri-pinnatisectis, hirsutiusculis : foliolis (segmentis) omnibus ovatis, incisis ; laciniis (segmentis ultimis) lanceolatis, acutis, cyispidatis : bracteis bipinnatifidis, urnbellula brevioribus ; bracteolis pinnatifidis, umbellulas tequantibus: umbellifera ampli radiis.

valde inseqalibus ; umbellularum floribus externis radiantibus: fructns  
ovalis aculeis ejus latitudinem aequantibus, ad basin distinctis, apice  
glochidiatis. —

a. asperocaulon : hispidus ; caule toto aspero, inferne pricsertim retrorsum

strigoso : foliis hirsutis.

1,-i. leiocaulon : glabriusculus ; caule fere nudo.

Hab. in saxosis apricis rupestribus regionis inferioris Madera.

Obs. Dauco hispido Desf. Fl. Atl. 1. 243. t. 63, prajsertim folioruni  
liabitu affinis. Laciiniis vero foliorum acutis, imo cuspidatis, nee " obtusis ;"  
bracteis (involucri foliolis) bipinnatifidis, uinbella? ainpte radiis exter-  
oribus longe productis, floribusque albidis, anisopetalis s. exterioruui  
petalis extimis magnis, dilatatis, nee omnibus '• minutis, sub-«qualibus,  
pallide flavis," mericarpiisque duplo majoribus, ovalibus, planiusculis nee  
" semiteretibus," satis differre videtur. Foliolis fsegmentis) foliorum  
omnium conformibus a D. maximo Uesf. distincta.

Planta annua; caule 1 — 2-pedali, erecto, parum ramoso. Flos urn-  
bella; centralis magnus, carnosus, atropurpureus, abortivus. Tjmbellas  
multiradiatae ; radiis defloratis incurvis.

41. Melanoselinum decipiens, (HofFm.) U. C.

Hab. in convallibus umbrosis orae septentrionalis xMaderae, ad alti-  
tudinem 2 — 3000 pedum.

The native country of this fine umbelliferous plant was unknown,  
till I discovered it, in the Autumn of the year 1829, growing plentifully  
high up the main, or central branch, of the Ribeira de Sao Jorge;  
both among the rocks and stones, forming the bed of the ravine, and  
up the steep shady banks on each side. It has since occurred in  
others of the shady ravines of the North.

**[Begin Page: Page 543]**

Mr LOWE, ON MADERAN BOTANY. 543

42. *Bupleurum salicifolium*, Sol. MSS.

B. fruticosum, erectum, ramosum ; ramis lfevigatis, elongatis, gra-  
cilibus, inferne luidis: foliis angustis, linear-lanceolatis, acuminatis, utrin-  
que attenuatis, planis, coriaceis, pallide glaucis, obliqui.s, sessilibiis, inte-  
gerrimis, inultinerviis : umbellis -5 — . 0-radiatis ; bracteis 4 — 5, reflexis, bre-  
vibus, lanceolatis ; biacteoli-s 4 — 5 confonnibus, iinbellula luulto brevi-  
oribus.

B. *salicifolium*, Sol. IMSS. et Herb. Banks, (auct. J. I. Bennett.)

Hab. in rupibus convallium Madera.

A B. gibmltarico foliis multi- (nee uni-)nerviis prima fronte  
differt. B. *plantagineum* Desf., cui vero species nostra propior, foliis pro  
longitudine multo latioribus, obtusiusculis cum mucrone (nee acuminatis),  
concavis (nee planis), bracteisque adpressis i nee, ut in nostra a;que ac

in B. gihraltarico, reflexis) a B. salicij'olio nob. satis superque distinctum  
videtur.

Frutex elegantior; ramis in rupibus declivibus saepe pendentibus.

43. Buniuni brevifollum, nob.

B. (Conopndium D. C.) glabrum : radice subgloboso: caule simplici,  
striate, tereti, glauco : foliis petiolatis, rigidis, deltoideis, abbreviatis, om-  
nibus 2 — S-pinnatisectis ; laciniis planis, tenuibus, remotis, pectinatis,  
oppositis ; ultimis brevissimis, linear-lanceolatis, acutis, integerrimis ;  
vaginis amplis, elongatis, striatis, cum petiolo erecto-patentibus : bracteis  
bracteolisque nuUis : stylopodiis tumidis, planatis ; stvlis rectis, invicem  
adpressis, demum subdivergentibus.

