AUTIKON BOTANIKON

OR

BOTANICAL ILLUSTRATIONS,

OF 2500

New, rare or beautiful Trees, Shrubs, Plants, Vines, Lilies, Grasses, Ferns &c, of all regions, but chiefly North America, with descriptions &c and 2500 self figures or specimens.

BY PROF. C. S. RAFINESQUE.

FIRST PART--CENTURIES I to V.
TEXT OF 500 OBJECTS & ARTICLES.

PHILADELPHIA.

1815–1840.

Text of each part of 500 objects, 50 cents. 500 Figures belonging thereto; 50 dollars.
This was published in 1840, the author attaining only 1500 of his proposed 2500 species. No actual illustrations were prepared, Rafinesque intending actual botanical specimens to "illustrate" his species. The original work closes with p. 200.
AUTIKON BOTANIKON.


CENTUR. XXV.

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In 5 parts of 5 Centuries each of text with 25 Volumes folio of Self-figures.

BY C. S. RAFINESQUE,

Prof. of Botany, the Historical and Natural Sciences, member of many learned Societies in America and Europe, author of many botanical and other works &c.

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(The best botanical figures are the objects themselves.)

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INTRODUCTION.

Although I am a Draftsman and can both draw and paint the plants that I collect, yet the expense of time in doing so, with the cost of engraving and colouring the drawings, are so great that I have but seldom availed myself of my talent and opportunities to publish costly figures of new or rare plants. I have preferred and I do now again prefer giving the specimens themselves for authentic figures. This can be done as cheap or cheaper than by multiplied figures: many splendid works of Iconographical Botany are often published at much higher rates. Copied figures are not always accurate, nor expressing many minute characters of surface &c, and some botanists are not satisfied until they can examine the original specimens of discoverers or improvers; or when wishing to detract from the merit of vast botanical researches, they deny the accuracy of whatever they cannot verify.

This Autikon of 2500 figures by specimens will be the best answer to any vain attempt to depreciate my discoveries and researches—although I have 5000 fine plants to illustrate in this manner, I have selected for this work, the rarest or new, else the finest or unfigured; such as will illustrate my botanical works and improvements, particularly those that shall be omitted in the North American Flora, lately undertaken jointly by Torrey, Gray and Nuttal, who have overlooked or left unnoticed many of our New Genera and Species, because either not met by them, or blended with others when seen in fields or herbals. Whence the need of giving sometimes the figures of akin species for contrast.
INTRODUCTION.

Whenever the plants have already been named and described by myself or others, it will be so stated, with a reference to the works where published. If yet new or undescribed, their synoptical description will be given; also their locality and some occasional remarks.

The principal works of mine, where such New Genera and Species have chiefly been described already, are the following.

- *Car. pl. sic.*—New Plants of Sicily 1810.
- *Prec. dec.*—Precis des Decouvertes 1814.
- *Fl. lud.*—Florula Ludoviciana 1817.
- *Dec. pl.*—Decads of new plants 1817.
- *Rev.*—Reviews of Pursh 1817, of Nuttal 1819 &c.

- *Neog.*—66 N. Gen. in Neogenyton 1825.
- *N. G.*—175 New Gen. sent to Decandole 1830

- *Herb. Raf.*—Herbarium Rafinesquianum. 1838.

- *New fl.*—New supplemental flora of North America 1000 articles, N. G. and Sp. 1836.
- *Fl. tel.*—Flora Telluriana Mantissa. 1225.
- *Ait. N. G. Sp.* 1836.

- *Sylva tel.*—Sylva Telluriana mant. with trees and shrubs of North America, 1075 articles, N. G. Sp. 1838.
INTRODUCTION.

Als. am.—Alsographia Americana or a grove of new Trees and Shrubs, 330 articles, 1838.

Pom. Am.—Pomona of native fruit trees of North America—Pterikon the Ferns of N. Am. &c.—Erikon or the Andromedas, Heaths, and Ericoid Shrubs—Agrostikon or Figures of 800 Grasses and Cyperoides—will form parts or supplements to this great work, being similarly illustrated by self-figures.

N. B.—The names of Authors will be abbreviated as usual, L. for Linneus, W. Wildenow, Dec. Decandole &c. . . . but O. will imply Omnes or all the authors.

† This mark will indicate that having but few Specimens left, they will belong to the first, 2d or 3d complete sets to be disposed of.

CENTURIA I.

VIBURNUM L. Subg. LENTAGO Raf. als. 219.
Autikon 1, Membranaceum R. als. 223 Florida.
2, Laurifolium R. als. 225—New Jersey.
3, Ferrugineum R. als. 226—New Jersey.
4, Heterophylum R. als. 227—Oquago Mts.
5, Retusum R. als. 228—Alabama.
6, Squamatum W en.—als. 229. once my V. punctatum—Atlantic marshes. In my Alsographia 30 sp. of Viburnum of N. America, are described and contrasted, whereof 16 are new, all in my herbal, I now give 6 as samples.

RIDDLELLA Raf. new fl. 856, sylva tel. 701. new genus of tribe Cleomides.
8, ARBUTUSandrachne O—Grecia.
9, Dillenia scandens W—Australia. t
10. Myrtilloia Raf. ut supra—Polygala do L.
 &c. Africa Austr.
11, Phyllis nobla L. &c—Canaria Ins.
12, Correa alba O.—Australia.
13, Ripsocites egyptiaca Raf. als. 52—Salix
octandra, Sieber—Egypt.
Nestronia Raf. n. fl. 503, N. G. of tribe Daph-

nides,
14, Umbellula R. 504, shrub of Georgia &c.
JUNIA Raf. Dioica, fl. masc . . , fem. cal.
5part. persist. cor. 5part. lobis spatulatis tru-
catis, glandulis 5 oppos. (an stam. abort?) ovar.
ovat. glabr. stylo 1 stig. 2fidiun. capsula 2lo-
cul. sem. paucis planis ellipticis. Fruxex, fol.
oppos. fl. axill.—N. G. near to Clethra and
Cyrilla; but habit unlike, and perhaps of
tribe Myrsinides if there are 5 stamens op-
posed to segments of Corolla. I restore for it
the name of Junia—given to Clethra by
Adanson.
15, Junia triflora Raf. ramulis teretis rugosis
fuscatis, fol. petiol. glabris, ovatobl. serratis
acutis reticulatis. pedunculis axil. trifloris—
pretty shrub, flowers small white, found name-
less in a parcel of plants received from Flor-
ida, but whether Floridan, Antillan or Afri-
can I am not sure.
16, Clethra acuminata Mx. Carolina.
17, Cl. tomentosa Lam.—South New Jersey.
18, Cl. angustifolia Raf. ramulis apice hispi-
dis, fol. brevi petiol. angustis cuneatis acutis,
apice mucronato-serratis, subitus pallidis gla-
bris, nervis hispidis: rac. gracilis lax. angul.
pu

beris, bracteis linearih, pedic. eq. calicib. vix-
acutis, furfuraceis, glauco-fulvis,—Florida
shrub, apparently very distinct from *Cl. alnifolia*, leaves quite narrow although as long.

19, *Cl. bracteata* Raf. ramulis teretib. fulvo tomentosis, fol. petiol. latoblongis, basi acutis, apice acum. ineq. serrulatris, subtus fulvescens granulatis, nervis tomentosis: racemis laxis, bracteis lanceolatis fl. longior, calicib. fulvis, toment. acutis—very peculiar sp. of Florida, leaves about 2 inches long and one wide, some bracts one inch long. †

20, *Cl. pumila* Raf. repens, caulib. erectis brevis slmpl. apice angul. pubens, fol. petiolis hirsuti. obovatis utrinque acutis, mucronato-serrulatis, glabris, nervis subtus hirsutis: racemo brevis basi laxo, bracteis linear. ped. eq. calicib. obtusis furfuraceis—in South New Jersey, stem only 4 to 10 inches high with a single raceme and few small uncial leaves. If it is a var. of *Cl. alnifolia*, it is a singular deviation.

21, *Cl. cordata* Raf. ramulis angul. villosis, fol. ovasris, basi cordatis, apice obtuse acum. subintegris vix erosis glabris, subtus reticul. nervis puberis: racemis laxis ebracteatis, cano villosis, calicib. obtusis canis furfuraceis—sent me as the *Cl. arborea*, but totally unlike, by cordate leaves 3 or 4 inches long, 2 broad, not serrate nor oblong, racemes not spiked with rather long pedicels. Probably African. †

23, *Diconanangia heterophyla* Raf. *Itea Virginica* L. &c. from New Jersey to Louisiana. I restore the excellent generic name of Mitchell and Adanson, the bad one of Linnaeus being too short and meaning a Willow! I give it a new specific name quite appropriate, since the same shrub has leaves ovate and obovate,
oblong and elliptic, acute acuminate or obtuse; there is nothing permanent but the short petiols, margin serrulate, and pale or glaucous lower surface. Capsules conical villose in all.

**Cyrilla** L. &c, the *racemiflora* of Mx. distinguished from the *antillana* is as variable in leaves as the last G. the only permanent characters are the entire leaves with reticulate nerves on both sides; but I have found in the fruit characters for 3 distinct blended species.

24, *Cyr. polystachia* Raf. fol. reticul. pallidis mediocris petiolatis, infinis obov. obtusis, imis cuneatis acutis; racemis fascicul. elongatis, bracteis subul. brevis, capsulis subglobose—Louisiana and Florida near waters, leaves 2 or 3 inches long, of a yellowish green, racemes 6 to 8 inches.


26, *Cyr. fuscata* Raf. fol. reticul. brevipetiol. fuscatis amplis, sepe ellipt. obtusis, nonnullis obl. cuneatis; racemis geminis ternisque abbreviatis, bracteis subul. pedic. eq. capsulis oblongis—Alabama and Georgia, leaves mostly 3 to 4 inches long of a dark fuscate color above, paler beneath, racemes 4 or 5 inches long—all these shrubs have evergreen coriaceous leaves; but their shapes and color, with bracts and capsules are permanent distinctions.

27, *Florkea uliginosa* W. &c—Pennsylv. to
Louisiana, but rare everywhere. Completely described by myself in 1818 in Silliman Journal, and referred to tribe of Galenides, which has since been wrongly called Limnanthacea.

28. Odacmis Raf. new fl. 828. N. G. of same family Galenides—Od. fascicularis Raf. 829—Florida. †

29. Forskalia angustifolia Mur—Tenerif.


32. Cornelia verticillata Am. Ammania do Lam. O. †—Egypt. The Ammanias with 4 dentate calix from the G. Cornelia.

RONCONIA Raf. cal. camp. 4dent. adherens, cor. o. stam. 4, styl. filif. stig. capit. capsula membranosa uniloc. apice ineq. erumpens, placenta centralis. Herba, fol. oppos. fl. axil, pedic—another G. blended in Ammania, dedicated to Ronconi, it differs chiefly from Cornelia by uniloc. capsule.


34. Boykinia humilis Raf. rev. 1817. Ammania do L. A—North America. This G. has also the capsule uniloc. but the calix 8 dentate as in Ammania and 4 petals.


36. Ruta tuberculata Forsk—Egypt.

37. Eplidium humifusum Raf. Peplidium (ad Peplis) do Del.—Egypt.

38. Didiplis linearis Raf. herb. et new fl.
39, Sempervivum arachnoideum W. A—Alps Tyrol. †
40, Thesium alpinum L. O—Alpis.
41, Thes. humifusum L. O—Hisp.
42, Papaver alpinum L. O—Alpis.
43, Pap. cambricum L. O—Cambria. †
44, Montia fontana L. O—Europa.
45, Atirsita pumila Raf. n. fl. 820-1. N. G. near Veronica, of Arkanzas. †
46, Veronica sparsiflora Raf. n. fl. 825. Missouri.
47, Ver. mollis Raf. n. fl. 826. Origon.
48, Littorella flexuosa Raf. n. fl. 748—Alabama and Arkanzas. †
49, Littor. lacustris L. A—Europa.
50, Lathyrus auriculatus Bert.—Sicilia.
51, Vicia leptophyla Raf. Dec.—Sicilia,
52, Samolus paniculatus R. herb—Florida to Texas.
53, Sam. acaulis R. herb—Mts. Origon. †
54, Sam. multicaulis R. herb—Cfeta.
55, Sam. valerandi L. Europa &c. Under that name have been blended 10 or 12 sp. distinguished in my Monograph, of which I now give 4.
56, Ononis reclinata O—Sicilia Mts.
57, Biscutela raphanifolia Poir—Sicilia.
58, Bisc. pilosa, R. fol. cuneatis acutis sessilib. remote dentatis, siliculis dilatatis obreniformis glabris, margine dense ciliolatis.—In Arkanzas, small annual plant, half pedal, leaves 1 or 2 inches long, lower almost petiolate, upper oblong or lanceol. racemes short, flowers
small yellowish, style persistent, stigma capitate. ♩

59, Farsetia incana Raf. Cheiranthus farsetia Desf. &c, Lunaria scabra Forsk—Egypt; Arabia. There is a 2d sp. *F. linearis*. The G. made a shbg. by Persoon is quite peculiar by elliptic silicles.

IONDRA Raf. diff. Thlaspi—Siliculis ovatis compressis margine alatis, latere nervo medio in stylo anceps decurrens. The name was an ancient one of Thlaspi.


61, Buffonia tenuifolia L. O.—Italia.

62, Dessenia scoparia Raf. Struthiola erecta L. O.—Africa austr. Adanson's name of *Dessenia* is far preferable to *Struthiola* derived from *Struthium*, the Ostrich, without even any preceptible allusion.

CARGILA Raf. diff. Melampodium, Perianth. 4-5phyl. ineq. rad. fem 4-5, floesculis 4-8, sem. 4-4gona, apice nuda truncata—Cargila was Adanson's name for Melampodium.

63, CARGILA dichotoma R. caule dichot. sulcatlo, fol. subconnatis obovatis acutis scabris, latere subangulatis subtus glaucis, pedic. erectis ad dichot. lac. per. ovatobl. Sent me under the false name of *Melampodium longifolium*, neither applying nor found in authors. South America, erect pedal, leaves 1 or 2 inches, flowers very small. ♩

64, Kuhnia elliptica Raf. new fl.—falls of R. Cumberland in East Kentucky.

65, K. cinerea R.—Kentucky.


67, K. eupatoroides L.—Philadelphia at a single spot. See my monograph of the genus,
and supplement thereto, where over a dozen N. Amer. sp. are distinguished.


69, *Oth. longifolium* R. n. fl. 924---Arkansas†

70, *Xetoligus brevifolius* R. n. fl. 925---Louisiana, another N. G. near *Stevia*.

71, *Flaveria contrayerba* Juss. *Milleria* do Cav---Peru. †

72, *Bœbera glandulosa* W. O---Carol. ad Mex.

73, *Alcina perfoliata* Cav. *Wedelia* do W.---Mexico. †

74, *Brickellia cardifolia* El.---Carol. †

75, *Diplostephia pumila* Raf. n. fl. 317---Arkansas. N. G. miscalled *Chetanthera* and Actinocarpus by some.

76, *Dipl. radians* R. n. fl. 318---Texas.

77, *Dipl. filiformis* R. n. fl. 319---Texas.

78, *Grindelia squarrosa* W. Donia do Pursh---Missouri.


81, *Dictannus albus* L. O---Italia.

82, *Rhinanthus maximus* W.---Creta †

83, *Dymocarpus crenulatus* Lind.---Australia N. G. near *Ruellia* with uniflore scopæs, leaves oblong obtuse crenate villose.


**TRIMISTA** Raf. diff. *Nyctago*, cal. 3fd. ineq. cor. infundib. limbo plano trilobo, lobis ineq. emarg. stem. 5 ineq. hypog. non epipet. 3 major exerta filif. antheris glob, stylo exerto filif. stig. capit. granul. fol. opp. fl. axil. et term.

85, *Trimista levigata* Raf. fol. petiol. glabris ovatis subcord. acutis integris, cal. ovatis a-
cutis---Central America, flowers large incarnate. One of the plants blended in Nyctago jalapa stated to grow in both Indies. †

86, *Lopezia* bracteata Raf. ramis virgatis, fol. sparsis petiol. ovaro lanceol. acum. dentatis ciliolatis, racemis foliosis, bracteis similis. pedic. equante—New Mexico, bipedal. leaves uncial, peduncles filiform nodding. †

87, *Endopogon* pumilum Raf. fl. tel. 196---Wasioto hills of Kentucky, N. G. near Hedyotis and the 2 next G. †

**PLETHYRSIS** Raf. diff. Hedyotis, cal. camp. 4part. ineq. foliaceus, cor. infundib. limbo 4part. lac. linear. revolutis, tubo intus villosa, stam. 4 eq. filif. basi villosis exsertis, stylo filif. stig. 2 linear. capsula coronata 2loc. dispersa. *fl. term. thyroideis, herba*---The name implies multiplied thyrsus, very distinct inflorescence.

88, *Plethyrsis* glauca Raf. caule 4gono scabro, fol. subsessil. ovatis acutis scabris integris, subtus glaucis, thyrsis ovatis basi compositis foliosis, fl. subsessil. bracteis parvis lanceol.---Unaka or Iron Mts. of Carolina, flowers handsome incarnate, leaves similar to Cunila mariana. Perhaps *Spermacoce involucrata* belongs to same G, but differs by narrow hirsute leaves. and capitate flowers. †

89, *Stelmanis* glomerata Raf. Oldenlandia et Hedyotis do L. A---New Jersey ad Louisiana my G. proposed since 1818 means *unequal crown*, the generic characters is found in the unequal calix as in Plethyrsis, but the stamens are inclosed, stigma sessile capitate, capsule polysperm, seeds trigone &c.

90, *Omonoia* californica Raf. fl. tel. 351 (in 1836) Elshotzia do Chamis. non W. Chryseis
do Lind. non Chrysis L.—Calif. et Origon.
94, Cobea scandens O.—Texas, Mex.
95, Glaux maritima L. O.—Europa.
MARZARIA Raf. (bot) diff. Bocconia, cal. nullus vel evanescens, stam. 12-15 filif. anth. longis linear. ovar. obl. stipit. stig. unicum oblongum obt. Herba acaulis, fl. racem. compos.—Totally unlike Bocconia which is frutescent, with 6-8 stamens, style bifid &c. This has habit of Heuchera.
97, Epimedium alpinum L. O—Alpis &c.
98, Troxirum villosum Raf. toto vilos. fol. subpetiol. opposit. ovatob. apice atten. obtusis uninervis, spicis filif. glabris axil. et term. —Central America, sent me as Piper blandum, but very distinct, herbaceous erect, 6 to 10 inches high, leaves uncial, spikes biuncial.
99, Trox. varians Raf. Piper verticillatum L, O.—Antilles. Small plant 3 to 6 inches high, leaves variable obovate or oblong, opposite or 3-5nate, always sessile obtuse trinervate.
100, Zalitea linearis Raf. new fl. 990—Arkansas, fine N. G. of Euphorbides.
Thus this Century contains 28 N. G. of mine, whereof 7 now first described, with many new and very rare species.
CENTURIA II.

101. VESTIA vel LEVANA Raf. cal. urceol. tubul. 5dent. dentib. subineq. brevis. cor. tubulosa elongata subclavata basi angustiora, limbo 5fido vix patens, lac. acutis, stam. 5 exertis ineq. filif. antheris subrot. 2 loc. stylo similiis, stigma truncatum. Fruct... Frutex, fol. alt. fl. term.—Very distinct G. sent me under 2 names Vestia lycioides and Blairia pentandra. I find neither in my Authors, it is certainly not a Blairia! I dont know who established Vestia, I give Levana (a nymph) as a synonym, in case it is also a blunder. The G. appears akin to the many blended in Lycium if the fruit is a berry, the unequal stamens are a character of this group, omitted by oversight in my reform fl. tel. 261 to 278, thus forming a family Lycioides distinct from Ilexides; the Convolvulides differ by capsule and opposite stamens.

VESTIA lycioides vel LEVANA uniflora Raf. glaberrima, fol. sessilib. oblongis obtusis integris uninervis glaucis, basi cuneatis acutis, ramulis apice nudis unifloris—fine African shrub, leaves uncial, some smaller ones obovate in the axils, flower large biuncial, white or incarnate, nodding in anthesis. Ῡ


103, CALYMNIA granulata Raf. glaberrima, fol. angusto lanceol. basi acutis, apice obtusis, utrinque granulatis, margine flexuoso, fl. axil. solit. lac. perianth. ovatis acutis membranosis
glabris—Florida and Alabama, pedal, leaves biuncial.

