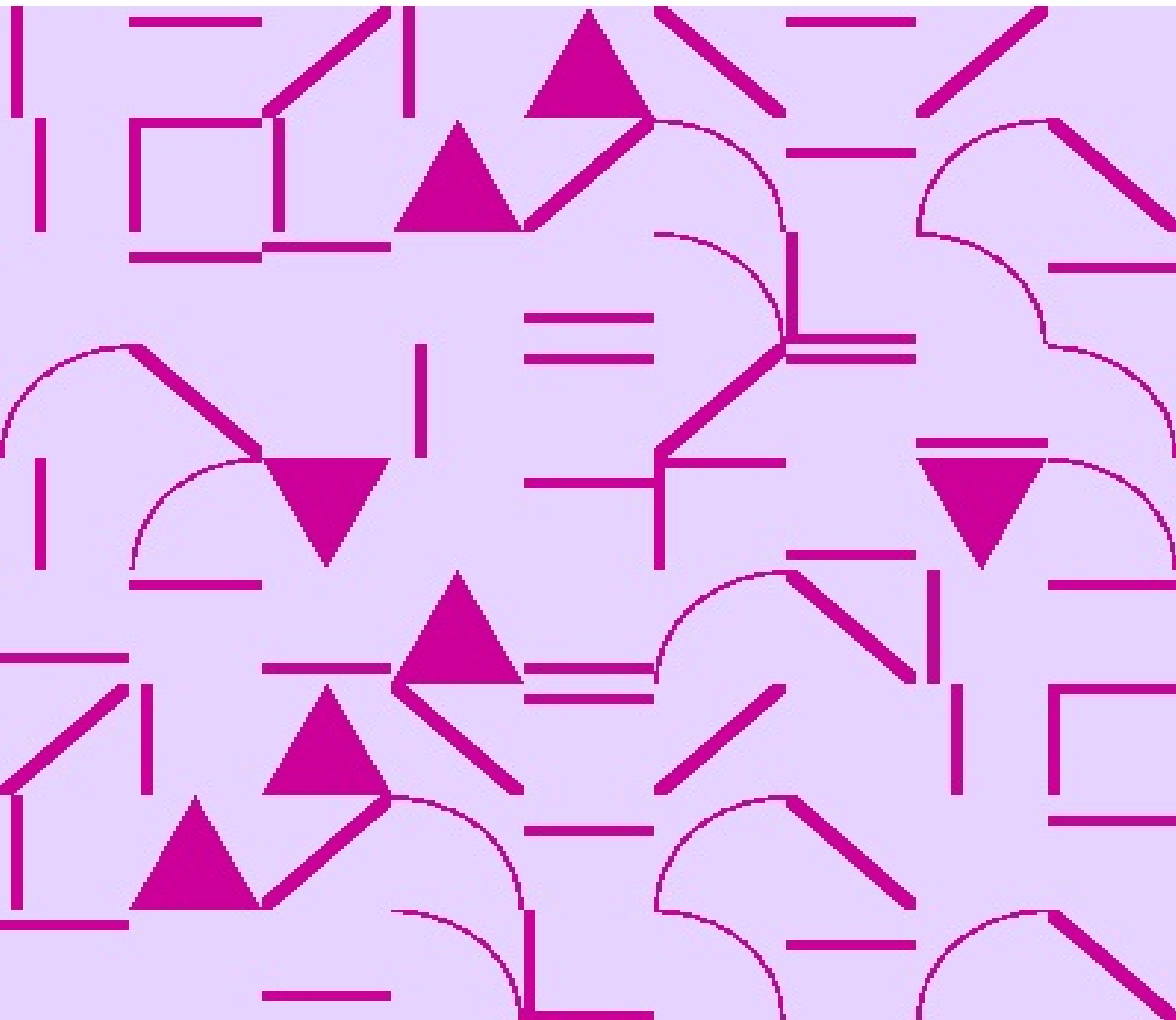


Tentamen Botanicum de Filicum Generibus Dorsiferarum

Mémoires de l'Académie Royale des Sciences de Turin vol. 5,
401-422

James Edward Smith



Rights for this book: [Public domain in the USA](#).

This edition is published by Project Gutenberg.

Originally [issued by Project Gutenberg](#) on 2012-04-25. To support the work of Project Gutenberg, visit their [Donation Page](#).

This free ebook has been produced by [GITenberg](#), a program of the [Free Ebook Foundation](#). If you have corrections or improvements to make to this ebook, or you want to use the source files for this ebook, visit [the book's github repository](#). You can support the work of the Free Ebook Foundation at their [Contributors Page](#).

The Project Gutenberg EBook of Tentamen Botanicum de Filicum Generibus
Dorsiferarum, by James Edward Smith

This eBook is for the use of anyone anywhere at no cost and with
almost no restrictions whatsoever. You may copy it, give it away or
re-use it under the terms of the Project Gutenberg License included
with this eBook or online at www.gutenberg.org

Title: Tentamen Botanicum de Filicum Generibus Dorsiferarum
Mémoires de l'Académie Royale des Sciences de Turin vol. 5, 401-422

Author: James Edward Smith

Release Date: April 25, 2012 [EBook #39534]

Language: Latin

*** START OF THIS PROJECT GUTENBERG EBOOK TENTAMEN BOTANICUM ***

Produced by Omaio Systems

[Transcriber's note: Spelling in the original has been preserved without correction, including
typographic errors (e.g. Asphenium for Asplenium). Four pages were printed with incorrect
page numbers. This HTML document contains URL fragment identifiers of the form #Agenus
and #Agenus_aspecies for all new taxa or combinations; in all such URLs the rendering of
taxonomic names conforms to current standards.]

{Extrait des}

MÉMOIRES
DE
L'ACADÉMIE ROYALE
DES SCIENCES
DE TURIN
VOL. V.
MDCCXC-XCI.

{Empreinte}

MÉMOIRES DE L'ACADÉMIE ROYALE DES SCIENCES
Années MDCCXC-XCI.

A TURIN

CHEZ JEAN-MICHEL BRIOLO
IMPRIMEUR-LIBRAIRIE DE L'ACADÉMIE

MDCCXCIII.

{401}

TENTAMEN BOTANICUM
DE FILICUM GENERIBUS DORSIFERARUM

AUCTORE
JACOBO EDVARDO SMITH

Genera Filicum, ab antiquioribus plane neglecta, a systematicis praeteriti aevi inconsiderate, negligenterque tractata, ad principia certa reducere primus conatus est Linnaeus. Raius ut videtur nomina, ne dicam consulta patrum (non omnia possumus omnes) incogitans servavit. Tournefortius, magis aliquantulum huic rei deditus, quo scopum suum egregium rite absolvat, filices, sicut alia sibi nota vegetabilia omnia, ad genera propria methodice referre voluit; sed characteres suos, vagos plerumque & lubricos, e figura frondis sumptos, minus feliciter scripsit. Vestigiis ejus omnino institit Plumierius, qui filices transatlanticas numerosissimas cum Botanicis Europaeis communicavit, denominationibusque Tournefortianis accomodavit. Alios recensere praetermitto.