Hab. in regionibus excelsioribus graminosis montium Maderse ; jam  
rarissima, ob puerorum et porcorum prsedationes.

A pube Maderensi monticolo sc in monte " Pico Grande" dicto  
degente, cui tubera escam gratissimam prsebent, " Norsa" dicitur. Planta  
vero longe aliena, se. Tammis Norsa nob., ab incolis Portus Caurum  
versus T Porto Moniz etiam " Norsa" dicitur.

Paronychie^.

44. Ilern/aria Jlavescens, nob.

H. annua, herbacea, liirsuta, huniifusa, flavescentia : ramis ramulis'-  
que disticliis, horizontalibus, cespitosis : foliis oblongo-lanceolatis. ciliatis :

glomerulis frequentissimis, axillaribus, multifloris.

[Begin Page: Page 544]

544 Mh LOWE, ON MADERAN BOTANY.

Hab. in collibus maritimis Maderse rariss : Portus S" frequentior.

Radix tenuis, subtenax, tortuosa, parum ramosa, annua. Caules  
humifusi, ramis ramulisque flabelliformibus s. concinne et creberrime  
distichis, horizontalibus, undique terre arctis.sime per totam longitu-  
dinem adpressis ; cespitem diametro 3 — 6-pollicari densam. pallide viridi-  
flavescenter, hirsutam formantibus.

Rosacea.

45. Poteriubi niegacarpon, nob.

P. herbaceum : caulis angulosus, deorsum hirsutus : rhachi foliorum  
foliolisque subtus birtiu.sculis : foliolis inciso-dentatis ; inferioribus sub-  
rotundis ; superioribus ovalibus oblongisve : capituloruni solitarioruni flo-  
ribus omnibus hermaphroditis ; inferioribus subabortientibus : filamentis  
abbreviatis : fructibus maximis, rugosis.

Hab. in collibus apricis graminosis saxosisque prsesertim maritimis  
regionis inferioris Maderse.

Habitus P. Sanguisorba L. : sed humilior, subpedalis, totaque in-

sipida, inodora. Capitula longe pedunculata. Filamenta brevia, albida,  
s. pallide flavescentia, nee purpurascentia. Stigmata brevia, parva, laete  
eoccinea. Sepala plerumque 4, lata, ovalia, magna, glabra, persistentia.  
Fructus quam in P. Sauguisorba L. duplo triplove major ; pericarpio  
fimugo, laminoso-serobiculato.

# LeGUMINOSjE.

46. *Vicia conspicua*, nob.

V. tenuis, gracilis ; caulis foliisque cirrosis tenellis. glabriusculis :  
foliolis subdenis (8 — 12), angustis, oblongis, mucronatis; foliorum infe-  
riorum spatulatis vel obcordatis ; summorum linearibus : stipulis incon-  
spicuis, angustis, semisagittatis, paudentatis ; laciniis acuminatis, subtus  
ustulato-notatis : floribus subsessilibus, conspicuis, calyce 3 — 4-plo lon-  
gioribus ; inferioribus solitariis, summis 3 — 4-nis, plerisque (intermediis)  
binis : laciniis calycinis duobus superioribus longioribus, angusto-acumi-  
natis tubo subaequalibus : leguminibus subcylindricis, vix compressis,  
rectis, angustis, puberulis, 9 — 12-spermis: seminibus parvis, sub-globosis,  
vix compressiusculis, fuscis, atro marmoratis, glabris.