105, Decumaria barbara O.—Florida.
110, Blutaparon breviflorum Raf. n. fl. 845, Illecebrum vermiculatum Mx. non L.—Florida.
111, Discoplis serrata Raf. n. fl. 740—Florida et Cuba, N. G. near Tragia.
112, Cartrema odorata Raf. Olea Americ. L. A—Carol. &c called Pausia in sylv. tel, 10, by mistake having a previous Pausia fl. tel. 1139, rectified in appendix. ♠
113, Polygonum jimbriatum El.—Alabama. ♠
114, Polyg. articul. L. O—Nov. Ces. ad Carol.
115, Arkezostis quinqueloba Raf. n. fl. 996. Boykinia trispora Nut.—Alabama: thus a 3d Boykinia, see 34 and 102. N. G. Cucurbitacea.
117, Triod. rupestris Raf. n. fl. 906.—Maryland.
118, Erigenia bulbosa Nut.—Pensylv. ad Kentucky.
119, Peltaria alliacea O.—Hungaria.
120, Shortia Raf. diff. Arabis et Draba stylo elongato persistens, stigma obt. siliculis
oblōngis planis acutis sepe dimidiatis—G. established 1834, dedicated to Dr Short.

Shortia dentata Raf. Arabis do Nut. Draba do Hooker, Sisymbri. do Tor. et Arabis!—Kent-
tucky, Missouri.

121, SEMETUM Raf. diff. Lepidium, stigma sessile bilob. silic. ovatobl. nervosa ad dis-
sep. contrario angusta, valvis compressis carina obtusa, loculis 1-2 sp.—all my specimens are in
fruit, thus flowers unknown, akin to Diplotium
if stamens 2, but silicle not emarginate. Sem-
et was an oldname of Lepidium.

SEMETUM ramosum Raf. ramosa subdichot.
fol. lin. cuneatis acutis glaucis integris, racemis
ramosis, pedic. comosis filif. elongatis proximis
—Florida. erect smooth, leaves uncial, flowers
and silicles very small but profuse. ♦

122, Discovery ohienae Raf. N. G. 1819.
Dec. &c.—Ohio. This G. although shown to
Torrey in 1826; has not been admitted by him,
and merely noticed as doubtful. It is near the
last G. but the silicle is shorter not nervose,
stigma entire, petals yellow. ♦

123, POLYPREMUM squarrosum Raf. P. pro-
cumbens L. O—perennis, caulib. erectis vel
procumb. bisulcatis scabris fol. linearib. mar-
gine scabris, internodis longior, florib. sepe term.
congestis, bracteis squarosis quaternis—Carol.
Florida. I have revised this sp. to contrast it
with the next. This curiose G. does not belong
to Scrofularides; but is very near Veronica,
differing by habit like Scleranthus, corolla equal
and 4 stamens, are they opposed? when it
would be of family Primulides.

124, Polypr. laxum Raf. annuum, decum-
bens, caulib. laxis glabris bisulcatis, fol. lin. lan-
ceol. margine glabris, internodis brevior, fl. so-
3
lit. ad dichot. bracteis sepe binis—Arkansas, Texas. Larger plant, leaves broader and longer, flowers quite sessile and never terminal.

125, Arenaria heterophylla Raf. glabra caule paucifloro, stricto simplex, apice fuscato subnudo, fol. planis obtusis, inferis subpetiol. cuneatis, medialis longe linearis. superis subulatis; axilis nudis, pedic. elongatis, calicib. acutis. 3nervis, petalis spatulatis elongatis—Arkansas, near A. tenella of Nuttal but leaves very different not acute; flowers white rather large. petals over twice the calix, leaves often uncial.

127, Aren. squarrosa Mx.—Nova Ces. Carol.
128, Aren. lateriflora O.—Niagara et Alleg.
129, Aren. glabra Mx.—summits of Allegh. Mts. I have it from Torrey himself found on top of Shawagunk Mts. of New York, a locality he has forgotten (like many others) in his flora.

130, Aren. incurva Allioni—Helvetia.
131, Aren. trinervia L. G—Gallia.
133, Aren. muralis Sieb—Creta.
134, Aren. setacea (quid ?) Gallia.


137, Dianthus tripunctatus Smith—Creta.
139, D. deltoides L. O.—Alpis.
140, Silene rotundifolia Nut.—Chio, &c.
141. Sil. virginica L. O. miniata Raf. an nat.—West Pennsylv. and Virginia, Kentucky.
142, Sil. scabra Raf. caule simplex scabro
apice glandul. pubescens, 1.-3floro, fol. ovato lanceol. obtusis scabris uninervis. fl. brevi pedunc. cal. teretis enervis glabrius. petalis bifidis, corona biloba---barrens of West Kentucky, bipedal, leaves uncial and over, flowers large, calix uncial, petals red.

143, *Sil. fruticosa* L. O—Sicilia.
144, *Sil. vulnere* L. O—Sibiria.
147, *Chlonanthus tomentosa* Raf. n. fl. 220—Mts. of Virginia. I have modified *Chelone* mg. turtle into Chlonanthes mg. turtle flower.
148, *Chlon. latifolia* Mg.—Kentucky.
150, *Chlon. montana* Raf. caule ramoso, ramis patulis 4sulcatis, fol. subsessil. lanceol. longe acum. sub serratis glabris, floribus capitatis involucratis, bract. ovatis acutis—Mts. Wasioto or Cumberland, bipedal, leaves narrow triuncial, flowers incarnate crowded in a short head.
151, *Hemitomus lanceolatus* Raf. *Herbeacea glabra* ramosa, ramis virgatis bisulcatis, fol. petiol. lanceol. pectinato serratis, oppos. ternisque racemis laxis, fl. alt. bract. lin. integris—Antillis and Florida. Stem bipedal, leaves small uncial, flowers large scarlet. One of the sp. blended in *Hemimeris coccinea* or *linearis* of authors, very different from *Hemitoma fruticosa* L'her. The G. Hemitoma has 4 stamens, Hemimeris only 2.
152, *Cymbalaria alpina* Raf. Linaria do O.
153, Cymb. vulgaris R. Linaria cymbal. O.
154. Cymb. egyptiaca R. lin. do O.
156, Peloria linaria Raf. Genus monstruosus, mirabilis, hybridus &c.
158, Myct. latifolia R. n. fl. 230—Allegh. M.
159, Myct. axillaris R. n. fl. 231—Allegh.m.
160, Claytonia linearis Raf. fol. binis ineq. sessilib. linearib. acutis racemo paucifl. equante, cal. obt. petalis obovatis—Arkansas, triuncial, slender, leaves uncial, very narrow, fl. incarnate.†
161, Claytonia dilatata Raf. caroliniana Mx? fol. binis eq. ovatolanceol. subpetiol. acum. racemo multifloro brevior. cal. subacutis, petalis obov.—Novanglia, triuncial, leaves uncial.
162, Clayt. perfoliata O.—Amer. bor.
163, Clayt. sibirica O.—Sib.
164, Hottonia inflata Mx.—Kentucky.
165, Mikania saturefolia Lam.—M. Video.
166, Meryrocarpus setosus Ruiz. Prv.—Chili ad Paraguay. †
167, ACTARTIFE Raf. diff. Boltonia, Rad. sepe 20, angustis subintegris, sem. obl. compr. mutica, apice integra vel denticul.—Types the sp. blended in B. asteroides, the real G. Boltonia with 2 sp. glastifolia and diffusa E, has 80 to 40 rays 3dentate, seeds winged with 2 or 4 bristles. Actartife was an ancient name of Anthemis.
ACTARTIFE cuneifolia Raf. caule erecto paucifl. sulcato, fol. sessilib, cuneatis mucronatis, margine integro scabro, infimis subspatulatis, pedunc. subnudis—Florida, found by Baldwin, deemed B. asteroides, which differs by leaves
oblong amplex. dentate, lower pinnatifid. Stem pedal nearly simple, leaves uncial, flowers like Erigeron, perianthe imbricate subulate as in all Boltonias.

168. Actartise angustifolia Raf. caule dichot. corymboso angulato, fol. sessilib. longo linearib. acutis margine scabro integro, pedunculis squamosis, sq. subulatis—Delaware, mistaken for B. glastifolia by Nuttal, not even of same Genus and leaves not serrate. Stem bipedal, leaves 1 or 2 inches long, flowers small, habit quite similar to Erigeron philadelphicum.


170, Balduina bicolor Raf. n. fl. 920—Florida.

171, Neactelis strigosa Raf. n. fl. 910—Florida.

172, Aimorra acuminata Raf. n. fl. 912—Florida, this and last G. near Acmella and Espelitia.

173, Bindera ciliata R. n. fl. 915—Louisiana, N. G. near Asters, differs by perianthe simple.

174, Neurelmis pumila Raf. n. fl. 918—Cuba, very singular flosculose G. I had called it once Jalambica from the discoverer; but there is a previous Jalambica of Llave.

175, Marshallia spiralis R. n. fl. 933—Arkansas.

176, Marsh. temuifolia R. n. fl. 934—Florida

177, Opicrina latifolia R. n. fl. 955—Kentucky, the Narbalia crepidinea belongs to this Genus.

178, Darluca prostrata Raf.—Florida N. G. near Evolvulus, but with irregular corolla.
179, **Stylisma peduncularis** Raf. n. fl. 871—Alab. Flor. This G. is formed by the sp. blended in Convolv. tenellus, trichosanthes, sherardi &c.

180, **Styl. heterophytra** R. n. fl. 869—Florida.
181, **Styl. elliptica** R. n. fl. 870—Alabama.
182, **Plesilia cuneifolia** R. n. fl. 874—Nov. Ces. &c. †

183, **Panax americanum** R. med. fl. ic. n. fl. 878—N. Amer.
184, **Panax trifolium** L. O—N. Amer.
185, **Panax lanceolatum** R. n. fl. 877—Allegh. m.
186, **Ansonia tenuifolia** R. n. fl. 880—Florida.
187, **Ans. angustif.** O—Carol. &c.
188, **Ans. ciliata** Walt.—Carol. †
189, **Ans. salicifolia** O—Kentucky ad Louisiana.

190, **Ans. elliptica** Raf. fol. ellipt. acutis—Alab. †
191, **Ans. latifolia** O—Virg. Carol.
192, **Lyonsia cuspidata** Raf. n. fl. 883—Florida. †
193, **Anantherix grandiflora** R. n. fl. 884—Arkansazas.
195, **An. viridis** Nut.—Carol. †
196, **Oligoron longifolium** R. n. fl. 886. Asclepias do Mx, floridana Lam.—Florida ad Arkansazas.
197, **Olig. tenuisfolium** R. n. fl. 887.—Arkansazas.
198, **Otanema latifolia** R. n. fl. 889—Allegh. M.
199, **Ot. ovata** R. n. fl. 890—Novangl. ad Virg,
200, *Ot. lanceolata* R. n. fl. 891. Asclep. do Ives & c---Novangl. ad Kentucky. All the above N. G. from 186 are of Asclepides tribe.

This Century contains 25 N. G. whereof 4 now first described with 14 N. sp. now described.

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**CENTURIA III.**

201. *Evactoma* Raf. diff. Silene et Cucubalus, cal. infl. camp. 5fid. membranosis, petalis 5 flabellatis multifidis non coronatis, sty-olis 3, caps. 3loc. 3valvis, fol. verticil. fl. subrac-cem.—This deserves to be a G. by habit and characters, the name means *well cut star.*


202, *Cucubalus* baccifer, L, Europa, the only real type of this G. with calix as in evactoma but deeper 5fid, petals bifid, capsule bac- cate, leaves opposite, fl. in forks. called *Moen- chia* by Necker, not of others.


204, *Oberna nivea* Raf. Silene nivea Dec. Cucub. do Nut.—Susquehanah, one of the rarest Amer. plants, found by me since 1804. +

205, *Oberna reticulata* Raf. caule erecto dichot. anceps, fol. brevis lanceol. acutis, basi membrana connatis, fl. corymbosis, cal. amplis reticulatis, petalis flabellatis bifidis nudiusculis —Sibiria or N. W. America, internodes long, leaves short seldom uncial, flowers large white, calix exactly as in the G. base deeply umbili- cate, 5 large teeth.
207, *Xamilenis* Raf. *Nanosilene*! Oth. nom. pessim. diff. Cucuralus, cal. camp. urecol. non inflatus 5dent. petalis emarg. subnudis, caps. sicca. fol. cespit, ped. 1st. fl. dioecis—very distinct by habit &c, the name means *dwarf pink.*


208, *Pleconax* Raf. diff. *Silene*, cal. ovatis conicis inflatis 5dent. 30 sulcatis, 30 nervis, basi umbilic. petalis bifidis, caps. lageniform. uniloc. caulib. simplex, paucifl.—very peculiar calix giving name to the Genus.


209, *Alifiola* Raf. diff. *Silene*, cal. ovatis lageniformis, 5gonus 5pteris 5dent. basi acutis, petalis angustis apice bilobis. caps. sessilis uniloc. globosa, pericarpium duplex, exstus crustaceum 3dent. intus membranostum sem. globosa, dichot. st. term.—very singular G. that I cannot refer to known sp. the fruit quite peculiar, not pedunculate as in most of akin, swelling the calix in the shape of a gourd or urn, with 5 wings, the name implies this: 2 sp.

*Alifiola* dichotoma Raf. levigata, caule tereto dichot. fol. amplexic. lanceol. acutis tri- nervis, fl. panicul. longe pedunc.—In Kentucky, disc. 1818 when called *Silene alata*, 12 to 15 inches high, leaves nearly biun- cial and subequal to internodes, flowers of mid- dle size, petals incarnate small on long claws, emarginate.

210, *Alifiola floridana* Raf. glabra, caule simplex paucifloro, fol. linearib. acutis interno- dis brevior uninnervis, fl. term. brevi pedunc.—Florida, disc. by Kin, habit of *S. antirrhina.*
only half pedal, flowers twice as large, equal to
\textit{A. dichotoma}, calix half uncial, wings not so
broad nor reaching the base, petals red emarg.
bilobe. ⊞

211, \textbf{IXOCA} Raf. diff. Silene, cal. camp. 5lo-
bis enervis, petalis apice 4lobis, stylis 3-5, caps.
3-5dentatis uniloc. \textit{fl. term.}—The name is
shortened from \textit{Ixocaulon} of Greeks.

\textbf{IXOCA tenella} Raf. Silene 4dentata \textit{L. O.}—
Alpis.

212, \textbf{OTITES} Ad. Raf. diff. Silene, dioic. vel
\textit{monoica}, cal. camp. 5dent. 10nervis, petalis in-
tegrís undulátis non connátis, \textit{fl. paniculatis}—
many sp. belong here \textit{O. parviflora, O. sibiri-
ca} &c, with the 2 next.

radic. petiol. cuneátis acutis, cauliniis parvís lin-
earib. basi membr. connátis, \textit{panicula gracilis,}
\textit{fl. vertici. ped. brevis glabris}—\textit{Germania} &c.

213, \textbf{OTITES myrianthes} Raf. fol. linearib.
parvis remotís sessilibus. \textit{panicula trichot. snbco-
rymb. fl. fastigiatis numerosís, pedic. elongatís}
glabris—\textit{Sibiria}, sent me as \textit{Cucubalus pilosus,}
name not in the books, perhaps only a var. of
last.

214, \textbf{GYPSOPHILA corymbosa} Raf. caule erec-
to tereto, apice dichot, glandulosó, fol. remotis
linearibus. acutis, basi membranosis connatis \textit{fl.}
corymb. dichot. fastigiatis, bracteis scariosís cal.
canís, caps. globosis—\textit{Florida}, pedal, leaves un-
cial, flowers almost similar to \textit{Otites} in size and
form, but a real \textit{Gypsophila} by cal. camp. 5an-
gular, petals obovate entire white, capsule uni-
locular semi \textit{4valve}, valves obtuse. Thus of
my subg. \textit{Aploma fl. tel. 190}.

216, Gyps. nudicaulis Raf. caule rigido trichot. glauco nudo, fol. squamulis acutis brevissimis, panicula dichotoma laxa, pedunc. longissimis—Carpathian Mts. sent me under a false name, unlike any other, large plant, flowers small, calix hardly angular 5fid, capsule obovate semi 4valve obtuse.

217, Gyps. muralis L. O—Europa.

218, Gyps. repens L. O—Alpis.

219, Gyps. suffrutosa Raf. caule suffruti. basi ramoso genicul. fol. basi imbricatis linearib. acutis. apice remotis subulatis, fl. corymbosis dichot. stylis elongatis, petalis integris—Carpathian Mts. semipedal, leaves uncial below. fl. white, calix membr. between the teeth. +

220, Gyps. (Vacaria) cretica Sm. Saponaria do L.—Creta, the subg. Vaccaria differs by calix more elongate, and petals emarginate.

221, Arrostia paniculata Raf. fl. Tel, 193—Sibiria, my G. Arrostia of 1810 differs from Gypsophila by calix not angular, capsule bivalve, fl. paniculate &c.

222, Arrostia parviglora Raf. caule tereto dichot. fol. lin. lanceol. acutis glabris uninervis internodis eq. basi subconnatis, paniculis corymbosis, cal. globosis semi membranosis, petalis integris—Armenia or Caucasus, sent me as Gyps. altissima. but very different, smaller leaves narrower uncial, flowers white very small the calix has 5 green stripes under the teeth +

223, Tunica dianthoides Raf. fl. T, 195. Gyps. do Sm.—Mts. of Creta, the old G. Tuni ca of Dalechamp by me restored is medial between Gypsophila and Dianthus, having the angular calix of the first. but caliculate as in the last.

224,---Tunica podolica Raf. caule dichot. fi-
lif, fol. remotis lineari-filif. adpressis pedicellis elongatis unifloris, caliculis sq. 2-4 lanceol. acum. petalis cuneatis retusis—Podolia, sent me by Decandole (by mistake) as Gyps. struthium a Spanish plant totally different; nearer to Tun. or Gyps. rigida which has flat leaves and biflere peduncles. Stem pedal, leaves half uncial flowers incarnate, calix membranose except the 5 angles and teeth.


EXEMIX grandiflora Raf. Lych. do Jaq. coronata Thunb.—China. fol. ovatis acum. subt. glaucis, bract. 2 lanc. acum. petalis emarg.† 234, Steris viscaria Raf. Lych. do L. O.—Europa. The G. Steris of Adanson is well distinguished by calix clavate 10nerve, petals entire caps. 5locular on a long stipe or podogyne. 235, Physocarpus Necker, Melandrium non-nulis, diff. Lychnis fl. dioicis cal. obl. 5nervis 5dent. petalis bifidis coronatis, unguibus sepe coalitis, caps. uniloc. 5valvis—the Lychnis dioica of L. blending probably 3 or 4 sp. forms this G. evidently distinct.

Physoe, arvense Raf. pubescens, caule di-
chot. striato, fol. obl. vel. ellipt. acutis scabriusc. panicula dichot. bract. lanceol. caps. conicis—the most common European sp. flowers white.

236, Physoc. capitatum Raf. piloso, caule simplex sulcato, fol. cuneatis obovatisque acutis, ciliatis reticulatis, fl. capit. involucratis, caps. subrostr.—Germania, fl. incarnatis, a smaller plant.

237, Physoc. vespertinum Raf. caule piloso angulato subdichot. fol. lanceol. glabriusc. acutis, fl. term. paucis pedunculatis, caps. ovatis—Sent me as Lychnis vespestina and nocturna from England and Germany, although no such names in books; pedal leaves longer and narrower than in others, flowers incarnate.

238, Silene (Viscago) furcata Raf. pubescens, caule bifloro vel furcato, ramis unifl. fol. cuneatis acutis, superis lanceol. remotis paucis, cal. brevis teretis, dentib. latis, petalis brevis angustis bifidis—Labrador and Hudson Bay, remarkably like the last plant, but a real Silene not dioecal and with 3 styles, smaller 4 to 6 inches high, calix and petals shorter, incarnate.

239, Arocion Ad. Otth &c, differs from Silene by capsule unilocular, calix clavate 10nerved. The G. Silene requires a total revision and reform, of which I show the bases here; it was preposterous to unite 150 sp. with calix swelled, campanulate. oval, oboval, clavate, terete &c, smooth or nerved or winged, petals entire or divided, with or without crowns, capsule 1 or 3 locular. The subg. of Ottoh and Dec. are more by habit than characters and often badly named.—The real Silene Raf. ought to have calix tubular obl. or terete, capsule 3 locular, with some subg. yet.—Viscago calix striate
or 10 nerved—*Anevriphes* cal. not nerved—*Gymnesiu*, petals not crowned &c.