Linnaeus, de characteribus vegetabilium genericis e fructificatione solummodo desumendis semper sollicitus, consilium hoc, viro tam sapienti vere dignissimum, in editione prima Generum Plantarum anno 1737 typis evulgata, apprime secutus est, plantarum cohortes plurimas exhibens,

{142 [402]}

quas talibus organis gaudere ne quidem ullus antea botanicus somniaverat; inter alias, FILICES DORSIFERAE in agmine bene instructo, primum nobis in hoc opere occurrunt.

Cum vero in hisce vegetabilibus structura fructificationis minus clare quam in plurimis aliis intellecta patuit, partibus essentialibus florum, staminibus nempe & pistillis, omnino, sicut hodie, ignotis, magnus ille systematis sexualis auctor familiis obscuris Filicum, nequaquam ex harum ope, suam cuique differentiam dare obnixus est. Eo usque autem sibi usui fuit, quod sine dubio ubinam hae partes fructificationis fuerint, fuerint modo (& revera esse ex analogia certissima existimabat) posset dicere; & quod ad fructum attinet, ad quem formandum caeterae partes fructificationis omnino accomodantur, structura jampridem bene cognita fuit. Neque hujusce rei cognitio difficultati, de qua loquor, satis obveniebat; quippe fructus Filicum Dorsiferarum in omnibus fere idem est, adeo ut ex hoc vel sapientissimus genericam differentiam nequit extundere. Linnaeus ergo ad principia, quae in aliis classibus quasi a dogmatibus Philosophorum abhorrentia omnino repudiaverat, situm nempe fructificationis, atque aggregatam ejus figuram, necessitate quadam coactus, recurrit. Hisce principiis fundantur genera sex illa Filicum Dorsiferarum, quae in prima Gen. Plant. editione meminit, vid:

Pteris. Fructificationes in lineam, subtus cingentem marginem folii, digestae.

Lonchitis. Fructif. in lineolas, sinubus folii subjectas, lunulatas, dispositae.

{143 [403]}

Adiantum. Fructif. in maculas ovales, apicibus foliorum reflexis subjectas, congestae.

Asplenium. Fructif. in lineas rectas, disco folii subjectas, dispositae.

Polypodium. Fructif. in puncta subrotunda, per discum folii aversum, distributae.

Acrosticum. Fructif. per totum discum primum folii accumulatae in unum acervum.

In secunda ejusdem operis editione, L. Bat. 1742, duo alia genera prioribus adduntur, nempe *Hemionitis*.
Fructif. in lineis coeuntibus, se intersecantibus, vel ramosis.

Trichomanes. Calyx turbinatus, solitarius, erectus, ex ipso margine folii. Stylus setaceus capsulam terminans.

In harum posteriore describenda phraseologiam vir optimus variat; neque tamen, meo sane judicio, in melius mutatur; nam neque ratione satis probata verba haec intulit, *stylus* nempe & *capsula*.

Quinta editio, Gen. Plant. Holmiae 1754, unum aliud genus filicum continet, *Blechnum* scilicet; *Fructif.* dispositae in lineas costae folii parallelas, & approximatas.

Aliorum etiam generum dispositio paululum mutatur.

In editione sexta, ultima cui Linnaeus operam navavit, nequid novi est, neque ullum ejus, quod hanc rem illustret, manuscriptum adhuc reperi.

Editores, imitatoresque operum Linnaei omnes, genera filicum mutare nescii, intacta reliquerunt. Insignissimus solummodo Schreberus, nova sua editione Gen. Plant. Francof. 1791 vol. 2, duo nova genera, *Marattia*, & *Coenopteris*, ex aliis auctoribus excerpta, protulit, & unicum porro, quod

{404}

sibi novum visum est, *Meniscium* addidit insuper. Omnia haec genera mox dicenda sunt.

Neque quae de characteribus filicum genericis formandis quidam Linnaei contemporanei fecerunt, in hoc loco licet praetermittere.

Imprimis, Adanson in suo opere *Familles des plantes*, Paris 1763, vol. 2, p. 20, involucrum animadvertit, quod & Gleditsch in suo *syst. Plant.* Berolin. 1764; sed in paucis admodum filicum generibus hoc membrum adesse observaverunt, & in observationibus quibusdam quas adjecerunt, in erroris quoddam inciderunt, e. g. in *Pteride* Linn. (*Thelypteride* Adansonii, *Circinale* Gleditschii), ille involucrum univalve esse, & in formam imbricis, vel tegulae structum bene monuit; hic autem omnino deesse affirmavit. Ambo rite monent *Asplenio* *Scolopendrio* involucrum bivalve adesse, sed de forma hujusce membranae in *Blechno*, *Hemionitide*, & *Lonchitide* ne verbum quidem. Genera, quae Linnaeus struxit, immutaverunt prorsus, sed principiorum certorum nescii, omnia in pejus verterunt, & quod ad nomenclaturam spectat, omni principio, omni auctoritati contrarii grassati sunt. Porro uterque annulum

illum elasticum, qui filicum capsulas constringit; observaverunt, sed longe errat hic, vel ille cum Polypodium vulgare hoc praeditum esse negat. In hac re hallucinationem Tournefortii nimis temere insecuti; at errorem ejus facile evitassent, capsulam inspexissent modo. Scopoli in Flora sua carniolica ex illorum monitionibus sibi profuit. Illustriss. Hallerus, & plerique alii scriptores Linnaeanas differentias acceperunt, parvas quasdam

{405}

variationes in speciebus distribuendis, tum in in nomenclatura rite ordinanda, pro re nata admittentes. Neque sane ultra Linnaeanos fines opus est quemquam progredi. Verumtamen illi, quels melior fortuna novas exoticas filices obtulit, jampridem in animo habuerunt, quam difficile est omnes ad familias Linnaei referre; & simul, quod difficilius, novas formare, nova caractere dignoscendas. Anno 1786 Illustr. Josephus Banks Baronettus, me suadente, plurimas filices raras quidem & curiosas, fructificatione jam instante, celeberrimo Hedwigio transmisit, haud sine spe quod vir acutissimus & huic ordini cryptogamico lucem, quam caeteris ante hoc obscura nocte pressis, daret. Opus suscepit necne incertum est.