[Begin Page: Page 545]

MI. LOWE, ON MADERAX BOTANY. 545

Madefj. A' "A"\*\*\* "A&'" - " " " " "A'A'A' g--"i" «aque montana

Constantly distinct, and easily distinguished by its large and

handson^e flowers, delicate sn^ooth foliage, fine narrow leaflel. and

much coarser habit in Madera. Neither is it to be confounded with  
f. ang^sHJolia "Roth, and WiUd." (*V. sativa* (i. Sm. in E. Fl.) • nor  
aga,n ..th *V. Bohartii* Forst. (K angustifoUa Sm. in E. Fl. n on Roth,  
et U.lld.) It differs from the former in the much r.arrower leaflets  
of the upper and inversely heart-shaped ones of the lower leaves-  
but more strikingly, in the much larger and conspicuous bright rich  
purple (approaching to crimson) flowers. In both these points it comes  
much nearer *V. Bobartu*: but still the flowers are larger; and those  
only winch open first, at the beginning of the season, are solitary :  
later they are two or three, and even sometimes quite the upper.nost  
are four together: the leaflets are more numerous and smoother; and  
the whole plant is larger, with the stems from one or two to three feet  
long.

#### 47. *Vicin capreolata*, nob.

. ^/"bpubescens, ramis gracilis. elongatis, filiformibus: foliis cir-  
rosis; fohhs 5-11; linear-i-olongis, ranotis: stipulis parvis, linear-i-  
oblongis, angustis, semi-sagittatis, simplicibusve, acuminatis vel apice  
bifidis, coloratis, marcescentibus : pedunculis submultifloris ; floriferis folio  
a.quant,bus; fructiferis duplo longioribus : calyce puberulo f; dentibus  
duobus superioribus inter se arcuato-incurvis ; tribus inferioribus longi-  
onbus, acumiatiis: floribus secundis, subdenis: leguminibus oblonjs,  
subfalcatis, glaberimis, obsolete reticulatis, 4-5-spermis: seminibus 3-4  
subtetrahedns, oblongis, subcompressis, glabris, nigrescentibus ; funiculo'

magno hiloque longo.

Hab in rupibus umbrosis convallium Mader\*. Florentem primus  
detexit. cl. Car. Lemann, M. D.

Flores eorum V. Cracca^ L. fere magnitudine, ochroleuci Videtu,  
r. ochroleuca Ten. affinis. An V. parviflora Cav., Brouss ?

48. Bisenu/a Pelecinus E.

a. /mbescem — B. Pelecinus L. D. C. Prodr. ii. 307.

**[Begin Page: Page 546]**

.546 Mr LOWK, on MADERAN BOTANY.

(i. glabra, nob.

Hab. ambee varietates in apricis maritimis incultis Madera et Por-  
tus S", una nascentes : sed /3. nostra, quamvis prima fronte valde distincta,  
nullo modo nisi glabritie differt ; an vero species ?

49. Lotus pisij'olius, nob.

L., herbaceus, glaucus, glaber : caule flexuoso rainisque divaricatis,  
crassis, fistulosis, firmis, erectis vel subdeclinatis : foliolis obovatis stipu-  
lisque subcordatis maximis : capitulis multifloris, longe pedunculatis :  
ealyzibus campanulatis ; laciniis ciliato-pilosis, sEStivatione stellatis: legu-  
ininibus seminibus

Hab. in humidis graminosis Montis excels! Pico Grande dicti :  
semel tantum lecta.

An varietas luxurians monstrosa L. majoris Srn. e solo pinguiore  
orta? Sed habitu, colore, magnitudine toto coelo difFert. Foliola stipi-  
lasque 1 — 2-pollicarife ; juniora ad margines pilis raris sparsa. Pedunculi  
4 — 6-pollicares. Capituli 12 — 15-flores, basi folio ternato bracteati. Ala-  
bastra floresque iit in L. majore Sm. Tota planta eximie glauca  
2 — 3-pedalis, ramis flabellatim expansis, suberecta.

50. *Lotus macrantlms*, nob.

L. subcinereo-glaucescens, sericeo-pubescent : radice annua aut bi-  
enni ; caule basi lignoso, frutescente : ramis diffuso-prostratis, patulisve :  
stipulis subsessilibus, transverse ovalibus; foliolisque rotundato-obovatis  
minimis : floribus solitariis, versicoloribus, breviter pedicellatis : legumi-  
nibus lomentaceis, cylindricis, longissimis, rectis, glaberrimis, polyspermis:  
seminibus 30 — 40 minutis, orbicularibus, compressis, lsevibus, glabris,  
fuscis.