*Atocion armeria* L. O.—fol. ovatolanc. superis latioribus subcordatis, fl. corymbosis—Europa.

240, *Atocion armeroides* Raf. fol. oblongis, infimis cuneatis, superis lanceol. angustior—Kentucky, Alabama &c, the American plant appears a deviation with narrow leaves and often few flowers—It has also 3 var. 1 *uniflora*—2 *pauciflora*—3 *albisflora*.


342, *Dianthera formosa* Raf. fruticosa, ramis teretis atropurp ramulis hispidis, fol. petiol. ovatis acum. subrepandis, basi acutis, superis hispidulis, fl. term. 3-5, cal. obl. ineq. cor. galea bident.—South America, sent me as *Justica formosa*, name not in books, a real *Dianthera*, and even a subg. therein, *Larnaplagis* Raf. different from the 5 subg. of my *Dianthera* fl. tel. 977, by—cal. ineq. cor. tubo recto, galea 2 dentata, lab. subeq. 3 fido, antheris curvis, loculis 2 proximis supraposisis diagonalis obliquis stigma acut—a fine shrub, leaves 3 or 4 inches long, rather thin, petioles and nerves hispid, flowers red nearly uncial.

243, *Dianthera linearifolia* Raf. Just do Lam. caule herb. costato flexuoso virgato, fol. sessilif., longis cuneato linearibus acutis integris
patulis, pedunc. 4gonis fol. brevior, capitulis paucifl.—Carol. Florida, this and all the North Amer. sp. of this G. belong to my subg. Eupodanthes fl. T. 977, so natural as to have been made a single sp. by some. This has long narrow leaves obt. triuncial. small heads and flowers.

244, Dianth. longifolia Raf. caule herb. costato rigido, fol. sess. lanceol. acutis longissimis, basi cuneatis integris patulis, pedunc. brevis sulcatis, capitulis depressis—found in R. Susquehannah, akin to last, but robust with large broad leaves, 4 to 6 inches long, perhaps a remarkable deviation.

245, Dianth. repanda Raf. caule rigido costato, fol. adpressis sessil. oblongis repandis, apice obtusis callosis, pedunc. longissimis 4sulc. sub4fl. —very distinct sp. from Arkanzas, smaller, with short leaves biuncial, larger flowers &c. ♦

246, Dianth. ensiformis Raf. Just. do Walt. pedunc. Mx. &c, repens, caulib. herb. 4gonis acutangulis erectis, fol. sess. lin. lanc. acutis subrepandis, pedunc. 4gonis fol. subeq. capit. spicatis—such is the most common kind from New England to Carolina and Missouri.

247, Dianth. humilis Raf. Just. do O.—repens, caulib. adscendens, costatis, fol. sess. obl. vel. cuneatis obtusis subintegris, pedunc. fol. longior angulatis, fl, spicatis—Alabama to Louisiana, 2 sp. have also been blended in J. humilis, this is small, semipedal or less.

248, Dianth. heterophyla Raf. caule recto acutang. fol. subsess. ellipt. vel ovatis vel. obov. vel. obl. integris vel repandis, sepe obtusis, ped. fol. subeq. spicatis—Carol. to Florida, pedal, leaves large quite variable, not at all humble, spike often of 5 remote flowers.
249, *Dianth. (Eumala) mollis* Raf. Just. lithospermif. nonnullis non omnis. Fruticosa mollis villosa, ramis teretis, fol. petiol. ovatobl. basi acutis, apice obt. acum. integris, fl. verticil. axill. sessilib. bract. linearib. galea emarg. labio dilat. 3lobo—South America, leaves uncial soft, flowers large white. The real *J. lithosp.* differs by rough oblong leaves, flowers peduncul. &c. This forms a subg. *Eumala* (well softened) by habit and calix subeq. cor. tube short & thick; upper lip ovate obt. emarg. lower very broad equally trilobe, anthers oblique as in *Larnaplagis*, but the lower cell protruding or caudate as in *Uranthera*.

250, *IDANTHISA* Raf. (aspect fl. eq.) diff. Just. cal. 5 part. eq. cor. tubulosa recta, limbo subeq. 4fido, lac. unica supera magis divisa ut, galea plana integra, antheris sagittatis 2loc. loculis paralelisis subobUq. insertis, stig. obt. *Frutex. semperv. fl. axil. subspicatis*—another N. G. of the Justicoides tribe, nearest akin to *Adatoda* fl. Tel. 969, but different by equal corolla, galea not concave, anthers bilocu &c.

*IDANTHISA ligustrina* Raf. glabra, ramis teretis, fol. subpetiol. lanceol. acutis coriaceis integris, superis linearib. sessil. fl. axil. sess. solit, cor. lac. obl. obt.—Fine shrub, sent me as *Just. superba* (no such name in books) probably of E. Indies, leaves uncial, flowers large nearly 2 inches long, apparently red or incarnate.

251, *RODATIA* Raf. (bot.) diff. cal. ineq. cor. limbo bilab. galea brevis biloba, labio dilatata eq. 3loba, antheris curvis 2loc. loc. paralelisis *fl. spicatis bracteatis*—very peculiar habit, unlike any of my G. except *Flavicoma* fl. Tel. 979. *RODATIA reticulata* Raf. ramis 4cost. 4sulc.
fol. petiol. amplis ovatobl. acum. reticulatis. spicis obl. axil. and term. pedunc. bract. imbricatis ovat. acum. reticul. cor. lobis obtusis—South America, sent me again as Just. formosa, altho' quite unlike 242, leaves 4 to 6 inches long 2 or 3 wide, corollas red almost covered by the large bracts. 

252, Elytraria virgata Mx.—Florida. 

253, Adeloda brachiata Raf. Just. do P. &c, ram. brachiatis 4 cost. 4 sulc. fol. petiol. ovat. acu-integris basi obt. fl. panic. sessilib. cal. ext. bracteoso 2 valv. ineq. obov. acutis—thus and next belong to my G. Adeloda fl. Tel. 972, with many sp. once blended in Just. bivalvis, the double calix external bivalve and corolla with 2 entire lips, are very peculiar. Florida.

254, Adeloda verticillata Raf. ramis eretis bisulcatis, fol. petiol. ovatobl. acutis repandis, basi acutis, fl. axill. vertic. pedunc. cal. ext. bracteoso 2 valv. ineq. obov. obt. repandis.—Arkansas and Texas, very distinct from last, bipedal, leaves very thin 2 or 3 inches long. The internal calix in both appears short subulate, often multifid or pectinate, corolla incarnate, lobes unequal obov. obt. stigma obt. anthers ex- ert bilobe, 2 locular, but one cell abortive, filaments subul. flat.

255, Ruellia strepens L. O—Pens. ad Louis. subgenus Hemelosia.

256, Ruel. tubiflora Lec.—Florida.

257, Ruel. ciliosa Pursh &c—Florida, Car. Alab.

258, Hygrophila oblongisolia Raf. Ruellia do O.—This G. was formed by R. Brown upon unequal corolla, see fl. Tel. 993

259, Hygroph. pilosa Raf. pilosa hispida caulib. simpl. 4 gonis, fol. subpet. lanc. vel obl.
acutis, fl. axil. cal. filif. hispidis, corollis tubi-floris reticulatis—Kentucky and Alabama, distinct from last although often blended, flowers as large as in R. Strepsens, leaves 1 or 2 inches.

260, *Hygrophys. hypericifolia* Raf. caulib. strictis pubens 4cost. 4sulc. fol. sessil. ellipt, obtusis subcrenato repandis glabriusc. axilis bi-foliosis unifl. cal. filif. cor. brevis venosis profunde lobatis—Florida to Alabama, habit of Hypericum and Ascyrum, leaves uncial, root perennial creeping, flowers small half size of the others, tube short, lobes oblong, blue as in all akin.

261, *Sarazina gibbosa* Raf. (vel grandiflora) purpurea L. non omnis—several sp. or var. are blended in this remarkable plant, difficult to characterize, and none are really purple—fol. conformis subsessilib. obovato gibbosis, lutes-cens, ala ampla gibbosa, appendice renif. setis retrorsis, scapis flexuosis, cal. obt. vel retusis, petalis spatulatis—Canada to Virginia, swamps.

262, *Saraz. heterophyla* Eaton, appears to differ by leaves difforme longer petiolate, narrow wing. streight scape, flowers smaller, calix and petals undulate &c.—Novanglia, very rare.

263, *Saraz. venosa* Raf. differs from gibbosa, by leaves short, with small wings, venose reticulate of red chiefly in the lid, scape streight flowers smaller—Virg. ad Florida.

264, *Saraz. parviflora* Raf. fol. sessilib, tubulosis, ala angusta, appendice concavo fornicato, scapis flexuosis, cal. latovatis acutis—very distinct sp. of Florida, yet akin to the last, leaves 3 to 6 inches long, nervose, flowers very small, purplish.

265, *Saraz. rubra* Walt. &c—Carol. Flori
da, leaves pedal, narrow lid ovate obt. flower red as in the preceding, rather large.

266, Saraz. acuta Raf. fol. tubul. longiss. nervosis ala angustissima, append. erecto renif. acuto—Alabama, I have not the flowers, leaves pedal with parallel nerves, base acute, mouth small, lid smooth. †

267, Saraz. adunca Raf. fol. tubul. longiss nervosis infundib. ala angust. append. ovato actuno-co glabro—Florida leaves pedal; lid with a hooked point.

268, Saraz. flava L. O—Carol.

269, Sarav. variolaris Mx—Carol. This fine G. requires yet an amending hand, notwithstanding the Monographs and labors of Nuttal, Croom, Eaton, Torrey who has only 6 sp. including S. drumondii and psittacina.

270, Hydrola ovatifolia Raf. n. fl. 896—Arkansas.


272, Hydr. caroliniana Mx. 4valvis W.—Carolina, capsule bivalve, peduncled axils, 2-flore, bracteate. stem and calix hirsute.

273, Hydr. uniflora Raf. caule flexuoso inerme glabro, fol. alt. lanceol. acutis subsessil. pedunc. axil. unifl. bract. 2 obl. ineq. cal. lin. glabris—Louisiana on Red River, sent me by Torrey as Hydr. Unalvis. but unlike the last, smooth, not spinose, leaves smaller biuncial, flowers bluish white, anthers blue shaped like x, caps. bivalve. †

274, Eberlea glomerata Riddell Mpt.—Louisiana in water, singular G. sent me by Riddell in fruit without flowers, and thus I cannot be sure of the tribe; the habit and fruit is of the Justicoides—caule herbaceo atropurp. sim-
plex, fol. opp. decuss. sess. lanceol. obtusis margine scabris integris. fl. vertic. glomeratis (albis estivalis est Rid.) cal. 5part. lac. lance. acum. capsulis obl. bivalvis biloc. valvis septiferis partebilis dorso sulcato, sem. ad sept. remotis renif, t—The Justicia cheliona of fl. ludov. 113 appears a 2d sp. of this G. differing merely by leaves acute, fl. geminate pedunculate; if so the corolla is campan. bilab. upper lip narrow reflexed bidentate, lower very broad 3lobe. It may be called Eb. geminata.

275, DIPLANDRA Raf. diff. Jussieva et Ludw. Ludw. petalis 4, glandulis 4 humulatis vilosis ad petalis oppos. stam. 8 brevis, stylo breve. stig. glob. capit. caps. 4gona coronata latere dehis. cens, intus subuniloc. placentas 8. Fol. alt. fl. axil.—the Amer. Sp. of Ludw. Jussieva, Isn. nardia and Ammania have been so blended, as to perplex all botanists: yet excellent characters can be found in the calix. stamens, glands and capsules, requiring yet some N. G. this is very distinct, the fruit is very peculiar almost clavate semi 4valv, nearly uniloc. with 8 filiform persistent placentas forming the 4 angles and nerves of surface, united at top in a kind of radiant arch, seeds minute.

DIPLANDRA decurrens Raf. Ludw. do Walt. Lud. justicoides Mx. Jussieva erecta Abbot t. 40, Pursh &c. caule ramoso tereto alato, fol. lanceol. decurrens acutis, fl. axil. sess. petalis subrot. caps. glabras alatis—Carol. ad Missouri &c, 2 or 3 feet high, leaves 3 to 6 inches, petals yellow, small.

276, Diplandra heterophyla Raf. caule humile basi ramoso vix alato, fol. infer. obl. obtusis vix decurrens, superis lin. lanc. obt. sessilib. —Louisiana, a deviation of last, pedal, leaves
small uncial or less, flowers and fruits similar.

277, Diplandra compressa Raf. caule anceps vixalato, ramis fastigiatis filif. spicatis, fol. lanceol. sessil. acutis, ad ramis linearib. petalis obovatis, capsulis non alatis 8nervis scabro-granulatis—Florida, sent to Collins by Leconte as Jussieva trachisperma, bipedal, leaves buncial, on twigs uncial, flowers pretty large.

278, Dipl. montana Raf. glabra, caule tereto simplex, fol. inf. parvis petiol. obl. obt. ceteris sessil. lanceol. obt. acum. fl. axil. solit. petalis obl. obt. cal. vix longior, capsulis clavatis 8nervis—Unaka Mts. of Cherokis, annual, pedal, lower leaves uncial, others large triuncial, petals white, called J. erecta in Collins Herb. as well as next, altho so unlike.†

279, Dipl. pumila Raf. nana glabra caule compr. simpl. fol. sess. lin. lanceol. obt. fl. sess. axil. parvis cal. ovat. acum. serrulatis, caps. clavatis—Florida, annual, 3 to 4 inches high, leaves few 1 or 2 inches, fl. small, petals yellow oblong.


281, Adenola Raf. diff. Jussieva Diplandra, cal. 5-6part. interdum deciduus, petals 5-6, stam. 10-12, alt. brevioribus, glandulis 10-12 ad stam. alt. stylo clavato, stigma turbin. capitato umbilic. capsulis teretiusculis, nervosis, subuniloc. septis evanescens, sem. numerosa 5-6serialis, ad placéntis 5-6erectis liberis. caps. maturis corona carens apice truncata erumpens vix de-
hiscens. Fol. alt. fl. axil.—this will include the remainder of the N. American Sp. of Jussieva, the real Ludwigias being distinguished by capsules short angular cubical opening by a terminal pore

**Adenola grandiflora** Raf. Jussieva do Mx. &c—Florida &c fol. lanceol. acutis, fl. decandris, seldom producing seeds.

282, **Adenola glauca** Raf. Jussieva leptocarpa Nut. &c, erecta caule angulato hispido, fol. sessil. obl. et cuneatis acutis glauces, fl. brevi pedic. sepe 12andris, cal. hisp. lance. acum. trinervis, petalis eq. capsul. glabriusc. multimervis—Louisiana to Alabama, ultra pedal, leaves 1 or 2 inches, flowers small petals short, capsule very singular, when quite ripe uncrowned but still indehiscent, seeds peculiar cordate flat with truncate margin around.

283, **Adenola longipes** Raf. Ludw. peduncul. nonnullis non Mx. Eatonia amphibia Rid. Mpt. repens, glabra, caule assurgens flexuoso, fol. longe petiol. ellipticas vel latobl. utrinque acutis, fl. longe pedunc. fol. eq. sepe decandris, cal. lance. acutis, petalis obov. venosis ad cal. longior—Florida and Louisiana in water, pedal, leaves large 2 to 4 inches long, 3 to 6 with petiols, flowers yellow larger than in last, 5 short alt. stamens often abortive or changed into glands, capsule as in last, but evidently 5locular when immature all seeds peculiar triquetrous oblong truncate at both ends, perhaps a subg. **Teresperma** Raf. as there is a previous Eatonia, quite distinct from Ludw. pedunolosa with oppos. linear leaves.

284, **Ludwigia mollis** Mx. O—Car. Florida, Alab.

285. **Ludw. pilosa** Walt. Virg. Car. caule
angul. ramosa, fol. obl. obt. petalis cal. longior.


289. *Ludw. juncea* Raf. caule virgato angul. simplex, fol. remotis glabris linear. obt. superis minimis cuneatis, fl. racemosis, cal. ovatis acutis ad pet subrot. subeq.—Alabama, near the last, but still more slender, leaves narrower, stem angular, flowers small yellow, petals round, stamens with 4 alt. glands or abortive stamens opp. to petals, style long, stigma very large shaped like an *Agaricus*.


291, *Isnardia angustifolia* D. R. Ludw. do Mx. linearis Walt.—*Carol. Flor.* Alab. I unite to *Isnardia* with Decand. all the *Ludwigias* without a cubical 4gone capsule, flowers often apetalous.

—Carol. Florida, mv specimens have the glands on stem, branched angular, leaves small petiolate obl. acute.

293, *Isn. cylindrica* D. R. Ludw. do Elliot —Carol. to Louisiana stem. ang, no glands, leaves sess. lanceol. acute 1-2 inches long, sub-repand.

294, *Ammania linearifolia* Raf. ramosa O. ramis 4gonis virgatis, fol. linearib. obt. nonnullis basi dilatatis, fl. sepe verticil.—one of 4 sp. or var. blended in *A. ramosa*, this the largest bi-pedal. This *G.* only differs from *Isnardia* by calix 8dentate.


296, *Am. teres* Raf. caule teres vix ramoso fol. obl. obt. carnosis, caulinis basi cord. ad medio. angustatis, rameis cuneatis brevis, fl. sepe solit.—Virg. ad Carol. pedal, leaves twice as broad as in last, broader at both ends.

297, *Am. longifolia* Raf. caule teres vix ramoso, fol. elongatis gramineis acutis flacidis, basi cord. amplex. subtus glaucis, fl. sepe solit. —Arkansas and Louisiana, leaves 2 or 3 inches long strap shaped not narrower in the middle, thin and flacid, not rigid as in the others, petals white.

298, *Am. diffusa* (quid ?) caule teres ramoso diffuso fol. spatulatis oblongis obtusis repando crenatis, basi angustatis vel dilatatis, pedunc. axil. 2-5floris—sent under that name (not in my books) without locality, probably Antillian, leaves uncial. fl. very small. Is it of *G. Ronconia*? see 33.

299, *Campanula divaricata* Mx.—Wasioto or Cumberland Mts. of East Kentucky.
300, Camp. erinoides Mg. flexuosa, spinulosa, aparinioides of others—Pennsylv. New Jersey.

This Century includes 22 N. G. whereof 12 now first described and some restored, with over 40 N. Sp.

CENTURIA IV,

301, Boerhavia atomaria Raf. erecta non-nulis non L. glabriusc. caule erecto basi tereto apice obt. 4gono, fol. opp. petiol. ovatis acutis repandis erosis planis basi subtrunc. subitus pal-lidis atroglandulosis, panicula nuda 2-3chotoma, fl. subternis pedic.—Florida, pedal, leaves un-cial, flowers minute, fruit 5gone obverse pyra-midal 5sulcate sub5dentate, mistaken for the Antillan B. erecta by all the Northern Botan-ists, which differs by stem viscase pilose, leaves undulate rough on margin not glandulose.

302, Boerh. squamata Raf. diffusa Baldw, Mpt. non L. caulib. diffusis vel adscendens teres furfuraceis, fol, opp. ternisque ineq. petiol. ova-tis vel subrot. basis subcordatis, apice vix acu-tis, marg. subrepando scabris, subitus fulvescens squamatis glandulosispanic. paucifl.. dichot. bract. lanceol, fl. subternis sessilib. involucris subulatis—Florida, found by Baldwin, not in authors, smaller than last, semipedal perennial, leaves small semiuncial quite unequal, quite scaly beneath with black dots besides, fl. small few. The B. diffusa of India differs by stem & leaves smooth, not cordate nor scaly.—The G. Boerhavia must form many subg. 1 Taludama stam. 1 or 2, such as this and Br. diffusa, repens, hirsuta, erecta, atomaria, &c—2 Saliunca R. stam. 3 or 4, such as B, scandens, excelsa, re-
panda, 4andra—3 Pleterina R. stam. sepe 10. B. arborescens.

303, Rhexia glabella Mx.—Florida. †
304, Rh. lutea Walt.—Car. Flor.
305, Rh. lanceolata Walt. angustif. E.—Car. Florida.

306, Rh. linearifolia Lam—Florida. †
307, Rh. ciliosa Mx.—Car. Alab.
308, Rh. serrulata Nut.—Alab. Flor.
309, Parnassia palustris L.—Canada.