Cum ex amplo Linnaei filii herbaria, tum ex donis cel. Banks, necnon amicorum quorundam aliorum, filices perplurimas accepi, omnino necesse esse duxi novam methodum experiri, quo acceptas ad normas, quoad potui, certas redigam. Ut tentamen hoc omni numero absolutum reddam, omnem speciem, in quam inciderim, probe examinavi, priusquam fundamenti quidquam locare ausus sim. Tum etiam amicos hujusce rei peritissimos adivi, Dom. Dryandrum nempe & T. F. Forsterum juniorem.

Involucrum vel fructificationis tegimen summo usui in generibus determinandis mihi visum est, & praecipue latus, ex quo ruptura involucris ortum ducit, & rumpendi modus.

Involucrum sane est membranae quoddam, & fructificationem omnis fere filicis adhuc immaturam obtegit. Initium capit modo a margine, saepius a nervo, vel a vena frondis. Nec fas est, si genera naturalia satis perspecta habere

{146 [406]}

velimus, omittere observare, num membrana, & fructificatio quam obtegit, sint respectu nervi sive venae, terminales aut laterales. Involucrum firme huic lateri frondis adhaeret, illi vero adpressum, sive levissimo quodam tactu obstrictum; haud tamen quin & hac etiam parte aër omnino excludatur, adeo ut quacumque ratione impregnatio florum absolvatur, quasi in tenebris sub hac membrana res tacite agatur, neque opem alterius cujusquam poscit. Membrana enim omnia fide amplectitur, fovetque, dum pericarpia, jamjam matura, semina sua valent projicere; & quod haec organa vera semina propellunt, ex multorum philosophorum experimentis patet.

Res, quae in hoc involucri membranaceo praecipue notanda est, directionem sive modum, quo se rumpit, spectat. Num externe (sive ad marginem frondis) an interne (sive ad latus, quod ad costam sive nervum frondis, vel frondis laciniae) vergit. Huic rei nemo ante me advertit animum. At sane summo usui est in generibus naturalibus determinandis, cum in omni specie sit constans; tum in filicibus, quae quoad habitum, & caeteras res consentiunt, semper eadem est. Porro tantum abest quod Linnaei genera turbet aut diruat, ut potius augeat, & characteres suos confirmet; tum perraro occurrit species, quae de sede sua a Linnaeo data depellatur inquilina. Neque haec dico quasi characteres Linnaeanos supervacaneos haberi vellem; e contrario, hos omnes strenuus retineo, at pace viri illustrissimi differentias de involucri

desumptas liceat addere, quo genera sua priora firmiori stent talo, & ut principiis veris characteres novorum generum rite determinentur.

{147 [407]}

In praesentia filices, quae dorsiferae dicuntur, i. e. quae fructificationem in dorso frondis gerunt, & has solum in animo est tractare. Itaque non solum illas plantas cryptogamicas, quas Prof. Schreberus in nova editione Gen. Plant. Linnaei sub nomine *Miscellanae* conclusit, sciens praetermisi, verum etiam Ophioglossum, Osmundam, & Onocleam. Haec ultima sane istis filicibus a doctissimo Professore conscribitur, quae capsula annulata gaudent, sed perperam. At observationibus ejus, in Ophioglossum, & Osmundam, nemo est, qui non assentiatur.

Veniamus ergo ad methodicam distributionem generum filicum dorsiferarum, legibus antea datis caute obsequentes. Has alio tempore fusius illustrabimus; verum enimvero haec omnia, quae jam proferre ausus sum, quasi adumbrationem rei, aliis doctioribus mox augendam, corrigendam haberi volo.

FILICES DORSIFERAE

Char. Essentialis. Fructificationes frondosae, in pagina inferiore, aliquando marginales.

SECTIO 1.^{ma} Annulatae.

Char. Essent. Capsulae pedicellatae, bivalves, uniloculares, annulo articulado elastico cinctae. Fructificationes involucro membranaceo plerumque tectae.

1. ACROSTICHUM LINN. *Fructificationes* maculam amorpham, continuam, discum fere totum occupantem, formantes.

{408}

Involucrum. Nullum, nisi squamulae, vel pili capsulis interstincti.

OBS. In hoc genere capsulae, adhuc tenerrimae, plerumque tenui pubescentia fota jacent; aliquando squamis membranaceis minutis interseruntur, quae ambo forsan involucris vicem gerunt.

Exempl. Generis. Acrostichum aureum Linn.

.... latifolium. Swartz. *Prod.* 128

.... villosum Swartz. *Prod.* 128.

Osmunda peltata ejusd. 127.

2. POLYPODIUM LINN. *Fructificationes* in punctis subrotundis, sparsis, non marginalibus.

Involucrum umbilicatum, undique fere dehiscens.

OBS. Polypodium vulgare, quod hujusce generis species primaria habenda est, ne quid involucris prae se ferre visum est. Capsularum coacervationes se se tenerrimas adhuc, ex ipsa frondis substantia nudas protrudunt. Cum vero hoc huic speciei omnino peculiare est, vix inde ratio habeatur cur hanc a caeteris revera Polypodiis temere distrahamus. Meliori sane ratione, istas, quarum involucrum vere umbilicatum est, & in orbem ductum, & aequaliter at omni parte se se rumpit, ab illis, quarum involucrum dimidiatum, sive reniforme est, liceat (praesertim cum in animo tenemus quot species hoc genus complectitur) seorsim

positas separare. Sed fines utriusque ordinis tam parvo usi sunt discrimine, & tam difficiles sunt determinari verbis, ut omnino

{409}

tutius sit, dum horum scientia in majus proferatur, genus, prout jamjam receptum fuerit, servare.

Ex. Gen. (Involucro obsoleto) Polypodium vulgare *Linn.*

(Invol. umbilicato) trifoliatum *ejusd.*

(Invol. subreniforme) filix mas *ejusd.*

&.... marginale *ejusd.*

(Invol. semilunare) filix faemina *ejusd.* ane ad DAREAM removenda ?

3. ASPLENIUM LINN. *Fructif.* in lineolis sparsis.

Involucrum e vena lateraliter ortum ducens interius (i. e. costam versus) dehiscens.

Exempl. Gener. Asplenium Hemionitis *Linn.*

..... monanthemum *ejusd.*

4. DAREA JUSS. GEN. 15. *Fructif.* in lineolis sparsis.

Involucrum e vena lateraliter ortum ducens, exterius (i. e. marginem versus.) dehiscens.