Hab. in apricis maritimis Maderae et Portias S" rario.

Habitus L. glauci Ait; sed minus incana. Pubescentia totius  
plantas brevissima, inconspicua, arctissime adpressa. Flores maximi,  
pollicares, cernui, pallide citrino-virescentes, mox fusco-purpurei ; carinae  
apice semper atro-purpureo. Legumina rectissima, subbipollucaria. Spe-  
cies notabilior, distinctissima.

51. *Lotus divaricatus*, Sol. MSS.

[Begin Page: Page 547]

Mr. LOWE, ON MADERAN BOTANY. 547

L. annuus, pilosus, subcespitosus : caulibus prostratis, intricatis,  
numerosis, elongatis, flexviosis, ramosis, pallidis: foliolis obovato-cuneatis  
stipulisque ovatis subcordatis acutis : capitulis trifloris: leguminibus tur-  
gidis, crassis, brevibus.

L. divaricatus, Sol. ]ISS. et Herb. Banks.

Hab. incultis graminosisque montanis Madera sat frequens.

A. Loto (lijfuso, Sol., in Madera seque vulgari, capitulis normaliter  
tri- nee bi-floris, floribus aurantiacis, nee citrinis neque flavis, legumi-  
nibusque multo brevioribus, pinguibus, crassis, statim dignoscitur.

52. Medicago pulchella, nob.

M. svibsericeo-pubescent, cinerascens : caulibus patulis prostratisve  
gracilibus: foliolis obcordatis vel obovatis, basi cuneatis, integris, sursum  
subdentatis, apiceque argute tridentato : stipulis integriusculis, ovato-  
lanceolatis, inferioribus acuminatis : pedunculis sub-bifloris, abbreviatis :  
leguminibus cochleatis, villosulis, parvis, inermibus, globosis; cyclis 3 — 4,  
angustissimis ; margine simplici, angusto, linearis, utrinque costis promi-  
nentibus, oblique deflexo-arcuatis, grosse dentato : seminibus compressis,  
reniformibus, flavis.

Hab. in collibus apricis saxosisque maritiniis Madere et Portus

S" rario.

53. *Ononis micrantha*, nob.

O. herbacea, annua, prostrata procumbensve foliosa, glanduloso-pubescent: foliis (preeter summa) trifoliolatis ; foliolis ovalibus, argute serratis: stipulis amplis, foliaceis, oblongo-ovatis, mucronatis, subserrulatis integrisve: floribus (purpureis) inconspicuis, sparsis, axillaribus, subses-silibus, solitariis, folio brevioribus : calycibus amplis, foliaceis, post anthesin dilatatis; laciniis acquis, acuminatis, integris, corollani subaquantibus, unicostatis : legumine erecto, turgido, ovali, brevi sc. laciniis calycinis breviore, dispermo: seminibus rufo nigroque marmoratis, compresso-ro-tundatis, minutissime granulato-scabris s. verruculatis.

" O. arthropodia Br. Fl. Lus. 2. 94," Herb. Banks, quoad exemplar unicum

Gibraltaricum, a cl. Broussonet lectum aut communicatuni ! — hand

Broteri in Fl. Lus. 1. c.

An. O. parviflora, Brot. Fl. Lus. 2. p. 96?

Vol. VI. Paiit III. 4 A

Hab. in collibus apricis maritimis Maderae et Portus S".

Ab. O. villosissima Desf. Fl. Att. 2. p. 147. T. 192. vix nisi floribus  
sessilibus, sparsis, nee confertis, nee racemosis, stipulis calycibusqne magnis,  
hirsutieque parciore differt.

54. Ononis dentata Sol. (Prim. p. 34. No. 59. t. 4.)

a. tridentata: laciiniis calyeinis 4 superioribus apiee plerumque triden-  
tatis.

O. dentata Sol. MSS. nob. 1. c.

Hab. in Portu S° et Insulis Desertis.