310, Parn. palustris var. parvifolia R. diff. fol. parvis subitus punct. scapis angul. brevis fl. minor, cal. lans—Mts. Allegh. †


312, Parn. rotundifolia Raf. amer. et carol. nonulis—Fol. subrot. vel ovatis obt. integris. subtus punct. petiolis apice dilat. scapis teretis, folia parva sess. ovata, cal. ellipt. obt. enervis, petalis ovatis, nect. 5setis?—Mts. Saranac of New York, leaves uncial on long petiols, scape 4 to 6 inches, flower size of P. palustris, petals multinerve as in most sp. This and the 3 following sp. appear blended in P. Caroliniana of Bosc and Mx. or Americana of Muhl. unmeaning names.

313, Parn. g andiflora Raf. fol. longe petiol. grandis, orbiculato cordatis obitus integris sub- tus glaucis glabris, scapis alatis teretis, fol am- plex. similis, cal. brevis ovatis obt. 5nervis. pe- talis ellipt. obt. multinervis, nect. trisetis elon- gatis—Fine sp. of the Unaka or Cherokee Mts.
petiols 6 inches, leaves 2 inches long and broad
scape pedal, flowers double size of \( P. \) palustris.

314, \textit{Parn. glauca} Raf. fol. longe pet. ovatis
obt. undulatis subtus glaucis glabris; scapis
teretis aniceps; folia sess. similis, cal. ovat. obt.
enervis, petalis obov. multinervis, nect. sepe tri-
setis—Lake Ontario, Genessee R. and New
Jersey, leaves uncial almost white beneath,
 scape 6 to 10 inches, flowers larger than in \( P. \)
palustris.

ovatoblongis vel ellipt. obt. repandis, basi in pe-
tiolo decurrens, vel interdum subcordatis, sub-
tus glaucis glabris, scapis compr. folia obl. par-
va, cal. ovat. obt. 3nervis, petalis obov. multin.
nect. trisetis—Taconick Mts. of New
England, large, leaves biuncial quite elongate, scape often
pedal, flowers as in last. †

316, \textit{Gratiola pilosa} Mx. Carol. Alab.

317, \textit{Grat. 4dentata} Mx. E. non omnis Caule
repens furfuraceo tereto bisulcato, fol. subulatis
acutis 4dent. ad nervo carinatis, ped. fol. eq.
cal. filif. caliculatus caps ovatis—Carol. Bald-
win first noticed that 3 sp. were blended in \textit{Gr.}
4dent. I therefore describe this in full to con-
trast with the 2 next. Flowers bicolor says
Elliot, yellow streaked of purple and border
white, capsule short in this and akin.

318, \textit{Grat. ramosa} Walt. caule 4gono gla-
bro erecto ramoso flexuoso, fol. lin. subul. acutis
integris vel bident. enervis subtus convexis, ped
fol. eq. cal. lin. ineq. ebract. caps ovatis—Carol.
Alab. semipedal, leaves semiuncial, flowers yel-
low.

319, \textit{Grat. callosa} Raf. caule teres furfurae-
ceo erecto ram. fol. obt. callosis 4-6dent. planis
nervosis, inferis obl. vel lanc. subtrinervis, cete-
ris linearibus. ped. fol. eq. cal. lin. callosis ineq. bract. caps. globosis—Florida found by Baldwin, 4 to 6 inches high, leaves short, fl. yellow. This and last of Subg. Psidiola by calix rot caliculate.

320, Grat. odorata Raf. virginica L. O.—easily known by its fine smell like Jessamine, all over N. Amer.


322, Grat. carolinensis Pursh—Carol. to Louisiana, to this Leconte and Eaton refer G. spherocarpa Elliot, and many other synonyms, that evince the previous confusion of this G.

323, Grat. heterophyla Raf. glabra diffusa flaccida, caule teres ramoso, fol. ovatis et obov. vel obl. integris vel subdent. obtusis vel reuisis, ped. fol. longior, cal. lin. ineq. calic. cor, tubo elongato, caps. ovatis cal. eq.—New Jersey to Florida, 3 to 4 inches high, leaves uncial thin, peduncles filiform very long, corolla white and yellow.

324, Grat. aurea Mg.—New Jersey to Louisiana. It varies with leaves linear and lanceol. stem virgate erect or decumbent ramoso.

325, Ambulia rigida Raf. fl. Tel. 966 Gr. anagallidea, Mx. Carol. to Kent. and Texas. All the Gratiolas with 4 fertile stamens belong to this G. of Adanson. Subg. Aotalix calix not caliculate, it varies with leaves cuneate, rhomboidal, oblong or obovate, always drying black and stiff.

326, Var. obovata, fol. sepe obovatis crenatis ped. longis arcuatis—Mts. Unaka. †

327, Var. microphyla, fol. obov. parvis crenatis, ped. brevior rectis—Florida. †
328, Var. cuneata fol. cuneat. vel obl. ped. longis rectis—Carol. Alab.
330, Ambulia micrantha Raf. Grat. do Baldw. glabra caule 4gono, fol. angustobl. basi cuneatis, apice serratis obl. pedunc. sepe geminatis fol. brevior. cal. brevis, ovatis obl. bract. capsulis subrot. semi4valvis—Florida, disc. by Baldwin, leaves nearly like the last, but neither black nor rigid, small, calix not lanceolate, caps. not obl. bivalve. Perhaps a subg. Impula Raf. by this and capsule unilocular, style filif. short, stig. obtuse.
331, Ambulia? psilosa Raf. Grat. 4gona El. his own specimens yet not answering to his description—glabra caule pumilo 4gono, fol. tenuis obov. vel obl. integris vel subdent. obtuse trinervis, ped fol. brevior. cal. ebract. subul. caps. subeq. ovatis compr. acutis—style and stigma as in last, stem 3 to 4 inches, leaves thin semi-uncial, flowers small.
332, Macuillamia rotundif. Raf. Monniera, and Herpestis do auct. glabra repens flexuosa, fol. petiol. ovatis vel subrot. pedic. fol. eq. caps. ovatis—Illinois, small plant. This G. was establ. by me in Neogen. 16, year 1825.
333, Macuill. obovata Raf. glabr. vel hirsuta prostrata non flex. fol. obov. vel. ellipt. sessilib. obt. ped. fol. brevior, caps. globosa—Virginia in the River Potomac. and in Louisiana, larger plant, leaves semiuncial.
334, Macuill. amplexicaulis Raf Mon. et Hesp. do auct—Carol. ad Florida.
335, Habershamia cuneifolia Raf. neog. 15. Mon. et Hesp. do auct.—Carol. Florida.
336, BAZINA Raf. (bot.) diff. Gratiola & c
cal. 5 part. lac. angustis, subeq. cor. tubulosa in- 
and. limbo obliquate ineq. lobis 5 ineq. stam- 
didyn. 2 sterilis furcatis uniloc. styl. filif. stig. 
...cut. caps. obl. semi 2loc. fol. subalt. fl. axil. 
alt.—G. medial between Ambulia and Ilysan- 
thes

Bazina nudiflora Raf. Lindernia grandifl. 
Nut. glabra repens, fol. sess. imbricatis subrot. 
obov. vel dilat. enervis integris crassis undula- 
tis obt. pedunc. solit. elongatis nudis, cal. lin. 
acutis—Florida, stem dwarf, 2 to 4 inches long, 
leaves small crowded, peduncles erect, flowers 
blue size of Ilysanthes, habit of Macuil. rotun- 
difolia.

337, Ilysanthes riparia Raf an. nat. 96. 
Lindernia attenuata Mg. this G. differs from 
Lindernia by stamens 2 fertile and simple, from 
Bazina by corolla bilabiate, stamens stigma 
capsule &c, established by myself 1820—seve- 
ral var. alba, cerulea, incarnata, repens, erecta, 
angustifolia &c, capsule obl. acute, leaves den- 
tate, lower obovate.

338, Ilys. brevipes Raf. glabra, diffusa pro- 
trata, ramis aniceps, fol. sess. obl. acutis integris 
conformis. pedic. brevis. fol. brevior, cal. subul. 
ad cor. subeq. capsulis ovatis obt. cal. eq—Al- 
legh. Mts, of New Jersey and Pennsylv. small 
plant, leaves semi uncial, fl. small white.

339, Ilys. geniculata Raf. glabra prostrata, 
ramis agonis genicul. fol. ovatis acutis integris 
undul. ped fol. eq. cal. filif. cor. subeq. capsul. 
obl. acutis cal. brevior—Long Island & South 
New Jersey, large trailing stems 6 to 10 inches 
long, leaves semiuncial, flowers small incarnate.

340, Ilys. monticola R. (Mg.—Mts, Allegh. 
very rare.


346, *Dichondra caroliniana* Mx.—Florida and Louisiana.

347, *Scluhria abrotanoides* Roth, Pectis pinnata Lam.—Mexico.

348, *Ximenesia enceloides* Cav. &c—Mexico. †

349, *Piqueria trinervia* Cav. &c,—Cuba, Mexico.

350, *Cosmea bipinnata* Cav. &c—Mexico.


354, *Lept. ovalifolium* Raf. Crotonopsis do Collins herb. caule 2-3chot. squamatum, fol. opp. ternisique petiol. ovatis acutis subtus argenteis, fl. ad dichot. vel term. fem. subces. masc. pedunc—Florida found by Baldwin; annual semipedal. leaves semiuncial thick nervose, flowers very minute, I cannot verify if the capsule is monosperm as in the G, the habit is quite like the next.
355, Lept. ellipticum Raf. Croton do Nut. Crotonopsis do W. Heptanis do R. syl. tel. 362—Kentucky, Tennessee Missouri &c. I have verified that it is of this G. Nuttal ascribes 2 seeds to it, I have only seen one, very large ovate obt. lucid. brown, in a trivalve capsule, calix 5parted subulate subunequal, annual pedal—caule squamat. 4-5fidum, ramis dichot. fol. opp. vel verticil. pet. ellipt. obt. vel acutus supra granulatis subtus glauco squam. fl. fem. axil. sess. solit. et glomeratis, masculis pedic. caps. glabris.

356, Lept. verrucosum Raf. Croton, ellipt? El. caule squamat. 2-3dichot. fol. opp. ternisque, petiol. vel sessil. oblongis acutis, supra glaucis, subtus argenteis, florib. glomeratis laxis, masc. pedunc. capsulis tomentosis verrucosis—Carol. to Arkanzas, pedal annual, near last, but capsules quite peculiar with white warts, a single large seed oval triangular, calix 5parted equal, segments ovate obtuse much shorter.

357, Heptallon graveolens Raf. neog. 3 (1823) sylv. tel. 360, Kentucky, very peculiar G. by large foliaceous unequal 7part. fem. calix, disc. by myself 1818, blended with the above by others, but not a Leptemon, nor they of this G. as stated in Sylv. tel. but all the sp. blended in Croton capitatum appear to belong to it. The capsule is also sometimes monosperm by abortion as in Leptemon.

358, Hept. simplex Raf. caule simpl. squamat. seminudo, fol. term longe petiol. alt. ellipt. acutis tomentosis, basi rotundatis, fl. term. paucis lanatis, masc. spicatis—Florida, annual, stem 10 inches high almost naked, leaves as in last but not cordate.

360, *Hept. fruticosum* Raf. caule suffrutic. dichot. squamat. nudum, fol. oppos. petiol. oblongis undul. acutis subt. toment. flor. glomeratis capit. ad dichot. vel apice, tomentosis, fl. masc. spicatis, bracteis linearib. ciliatis—Arkanzas. very distinct sp. all the others being annual, flowers reaely capitate. yet it is not the real capitatum of Mx. which has obtuse leaves and is herbaceous. Calix very large, segments unequal thick obovate, seeds often solitary large fuscate round lenticular.

361, *Drepadenum maritimum* Raf. neog. 4 Sylv. T. 357. Croton do Walt. El. &c non W. P. disjuntifl. Mx. This shruby G. has calix 4-6fid. equal, Elliot says 6fid, his own specimens are 4-5fid. *Cr. marit.* of W. Pers. &c with elliptic tomentose leaves and fl. spicate must be another sp. my specimens have mostly broad ovate leaves seldom subcordate, few term. fl. pedic. calix urceolate, segm. ovate obt. Carol. to Florida.

362, *Drepad. argyranthes* Raf. Croton do Mx. &c, non W. P.—Cuba, Florida. I refer this fine shrub to this G. some fl. being also 4fid. my specimen from Cuba of Jalambic and of Baldwin from Florida agree, but not at all with Wildenow—frutic. ramulis angulatis squamulosis, fol. alt. petiol. ellipt. vel obl. acutis vel obt. infinis obov. supra granulatis, subtus argenteis, fl. term. racemosis glomeratis argenteis.

363, *Decarinium glandulosum* Raf. neog. 5,
Sylv. tel. 358. Croton do L. O.—Hirsutum caule 2-3chot. angul. fol. subsess. alt. et verticil, obl. acutis serratis basi 2gland. fl. axil. et term. glomeratis paucis—Florida, Carol. bipedal, leaves uncial narrow. Several sp. blended in Cr. glandul. this is Elliot’s and Mx. contrast with next and 369.


365, MERLETA Raf. (bot) diff. Decarini- um and Croton G. Monoica, fl. masc. 4fidis, apetalis, 4andris, fl. fem. cal. 4part persistens, ineq. stylo stig. 2, capsulis 4valvis 2loc, 2sp. Herba fol. alt. fl. axil.—Altho’ I had revised and divided the G. Croton in my Sylva Tellur. I can hardly refer to my numerous G. several akin plants, such as this and others following; it is better therefore to distinguish and insulate them, this is more akin to some Tragias.

MERLETA microphyla Raf. caule ramoso filif. squamulos. fol. alt. petiol. obov. obt. vel re- tusis minimis integris, subtus squam. fl. axil. pedunc. sepe geminatis—Cuba, collected by Jalambic, deemed a Croton, small annual plant probably trailing, leaves and fl. minute.

366, VANDERA Raf. (bot) diff. Cascarilla (S. T. 339) fl. masc 5fidis 5andris? fl. fem. cal. 5part. ineq. patens persist, stylus 0, stig. 3lobo sess. caps. globosa 3coca 3sp. Frutic. fol. alt. fl, axil.—The calix very unequal, stigma &c make this a very peculiar G. totally unlike Cro- ton or Cascarilla discolor.


ALDINIA *glechomoides* Raf. pubesc. caul. filif. flexuoso repens, fol. alt. petiol. subrotnudo cordatis profunde crenatis, spicis axil. pedunc. —also from Cuba and deemed a Croton by Ja- lambic, leaves size and shape of Glechoma, spikes with many minute flowers, fem. calix acute very short.

368, BANALIA Raf. (bot) diff. Croton, fl. masc. 4fidis ineq. stam. villosis, fl. fem. cal. 4part. ineq. lin. cuneatis persist. caps, 3loc. 3sp. *Herba fol. alt. fl. axil.-solit.*—as near Tragia as Croton.

BANALIA *muricata* Raf. annua, ramosa, ra- mulis muricatis, fol. sessilib. subrot. vel obov. crenatis, fl. masc. sess. fem. pedic.—Florida, found by Baldwin, deemed a Croton, semipedal, leaves small, capsules oblong crustaceous ful- vous pilose.

369, PLEOPADIUM Raf. diff. Croton. fl. masc. prof. 5fidis, apetalis, stam. plurimis libe- ris, fil. filif. antheris obl. fl. fem. 5part. apetalis. *Frutic. fol. alt. pilis glanduliferis obsitis*—Very near the G. Kurkas Ad. and probably
including some of the sp. thereto referred. The name means many stipitate glands.

**Pleopodium ciliatum** Raf. Croton glandul. hortis! caule fruct. toment. fol. longe petiol. latovatis acum. integris. supra pubens, subtus villosis canis ut petiolis, marginae glandulis ciliatis, ad axilis pet. fascicul. spicas brevis term. fl. fem. 2-3 ad basis, cal. obl. obt. toment—South America, totally unlike our Crot. glandul. nearer to Cr. hirtum, which is annual with serrate leaves; leaves uncial, flowers rather large 30 to 40 free stamens.

370, **Crozophora tinctoria** Raf. S. T. 369. Croton do L, O. the G. is of Necker—Sicilia Grecia &c.

371, **Crozoph. plicata** Raf. Crot. do Vahl. &c—Egypt.

272, **Allosandra** Raf. diff. Tragia, fl. masc. 4 sepalis, stam. 4-8, filam. brevis 2-4, utrinque 2antheriferis. fl. fem. 4-6part. reflexis deciduis, stylo trifido deciduo, capsula 2-3-4coxa. loculis monosp. sem. globosis. **Herbac. fol. alt. fl. axil. racem. bracteatis**—all the N. Amer. sp. of Tragias appear to belong to this G. difficult to fix by the anomalies, yet quite distinct from the triandrous Tragias, the name implies different stamens.

**Allosandra verbenifolia** Raf. Tragia urens var. Auct. erecta simplex pubesc. fol. sessil. obovatis vel. cuneatis inciso serratis, basi integris, racemis pedunc. bract. lin. fl. fem. subsess. nutans, cal. sepe 6part. brevis, stig. 3 obtusis revolutis—Florida, found by Baldwin and Ware, semipedal, leaves uncial, 3 sp. have been mingled in our Tragia urens, this the next and linearis, none are urent.

373, **Allos. lanceolata** Raf. Trag. innocua
Walt, hirsuta suffrutic. simpl. fol. sessil. lanceol. acutis, basi cuneatis integris, apice serratis, subtus glaucis, racemis term. bract. lanc. squamosis, cal. glabris, fl. fem. sepe 4 part. stylis 2 4fidis stigm. obt.—Alabama and Florida, pedal or less, base woody, leaves uncial, fl. minute few, capsules hirsute pendulous, often with 2 or 4 round lobes and seeds, or even only one by abortion.

374, *Allos. macrocarpa* Raf. *Tragia* do *Ms. O.—Tennessee and Kentucky, hardly different from *Tr. urticifolia*, except by stem ramose diffuse divaricate, leaves dentate; habit very unlike the 2 last, by long petiolate cordate leaves, spikes filiform flexuose, bracts oblong; perhaps a subg. *Etoradis* Raf. by stigmas acute, cal. persistent 3 part. subequal reflexed, the central trigone trifid placenta is also persistent after the seeds are fallen.


376, *Pariet. pensylvanica* Mg & c.—Pens. ad Missouri.


379, *Pariet. virgata* Raf. annua, caule ercc-
to simplex virgato basi aphylo, vel fol. pauci
linearib. fol. superis petiol. lineari-lanceol. acu-
tis; fl. glomeratis. invol. subul. fl. equante—
singular sp. only found once in the Apalachian
Mts. of Virginia, pedal, leaves uncial or longer,
flowers very small. †

380, Pariet. rotundifolia Raf. caule erecto
simplex, fol. longe petiol. ovatis subrot. acumi-
natis; fl. glomer. invol. obl. fl. eq.—Florida;
petal, annual, pubescent as all are more or less,
leaves uncial broad not obtuse.

381, Pariet. falcata Raf. caule erecto elato
simplex, fol. brevi petiol. ovatis falcato-acum.
basi acutis; fl. glomeratis, invol. obl. fl. eq.—
Sibiria and Origon, large plant, leaves biun-
cial, &c. †

382, Pariet. officinalis L. O.—Europa. I
add this to contrast with all the above, leaves
obl. or lanceol. acum. acute, fl. densely glome-
rate, bracts obl. equal to fl. and petiols.

383, Pariet. judaica L. O.—Palestine.

384, Pariet. cretica L. O.—Creta.

385, Pariet. rufa Raf. rufo pilosa, fol. sessi-
lib. linearib. obtusis, axillis foliosis; fl. glomer.
lanatis, involucris fl. brevior, scariosis imbric.
ovatis acutis stam. exertis.—Upper Missouri
disc. by Bradbury, stem simple flexuose, leaves
uncial, flowers so involved in hairs as to be diffi-
cult to analyze, and I am not positive if of this
G. habit rather unlike the others. †

386, Trautveteria palmata F. M. Tor. Ac-
tea et Cimicifuga do Auctoris—Apalachian and
Cumberland Mts.

387. Cimicifuga americana Mx. &c, podo-
carpa El. Actea do Dec.—Apalachian and
Unaka Mts. The real type of G. with petals
and 2-stipitate capsules.
388, DIIPLEINA Raf. diff. Actea &c, cal. colorato 4sepalo, petalis 4 ineq. unguic. obl.: stam. plura filif. antheris obov. pistillis 1-2 ova-tobl. sessilib. stig. sess. magno plano. fol. bitern. fl. umbellatis.—Very striking G. by umbellate habit, probably blended with Actea and Blondia (see fl. tel. 279) by authors. I cannot tell if the fruits are berries or capsules. The name implies that the single pistil is often doubled in the same umbel.