CONFER. *Smith. Pl. Ic. t. 50.*

Exempl. Gener. Caenopteris furcata *Bergii in Act. Petrop. ann. 1782.*

..... rutaefolia *ejusd.*

..... vivipara *ejusd.*

..... rhizophylla *Smith. Plant. Ic. t. 50.* (habitat in Hispaniola).

Asplenium cicutarium *Swartz Prod. 130.*

..... flaccidum *Forst. Prod. 80.*

{410}

5. HEMIONITIS LINN. *Fructif.* in lineolis sparsis, decussantibus, geminis, venae approximatis.

Involucra e vena ortum ducentia, utrinque exterius dehiscentia.

CONFER. [Fig. 1.](#)

Exempl. Gener. Hemionitis lanceolata *Linn.*

.... palmata *ejusd.*

Asplenium plantagineum *ejusd.*

.... grandifolium *Swartz. Prod. 130*

Meniscium *Schreb. Gen. Pl. 757?*

6. SCOLOPENDRIUM *Fructif.* in lineolis sparsis, geminis, interveniis.

Involucra superficialia, sibi invicem longitudinaliter incumbentia, sutura longitudinali dehiscentia.

CONFER. [Fig. 2.](#)

OBS. Character hujusce generis, Hemionitidis characteri contrarius admodum. Utrumque satis ab Asplenio distinctum, neque ullo modo cum hoc confundi debet.

Termino *involucrum superficialium* intelligi velim involucrum quod a superficie sive disco frondis ortum capit, nec a margine aut nervo. Venula plerumque comitatur.

Exempl. Gener. Asplenium Scolopendrium *Linn.*

.... Ceterach *ejusd.*?

vix aliam speciem inveni.

{411}

7. BLECHNUM LINN. *Fructif.* in lineis longitudinalibus, continuis, costae adjacentibus.

Involucrum superficialium, continuum, costam versus dehiscens.

Exempl. Gener. Blechnum occidentale *Linn.*

..... australe *ejusd.*

Osmunda spicant *ejusd.*

8. WOODWARDIA *Fructif.* in punctis oblongis, distinctis, serialibus, costae adjacentibus.

Involucra superficialia, fornicata, costam versus dehiscencia.

CONFER. [Fig. 3.](#)

OBS. Amicissimus Thomas Jenkinson WOODWARD L. L. B. Soc. Linn. sodalis, observationibus variis, dissertationibusque de stirpibus anglicanis praeclarus, vir summae fidei atque ingenii, hoc genus optime meruit.

Exempl. Gener. Species mihi notae sunt sequentes tantum.

1. *W. augustifolia*, fronde pinnata: pinnis linearibus acutis, integerrimis. *Habitat* in Pensylvania. Ex amicissimo viro D. Georgio Staunton Baronetto habui.

2. *W. japonica*, fronde pinnata: pinnis pinnatifidis, nervo nudo: lobis obtusis, serratis, stipite squamoso. *Blechnum japonicum*. *Thunb. Jap.* 333. t. 35. *Linn. suppl.* 445.

Obs. In exemplari ab ipso Thunbergio misso, stipes squamosus & scaber est, neque glaber, ut in Flo. Japonica traditur.

{412}

Habitat in Japonia *Thunberg.*

3. *W. virginica*, fronde pinnata, pinnis pinnatifidis, nervo utrinque fructificante: lobis obtusis serrulatis, stipite glabro.

Blechnum virginicum. *Linn. Mant.* 307. *Ait. hort. Kew.* V. 3. 460.

Filix mas vulgari similis, pinnulis amplioribus planis, nec crenatis, virginiana. *Pluk. Phyt.* t. 179. f. 2. male

Habitat in Virginia.

4. *W. radicans*, fronde pinnata: pinnis pinnatifidis nervo nudo: lobis acutis, serratis, stipite glabro.

Blechnum radicans. *Linn. Mant.* 307. (excluso syn. *Pluk.*) *Ait. Hort. Kew.* V. 3. 460.

Filix italica non ramosa maxima, glabra, Polypodii folio, gallas ferens, D. Michellii. *Til. Pis.* 62. t. 24.
Habitat in Maderae rimis rupium profundis, argillaceis, *Koenig*; in Amalphii & Cerasii valle inter Chartariam & Ferraram, *Tilli*; in Lusitania, *Edoardus Whittaker Gray* M. D.

9. PTERIS LINN. *Fructif.* in linea marginali, continua.
Involucrum e margine ipsius frondis inflexo, continuum, interius dehiscens.

Exempl. Gener. Pteris grandifolia Linn.

.... vittata ejusd.

.... cretica ejusd.

.... aquilina ejusd.

Huc forsitan spectant Acrostichum septentrionale, atque australe Linn. ut & australe

{413}

*Vahl*ii *Symb.* 1. t. 25., quae A. radiatum a Koenigio melius appellatur.

10. LINDSAEA DRYANDRI (inedit.) *Fructif.* in linea continua, a margine parum remota.
Involucrum superficialium, continuum, exterius dehiscens.

CONFER. [Fig. 4.](#)

Exempl. Gener. Adiantum guianense Aubl. *Guian.* t. 365.

..... sagittatum ejusd. t. 366.

..... strictum Swartz *Prod.* 135.

11. VITTARIA *Fructif.* in linea marginali continua.
Involucrum duplex, continuum; alterum superficialium, exterius dehiscens; aliud e margine ipsius frondis, inflexo, interius dehiscens.

CONFER. [Fig. 5.](#)

Exempl. Gener. Pteris lineata Linn.

Unica species, ni fallor, inter filices adhuc inventas.

12. LONCHITIS LINN. *Fructif.* in lineolis, sinubus frondis geminatim subjectis, lunulatis.
Involucra e margine ipsius frondis inflexa, interius dehiscencia.

OBS. Genus habitu affine Pteridi, caractere Adianto. L. pedata Linn. & L. adscensionis Forst. Pterides sont.

Exempl. Gener. Lonchitis hirsuta Linn.

..... aurita ejusd.

{414}

13. ADIANTUM LINN. *Fructif.* in punctis subrotundis, marginalibus, distinctis.
Involucra squamiformia, e margine ipsius frondis inflexo, distincta, interius dehiscencia.

Exempl. Gener. Adiantum Capillus-Veneris Linn.

..... triphyllum *Smith Pl. Ic. t. 74.*

14. *DAVALLIA Fructif.* in punctis subrotundis, submarginalibus, distinctis.

Involucra squamiformia, superficialia, distincta, exterius dehiscentia.

CONFER. [Fig. 6.](#)

OBS. Fructificationes respectu venarum semper terminales sunt, nequaquam laterales. Genus gaudet habitu firmiori, nitido concinno, neque tenero membranaceo, dilatato *Trichomanis* & *Adianti*.