/3. simplex: laciiniis calyeinis simplicibus, eonformibus, acuminatis.

Hab. in Promontorio Madera; Ponta Sao Lourenfo dicto, Dr C. Le-  
mann ; et in Insulis Desertis cum « mixta, Dr Lippold.

Quoad cetera, plants omnino convenient : quoad imo calycis lacinias,  
status intermedii, sc. lacinia uni-bi-dentata facile adsunt.

Hypericine^.

55. Hypericum uubigenum, nob. in Bot. Misc. 2d Series, I. p. 43.

H. glabrum : caulis simplicibus, erectis, strictis, ancipitibus, basi

suffrutescentibus : foliis epunctatis, erectis, lineari-oblongis, obtusissimis  
vel retusis, amplexicaulibus, margine revolutis: panicula terminali, co-  
rymbosa: sepalis ovatis, aequalibus, dentato-glandulosis petalisque nigro-  
punctatis: floribus trigynis; antheris epunctatis s. eglandulosis.

H. angustifolium, Primit. p. 35. No. 61 ; baud Lam.

Hab. in Madera; editioribus.

H. angustifolium Lam. jam adest: ideoque nomen mutetur.

Malvace^.

56. Sid<B ^naderensis, nob Prim. p. 35. No. 62.

Sides canariensis W. mera varietas statusve videtur : qualis Sidts car-  
pinifoliffi L. est verosimiliter Sida carpioides, D. C.

CaRYOPHYLLEuE.

57. Celastium vagans, nob.

C. viscoso-pubescent, perennis; caulis diffusis, deorsum suffrutes-  
centibus, apice ascendentibus, paniculisque pedicellisque calycibusque

dense fulvo-glandulosis : foliis angustis, sublanceolatis, acuminatis : petalis bifidis, sepalis subduplo longioribus, conspicuis : capsulis ovatis, calyce sublongioribus.

a. fulva ; dense fulvo-tomentosa.

/3. subiuida ; glabriuscula ; foliis inferioribus glabris.

Hab. rario sparsimque in rupibus siceis excelsioribus Maderte.

Habitus quodammodo Stellaria;. Pedicelli semper erecti. Capsulse fructiferEe calyce tect«, abbreviatte, obovatEe vel ovales.

58. Arenaria setpylUfolia \j.

y. depaupentta ; viscida, glanduloso-pubescentia.

Hab. in Portu Sancto : etiam in cacuminibus summis Maderae.

59- Sileii Jiliformis, nob.

S. annua, pubescens : caule erecto : ramis divaricatis, filiformibus, gracilibus, strictis ; internodiis sape viscidis : foliis angusto-lanceolatis, acutis ; infimis obtusiusculis ; summis raris linearibus : floribus solitariis, inconspicuis pedunculatis ; pedunculis glabriusculis ; calycibus oblongis; petalis linearibus, capsulisque cylindricis, sepala subaequantibus : an-thophoro capsulee dimidium vix asquante.

S. inaperta, Hort, Reid. quoad saltern stirpem Maderensem : baud

Linn .

Hab. in sterilibus apricis, alveisque siceis convallium Maderie.

Flores inaperti : petala viridi-fusca. S. inapertce L. proxima ; sat vero  
distincta.

60. Silene ig?iobilis, nob.

S. annua, glabriuscula, dichotome ramosa, erecta: foliis inferioribus  
subciliolati.s, spathulatis, superioribus lanceolatis : floribus solitariis, in-  
conspicuis, pediunculatis ; calycibus oblongis, baud inflatis, mox ventri-  
cosiusculis basique coarctatis, reticulatis ; petalis inconspicuis, calycem  
vix superantibus : capsulis ventricosis, doliformibus, calycem tequantibus;  
antliophoro brevissimo.

Hab. inter segetes Maderee rariss.

Viridis, vix glaucescens. Variat plus minus velutino-pubescentia ;  
plerumque fere glabra. Petala apice purpurascentia.

4a 2

61. *Silene inflata*, Sm., D. C, &c.

Var. *intricata* nob. ; vix glaucescens ; caulis ramosissimis, dense intricatis, elongatis, pendulis, basi suffrutescentibus.