DIIPLEINA umMllata Raf. glabra, fol. 2-3fur-catis biternatis, foliolis 6-9ineq. sess, vel petiol. obliq. ovatis incisis acutis, terminalis trifidis; umbelis term. 3-5floris, bract. 2-3subulatis—Sir-biria, sent me as an Actea! same habit, long petiols, folioles very unequal 1 or 2 uncial, flowers rather large white, calix rounded. †

389, HELENium discovatum Raf. new fl. 942 Florida.

390, Hel. anceps. Raf. n. fl. 943—Florida.

391, Hel. flexuosum R. n. fl. 944—Wabash.

492, Hel. dichotomum R. n. fl. 945—West Kentucky. †

393, Hel. traxilum R. n. fl. 946—Illinois.

394, Hel. cuneiform *Raf.* caule subalato corymboso, fol. cuneatis obtusis-integris: angustis supra scabris, pedunc. filif. disco globoso—Untaka Mts. annual? ultra pedal, leaves small uncial, radical often oblong, flowers rather small, calix obl. linear obtuse, †

395, Hel. tenuisfolium Riddell Mpt. caule angulato ramoso subumbellato, ramis 1-2fl.; fol. tenuiter lineariib, obtusis integris imbricatis, axillus foliosis fascicul. pedunc. filif. perianthis sepals linear. disco. glob.—Louisiana at Lake Pontchartrain, very distinct sp. disc, by Riddell, stem 10 to 20 inches high, leaves uncial
very slender and crowded, flowers very small but similar, seeds minute oboval compr, black, edges white, crown of 4 or 5 scariose scales ovate ariostate.

396. Hel. Adentatum Lam—Louisiana, the real kind sent me by Riddell with lower leaves pinnatifid, disk ovate.

397, Bilamista grandiflora Raf. n. fl. 976—Louisiana, Arkanzas and Texas, beautiful plant very near the Lisianthus russelianus of Hooker, if not the same; but his figure and description do not agree, and do not express the character of the N.G. nor the fine opposition of stamens as in all Gentianides. +

398, Sabattia nervosa or Neurolais arkanzica Raf. n. fl. 975—fine subg. perhaps a Genus, Arkanzas.

399, Pleienta 5nervia Raf. n. fl. 973—Louisiana.

400, Pl. leucantha R. n. fl. 974. Sabatia gracilis numnulis non omnes—maritimis Novacas. ad Florida.

This Century includes 17 New Gen. whereof 8 now first described, with 24 new species.

CENTURIA V.

ENDOGENOUS OR MONOCOTYLES.

401, REGGERIA Raf. (bot) perig. 6-8part. persistens, sepalis 3nervis obl. obt. alt. angustior, sepe omnis ineq. stam. 6-8filam. ineq. filif. anth. subrot. ovar. apice 3lobo, stylo trigono clavate, stigm. obt. 3lobo. Bulbosa, scapis 1-floris bracteis foliosis—Genus mediate between Gagea and Skilla, singularly by'often 7 or 8 stamens. REGGERIA bohemica (vel. rupestris) Raf. Ornithogalum do W.—Bohemia on rocks, quite peculiar habit, radical leaves filiform, stem or
scape dwarf, with 2 or 3 leaves or bracts lanceol. acum. fl. pedunc. large yellowish.

402, Syncodium nutans Raf. fl. Tel. 52, Ornithog. do L. O.—Europa.


404, Lonc. narbonense Raf. Orn. do 0—Hispania.

405, Gagea fascicularis 6al. Raf. fl. T. 55. Ornithog. luteum Sm. non L.—Europa. nearly all the yellow sp. or Orn. belong to this G.


407, Gag, minima Sal.—Europa.

408, Gag. fistulosa Raf. Ornith. do Dec.—Gallia australis.†

409, Skilla amena L. O.—Russia, Grecia. This G. is distinguished by filiform stamens, see 13 fl. tel.

410, Sk. mixta Raf. autumnalis Nut. Mpt. non L. fol. scapo eq. 1-2 angustissimis planis, racemo brevis subcorymb. 5-8floris, bract. subbul. membro. albis pedic. eq. sepalis lanceol. obt. Island of Anglesey, quite unlike the Sk. autumnalis without bracts see 413, scape and leaf 3uncial, flowers small blue. †

411, Sk. filiformis Raf. Ornithog. rupestr nonnullis non omnis. fol. filiformis scapo longior, scapo flexuoso, racemo 10-12 floro, bract. filif. pedic. eq. fl. erectis sepalis 3 ovatis acutis, 3 obl. obt.—Africa australis. Leaves pedal carnose, flowers purple. Certainly no Ornithog. nor any akin G. not even O. rupestr with reflexed flowers. Probably forming with it and O. junecifo-

lium a peculiar subgenus, Anthyron Raf. by perigone camp. 3 alt. larger, all uninerve, stamens short filif. equal, style long, stigma subca-
pitate. †
412, GENLISA Raf. diff. Skilla, perig. subeq. camp. persist. sepalis obl. uninervis, stam. brevis eq. subul. planis acutis, stylo filif. stig. obtusum. fl. racemosis nudis non bracteatis—Perhaps only a subg. like Anthrygon but lack of bract very striking, stamens almost as in Loncemos. Dedicated to Genlis the celebrated female writer for her botanical works. Characters near to Aglithes, but habit unlike.

GENLISA bifolia Raf. Skilla do L. O.—Germania. My specimens have 2, 3 and 4 broad leaves in middle of stem, canaliculate obt. shorter than raceme 8-12flore, pedicels erect elongate.

413, Genlisa autumnalis Raf. Sk. do L. O.—Europa, leaves radical linear filif. short, raceme 5-7flore, pedicels short and spreading.

414, BULBINE grecum Sch. Anthericum et Phalangium do alis—Grecia filaments smooth filif. as in Skilla, G. hardly different, but root not bulbose.

415, BLEISOLIRION liliastrum Raf. fl. Tel. 76 Atheric. et Phal. do O—Italia, large white flowers.

416, ENODOGONA ramosa R. 74 Anther. et Phal. do O—Sicilia Creta &c.

417, LEMOTRYS hyacinthina Raf. fl. Tel, 601. Skilla esculenta O. ad Quamasia do distincta stam. rectis &c.—Ohio ad Missouri.

418, IRIS floridana Raf. n. fl. 491—Flor. Alab. †

419, IRIS biflora or virgata R. n. fl. 492—Unaka Mts. †

420, IRIS convoluta R. n. fl. 493—Arkansas, Texas.

421, IRIS brevicaulis R. fl. lud. 55, n. fl. 494—Louisiana ad Kentucky.
422, *Iris fulva* Mg. cuprea P. N. rubescens fl. lud.—Louisiana.
425, *Clintonia biflora* Raf. n. fl. 429—Appalachian Mts. see in my new flora 426 to 448 my monograph of this fine G. of mine of 1817, quite different from *Clintonia* of Lindley 1829 which is my Gynampsis.
430, *Aglitheis melopolis* Raf. scaposa, fol. lanceol. scapo tereto eq. apice obtuse acum. umbella multiflora, spatha involucris poliphylis scariosis lanceol. sepalis ovatolanc. acutis ad stam. duplo longior—my G. *Aglitheis* fl. tel. 33 contains the Alliums with flat subulate stamens. This was sent me as the *A. obliquum* which is totally unlike and of another G. *Geboscon*. Probably Sibirian, leaves peda^over one inch broad, flowers white pretty large, remarkable by the many leaved involucres giving the name.†
431, *Agl. 5flora* Raf. Allium do herb. p. 64.—Kentucky to Texas, vernal, inodorous, yet the *A. fragrans* of many American Botanists, certainly not the African sp. of Ventenat &c, stamens subulate, flowers with unequal pedicels.
432, *Agl. tricocum* Raf. Allium do O.—No-
vangiia, Canada, remarkable by leaves after fl. elliptic, umbel 12-15fl. spatha uneq. diphyl. sepals connivent ovate acute, capsules 3seeded. Type of a subgenus Traxordum Raf.

433, GEBOSCON Raf. fl. Tel. 36. This G. must include all the Alliums with filiform stamens as in Skilla, which are rather numerous.

Geboscon lanceolatum Raf. caulescens, fol. subpetiol. amplis lanceol. utrinque acutis; umbella globosa multifl. spatha reflexa dilatata erumpens, pedic. eq. sepalis ovatobl. acutis, stam. exertis—Sibiria and Alps, sent me as Allium victoriale and ursinum two sp. blending many probably, the A. vict. is a true Agitheis with lanceol. stamens, this has them quite filiform, stem sesquipedal, 1 or 2 large leaves 8 or 10 inches long, flowers rather small ochroleucous.

434, Geboscon triphyllum Raf. caulescent, fol. 3 alt. petiolis vaginas tubulosis, ellipticis obtusiusc. basi angust. multinervis; umbella globosa, spatha reflexa monophyla, sepalis ovatobl. acutis, stam. exertis—Sibiria or Origon, sent me also as A. victoriale but totally unlike the last, same flowers and stamens, but fl. whiter, stem pedal, leaves only 4 inches long. ♦

435, Geb. ursinum (vel petiolaris) Raf. Allium do L. O.—Alpis, my specimens have leaves lanceolate acute at both ends on very long petiols, spatha diphyl. equal, umbel 12-15fl. sepals lanceol. stamens inclosed.

436, Geb. latifolium Raf. scaposum, fol. brevi petiol. amplis ellipt. basi rotund. subcord. apice brevi acum. scapo tereto eq. umbella nuda sub 20flora, spatha nulla vel decidua, sepalis lanceol. acutis ad stam. longior, capsulis ineq. 3lobis—Origon or East Sibiria, very peculiar sp. akin to last, but leaves 6 to 8 inches long, 2 or
3 bread, petiol 2 or 3 inches, flowers white pretty large, capsule commonly with lobes or cells unequal.†  

437, *Geb. geminatum* Raf. herb. p. 64. fol. lin. longiss. lato planis non striatis, obt. scapo equante filif. bifloro, spatha bivalvis eq. subul. lanceol. pedicellis 2 equalib. sepalis lanceol. stam. inclusi—West Kentucky semipetal, slender, fl. white, deemed *M. striatum* by Torrey, totally unlike the African sp. reduced to minimum of umbellate flowers.  


439, *Geb. tenellum* Raf. fol. filif. planiusec. obt. scapo breviriorib. scapo filif. substriatum; umbella 2-4flora, pedic. filif. ineq. erectis, spatha bivalvis brevis lanceol. eq. obtusis, sepalis obl. ellipt. subobtusis stam. subequante—Florida, akin to the 2 last and also to *G. sulcatum*, but different from all, very slender 6 to 9 inches high, sometimes only 2 fl. as in *geminatum*, but unequal in length, white: deemed a N. sp. by Baldwin. All our narrow leaved and few flowered sp. have been mingled by our botanists with African sp. as *Allium striatum*, *fragrans*, *inodorum*, and all perhaps included in *A. ornithogaloides* of Walter, see 443 and 444.  

**Allium mutabile** by Collins, totally unlike, leaves 6 to 8 inches long one line broad, scape sesquipedal, flowers only 3 fertile in my specimen large white, bulb central large ovate with a separate spatha. 

441, *Geb. rubrum* Raf. scap. fol. brevis linear. planis nervosis, scapo tereto; umbella globosa, spatha bivalvis reflex. ovatis, pedicelis brevis, sepalis connivens obl. acnum. ad stam. longior—Sibiria, sent me as *Al. rubrum* (not in books) and *Schenoprasum*, which has filiform fistulose leaves! pedal and more, leaves semipedal, flowers rather large incarcinate or red forming a globular head.

442, *Geb. acetabulum* Raf. scapos. fol. longis linearibus. plaucis vix striatis, scapo longior tereto umbella sub 8flora pedic. equalis, spatha campanulata alba dilatata bidentata, sepalis ovatis acutis, stam. subeq.—Arkansas and Texas, semipedal, very singular involucre shorter than pedicels, flowers white. 


445, *Geb. carneum* Raf. scapos. fol. longissimis linearifilif. striatis scapo eq. tereto fuscato,
umbrella glomerata multifl. pedic. fl. brevior, ineq. spatha eq. diphyila ovatis subrot. retusis coloratis, sepalis ovatolanceol. acum. ad stam. longior—Origon Mts. 10 inches high, flowers incarnate and even the spathas or involucres, fl. larger than in the others.

446, Gynodon rupestre Raf. fl. Tel. 34—Rocks of Kentucky and West Alleghanies, blended with next in Allium Cernuum of Am. botanists, not of Caucasus.


448, Stelmesus stellatus Raf. fl. tel. 35. Allium do Sims, Nat.—Alab. Louisiana.

449, Alisma subcordata Raf. (1808) trivialis Pursh (1814) fol. ovatis ellipt. acum. basi subcordatis, bracteis membranosis dilat. ovatis acum. seminib. dorso sulcatis.—N. America, long mistaken for A. plantago with lanceol. leaves, or A. cordifolia of Sw. with obtuse deep cordate leaves. One or 2 feet high, leaves 2-4 inches long.

450, Alisma parviflora Raf. var. preced. Eat. Tor. fol. ellipt. subacum. basi acutis vel rotundatis, bract. lanceol. striatis, sem. dorso non exaratis—Pensylv. Kent. Alab. only 6 to 8 inches high, leaves uncial. flowers and fruits one fourth of last.

451, Alisma montana Raf. fol. minimis obl. utrinque acutis, paniculis paucifloris, bract. dilat. ovatis acum. sem. exaratis ?—Mts. Allegh. and Taconick, only, 3 to 6 inches high, leaves only half inch long, flowers nearly as small as in last.

452, Alisma subulata L. O.—Delaware River, rare, dwarf, habit of Isoetes, leaves
linear obt. with 2 rows of cells, longer than
scapes.

453, *Alisma ranunculoides* L. O.—Germa-
nia &c, habit of *Ranunculus flamula*.

454, *LURONIUM* Raf. diff. *Alisma*, cal. de-
ciduus, disco globoso, pistilis paucis definitis 6-9
obl. stylo brevis term. sem. obl. scabris non cym-
—certainly a G. by habit and characters, the
name was an ancient one of *Alisma*.

*Luronium natans* Raf. *Alisma* do L. O.—
Canada, Europa. fol. ellipt. vel subrot. obt. 
habit of *Potamogeton*.

455, *DAMASONIUM stellatum* Juss. Pers. *Alis-
ma damasonium* L.—Europa borealis.

456, *BUTOMUS umbellatus* L. O.—Europa,
one of the finest European plants.

457, *METHONICA gloriosa* Juss. *Gloriosa su-
perba* L.—Malabar, one of the most splendid
Lilies. †

anguste lanceol. acum. ineq. nervosis glabris,
scapo fol. brevior, fl. spicatis ebract. cor. tubo
brevis teres, stam. exertis stylo eq.—African? 
sent me under that name (not in books) of subg.
*Salmia* by the corolla not filiform, bracts lack-
ing &c. Leaves 2 to 6 inches long, scape 3 or
4, fl. 8 to 10 incarnate, anthers white, †


460, *Funkia angustifolia* Raf. Japan, these
2 plants and some others once blended in *He-
merocalis cerulea*.

Mx.—N. Amer. many var. parviflora, graminif.
angustif. latif. decumbens, striata, multiflora (5
to 9 fl.) uniflora &c.

462, *Hypoxis filifolia* Elliot—Carol. †
463, AMBLOSTIMA Raf. fl. tel. 66. charact. emend. (aff. Skilla) cal. persist. colorato, sepalis 6 eq. uninnervis, stam. 6 eq. ad basis, filam. filif. subulatis acutis basi incrassatis, antheris obl. ovar. basi supercresco, stylo teres vel subconico, stigma integrum obt. caps. 3loc. oligosp. sem. subglobosis nitidis. Bulbosa, scaposus, fol. striatis racemo bract.—This G. will probably include the American Skillas except those with a triple stigma, see Oxytria fl. tel. 65.

Amblost. albiflora Raf. ut supra, Ornithog. croceum Elliot. fol. gramineis longissimis angustis striato nervosis, scapo longior tereto lutaeo, racemo oblongo 20-30fl. bract. brevis ovatis obt. sepalis ovatoobl. obt. stam. subeq.—I have reformed the character out of a specimen from Elliot himself, the Phalangium croceum of Mx doubtful refered to it. is a different sp. and the plant of same name of Nuttal is of a different G. my Oxytria 65. This has leaves sesquipedal 2 lines broad, scape bipedal yellow, fl. small whitish Georgia.


466, Tripterella cerulea Mx. Burmanii biflora L.—Florida.

467, Tripter. capitata Mx. Burm. do L.—Florida.

469. **Crinum americanum** L. O.—Louisiana.

470. **Zigadenus glaberrimus** Mx.—Alabama.

471. **Ennearina pleiana** Raf. Pleea tenuif. Mx. O.—Carol. singular Genus by 9 stamens whence my name, **Pleea** like **Leea** are bad, Plee was no botanist, very rare.

472. **Narthecium americanum** Ker.—Nova Cesarea, G. very distinct by wooly stamens as Anthericum.

473. **Narth. ossifragum** O.—Eur. borealis.


476. **Tofielda capitata** Raf. scaposa, fol. linearib. acutis, brevis nervosis glabris, scapo tereo nudo vel unifoliato, fl. capitatis minutis subsess. petalis obl. obt.—Labrador, annual, leaves uncial, scape 3 to 4 inches, flowers white very small about 6, hardly any bract, capsules gibbose with a minute reflexed style.†


478. **Abbottia filiformis** Raf. n. fl. 36, Tri-glochin triandrum Mx. &c Ohio to Florida.


481. **Sisyrinchium flexuosum** Raf. caule dichot. flexuoso anceps, fol. brevis ensatis acutis vix nervosis, spathis lanc. diphylis ineq. fl. subeq. 3-4fl. capsulis ovoideis truncatis torulosis—Arkansas and Texas, semipedal, leaves 1 or 2 inches, specimens in fruit only.

482. **Sisyr. tenuifolium** Raf. caulis. cespito-
sis genicul. filif. 2ang. fol. tenuis angustissimis elong. lin. filif. acutis. spathis 2valvis subeq. lanceol. fl. brevior 2-5fl. petalis obt. cuspid. capsul. globosis—Arkansas and Texas, annual, semipedal, leaves 2-4 inches long very slender, fl. blue, larger than in S. anceps.

483, *Sisyr. floridanum* Raf. Scaposum, fol. lin. lanc. acutis vix nervosis, scapis fol. subeq. lato bialatis, spathis ineq. bivalvis lanc. 2-4floris equante. petalis retusis cuspidatis. caps. obovatis—Florida, found by Baldwin, 4 to 6 inches high, annual leaves 2-4 inches, one line broad, flowers large white.

484, *Sisyr. niveum* Raf. scaposum, fol. lin. angustis striatis nervosis acutis, scapis fol. longior bialatis, alis striatis, spathis sepe coloratis 3valvis, 2int. brevis subeq. 1 ext. longissima lanc. plicata, 6-8floris. petalis retusis cuspidis. capsul. globosis—Alab. Kentucky &c, 6 to 8 inches high, leaves 3 to 5, half line wide, flowers size of S. anceps, snowy white, spathas more or less colored of red.

485, *Convallaria parviflora* Raf. fol. binis sessilib. angustis obl. acutis, scapo filif. fol. brevior racemis 3-5floris, bracteis scariosis brevis, fl. vix secundis parvis—Apalachian and Wasoito Mts. leaves and fl. half size of C. majalis, 3 to 6 inches high, &c.

486, *Convall. montana* Raf. (pseudlo-majalis Bartr. in Rees cycl. Am. ed.) fol. binis sessilib. ovatobl. acum. scapo angul. fol. subeq. racemo 10-12floris, bract. lanc. ad ped. eq. fl. secundis—Unaka and Cherokis Mts. large plant, leaves 6 fo 8 inches long, 2 wide, fl. size of C. majalis, Bartram says the berries are blue and ovate. C. majalis has leaves petiolate elliptic acute at
both ends, raceme of 7-8 fl. bracts half length of pedicels.

These 3 plants are the types of the true G. Convallaria, this protean linnean G. was emended by me in 1813, also in medical fl. and in fl. Telur. divided in 8 Genera, Vagnera, Styandra, Flugea, Sigillaria, Globeris, Clintonia, Siphylalis, to which I now add 2 others.