Botanico indefesso atque acutissimo, caractere amabili, ut & scientia claro, Edmundo DAVALL, Soc. Linn. Sod. Urbae apud Helvetos degenti, novum hoc genus lubentissime dicavi.

Exempl. Gener.

1. *D. canariensis*, fronde tripartita alternatim supradecomposita: lacinulis lanceolatis unifloris.

Trichomanes canariense Linn.

Habitat in canariis, Lusitania, ad latera montium. *Loëfling, Herb. Linn.*

2. *D. chinensis*, fronde alternatim tripinnata: lacinulis cuneiformibus obtusis subbifloris.

Trichomanes chinense Linn.

{415}

Habitat in China.

3. *D. clavata*, fronde alternatim decomposita: lacinulis linearicuneiformibus obtusis unifloris.

Adiantum clavatum Linn.

Habitat in Insulis Indiae Occidentalis.

4. *D. aculeata*, fronde supradecomposita: lacinulis cuneiformibus obtusis palmato-lobatis multifloris, rachi flexuosa aculeata.

Adiantum aculeatum Linn.

Habitat in Jamaica & Hispaniola.

5. *D. pedata*, fronde quinquangula trifida pinnatifida: laciniis apice multifloris.

Adiantum repens Linn. suppl. 446.

Habitat in Insula Mauritii.

Obs. Omnes fere species gaudent surculis repentibus squamosis, nomen hujus triviale, a Linnaeo filio datum, necesse itaque mutandum est.

6. *D. falcata*, fronde pinnata: pinnis lanceolatis subfalcatis undulatis multifloris basi inaequaliter cordatis.

Lonchitis glabra minor. Plum. fil. 48., t. 63.

Habitat ad rivulos, & in sylvis Antillinarum insularum. *Plumier. in Herb. Linn. absque nomine aut loco.*

7. *D. pectinata*, fronde lanceolata pectinato-pinnatifida: laciniis obtusis undulatis multifloris; infimis auriculatis semipinnatisve.

Habitat in India Orientali, *D. Hurloch* 1786. eandem forte in Otaheite legit Nelson. *H. Banks.*

8. *D. heterophylla*, frondibus sterilibus simplicissimis

{416}

ovato-lanceolatis acutis integerrimis; fertilibus lineari-lanceolatis sinuatis multifloris.

Habitat in India orientali, Nicobar, Sumatra; ex herb. Banks. habui.

15. DICKSONIA. L'Heritier. *Fructif.* in punctis subrotundis, marginalibus, distinctis, prominentibus. *Involucrum* duplex; *alterum* superficiarium, exterius dehiscens; *aliud* e margine ipsius frondis inflexo, alterum amplexans, interius dehiscens.

CONFER. [Fig. 7.](#)

OBS. Habitus Davalliae.

Exempl. Gener. Dicksonia arborescens, Ait. *Hort. Hew.* V. 3. 469.

..... culcita *ibid.*

16. CYATHEA. *Fructif.* sparsae, subrotundae, calyci hemisphaerico, apice dehiscenti absque operculo, insidentes.

CONFER. *Plum. Fil. t. 2.*

Exempl. Gener.

1. *C. horrida*, caudice aculeato, fronde bipinnata, pinnatifida: laciniis acuminatis, apice serratis, marginem versus floriferis, basi venis anastomosantibus.

Polypodium horridum Linn. *Ip. Pl.* 1554.

Habitat in Hispaniola & Jamaica.

2. *C. multiflora*, caudice... fronde bipinnata pinnatifida: laciniis obtusis serratis; rachi alata, floribus sparsis; calyce lacero.

{417}

Habitat in Jamaica; ex herb. Banks.

3. *C. arborea*, caudice arboreo squamoso fronde bipinnata: pinnulis sessilibus serratis basi multifloris, calyce integerrimo.

Polypodium arboreum Linn.

Habitat in Jamaica, Everardus Home.

4. *C. capensis* fronde tripinnata: pinnulis sessilibus acutis serratis basi unifloris, calyce lacero.

Polypodium capense Linn. *suppl.* 445.

Habitat ad Cap. bonae spei, Sparrmann.

5. *C. fragilis*, fronde bipinnata pinnatifida: laciniis obovatis incis; rachi alata, floribus sparsis; calyce lacero.

Polypodium fragile Linn.

Habitat in Europae rupibus umbrosis humidis.

6. *C. montana*, fronde trifida bipinnata pinnatifida: laciniis subfalcatis apice dentatis; rachi alata, floribus sparsis; calyce lacero.

Polypodium montanum Allion. *Ped. n.* 2410.

Habitat in Alpibus Europae.

Obs. Ejusdem generis mihi videtur *Polypodium alpinum* Jacq. *Coll.* V. 2. 271. cum specimina ex amicissimo Jacquino filio mecum communicata; minus bene cum descriptione Cl. Wulfeni, quoad fructificationis tegmentum, concordent; nec tamen haec satis perfecta, adeo ut ad quod genus amandanda sint certe sciam.

17. TRICHOMANES. LINN. *Fructif.* margini frondis insertae, distinctae.

{418}

Involucra urceolata, monophylla, exterius hiantia.
Columellae exsertae, pistilliformes.

CONFER. *Plum. Fil. t.* 86.

OBS. Habitus membranaceus, semipellucidus.

Ex. *Gen.* *Trichomanes crispum* Linn.

..... *scandens ejusd.*

..... *pusillum Swartz. Prod.* 136.

..... *reptans ejusd.*

..... *lucens ejusd.*

..... *rigidum ejusd.*

18. HYMENOPHYLLUM. *Fructif.* margini frondis insertae, distinctae.

Involucra bivalvia, planiuscula, recta, exterius hiantia.

Columellae inclusae.

CONFER. [Fig. 8.](#)

OBS. Habitus *Trichomanis*.

Ex. *Gen.* *Trichomanes tunbridgense* Linn.

..... *asplenoides Swartz. Prod.*

..... *fucoides ejusd.*

..... *ciliatum ejusd.*

..... *lineare ejusd.*

..... *undulatum ejusd.*

..... *polyanthos ejusd.*

..... *clavatum ejusd.*

Etiam *Adiantum decurrens Jacq. Coll. V. 2.* 103, *t.* 2, *f.* 1, 2, sed in hac specie columella mihi videtur exserta.

{419}

19. SCHIZAEA. *Fructif.* in appendiculo frondis, ejusdemque dorsum tegentes.

Involucra e marginibus appendiculi inflexis, continuis.

CONFER. [Fig. 9.](#)

OBS. Genus habitu distinctissimum, caractere obscurum. Nomen a σκίζω, findo.

Ex. *Gen.* *Acrostichum pectinatum* Linn.