Hab. in ripibus excelsis declivibus Convallium Madere.

Frankeniace^.

62. *Frankenia cespitosa*, nob.

F. caulis fruticulosus, ramosissimus, densissime cespitosus, humilis, humifusus, calycibusque basi velutino-pubescentibus : foliis sessilibus, basi connatis, linearibus, glabris, margine revolutis, basi breviter et parce ciliolatis : floribus in capitulos terminales congestis, subcymosis, foliis multo longioribus.

Hab. in collibus maritimis sterilibus aridisque Promontorii Ponta

S. Louren^o Maderse; etium Portus S".

F. ericifolia C. Sm., necnon F. corymbosce Desf. nimis forsitan africana.

VIOLARIE.(E.

63. *Viola paradoxa*, nob.

V. suffruticosa, e basi ramosa; ramis subproductis, elongatis, simpliciusculi? ; inferne nudis, stipulisque simplicibus linearibus integris

minutis ssepe obsoletis, petiolisque elongatis marginatis ternato-fasciculatis, foliisque rotundato-spathulatis crenatis basi abruptis cordatisve, glaberrimis : foliis summis cuneato-elongatis, in petiolum attenuatis, apice subtridentatis, petiolisque caulibusque subpuberulis : sepalis oblongis integris, bracteisque pedicelloque pubescentibus : calcare obtuso, calyce

longiore; nectario capsula obsolete hexagona, glabra; seminibus

pallide flavescentibus, paucis (15 — 20), ovatis.

Hab. rariss. in summis cacuminibus montium excelsiorum Maderte,  
in fissuris rupium. Invenit cl. Car Lemann, M. D.

Obs. Cum V. calcarata L. conferenda. Flos aureo-flavus. Stylus  
ab apice ad basin attenuatus. Stigma urceolatum, utrinque fascieulato-pilosum, ore magno, expanso dilatato, inferne in labellum producto.

Folia ad apices ramorum sterilium conferta. Pedunculi solitarii, axillares,  
subpollicares. Capsule abbreviata;, obtusse. Semina, prsester colorem, fere  
ut in V. tricolore L.

**[Begin Page: Page 551]**

Mr LOWE, ON MADERAN BOTANY. 551

Crucifer^.

64. Sinapidendro7i mhcfolium, Prim. p. 37. No. 65.

Si/i. Sinapis angustifolia, D. C. Prodr. i. 220.

Hab. in rupe quadam excelsa maritima, "Cabo Giram" dicta, prope  
vicum Camera de lobos Madera, nuperime ab amico Rev° I&I Tucker  
botanophilo vel oculatissimo, detecta. Species genuina videtur.  
Qo. Matthiola maderemis, nob.

M. biennis: caule herbaceo, erecto, elato, ramoso : foliis oblongis  
uitegerrnis, incano-tomentosis ; radicalibus densissime rosaceo-conferdis  
si quis compressis, glanduloso-muricatis.

Hab. in rupibus maritimis Maderse et Portus S". ubique vulg  
Flores pallide violacei, vespere pr^sertim odori, rarissime albi  
species intermedia, habitu foliisque 31. incana^ R. Br.; siliquas, 3-5 poll  
longis, M. sinuataE, ejusd.

Madera, October 1837.

#### SUPPLEIMENTUM.

CHAEACE.iE.

QQ. Cham atrovirens, nob.

C. atroviridis, pellucida, lucida, gracilis, fctens: caule ramisque  
tenacibus, tenuibus, flexilibus, hinc inde articulatis superne sparsim mi  
nutissime retrosum papilloso-spinellosis, contorto-striatis : ramulis verti  
cillatis, 5-6-articulatis; articulis inferioribus striatis; summis simplicibus  
bracteisque 2-4 inarticulatis, cylindrico-setaceis, nucula triplo quadruplove  
longioribus, lajvibus, baud striatis, glabris.

Hab. in rivulis aquarum fluentium Madera rariss.

C vulgari Ag. proxima. Differt colore, scabritieque ramorum, radicellos nascentes deflexos, sparsos iemulante.

Madaba, May 18,%.