487, CODOMALE Raf. (bell axil.) diff. fl. artic. ad pedunc. campanulata profunde 6fida, lac. obl. 3 internis latiorib, stam. brevis ad basis insertis, antheris ovatis subsess. fol. alt. secundis, fl. axil. secundis—very distinct G. with habit of Sigillaria and flowers nearly as in last, but not so open, base acute.


488, TROXILANTHES Raf. (wheel leav. fl,) diff. fl. urceolatis 6dentatis deinde lageniformis, dentih. barbatis, stam. ad apice tubo, stylo brevis. fol. et fl. verticillatis—habit so peculiar as to indicate a G. fl. also different from Sigillaria.

Troxilanthes angustif. Raf. caule simplex sulcato, fol. rotatis 3-7 lin, lanceol. obt. fl. axil. vert. pedic. sepe bifloris nutans—Belgia &c. There appears to be 2 other sp. in North Europe blended in Convallaria verticillata—2 Tr. lanceolata with broader lanc. acute leaves—3 Tr. ramosa with branches &c.

489, Sigillaria hirta Raf. Conv. do Bosc, Lam. Sm. &c pubescens W.—Mts. Alleghanies. If the fossil Sigillaria is not changed to Sigilli-
tes this G. must then become *Axillaria* Raf. see fl. T. 831.


492, *Sigil. angustif.* Raf. caule flexuoso angul. sulcato, fol. sessilib. elongatis angustis lin. lanceol. obt. glabris, distichis, pedunc. unifl.—Alabama, pedal, leaves 3 inches long, only 3 lines broad. †


494, VAGNERA Ad. Smilacina Desf. bad and posterior name.

VAGNERA angustif. Raf. caule angul. recto, fol. sessilib. lanceol. obt. racemo simplex 3-10floris—Novanglia ad Canada. Smaller than *V. stellata*, semidedal, leaves longer and narrower, 2 or 3 inches long, found at Niagara.

495, *Vagnera retusa* Raf. caule flexuoso angul. fol. sessilib. ellipt. obt. retusis glabriusculis, racemo paucifl. fasciculis alt. 3-5floris, ped. brevis—Allegh. Mts. found only once and in fruit, semipedal, leaves 2 inches long, one broad, 3 nerves stronger, berries dark purple. †


bifolia amer. O. fol. radic. cordatis, caule bifolio, fol. sess. amplex. ovatobl. acutis, basi subcord. fl. racemosis sepe geminis--Canada and Mts. Allegh. smaller than last, blended with it, altho' very distinct.

498, Peltandra undulata Raf. new fl. I p. 87—Allegh. Mts. &c. In my monograph I have shown that this and the 2 next sp. were mingled in Arum virginicum, and given a monograph of 8 sp. my G. of 1819 is the Lecontea of Torrey 1821 and Renselaeria of Beck. 1833.

499, Pelt. latifolia Raf. ut supra—Nova Cesarea.


This Century includes 20 N. G. whereof 7 now first described, with 36 N. sp. now described.

Therefore this first part or series of the Au- tikon includes in 5 Centuries, the illustrations of 112 New Genera of mine, with the descriptions of 38 hitherto undescribed. Also the descriptions and figures of 132 New species, with the illustrations of twice as many described elsewhere. It is likewise replete with new facts, remarks, observations, notes, criticisms, localities &c, forming a vast mass of novelties and improvements.

Corrections. I had a previous Stelmanis in fl. tel. 166, therefore read Anistelma instead of it at article 89.

Even if Macuillamia 332 should be the real type of Herpestis this name is identic with Herpestes in Zoology previous I believe; but Monnieria and Habershamia are distinct. I have them all.
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OLD GENERA ILLUSTRATED.

SYNONYMS IN ITALIC.

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SECOND PART,—CENTURIES VI to X.

BY C. S. RAFINESQUE, Prof.

Philadelphia—1815 to 1840.

CENTURIA VI.

ARB. ET FRUT.—TREES AND SHRUBS.


LOMAKE brachiata Raf. ramis brachiatis 4sulcatis obtuse 4gonis, fol. petiolatis ovato subrot. acutis grandiserratis, spicis pedunc. gracilis term. fl. adpressis bract. subul, cal. brevior —Shrub of Cuba, leaves remote small nearly smooth, spikes 2 or 3 inches slender, flowers incarnate? seeds very peculiar with a thick large terminal arilla obtuse and notched.

502, Sclerozus tenax Raf. sylv. tel. 163 sub nom Scleroeadus. This rare tree has been put into 3 G. by turns Sideroxylum, Bumelia
and Chrysophyllum.—Sclerozus means hard branches, they are brown rugose, leaves petiolar cuneate acute or obtuse, reticulate above, glaucous silky hairy beneath: flowers fasciculate on long peduncles, calix camp. rufous, 5 lobes obt. unequal, corolla rather longer. My specimens are inerme, from Florida.


504, *Bum. arachnoidea* R. n. fl. 546—Arkansas. †

505, *Bum. rufa* Raf. ramis fusco rufis villosis, fol. subsessil. ellipt. obt. undul. margine revol. supra glaucescens subtus rufis villosis reticulatis; flor. glomeratis densis rufis—Florida, disc. by Ware, I made it a var. of *B. lanuginosa* in new flora, but it appears peculiar. †

506, *Bum. serrulata* R. n. fl. 548—Alabama, a doubtful shrub, since flowers lacking: there are many such in Florida and Alabama, even when flowers known, as the 3 next till 509.

507, *Bum. denticulata* R. n. fl. 547, certainly no Bumelia, I was deceived by Collins label; he and I have destroyed all the flowers except 2 to analyze this singular tree, which I compared with *Nyssa denticulata* and *Schizandra*, both akin in leaves, but not in flowers. It is nearer to my G. *Lomilis*, but I have fixed it protom as follows.

STREBLINA Raf. (ambiguity) dioical, fl. masc . . . fem. calix 5part. lac. ineq. subrot. obtusis undul. petalis 5 ellipt. obt. undul. subeq. calix brevier, pistillum minimum in apex pedunculo immerso, stigma obt. sessil. fruct . . . drupa 1sp ?—Thus it differs from *Nyssa* by petals, unequal calix &c, from *Schizandra* by many peculiarities, and yet it may be of same family or
another link with *Fothergilla, Hamamelis &c* — *Streblina denticulata* Raf. fol. petiol. ovatis obovatisque glabris, venis reticulatis, basi acutis, apice sepe acum. margine parce dentatis, pedunc. filif. unifl. extraxil. petioli equante — Florida, leaves very thin biuncial, flowers 3 times as large as in *Nyssa*, incarnate.

508, *Lomilis ciliata* Raf. alsogr. 1, 2. Compare with last and with next, certainly neither like *Nyssa* nor *Schizandra*.

509, *Forrestiera? glauca* Raf. ramulis fuscatis rugosis, fol. subsessilib. obovatis acut. integris ciliolatis glabris, subtus glaucis. drupis sessilib. ovatis acutis levis — Alabama. I thought I had another sp. of *Lomilis*, but it agrees in nothing but the ciliolate leaves, and the fruit is as in *Forrestiera*, but I have not the flowers: akin also to *For. disticha*, and it may form another G. with it when flowers known. Leaves very thin 1 or 2 inches long, fruit small.

510, *Tatina* Raf. (bot.) monoical, fl. masc. cal. camp. 4-5gonus, 4-5fidus, acutus, corolla brevis equante camp. 4-5fida, stam. 4-5 ad cor. opposita? fl. fem. cal. 4part. deciduus, ovar. globoso stig. sess. capit. umbilic. sepe bilob. drupa globosa, nucleus rugosus bisulcato, 2loc. 2sperm. *Frutex inermis*. fol. alt. fl. axil. sepe fascic—another G. akin to *Bumelia*, but if the stamens alternate with corolla, it rather belongs to *Ilexides*, and is akin to *Ageria*.

*Tatina parviflora* Raf. ramulis teretis cine-reis parce granulatis, fol. petiol. oblongis vel cuneatis, apice acutis vel obt. integris vel erosis, subtus nervis pubens, juniorib. villosis, fl. fascic. axil. petioli brevior, drupis subsolit. pedunc. pisiformis—discovered by Dr. Hart near Natchez in 1820, since obtained also from Ar-
kanzashes, mistaken then for the *Bumelia lanuginosa*, altho' so unlike *B. rufa*. Leaves biun-
cial, the young quite villose fuscate beneath, flowers minute shut up in ovate acute form, brown on unequal peduncles, fruit fuscate.

511, *Decateles lyecioides* Raf. sylv. tel. 167

*Bumelia* do Authors—Florida to Louisiana, the leaves are seldom lanceolate, but rather oblong, uncial reticulate on both sides, apparently ever-
green: the fruit is very peculiar, green, size of a Cherry, compressed smooth on both sides, but edge broad with 3 circular ridges united by transverse wrinkles; the calyx is persistent patent, with 5 unequal parts ovate obtuse, style short acute. It is a shrub 4 to 8 feet high, branches rugose or verrucose, spines conical valid, flow-
ers vernal.


516, *Amerina balduiniana* Raf. als. 54.

Florida,

519, *Ois. oblongifolia* R. als. 57 Maine.
520, *Vetrix* (Stenalix) *linearifolia* R. als.
58. Missouri.

521, *Salix repanda* R. als. 59. Florida.†
522, *Usionis humilis* R. als. 60. Allegh. Mts. These since 516 are new Willows, described in my Grove of 330 trees.

523, *Asimina parviflora* Dunal. Florida. This G. after being shuffled into Annona, Por-
celia, Orchidocarpum, altho' settled by Adan-
son 75 years ago! has been sunk by Torrey
into Uvaria to increase useless synonyms. † 
524, **Asimina pygmea** Dunal. Florida. † 
525, **Asimina angustifolia** Raf. ramulis rugosis angulatis fuscatis, fol. sessilib. longissimis angustis linear-lanceol. acutis, margine revolutis, utrinque nervoso reticulatis—South Florida, found in Collins herb. labelled Glyptomenes and Porcelia pygmea, very unlike this last with cuneate obtuse broad leaves. This has them 4 inches long, only 1 fourth of inch wide. † 
526, **Asimina triloba** Dunal. Annona do L. Shrub, Pens. Virg. 
527, **Asim. arborea** Raf. Annona glabra L. large tree 15 to 30 feet high, Ohio to Louisiana. I have shown in my Atlantic Journal page 200, the mistake committed by all Botanists except Linneus, in blending this large tree of the west, with the last shrub of the East: they differ in leaves, flowers and fruits. Torrey has copied the blunder of course and unnoticed my correction of 1833. 
528, **Magnolia macrophylla** Mx. Raf. med. fl. tab. 62. This rare tree is found in few localities, some of them discovered by myself in 1823 in East Kentucky, are omitted by Torrey, altho' published in 1830. 
529, **Magn. fraseri** Walt. auriculata of others. Allegh. Mts. 
530, **Magn. cordata** Mx. East Florida, Kin! 
531, **Magn. glauca** L. New Jersey, leaves elliptic obt. 
532, **Magn. glauca** var. **longifolia** Pursh. M. fragrans Raf. fl. lud. 301. Arborea, fol. obl. lanc. angustis, vix obtusis, basi acutis, &c—Louisiana &c, perhaps a sp. leaves evergreen 4 to 6 inches long, one wide, flowers very fragrant as in last. Omitted by Torrey.

534, *Magn. lacunosa* Raf. fol. amplis planis oblongis basi acutis, apice obt. utrinque latere glabris lucidis nervosis lacunoso reticulatis.—Florida, the real holy tree of the Seminoles, leaves 8 to 10 inches long, 3 or 4 in the middle. Is it a var. of last?

535, *Magn. ferruginea* Collins (vel rotundif.) fol. subrotundis, basi et apice obtusis, supra lucidis vix reticul. subtus arcte tomentosis ferrugineis, margine cartilagineis subundul—Alabama? certainly totally unlike the last, and also from *M. grandifl.* leaves smaller on longer petiols, 2 or 3 inches long and broad, densely wooly beneath: found by Kin. †

536, *Cladrastis tinctoria* Raf. (or albiflora) 1825, new fl. 700,—Virgilia lutea Mx, and all authors, quite a peculiar G.—Kentucky to Alabama, flowers white not yellow as stated by Nuttal, who never saw them, vernal fragrant.


538, *Konxikas* Raf. cal. urocol. gibbosus subbilab. 5dent. ineq. cor. papil. vexillum deflexum, dilat. alae. subeq. obov. carina bipartibilis, stam. 10 monadelphis ineq. ovar. compr. stylo horizontalis lato plano glabro, stigma obt. Leg . . . Scandens fol. pinnatis alt. stipulatis, fl. racem. 2bract,—Apparently a N. G. near Lathyrus and Clitoria, sent to Collins by a German Botanist for our *Cercis canadensis*! the name was the Greek one of Cercis.

*Konxikas acuminatum* Raf. scandens, folio-
lis 7-9 sessilib. alt ovatis acum. glabris integris, stipulis dimidiatis, racemis axil. paucifl. bracteis linearib.—Leaves thin uncial flowers bluish middle size, stamens white. Sibiria?

539, **Robinia viscosa** Vent—Apal. Mts.
540, **Rob. hispida** L. Apal. Mts.
541, **Caragana arborescens** Lam. **Robinia caragana** L. O.—Sibiria.
542, **Carag. spinosa** Lam. **Robinia do O.**—China, Sibiria.

543, **Colutea orientalis** L.—Italia, Grecia.
544, **Col. pococki** O—Syria.
545, **Col. frutescens** L.—South Africa.
546, **Anthyllis barbajovis** L.—Hisp.
547, **Anth. cytisoides** L. O—Hisp.
548, **Emerus major** Mill. Mench. **Coronilla emorus** L. &c.—Gallia H. Sicilia.
549, **Coronilla glauca** L.—Gallia mer.
550, **Coron. rosea** Raf. herbacea? caule angul. fol. multijugis, foliolis petiol. obl. linearib. mucronatis, pedunc. fol. eq. umbellis multifloris—Persia, very pretty sp. leaves with 15 to 21 small folioles, flowers large rosate.

551, **Amorpha macrophyla** Raf. petiolis sulcatis, foliolis 18-20 oppos. stipulatis subsect. glabris latoblongis, utrinque acutis cuspidatis concolor—Florida, leaves very large 10 inches long, folioles 2 inches not dotted, near to A. paniculata T. but smooth and folioles with stipples, hardly any petiol, not punctate nor obtuse. †

552, **Amorpha discolor** Raf. petiolis semiteres, foliolis 22-25 suboppos. petiol. stipul. glabris perforatis, obl. ligulatis angustis, utrinque obt. cuspid. subtus glaucis—Alabama, another sp. with large leaves 6 to 8 inches long, folioles
nearly 2 inches, but narrow, perforated by glands as Hypericum.


554, *Am. retusa* Raf. ramis sulcatis, petiolis trigonis, foliolis 11-15 oppos. subpetiol. extstipul. opacis. ovatobl. obt. retusis emarg. muticis concolor subtus tomentosis; ultima ovata; spicis obl. cal. acutidens—Apalachian Mts. large shrub, leaves 4 to 6 inches, foliolos often uncial, flowers sessile.


556, *Am. verrucosa* Raf. fruticosa? L. O. (all are such) ramulis rectis subteres furfuraceis, petiolis subteres, foliolis sepe 15 opp. et alt. petiolis pubens, stipul. ovato ellipt. obt. vel acutis, insimis et ultimis ovatis, opacis subtus punctatis pallidis: fl. racemosis, cal. acutis, stam. exertis, legum. curvis verrucosis Ispermis—Alabama, leaves 6 inches long, foliolos nearly uncial, pod like the last, but warts much larger—*A. fruticosa* of L. included all our sp. and is yet a doubtful shrub, I have seen 5 sp. under that name.


559, *Am. canescens* Nut. O. the description of Torrey blends 2 plants, which I have both in seed, with many things in common, but yet distinct; this has larger folioles elliptic obtuse micronate almost smooth above, grey beneath but not tomentose petiols 3ang.—Illinois and Missouri.

560, *Am. tomentosa* Raf. tota tomentosa, petiolis semiteres, foliolis 40-50 subsess. lato lanceol. acutis cuspidatis, subtus canis exstipul. opacis; imbric. cal. acutis, leg. ovatis cal. subeq. —on Wabash and West Kentucky, folioles as small as in *A. nana*, really lanceolate with a long cuspis.

561, *Am. colorata* Raf. (caroliniana? Croom Tor.) glabra ramis angul. petiolis supra planis, foliolis 15-21 oppos. petiolis pubens stipulatis ellipt. basi acutis, apice obt. cuspid. perfor. subt. pallidis; fl. racem. cal. glabris bicolor, dentib. acutis pubens ut stylo—Apalachian Mts. leaves short, folioles half uncial, calix white, colored at both ends like petal.—I have thus ascertained a dozen sp. of this fine G. which is
the type of my natural family Amorphides of 1815, including the next G. which I venture to separate. The other 3 sp. in Torrey (who has only 8, paniculata with californica and levigata of Nut. not seen by T.) are doubtful.

562. Monosemeion Raf. (alone flag) cal. campanul. 5fidus, lac. subeq. ellipt. obt. vexillum subrot. sessile plano integrum, brevis deci-
duum. Stam. 5 liberis filif. anth. obl. pistillum pedunc. obl. albo sericeo, stigma subsess. obliq. capitat. purpur. legum. obl. vill ... fol. fascic.
pinnatis, fl. spicatis—Very singular G, by the peculiar single petal, stigma &c. I found it labelled Amorpha fruticosa by Collins! I sus-
pected it was the Asacara or Gleditsia monosperma, but this has no petal and a smooth flat pod.

Monosemeion obliquatum Raf. petiolis plano convexis, foliolis 11-21 alt. sessilib. obliq. ova-
tobl. obtusis muticis opacis concolor, glauces-
cens. petiolis nervisque pubens: spica brevis multifl.—leaves 4 to 6 inches long, folioles sub-
uncial, reticulate as in Amorpha, spike uncial, flowers yellowish very conspicuous, petal hardly longer than oalix and stamens, North Amer-
ica? 

563. Cotinus obovatus Raf. ramis striatis, petiolis longis gracilis, fol. obov, basi acutis, apice rotundatis, paniculis sepe plumosis—Ar-
kanzas, Louis. The G. Cotinus of Tourn. Ad. must be restored, as well as all the Genera blen-
ded in Rhus, and Rh. cotinus O. includes 3 or 4 species!

564. Cotinus retusus Raf. ramis rugosis et verrucosis, petiolis brevis angustis, fol. subrot. obovatis apice retusis, paniculis interdum plu-
mosis—Asia, leaves and flowers small.
565, *Cotinus ellipticus* Raf. ramis striatis, petiolis brevis marginatis, fol. ellipt. utrinque obtusis, paniculis non plumosis.—Mts. of Tyrol, Carniola, Sibiria and Origon? leaves larger than in others often triuncial, panicle of many large flowers, seldom plumose.

566, *Sumacus copallina* Raf. *Rhus do* O. well known sp. to which Torrey has mixt 2 new ones, *S. montana* and *floridana*. This has twigs verrucose, few entire leaflets acuminated &c &c—New Jersey &c.

567, *Sumacus montana* Raf. differs by folioles unequally serrate &c—Allegh. Mts.—The bad name of *Rhus* must be discarded, and we shall have instead Cotinus, Sumacus, Philoste- mon, Lobadium. Thezera, Metopium, Cominia, Festania, Malosma and *Lilithia* Raf. (10 sta- mens) all good genera, see my revision.

**PHILOSTEMON** Raf. fl. lud. p. 107, dif- fers from *Sumacus* by flowers dioical, calix ur- ceolate 5d dent. petals reflexed, stigma one, fruit umbilicate (in all?) leaves ternate, 2 folioles sessile obliqual middle petiolate, fl. racemose not paniculate.

568, *Philostemon toxicodendron* R. *Rhus do*. L. O. frutescens pubens, ramulis teretes punctatis, foliolis ovatis obovatisque, subangula- tis, acutis, petiolis longissimis striatis, drupis globosis glabris fuscatis—N. Amer. Torrey has blended 3 or 4 species with it as usual.

569, *Philost. radicans* R. *Rhus do* L. O. sepe scandens radicans glabrum, ramulis stria- tis, petiolis longis semiteres, foliolis ovatis acu- minatis integris, drupis glabris fuscatis—now properly distinguished from last.