..... *dichotomum ejusd.*

..... *elegans Vahl. Symbol. 2., t.* 50.

?..... spicatum *Linn. Smith. Pl. Ic. t. 49.*

SECTIO 2.^{da} Thecatae.

Char. Essent. Capsulae sessiles, per foramina dehiscentes, absque annulo, nudaе.

20. GLEICHENIA. *Capsulae* triloculares, trivalves; *dissepimenta* e medio valvularum.

CONFER. [Fig. 10.](#)

OBS. In memoriam Illustr. Gulielmi Friderici Baronis de *Gleichen*, observationum microscopicarum in genitalia plantarum auctoris.

Exempl. Gen.

1. *Gleichenia polypodioides*, unica species adhuc detecta.

Onoclea polypodioides Linn. Mant. 306.

Habitat ad Cap. bonae spei.

21. MARATTIA. SWARTZ. *Capsulae* ovales, superne longitudinaliter dehiscentes; *loculis* utrinque pluribus.

{420}

Ex. Gen. *Marattia alata Swartz. Prod. 128. Sm. Pl. Jc. t. 46.*

..... *laevis Sm. Pl. Jc. t. 47.*

..... *fraxinea ibid. t. 48.*

22. DANAEA. *Capsulae* uniloculares extus porro dehiscentes, duplici serie aggregatae.

CONFER. [Fig. 11.](#)

OBS. Nomen dedi in honorem amici, & fautoris maxime colendi, Bot. Prof. J. Petri Mariae DANA, cujus nomine stirpem, quae mihi videtur Ligustici species, jamjam condecoravit Illustr. Allionius. Capsulae venulis insident.

Exempl. Gener.

1. *D. nodosa*, rachi subsimplici, foliolis acuminatis, subintegerrimis, ad marginem usque capsuliferis, stipulis acutis.

Asphenium nodosum Linn.

Lingua cervina nodosa major, Plum. Fil. 90, t. 108.

Habitat in Jamaica, Hispaniola, Martinica, locis humidis umbrosis. In *Herb. Linn.*

2. *D. alata*, rachi apice alata, foliolis serrulatis prope marginem nudis, stipulis obtusis, erosis.

Lingua cervina nodosa minor, Plum. Fil. 91., t. 109.

Habitat in Martinica, *Plumier. in herb. Linn.*

{421}

EXPLICATIO TABULAE

Fig. 1. *Hemionitis plantaginea*.

a. Portio frondis, magn. nat.

b. Fructificatio aucta.

c. Annuli capsularum.

Fig. 2. *Scolopendrium vulgare*.

Portio frondis magn. nat., cum fructif. in situ, involucris jam diruptis.

Fig. 3. *Woodwardia radicans*.

d. Pinnula.

e. Portio ejusdem aucta.

f. Involucrum.

Fig. 4. *Lindsaea*, forte nova species.

g. Pinna.

h. Portio ejusdem aucta.

i. Involucrum.

k. Capsularum coacervatio.

Fig. 5. *Vittaria lineata*.

l. Portio frondis.

m. Portio aucta.

n. Involucra.

Fig. 6. *Davallia canariensis*.

o. Pinnula.

p. Eadem aucta.

q. Involucrum.

{422}

Fig. 7. *Dicksonia arborescens*.

r. Pinnula.

s. Fructif. aucta.

t. Involucrum interius.

u. Invol. exterius.

Fig. 8. *Hymenophyllum*, nova species?

v. Portio frondis.

w. Pars ejusdem aucta.

x. Fructif. in statu naturali.

y. Involucrum arte expansum.

z. Capsulae.

Fig. 9. *Schizaea dichotoma*.

aa. Apex frondis fructificantis.

bb. Aucta.

cc. Involucr.

Fig. 10. *Gleichenia polypodioides*.
dd. Portio pinnae.
ee. Lacinia aucta.
ff. Capsulae apertura.

Fig. 11. *Danaea nodosa*.
gg. Portio pinnae.
hh. Capsularum congeries aucta.
ii. Ejusdem interna structura.



Fig. 1. *Hemionitis*



Fig. 2. *Scolopendrium*



Fig. 3. *Woodwardia*



Fig. 4. *Lindsaea*



Fig. 5. *Vittaria*



Fig. 6. *Davallia*



Fig. 7. *Dichsonia*



Fig. 8. *Hymenophyllum*



Fig. 9. *Schizaea*



Fig. 10. *Gleichenia*

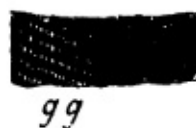


Fig. 11. *Danaea*

End of the Project Gutenberg EBook of Tentamen Botanicum de Filicum
Generibus Dorsiferarum, by James Edward Smith

*** END OF THIS PROJECT GUTENBERG EBOOK TENTAMEN BOTANICUM ***

***** This file should be named 39534-h.htm or 39534-h.zip *****
This and all associated files of various formats will be found in:
<http://www.gutenberg.org/3/9/5/3/39534/>

Produced by Omaio Systems

Updated editions will replace the previous one--the old editions
will be renamed.

Creating the works from public domain print editions means that no
one owns a United States copyright in these works, so the Foundation
(and you!) can copy and distribute it in the United States without
permission and without paying copyright royalties. Special rules,
set forth in the General Terms of Use part of this license, apply to
copying and distributing Project Gutenberg-tm electronic works to
protect the PROJECT GUTENBERG-tm concept and trademark. Project
Gutenberg is a registered trademark, and may not be used if you
charge for the eBooks, unless you receive specific permission. If you
do not charge anything for copies of this eBook, complying with the
rules is very easy. You may use this eBook for nearly any purpose
such as creation of derivative works, reports, performances and
research. They may be modified and printed and given away--you may do
practically ANYTHING with public domain eBooks. Redistribution is
subject to the trademark license, especially commercial
redistribution.

*** START: FULL LICENSE ***

THE FULL PROJECT GUTENBERG LICENSE
PLEASE READ THIS BEFORE YOU DISTRIBUTE OR USE THIS WORK

To protect the Project Gutenberg-tm mission of promoting the free
distribution of electronic works, by using or distributing this work
(or any other work associated in any way with the phrase "Project
Gutenberg"), you agree to comply with all the terms of the Full Project
Gutenberg-tm License available with this file or online at
www.gutenberg.org/license.

Section 1. General Terms of Use and Redistributing Project Gutenberg-tm
electronic works

1.A. By reading or using any part of this Project Gutenberg-tm
electronic work, you indicate that you have read, understand, agree to
and accept all the terms of this license and intellectual property
(trademark/copyright) agreement. If you do not agree to abide by all
the terms of this agreement, you must cease using and return or destroy
all copies of Project Gutenberg-tm electronic works in your possession.
If you paid a fee for obtaining a copy of or access to a Project
Gutenberg-tm electronic work and you do not agree to be bound by the
terms of this agreement, you may obtain a refund from the person or
entity to whom you paid the fee as set forth in paragraph 1.E.8.