570, *Philost. lutescens* Raf. an Ph. radicans fl. lud. 354? scandens, rámis angulatis verruco-
sis, petiolis teretib. pubescens, foliolis ovatis acutis 2-5fidis, utrinque reticul. supra scabris, subtus villosis lutescens, drupis globosis villosis luteis—Florida to Louisiana, my specimen in fruit deeply umbilicate quite yellow very hairy; leaves firm and thick, a very large vine: for the Louisiana plant, see flora Lud. for a long account, but fruit not described there; very different from all.

571, **FESTANIA** Raf. (bot.) diff. Sumacus, cal. urceol. 5fidus, petalis minimis obl. obt. stam. 5 subsessil. fl. fem ... fol. ternatis, foliolis omnibus sessilib. fl. panic—at least a subg. leaves disposed as in Lobadium, flowers as in Sumacus.

**Festania nivea** Raf. (Rhus do. Coll. herb.) ramulis fuscatis angul. fol. brevi petiol. foliolis sess. ineq. oblongis acutis integris, supra reticulatis, subtus canis furraceous, nervis fulvis—Africa, leaves small, flowers very minute.

572, **Lobadium** Raf. N. G. 1819. Torrey has omitted *Myrica trifoliata* L. in the synonyms and has only one sp. (not aromatic) but there are 3 sp. or var. besides his new, my *Lob. trilobatum*.

**Lobadium rupestre** Raf. ramis subangul. punctatis, foliolis ovatis acutis grosse serratis, supra glabris subtus pubescens—Virginia, Kentucky, Carol. ad rupes.

573, **Lobad. fetidum** Raf. ramis teretib. foliolis ovatis obovatisque acutis grosse serratis supra scabris, subtus tomentosis fulvescens—Allegh. Mts. wood fetid, leaves scentless as in all.

574, **Lobad. rotundifolium** Raf, ramistere- tib, foliolis subrot. sepe obtusis subintegris vel
crenato lobatis, utrinque glabris—Florida, Alabama, nearer to Lob. trilobatum of Origon.

575, Camphora vera Raf. Sylv. tel. 858. ramulis fuscatulis rugosis, fol. ovatis trinervatis, basi acutis, apice acum—Borneo, very rare, leaves not lucid nor glaucous, 1 or 2 inches long; double of petiol.

576, Camphora japonica Raf. sylv. 859, ramulis apice angulatis, fol. lato lanceol, utrinque acum. trinervatis, supra pallidis lucidis, subtus glaucis—Japan, blended with last in Laurus camphora, branches fuscate or lutescent, leaves 3 to 5 inches long, triple of petiol canaliculate above, end commonly falcate.


578, Evelynia diospyros Raf. Laurus do O. —Florida.

579, Tamala acuminata Raf, sylv. tel. 869. —Louisiana.

580, Tamala palustris R. sylv. 868. fol. lanc. vel obl. vel cuneatis acutis, interdum repandis, ramulis petiolis nervisque villosis—Car. Florida, a shrub, leaves 4 to 6 inches long, peduncles 2-4flore. †

581, Tamala? serrulata Raf. ramulis fuscatulis rugosis glabris. fol. cuneatis acutis subses-silib. glabris, medio ad apice remote serrulatis—Florida, mixt with last, leaves 4 to 5 inches. †

582, Tamala carolinensis R. sylv. 867, Laurus do O. fol. ellipt. utrinque acutis, subtus glabriusculis—large tree.

583, Ozanthes benzoin Raf. sylv. 836. Laurus do O—N. America.


585, Var. mollis Raf. fol. sepe integris villo-
sis mollis, florib. laxis—Pennsylvania, smaller tree, fl. ochroleucous narrow.


588, *Illic. reticulatum* Raf. ramulis angulatis, fol, subpetiol. oblongis subcuneatis angustis acutis utrinque latere reticulatis—Florida, found by Kin, leaves evergreen pale beneath biuncial, one third inch broad, certainly not the *I. floridanum* with acuminate leaves. †

589, *Rhododendron catabiense* Mx.—Unaka Mts. of Apalachians, very rare and local: twigs and petiols rugose, leaves fulvous beneath. †


597, *Kalmia ferruginea* Raf.* ramulis teretis, fol. sepe ternis petiol. obl. lanceol. acutis subtus ferrugineis glabris; fl. verticill. pedunc. pubens, calicib. glabris—Alleghany Mts, one of the sp. blended in *K. angustifolia* by many, which differs by larger leaves elliptic obtuse glaucous beneath. This is a small shrub bipe- dal, leaves uncial, flowers rose color.

598, *Kalmia lanceolata* Raf. ramulis teretis, fol. sepe ternis subsessilib. lanceol. acutis mar-
gine revolutis, subtus fulvis glabris, corymbis densifloris sepe terminalib. pedunc. calicibusque glabris—South New Jersey discovered 1802, still more unlike the *K. angustif.* (elliptica Raf.) small shrub sesquipedal leaves hardly uncials, flowers red. Is it not the *K. rosmanirinifolia* of some?

This 6th Century contains 23 New Genera, whereof 6 now first described, 40 new species of trees and shrubs, whereof 28 now first described and figured.

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**CENTURIA VII.**

601. *Saliunca* Raf. calix adherens oblongo striato integer, edentulo, corolla brevis campan. patens 4loba subeq. stam. 2? brevis stylo elongato, stigma bilob. akena obl. 2spema? *fol. oppos. integris, fl. cymosis bracteatis*—another N. G. of family VALERIANIDES, near to *Fedia and Mouffetta* of Necker, the name is of Plinius.

*Saliunca plantaginea* Raf. fol. radic. petiol. oblongis obt. trinervis basi acutis, caule subnudo, fol. linearrib. obt. remotis, cymis dichotomis glomeratis, bracteis oppos. ineq. scariosis obl. obt.—Carpathian or Caucasian Mts. small plant, annual? 6 to 8 inches high, radical leaves large erect, on stem very small, flowers small red. It must not be blended with *Val. saliunca* Allioni or *fragrans* with a ringent infundrolla, and pappose seed. ++

602. *Fedia hemiodes* Raf. new fl. 907 che nopodea? Nut.—Arkansas; this G. of Adan-
son and Gaertner, not of Decandole, has naked seeds like the last, but corolla infundibuliform.
603, *Fedia ligulata* R. n. fl. 908—Louisiana.
604, *Fedia ciliolata* R. n. fl 909—Kentucky.
605, Var. *ternifolia* ditto—Kentucky.
608, *Od. coronata* R. *Fedia et Val. do O—Lusitania.†
609, *Od. dentata* R. *Fedia, Val. do O—Anglia.†
*FUISA rupestris* Raf. Val. do Pallas, sibirica Gm. W. *Fedia do &c—Sibiria. V. ruthenica and villosa also belong to this G. this last has stigma cyathiform.
614, *Valeriana pauciflora* Mx---Ohio ad Louisiana.
615, *Val. officinalis* L.—Europe sylvis.
617, Val. montana L.—Alpis.
618, Val. elongata Jaq.—Carinthia.†
619, Val. celtica L.—Alpib. summis.†
620, Val. gracilis Raf. caule fistulosus teres ramoso gracilis, fol. pinnatis, foliolis linearibus obtusis, cymis trisdis, bracteis longis subul. membranosis, florib. fastigiatis—Sibiria, found as V. alpina (no such name) in Collins herb. branches slender naked flowers red.
There are other G. included in this fine family once a Genus! Mouffetia of Necker is based on Val. supina, my G. Oncosina on Val. vesicaria with fruit globose inflate 6aristate, my G. Oncolon on Val. echinata with cor. regular infund. 3 stigmas, fruit linear unequally 5dentate. Other G. exist in the Peruvian sp. besides Phylactis of Persoon, and my Amplophus based on V. scandens with corol tubular 5dentate.
621, Scabiosa Necker non L. Raf. fl. tel. 1084. This large Linnean G. has been rectified by myself in flora tel. and divided in 16 Genera, perfectly distinct, Scabiosa, Astrocephalus, Pterocephalus, Succisa, Cephalaria, Euptilia, Plesiopsora, Tereiphas, Xetola, Lomelosia, Leucopsora, Sialix, Gonokeros, Pentena, Tremastelma and Thlasidia—Type Sc. columbaria L. Europa.
622, Scab. graminifolia L.—Alpis.
623, Scab. cretica L.—Sicilia &c.
624, Scab. atropurpurea L.—Asia.
625, Succisa vulgaris Raf. fl. tel. 1037, Scab. succisa O—Europa.
626, Succisa integrisfolia Raf. Scab. do O—Helvetia, Bavaria &c.

628, *Succisa bidentata* Raf. scabra, caule subnudo apice angulato paucifloro, fol. subradi-calib. glaucis latoblongis acutis integris vel basi bidentatis, caulinis 2 lanceol. pedunculis brevis, fl. globosis, perianthis 8-10part. ovatobl. acutis—Hispania, perennial, pedal, leaves uncial, flowers small.†


630, *Astrocephalus pumilus* Raf. pumilus uniflorus glaber. fol. petiol. oblongis crenatis basi attenuatis, superis pinnatifidis. pinnulis infinis angustis integris, floribus planis radiatis, perianthis 12part. linearib. ineq.—Sicilia ad Montes Mt. Etna. Small annual plant 4 to 6 inches high, leaves proximate in middle of stem, biuncial, peduncle naked, flowers white, corolls quite radiate unequal, seeds aristate.


2 others here. Kobiosis and Dematra. As far as 698 the species will be all Euphorbias of authors, 65 sp. in 12 G.

633, Tithymalis cinerea Raf. pilosa cinerea fol. sparsis sessil, ellipt. retusis integris; umbellis 5fidis, invol. 5 fol. similis, involuc. 2 similis, caps. papillosis—Styria, Bavaria: pedal simple, of subg. Xarakias, like the next 3, sent me both as Euph. epithymoides and ciparissias, but quite unlike either.

634, Tithym. epithymoides Jaq. &c---Austria, Bavaria, differs by color green, leaves lanceol. or oblong, obtuse and acute, involucres ovate not entire &c.


636, Tithym. characias R. Euph. O.—Sicilia ad Anglia.

637, Tithym. mucronata R. pubescens, fol. sparsis oblongis elongatis pendulis mucronatis integris; umbella 6fida trifida, amplissima, involucelis ovatoobl. capsulis pubescens—Sicilia, Creta, large plant 3pedal, leaves triuncial narrow, flowers red few concealed in the ample umbel: near T. pubescens and platiphylos.

638, Tithym. platiphylos R. Euph, O—Europa.†


640, Tithym. verrucosa R. var. glabra, diff. caule erecto angulato fol. glabris integris—Bavaria, an sp? Tith. bavaricus.

641, Tithym. floridana Raf. glabra, caule fistuloso, fol. remotis sessil. obl. ligulatis apice serrulatis obtusis, umbella trifida dichotoma, invol. 3 similis, involucelis 2 ovatis, capsulis scabris—Florida and Georgia, found by Dr. Bald-
win, mistaken for E. helioscopia by Muhlenberg and Elliot, but quite unlike. Pedall, eaves uncial narrow, flowers very small 4lobe.

642, Tithym. helioscopia R. Euph. O---Europa, it has leaves cuneate acute serrulate, umbel 5fid, capsules smooth.


644, Tithym. obovata Raf. (E. helioscopia nonnullis non L.) fol. obovatis serratis obtusis glabris, inferis petiolatis, umbella 5fida 3fida, invol. 5-3 conformis, capsulis glabris---Novanglia ad Kentuky, Anglia ad Sicilia &c annual pedal, leaves exactly like E. peplus, but larger and serrate, umbel not trifid. It appears to be deemed E. helioscopia both in America and Europe, altho’ quite distinct from it by leaves neither narrow nor acute.

645, Tithym. paralias R.---Europa maritimas.

646, Tithym. saxatilis R.---Styria, Illyria.

647, Tithym. apios R.---Creta, tuberosa pilosa fol. oblongis, rara. †.


649, Tithym. calendula R. Euph. do Delile ---Egypt.

650, Tithym. connata Raf. pumila pubescens, fol. sess. obt. vel cuneatis acutis integris; umbellis dichotomis, invol. subrot. obt. sepe connatis---Syria, sent me as E. aleppica, which has setaceous leaves, apparently new, but the specimen is imperfect †

651, Keraselma exigua R. Euph. O.---Europa, fol. lin. lanc. acutis cuspidatis. For this G. of Necker see fl. tel. 1184.

652, Keras. retusa R. Euph. O.---Hisp. Gallia, fol. cuneat. linearib, retusis. Sent me by 2 botanists as Exigua,

654, *Keras. virgata* R. Euph. do Waldstein—Hungaria, near to *R. esula*, larger, flowers thyrsoidal below the multifid umbel. flowers bicorne.


657, *Keras. pungens* Raf. fruticosa levis, fol. lin. cuneatis acum. pungens integris; umbellis 5fidis bifidis, invol. conformis, involucelis ovatis rigidis pungens, caps. glabris—Palestina Arabia, leaves imbricate, ombel large, flowers small, 4 bicorne lobes. †


660. *Keras. reniformis* Raf. (Euph. peploides R. 1804. E. peplus Am. bot.) fol. sepe sessilib. obovatis vel ellipt. acutis obt. et retusis integris, umb. 3fidis, involucelis reniformis, caps. glabris non angulatis—Pensylv. ad Missouri, annual, pedal or less, leaves thin pellucid.


662. *Keras. spatulata* Raf. an Euph. obtusata? Pursh &c pumila glabra. fol. arcte sessilib. obov. spatul. obt. integris, umb. 3fida, invol. ovat. obovatisque—Arkansas, Texas, annual 3 to 6 inches high, leaves small, not serrate as says Pursh, capsules not seen.
663, Keras. ciliata Raf. Euph. pilosa Am. auct. non W. fol. sessilib. cuneatis apice serrulatis acutis, margine ciliatis, subtus pilosis; umb. 5fida invol. 5 ovatis, involucelis 2 deltoideis acutis, capsulis glabris—Missouri, annual, semi pedal. The E. pilosa of Sibiria is a Tithymalis with lanceol. leaves, capsules verrucose & c.†

664, KOBIOYSIS Raf. (non grec) periantho cupularis lobis ext. 5 crassis rotund. 5 int. alt. scariosis serratis, disco mellifluo, fl. masc. paucis brevis, antheris bilobis, fem. subsess. stylo 3idio, stigm. 6 obt. fruticosa, fol. sparsi, fl. thyrsoides non involucratis, bract. scariosis—Thus another N. G. near Tirucalia, Tumalis, Vallaris & c, habit peculiar.

Kobiosis mellifera Raf. Euph. do O. fol. lanceol. cuspidatis integris, thyrs apice umbella nuda 5fida. bract. obl. obt. brevis subfloribus—Madera, fine shrub, leaves 4 to 6 inches long, flowers rather large dark purple.

665, Agaloma (Raf. fl. tel. 1188) purpurea Raf. glabra caule elato angul. striato fistuloso, fol. lanceol. acutis basi attenuatis subtus glaucis; fl. ad apice axil. pedunc. unifl. invol. 2 delt. subflos, caps. glabris—very remarkable sp. of this G. linking with last, 3' feet high, leaves 4 inches long one broad, flowers not white as in most sp. but purple rather small: Glades of Pennsylvania Allegh. Mts. very rare. †

666. Agal. ciliata Raf. caule piloso tereto striato, fol. subsess. ovatobl. vel. ellipt. obtusis margin et nervis ciliatis; umb. 2-4fidis paucifl. invol. similis—Alabama to Kentucky pedal, leaves uncial, flowers white and small.

667, Var. floridana R. elata fol. oblongis angustior, umbella multifida ramosa foliosa. fl. paucis ad dichot.—Florida, bipedal, leaves lar-
ger but narrower. Probably the Euph. paniculata Elliot.

668, Var monanthes R glabriuseula, fol. obl. flos solit. longepedunc. in umbella 4fid. inv. angustis—Alabama.

669, Agal. corollata R. Euph. do O—Type of the G. with many varieties, cuneifolia, angustifolia, nudiflora, pauciflora, uniflora, flowers large white, from Canada to Louisiana.


671, Agal. longifolia R. an E. graminis. Mx? caule ramoso pubens, fol. lineari lanceol. glabris obtusis, petiolis hirsutis, umbel. 3-5fidis, invol. conformis—Kentucky ad Carol. 1-2pedal, leaves 2 to 4 inches long very narrow, but always broader at base, flowers few white small, 2 var. major, linearis.

672, Agal. polyscadia Raf. glabra elata, fol. sessilib. oblongis adpressis obt. umbela multifida 3fidis dichot. amplis multifl. invol. 8-5-2 similis brevior—Mts. Allegh. 3 to 4 feet high, leaves biuncial, umbel enormous of 8 rays, next 3fid and bifid several times fl. profuse white.

673, Agal. linearis Raf. glabra virgata, fol. petiol. linearib. obtusis, umb. 4-5idia, 2-3chot. invol. oblongis acutis parvis—Alabama and Tennessee, semipedal, leaves uncial, flowers white large.

674, Agal. tenuifolia Raf. glabra ramosa, ramis filif. fol. angustis linearib. acutis, sessilib. umb. 3idia dichot. pauciflora, invol. conformis
pedic. equante—Florida (Baldwin) very slender, flowers small white. †


676, *Pleuradenia coccinea* Raf. fl. tel. 1174—Mexico. † I published this G. 1833, it is the Poinsetia of Graham 1836.

677, *Desmonema hirta* Raf. fl. tel. 1175—Kentucky. †


680, Var. *portulacoides* R. Euph. do Lin. &c, apparently only a var. with broader leaves often retuse, New Jersey.

681, *Dematra* Raf. (bot) periantho camp. villosa pluridens, fl. masc. pluris, fem. stip. villosa, stig. 3 sess. acutis, capsulis duplex, externa villosa ineq. dehiscens, interna glabra crustacea, 3valvis 3sperma. *Frutex dichotomus* fol. oppos. fl. axil.—certainly a peculiar G. with habit of Xamesike and Croton, fruit very singular, the outer coat is perhaps a calix.

*Dematra sericea* Raf. (Euph. villosa Sieber non Waldstein) caule dichot. angul. lutescens pubens, fol. petiol. ovatis obt. integris villosis, subtus cano sericeis, fl. axil. solit. sessilib. caps. globosis cano tomentosis—Palestina, sent me by Sieber as *E. villosa*, but the previous sp. of Hungary is a Tithymalis. A shrub bipedal, leaves hardly uncial, flowers small, capsules large.

*XAMESIKE* Raf. fl. tel. 1181, This nat-
ural group includes many small plants often blended, habit similar in all, but the minute flowers are difficult to analyze and must be studied alive. I have some with only one male fl. in the perianth that form my G. Aplarina new flora 892; many will be found to possess this character: meantime I now make 3 subg. in it Xamesike, Xamobala lobes entire, and Aplarina fl. monandrous.

682, X. supina Raf. dec. 15—Novebor. ad Ohio, well described by me with the 2 next as Euphorbia in 1817: this has leaves ovatoblong obt. serrat. fl. fasciculate, prostrate, deemed E. maculata by Torrey.

683, X. littoralis Raf. dec. 16—Novebor. leaves ovate rounded subcord. uninerve serrate, fl. solitary. prostrate.

684, X. vermiculata R. dec. 21. Noveb. ad Kentucky, erect, leaves oblong acute serrate trinerve, fl. solitary. These 3 belong to Xamobala, have hairy stems, leaves oblique.

685, X. glauca Raf. caulib. prostr. ramosis pilosis fol. glaucis glabris ovatobli. obliqu. subserr. acutis 3 nervis, axilis paucifl. foliosis, caps. glabris—Kentucky, Virg. easily known by its glaucous appearance, not spotted.


687, X. maculata R. Euph. do O. differs from X. vermiculata by leaves smooth with a fuscate spot, obtuse uninerve opaque not vermiculate.

688, X. palestina Raf. Euph. canescens Sieber non L. caulib. prostratis pubens, fol. glabris ellipt. obt. obliqu. crenatis, axilis multifl. foliosis,
caps. glabris—Palestine, certainly neither *X. canescens* nor *vulgaris*, long stems, small leaves thicker above.

689, *X. alsinoides* Raf. glabra dichot. diffusa, fol. sessil. ovatis acutis integris, fl. axil. solit. sessilib. caps. granulatis—Sibiria, small plant, flowers very minute, leaves not oblique, found in Collins herb. as *E. sanguinaria*!