1.B. "Project Gutenberg" is a registered trademark. It may only be
used on or associated in any way with an electronic work by people who
agree to be bound by the terms of this agreement. There are a few
things that you can do with most Project Gutenberg-tm electronic works
even without complying with the full terms of this agreement. See
paragraph 1.C below. There are a lot of things you can do with Project
Gutenberg-tm electronic works if you follow the terms of this agreement
and help preserve free future access to Project Gutenberg-tm electronic
works. See paragraph 1.E below.

1.C. The Project Gutenberg Literary Archive Foundation ("the Foundation"
or PGLAF), owns a compilation copyright in the collection of Project
Gutenberg-tm electronic works. Nearly all the individual works in the
collection are in the public domain in the United States. If an
individual work is in the public domain in the United States and you are

located in the United States, we do not claim a right to prevent you from copying, distributing, performing, displaying or creating derivative works based on the work as long as all references to Project Gutenberg are removed. Of course, we hope that you will support the Project Gutenberg-tm mission of promoting free access to electronic works by freely sharing Project Gutenberg-tm works in compliance with the terms of this agreement for keeping the Project Gutenberg-tm name associated with the work. You can easily comply with the terms of this agreement by keeping this work in the same format with its attached full Project Gutenberg-tm License when you share it without charge with others.

1.D. The copyright laws of the place where you are located also govern what you can do with this work. Copyright laws in most countries are in a constant state of change. If you are outside the United States, check the laws of your country in addition to the terms of this agreement before downloading, copying, displaying, performing, distributing or creating derivative works based on this work or any other Project Gutenberg-tm work. The Foundation makes no representations concerning the copyright status of any work in any country outside the United States.

1.E. Unless you have removed all references to Project Gutenberg:

1.E.1. The following sentence, with active links to, or other immediate access to, the full Project Gutenberg-tm License must appear prominently whenever any copy of a Project Gutenberg-tm work (any work on which the phrase "Project Gutenberg" appears, or with which the phrase "Project Gutenberg" is associated) is accessed, displayed, performed, viewed, copied or distributed:

This eBook is for the use of anyone anywhere at no cost and with almost no restrictions whatsoever. You may copy it, give it away or re-use it under the terms of the Project Gutenberg License included with this eBook or online at www.gutenberg.org

1.E.2. If an individual Project Gutenberg-tm electronic work is derived from the public domain (does not contain a notice indicating that it is posted with permission of the copyright holder), the work can be copied and distributed to anyone in the United States without paying any fees or charges. If you are redistributing or providing access to a work with the phrase "Project Gutenberg" associated with or appearing on the work, you must comply either with the requirements of paragraphs 1.E.1 through 1.E.7 or obtain permission for the use of the work and the Project Gutenberg-tm trademark as set forth in paragraphs 1.E.8 or 1.E.9.

1.E.3. If an individual Project Gutenberg-tm electronic work is posted with the permission of the copyright holder, your use and distribution must comply with both paragraphs 1.E.1 through 1.E.7 and any additional terms imposed by the copyright holder. Additional terms will be linked to the Project Gutenberg-tm License for all works posted with the permission of the copyright holder found at the beginning of this work.

1.E.4. Do not unlink or detach or remove the full Project Gutenberg-tm License terms from this work, or any files containing a part of this work or any other work associated with Project Gutenberg-tm.

1.E.5. Do not copy, display, perform, distribute or redistribute this electronic work, or any part of this electronic work, without prominently displaying the sentence set forth in paragraph 1.E.1 with active links or immediate access to the full terms of the Project Gutenberg-tm License.

1.E.6. You may convert to and distribute this work in any binary, compressed, marked up, nonproprietary or proprietary form, including any word processing or hypertext form. However, if you provide access to or distribute copies of a Project Gutenberg-tm work in a format other than "Plain Vanilla ASCII" or other format used in the official version posted on the official Project Gutenberg-tm web site (www.gutenberg.org), you must, at no additional cost, fee or expense to the user, provide a copy, a means of exporting a copy, or a means of obtaining a copy upon request, of the work in its original "Plain Vanilla ASCII" or other form. Any alternate format must include the full Project Gutenberg-tm License as specified in paragraph 1.E.1.

1.E.7. Do not charge a fee for access to, viewing, displaying, performing, copying or distributing any Project Gutenberg-tm works

unless you comply with paragraph 1.E.8 or 1.E.9.

1.E.8. You may charge a reasonable fee for copies of or providing access to or distributing Project Gutenberg-tm electronic works provided that

- You pay a royalty fee of 20% of the gross profits you derive from the use of Project Gutenberg-tm works calculated using the method you already use to calculate your applicable taxes. The fee is owed to the owner of the Project Gutenberg-tm trademark, but he has agreed to donate royalties under this paragraph to the Project Gutenberg Literary Archive Foundation. Royalty payments must be paid within 60 days following each date on which you prepare (or are legally required to prepare) your periodic tax returns. Royalty payments should be clearly marked as such and sent to the Project Gutenberg Literary Archive Foundation at the address specified in Section 4, "Information about donations to the Project Gutenberg Literary Archive Foundation."
- You provide a full refund of any money paid by a user who notifies you in writing (or by e-mail) within 30 days of receipt that s/he does not agree to the terms of the full Project Gutenberg-tm License. You must require such a user to return or destroy all copies of the works possessed in a physical medium and discontinue all use of and all access to other copies of Project Gutenberg-tm works.
- You provide, in accordance with paragraph 1.F.3, a full refund of any money paid for a work or a replacement copy, if a defect in the electronic work is discovered and reported to you within 90 days of receipt of the work.
- You comply with all other terms of this agreement for free distribution of Project Gutenberg-tm works.

1.E.9. If you wish to charge a fee or distribute a Project Gutenberg-tm electronic work or group of works on different terms than are set forth in this agreement, you must obtain permission in writing from both the Project Gutenberg Literary Archive Foundation and Michael Hart, the owner of the Project Gutenberg-tm trademark. Contact the Foundation as set forth in Section 3 below.

1.F.

1.F.1. Project Gutenberg volunteers and employees expend considerable effort to identify, do copyright research on, transcribe and proofread public domain works in creating the Project Gutenberg-tm collection. Despite these efforts, Project Gutenberg-tm electronic works, and the medium on which they may be stored, may contain "Defects," such as, but not limited to, incomplete, inaccurate or corrupt data, transcription errors, a copyright or other intellectual property infringement, a defective or damaged disk or other medium, a computer virus, or computer codes that damage or cannot be read by your equipment.

1.F.2. LIMITED WARRANTY, DISCLAIMER OF DAMAGES - Except for the "Right of Replacement or Refund" described in paragraph 1.F.3, the Project Gutenberg Literary Archive Foundation, the owner of the Project Gutenberg-tm trademark, and any other party distributing a Project Gutenberg-tm electronic work under this agreement, disclaim all liability to you for damages, costs and expenses, including legal fees. YOU AGREE THAT YOU HAVE NO REMEDIES FOR NEGLIGENCE, STRICT LIABILITY, BREACH OF WARRANTY OR BREACH OF CONTRACT EXCEPT THOSE PROVIDED IN PARAGRAPH 1.F.3. YOU AGREE THAT THE FOUNDATION, THE TRADEMARK OWNER, AND ANY DISTRIBUTOR UNDER THIS AGREEMENT WILL NOT BE LIABLE TO YOU FOR ACTUAL, DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE OR INCIDENTAL DAMAGES EVEN IF YOU GIVE NOTICE OF THE POSSIBILITY OF SUCH DAMAGE.

1.F.3. LIMITED RIGHT OF REPLACEMENT OR REFUND - If you discover a defect in this electronic work within 90 days of receiving it, you can receive a refund of the money (if any) you paid for it by sending a written explanation to the person you received the work from. If you received the work on a physical medium, you must return the medium with your written explanation. The person or entity that provided you with the defective work may elect to provide a replacement copy in lieu of a refund. If you received the work electronically, the person or entity

providing it to you may choose to give you a second opportunity to receive the work electronically in lieu of a refund. If the second copy is also defective, you may demand a refund in writing without further opportunities to fix the problem.

1.F.4. Except for the limited right of replacement or refund set forth in paragraph 1.F.3, this work is provided to you 'AS-IS', WITH NO OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PURPOSE.

1.F.5. Some states do not allow disclaimers of certain implied warranties or the exclusion or limitation of certain types of damages. If any disclaimer or limitation set forth in this agreement violates the law of the state applicable to this agreement, the agreement shall be interpreted to make the maximum disclaimer or limitation permitted by the applicable state law. The invalidity or unenforceability of any provision of this agreement shall not void the remaining provisions.

1.F.6. INDEMNITY - You agree to indemnify and hold the Foundation, the trademark owner, any agent or employee of the Foundation, anyone providing copies of Project Gutenberg-tm electronic works in accordance with this agreement, and any volunteers associated with the production, promotion and distribution of Project Gutenberg-tm electronic works, harmless from all liability, costs and expenses, including legal fees, that arise directly or indirectly from any of the following which you do or cause to occur: (a) distribution of this or any Project Gutenberg-tm work, (b) alteration, modification, or additions or deletions to any Project Gutenberg-tm work, and (c) any Defect you cause.

Section 2. Information about the Mission of Project Gutenberg-tm

Project Gutenberg-tm is synonymous with the free distribution of electronic works in formats readable by the widest variety of computers including obsolete, old, middle-aged and new computers. It exists because of the efforts of hundreds of volunteers and donations from people in all walks of life.

Volunteers and financial support to provide volunteers with the assistance they need are critical to reaching Project Gutenberg-tm's goals and ensuring that the Project Gutenberg-tm collection will remain freely available for generations to come. In 2001, the Project Gutenberg Literary Archive Foundation was created to provide a secure and permanent future for Project Gutenberg-tm and future generations. To learn more about the Project Gutenberg Literary Archive Foundation and how your efforts and donations can help, see Sections 3 and 4 and the Foundation information page at www.gutenberg.org

Section 3. Information about the Project Gutenberg Literary Archive Foundation

The Project Gutenberg Literary Archive Foundation is a non profit 501(c)(3) educational corporation organized under the laws of the state of Mississippi and granted tax exempt status by the Internal Revenue Service. The Foundation's EIN or federal tax identification number is 64-6221541. Contributions to the Project Gutenberg Literary Archive Foundation are tax deductible to the full extent permitted by U.S. federal laws and your state's laws.

The Foundation's principal office is located at 4557 Melan Dr. S. Fairbanks, AK, 99712., but its volunteers and employees are scattered throughout numerous locations. Its business office is located at 809 North 1500 West, Salt Lake City, UT 84116, (801) 596-1887. Email contact links and up to date contact information can be found at the Foundation's web site and official page at www.gutenberg.org/contact

For additional contact information:

Dr. Gregory B. Newby
Chief Executive and Director
gbnewby@pglaf.org

Section 4. Information about Donations to the Project Gutenberg Literary Archive Foundation

Project Gutenberg-tm depends upon and cannot survive without wide spread public support and donations to carry out its mission of

increasing the number of public domain and licensed works that can be freely distributed in machine readable form accessible by the widest array of equipment including outdated equipment. Many small donations (\$1 to \$5,000) are particularly important to maintaining tax exempt status with the IRS.

The Foundation is committed to complying with the laws regulating charities and charitable donations in all 50 states of the United States. Compliance requirements are not uniform and it takes a considerable effort, much paperwork and many fees to meet and keep up with these requirements. We do not solicit donations in locations where we have not received written confirmation of compliance. To SEND DONATIONS or determine the status of compliance for any particular state visit www.gutenberg.org/donate

While we cannot and do not solicit contributions from states where we have not met the solicitation requirements, we know of no prohibition against accepting unsolicited donations from donors in such states who approach us with offers to donate.

International donations are gratefully accepted, but we cannot make any statements concerning tax treatment of donations received from outside the United States. U.S. laws alone swamp our small staff.

Please check the Project Gutenberg Web pages for current donation methods and addresses. Donations are accepted in a number of other ways including checks, online payments and credit card donations. To donate, please visit: www.gutenberg.org/donate

Section 5. General Information About Project Gutenberg-tm electronic works.

Professor Michael S. Hart was the originator of the Project Gutenberg-tm concept of a library of electronic works that could be freely shared with anyone. For forty years, he produced and distributed Project Gutenberg-tm eBooks with only a loose network of volunteer support.

Project Gutenberg-tm eBooks are often created from several printed editions, all of which are confirmed as Public Domain in the U.S. unless a copyright notice is included. Thus, we do not necessarily keep eBooks in compliance with any particular paper edition.

Most people start at our Web site which has the main PG search facility:

www.gutenberg.org

This Web site includes information about Project Gutenberg-tm, including how to make donations to the Project Gutenberg Literary Archive Foundation, how to help produce our new eBooks, and how to