690, *X. deltifolia* Raf. glabra dichot. erecta, fol. sessil. lato deltoideis acutis integris, fl. axil. solit. sess. caps. granulatis—Florida peduncle, leaves not oblique, lobes of flowers entire, akin to last and to *E. cordifolia* of Elliot; but not at all like *E. literata* of another G. altho' so labelled in Collins herb.


692, *X. gracilis* R. Euph, do Elliot.—Florida, near last, leaves longer, fl. larger white, lobes entire, thus also a *Xamobala* like most of the above.

693, *X. A. hypericifolia* R. Euph. O of subg. or G. Aplarina like all the next. Canada ad Carol. several var.


696, *X. A. micranthes* Raf. glabra prostrata diffusa, fol. petiol. ellipt. obl. integris vix obliqu. axilis sepe unifl. vel foliosis, fl. subsess. caps. glabris—Louisiana ad Alabama, very branched, leaves very small, fl. very minute.

697, *X. A. microphylla* Raf. n. fl 994—Texas and Louisiana, near last, leaves still smaller cordate oblique.
698, X. A. prostrata Raf. n. fl. 993—Pennsylv. habit of the first kinds of this G.

699, X. A. rotundifolia Raf. Euph. humboldtii nonulis—caule erecto simplex glaber, fol. petiol. ovato subrotundis acutis nervo piloso, integris, fl. longe pedunc. solit. capsulis glabris—Central America, pedal, leaves thin uncial flowers small on long peduncles, perianthe 4dentate, my specimen female.†

700, Sesuvium verrucosum Raf. new fl. 758—Arkansas.
This 7th Century includes 20 new Genera, whereof 5 now first described, besides 40 new species of mine, whereof 25 are now described, all Endogenous plants with a few shrubs.

CENTURJA VIII.

701, Galax erythrorhiza Raf. aphyla L. Erythr. rotundis. 'Mx. Pyrola urceolata Poiret Rad—Unaka Mts. very rare.†

702, Pterospora andromedea Nut, Raf. med. fl. t. 78. Monotropa procera Torrey—near Albany, very rare and curious.

Pyrola of L. divided into 4 subg. in my Medical Flora 1830, which may be deemed Genera and others must be added. Radius had only 14 sp. in his monograph, and altho’ I lack 3 I will now illustrate 32, see till 734.

703, Pyrola elliptica Nut. not in Radius unless blended, easily known by the thin elliptic leaves; this and all the akin with declinate flexuose style, and flowers racemose nodding belong to my Streptilia real type of Pyrola, subg. of 1830—North America.

704, Pyrola petiolaris Raf. fol. 4-5 longe petiol ovatis vel ellipt. utrinque acutis integris, supra subreticul. scapo angul. squama ad basis
obl. acuta, racemo 8-15fl. bract. obl. ac. pedic. eq.—Bohemia, sent me as P. rotundif. unmeaning name applied to 6 sp. not that of Radius: petiols biuncial, leaves uncial rather thin, flowers middle size, caudex scaly, scape pedal.

705, Pyr. bifolia Raf. fol. 2 petiol. eq. ellipt. subrot. obt. vel acutis integris, supra maculatis vix reticulatis, scapo angul. squamis 2 obl. ac. racemo 10-12fl. bract. ped eq.—Germany, sent me also as P. rotundif. only 2 unequal leaves smaller spotted, flowers rather large, bracts similar to scales.

706, Pyr. reticulata Raf. (rotundif. Am. bot.) fol. 3-4 pet. subeq. subrotundis vel obov. subintegrigris obt. supra reticul. nervosis, interdum maculis reticul. scapo angul. sq. 2-3 lanceol. acutis, racemo 12-20fl. bract. lanc. ac. ped eq.—Allegh. Mts. leaves firm 1 or 2 inches long and broad, strongly netted, scape pedal, flowers large.

707, Pyrola unifolia Raf. fol. sepe unica longe petiol. ellipt. obt. crenata. supra reticul. scapo angul. sq. 3 lanceol. acutis, racemo sub12fl. bract. lanc. ped. eq.—New Jersey, petiol. 3uncial. leaf 2uncial, scape pedal, akin to last but flowers smaller, leaf well crenate, sometimes 2 but one soon decays.

708, Pyr. obovata Raf. folia unica obov. subsess. vel petiolo marginato, integra subpanda supra reticul. scapo angul. tortilis paucifl. squamis 2 lanceol. acut. bract. similis—summits of Alleghanies, semipedal, leaf and flowers small, only 6 to 8.

709, Pyr. orbiculata Raf. var. unifolia vel P. monophyla. folia unica longe petiol. ovato subrot. vix cord. obt. integra supra reticul. scapo vixangul. paucifl. sq. 3 obl. obt. mucronatis,
bract. lanc. acutis ped. eq.—Germany &c, semi-pedal, leaf uncial, petiol 2, flowers 6-8 rather small, nearer to P. rotundif. of Radius than P. petiolaris.

710, *Pyr. grandiflora* Rad.—Labrador, leaves 3 small petiols longer, scape uncial, flowers 2-5 as large as in *P. reticulata*, scale elliptic acute, bracts lanc. ac. longer than pedicels. It forms with next a subg *Toxilis* by style arched not flexuose, stamens not ascending, stigma 5lobed &c.

711, *Pyr. cespitosa* Raf. rotundif. Torrey!... fol. plurimis cespitosis parvis petiolis subeq. ovatis vel subrot. obt. marg. integris revolutis scapo angul. nudo paucifloro, bract lanc. acutis eq.—summit of Oquago, Taconic and Saranac Mts. of New York, 3 to 6 inches high, leaves 6 to 12 very small hardly reticulate, fl. 5-8 medial size. subg. *Toxilis*.

712, *Pyr. heterophyla* Raf. rotundifolia Tor!—repens petiolis brevis et longis, fol. 3-7 membranaceis ovatis et obovatis, obt. vel retusis, integris vel crenatis vix reticul. scapis 1-4 angulatis nudis, racemis 8-10fl. bract. lanceol. acutis pedic. brevior—New York to Virg. near to *P. elliptica*, but remarkable by the variable leaves 1 or 2 inches long, scapes 6 to 10 inches, flowers medial, the naked scapes and short bracts distinguish it well through all its variations.

713, *Pyr. hybrida* Raf. medial between *P. heterophyla* and *P. reticulata*—fol. 1-6 ovat. obov. et ellipt. obt. vel ret:vis integris, cartilagineis supra nervoso reticul. petiolis brevis, scapo ang. squamis 2-3 lanc. ac. bracteis similis ped. eq.—Mts. Allegh. it differs from *P. reticulata* by smaller leaves and flowers, 2 var. unifolia and pauciflora.
714, Pyr. asarifolia Mx. to which Radi has referred P. chlorantha, virens, convoluta; but his 4 var. figured offer 4 distinct sp. therefore I must describe mine—petiolis elongatis; fol. subcord. subrot. obt. et retusis integris membr. vix reticulatis, scapo vix angul. sq. 2 obl. acutis, racemo multifl. bract. ped. eq.—New England, Canada, 4 to 8 inches, leaves uncial like those of Asarum virginicum, fl. many from 5 to 10, fl. medial.

715, Pyr. ovata Raf. petiolis brevis, fol. ovatis obtusis integris vix retic. scapo angul. contorto 8-10 fl. sq. 2 lanceol. ac. bract. similis eq.—Allegh. Mts. leaves and fl. larger than in last.

716, Pyr. subcordata R. petiolis longis, fol. ovatis obt. subcord. integris membran. vix nervosis, scapo angul. 6-10fl. sq. 1-3 obl. acum. bract. similis eq.—Germany and England, sent me as P. rotundif. again, medial between last and P. petiolaris, 8 or 10 inches high, petiols 2 inches, leaves 1, flowers small.

717, Pyr. virgata R. repens, folia unica minima subrot. retusa integra vix nervosa, petiolo subeq. scapo virgato angul. subnudo basi sq. 2 subulatis, apice 6-8fl. laxo, bract. subul. ped. brevior,—Apalachian Mts. semipedal, leaf minute 1-3d of inch, flowers small: of subg. Toxilis, perhaps the P. aphyla of Amer. botanists. I lack P. dentata and picta.

BRAXILIA Raf. diff. Pyrola, cal. 5part. petalis vix patens, stam. rectis brevis, stylo brevis recto, stigma 5dent. &c.

718, Braxilia parvifolia Raf. Pyrola minor L. O. fol. ovatis acutis serrulatis mucronatis petioli eq. caule apice nudo squamis 3-4 lanc. aequis racemo paucifl. subsecund. fl. nutans, pe-
dic. brevis bract. eq.—Labrador, Sweden &c, small plant, 3 to 4 inches high, leaves small—this G. differs from Pyrola by petals campanulate, stamens streight, style short erect not curved, stigma 5dentate.

719, Brax. squamata Raf. petiolis brevissimis marginatis, fol. subrot. integris obt. margine revolutis, caudex squamato, scapo teres, sq. 1-3 ellipt. obt. coloratis, florib. 2-3 bract. obt. ped. brevis, cal. obt.—Labrador, blended with last, quite unlike, leaves equaly small but broad, stem 2 or 3 inches with large obtuse scales, flowers white large.

720, Brax. viridiflora Raf. petiolis angustis eq. fol. subrot. integris, scapo gracilis teres trifloro, squama unica subulata, bract. acutis lanceol. ped. eq.—Alleghany Mts. of Pennsylv. similar to last, but flowers small greenish, scales very different, calix acute.

721, Brax. media Raf. Pyrola minor nonnullis. petiolis elongatis, fol. obov. integris vel subcrenatis obtusis, membranaceis, scapo teres subnudo multifl. ped. cernuis brevis bract. eq.—Anglia, Germania. Sent me as P. minor, but unlike it, leaves larger uncial, flowers small, scape semipedal.

722, Brax. heterophyla Raf. petiolis brevis marginatis, fol. ovatis obov. ellipt. subrot. obt. vel. acutis, integris vel subrepandis membranaceis, scapo teres nudo vel sq. 1 subul. racemo multifl. pedic. brevis. bract. obt. eq.—summit of Alleghany Mts. leaves large uncial, stem. 6 to 8 inches, flowers small, incarnate. Near to O. rosea with ovate crenate leaves, longer petiols.

ORTHILIA Raf. diff. Pyrola, cal. 5dent. petalis campanulatis, stam. rectis, stylo elongato filif. recto, stig. 5dent. caps. 5gona profunde
umbilicata. *Caulib. ramosis, floribus racem. secundis.*

723, *Orthilia parvifolia* Raf. Pyrola secunda europea L. &c, caule erecto ramoso squamoso, fol. parvis. brevi petiol. ovatis acutis serrulatis, bract. lanceol. acutis pedic. longior—Europa, my specimens from Bavaria, small plant 2 or 3 inches high. leaves minute, scales large similar to bracts, flowers small subsecund.

724, *Orthilia procumbens* Raf. caule procumb. ramoso vix squamoso, fol. ovatobl. ulrilque acutis, dentatis subtus glaucis, petiolis subeq. f. pedic. ad bract. longior—Alleghanies &c, blended with last, leaves narrower, petiols longer, flowers smaller.

725, *Odostima* Raf. diff. Pyrola, cal. 4-5part. obt. petalis 4-5 rotatis, stam. 8-10 brevis rectis subeq. antheris subglob. biporosis. ovar. glob. stylo recto brevis teres, stigma magnum 3-5fid. dentibus ineq. erectis acutis. caps. 3-5loc. 6-10sperma. *caulis uniflor. unisquamato fol. vertic*—Types the *Pyre. uniflora* and akin, very distinct habit, 5 sp. 2 European and 3 American.

*Odostima caulina* Raf. caulescens, fol. opp. ternisque latovatis acutis petiolis equante acute serratis squama obov. ad apice, petalis obtusis—Europa borealis, sent me as *P. uniflora* 4 to 6 inches high, leaves semiuncial, flower said to be yellowish and odorous like Convallaria.

subrot. crenatis, linking with next sp. by leaves similar, but long petiols, bract or scale terminal, perhaps a species? sent me by Decandole as the real *P. uniflora*.

728, *Odost. orbiculata* Raf. subacaulis, fol. 3, petiolis brevissimis, orbiculatis obtusis crenatis, squama mediaeis ellipt. obt. petalis obt. undulatis—Alpis et Montes Europa, 2 or 3 inches high. flowers large.

729, *Odost. obovata* Raf. subacaulis, fol. 3 petiolis brevis, obov. obt. apice serrulatis, squama term. ovata, petalis obt.—Novanglia &c, 2 inches, leaves uncial nearly as long as stem, rather thin.

730, *Odost. grandiflora* Raf. subcaul. fol. oppos. petiolis brevis, ovatis ellipt. acutis serratis. squama infera subrot. petalis obt.—Canada &c, near to *O. caulina*, but larger leaves, the lower subsesile, flower large yellow, stem triuncial.

731, *Odost. acutiflora* Raf. subacaulis, fol. 3 subsessilib. obov. subrot. obt. repando crenatis, squama term. ovata acuta, petalis acutis—Labrador ad Noveboraco, biuncial, leaves very small, flower peculiar.  

732, *Chimaphila maculata* Pursh. *Pyrola do O. Raf. med. fl. t. 79. I restrict this G. to this single American sp. with calix 5dentate, style immersed, stigma urceolate, flowers 1-3 umbellate—it has several var. *ovata, lanceolata, heterophyla, uniflora*.

733, Var. *durandi* R. *Pyrola do Raf. atl. j. uniflora* fol. ovatis immaculatis. Probably only a var. or incipient sp.

733, *Pipseva* Raf. 1808, cal. 5part. stylo brevis teres crasso, stigma annularis, caules-
cens, fol. subvertic. semperv. florib. corymbosis ebract.

Pipseva officinalis Raf. Pyrola umbellata L. Chimaph. corymbosa nonulis &c—several var. cuneifolia, angustifolia, multiflora, pauciflora &c. I have not the European plant, which may be different if really umbelate.

735, Tiric tapaucoides Raf. new fl. 778. South New Jersey, N. G. near Daucus.

736, Babiron pusillum R. new fl. 780, Daucus pusillus Tor. non Mx. Alabama &c.

737, Bab. divaricatum R. new fl. 781, put in 5 Genera before! see my syn. Floriana &c.

738, Bab. dichotomum R. n. fl. 782, Florida.

739, Daucus scadiophylus R. n. fl. 783, Alab. Florida.

740, D. scariosus ib. 784, Pensylv.

741, D. brevicaulis ib. 785, Pensylv.

742, D. nudicaulis ib. 786, Pensylv.

743, D. levis ib. 787, Novaces. ad Kentucky.


746, D. heterophylus R. n. fl. 790, D. carotta of Am. bot. like all the above, Canada to Louisiana, several var. fumaroides, asper, laxifolius.


748, D. agrestis Raf. n. fl. 792 D. carotta L. O. the wild European type, several sp. were blended in D. carotta, now called D. maritimus, carotta, polygamus, exiguis and these two.

749, Solanum carolinianum L.—Pensylv. ad Louisiana.

750, Sol. obliquatum Raf. scabra herb.
inerme fol. brevipet. obliquis ovatolanc. elongatis integris acum. pedunc. racemosis 3-5floris—Florida near last, but leaves narrower entire 4 to 5 inches long, flowers similar size white, inerme but roughly puberulent, herbaceous.

751, *Sol. floridanum* Raf. toto pilosum hirtum, caule herb. flexuoso ramoso inermis, fol. subsess. obovatis obtusis repando sinuatis, nervo medio aculeato, pedunc. sepe trifloris—Florida near to *S. mammosum* but more inerme, leaves not cordate 2 or 3 inches, flowers size of the 2 last.

752, *Sol. verbascifolium* Florida akin to *S. obliquum* but fruticose tomentose, leaves not oblique, peduncles multifl.†

753, *Sol. dimidiatum* Raf. herb. subinerme scabrosom tomentosum. fol. petiol. amplis ovatis lobato pinnatif. lobis acutis subdent. basi ad petiolis dimidiatis, racemis furcatis multifl.—Texas, New Mexico, Arkansas, very striking sp. leaves semipedal, base decurrent or longer on one side so as to be dimidiate, flowers large bluish, calix campanulate with 5 distant teeth subulate, lobes of corolla ovate reflexed acute nervose, anthers linear subsessile distinct alike, and thus not an Androcera.


ad Kentucky—usually mistaken for S. Virg. but smooth smaller, fl. white small, berries pisiform.

757, *Sol. virginicum* L. usually blended with S. carolinian. by our botanists, nearer to S. obliquatum, leaves oblique angular pubescent, stem leaves and calix subspinose, flowers racemose.

758, *Sol. bidentatum* Raf. caule herb. teres inermis, fol. ovatis vel subcord. acutis integris vel basi bidentatis tenuis levigatis, nmbelis sepe 5floris—Sicilia, Italia, and near to S. patulum of India.


760, *Sol. coagulans* Vahl. Arabia, Egypt.†


762, *Sol. pilosum* Raf. acul. albo piloso hirsuto, fol. obliquis ovatobl. glaucis acutis, sinuato pinnatif. lobis dentatis acutis, cymis pedunculatis paucifl.—South America, sent me as *Sol. decurrens* (no such name,) near my S. dimidiatum, but very hairy, leaves small uncial, flowers 5 or 6 very large, calix 5fid, lobes of corolla unineve patent acute, stamens as in 753, hardly porose.

763, PARMENTIERA Raf. diff. *Solanum*, cal. 5fid. corolla 5loba, stam. 5 antheris ellipt. 2loc. intus dehiscens non porosis, stylo elongato, stig. capit. bacca 2loc. *tuberosa, fol. pinnatis, fl. corymbosis*—this G. for the Potato was proposed 100 years ago in France, it has since been blended with *Lycopersicon* differing by 6 to 9 stamens, berry multilocular.

*PARMENTIERA edulis* Raf. *Sol. tuberosum* O. fol. interrupte pinnatis, foliolis ovatis acum, in-
tegris glabris, corymbis multifl.—such is the common Potato native of Peru, compare with next.

764, Parmentiera balduini Raf. fol. pinnatis. foliolis ovatobl. obtusis ciliatis, terminalis major rotundata integra, corymbis pubescens 3-6fl—Uruguay, found by Baldwin at Mt. Video, deemed the wild type of our Potato, but leaves different, small tubers mixt with fibrose roots, stem 6 to 10 inches, flowers not so large. &c.

765, ANTIMION Raf. (n. grec) diff. Parmentiera, cal. globoso 5-7fid. lac. ineq. subfoliosis, cor. campanul. 5fida, stylo brevis, (an tuberosa ?)—Solanum includes yet 20 fine distinct Genera. I can only add here those I possess.

Antimion tomentosum Raf. Sol. peruv? fol. interrupte pinnatis, foliolis ovatis obovatisque repandis acutis supra. pubescens, subtus tomentosis, cymis pedunc. comos, multifl. subfoliosis, calicib. tomentosis—Peru, sent me as S. peruv with next altho' of different Genera! corollas hardly longer than calix with enclosed stamens.†

766, SCUBULON Raf. (n. antiq) cal. 5part. eq. cor. 5part. antheris 5 connatis in tubo obl. 5dent. intus dehis. stylo filif. stigma bidentatum. fol. pinnat. fl. racem.—thus stamens united as in Solanum, but opening as in Lycopersicon.

SCUBULON incanum Raf. fruticos. inerme, fol. pinnatis cano pulverulentis, foliolis obl. obt. integris vel repandis undulatis, ultima ovata, racemis laxis multifl. cal. linearib. baccis globosis glabris—Peru, how different from last, and yet labelled alike by orthodox botanists; flowers ochroleucous, folioles small.

767, Scubulon humboldti Raf. Sol. do? caule herbaceo sulcato, fol. interrupte pinnatis, foliolis petiol. cordatis sinuatis acutis glabris,
racemis paucifl. cal. subul.—South America, probably the Sol. humboldti of Kunth and gardens.†

768, **Androcera lobata** Nut. Ceranthera Raf. 1817, Sol. heterandrum Pursh ic—Missouri, rare plant; my good and previous name has been employed for a labiate. My specimen is semipedal annual, very prickly, calix very much so around the fruit.

769, **Capsicum purpureum** (quid) herbac. fol. longe petiol. ovat. acum. pedunc. axil. solit. —Antilles, one of the sp. blended in C. annuum, fruit purple.

770, **Atropa belladona** L.—Europa.

771, **Mandragnora acaulis** Dec. Atropa mandragora L.—Sicilia, Grecia &c, the Mandrake of the Bible.


773, **Verbascum thapsus** L.—Eur. Amer. type of Subg. Thapsus, see fl. tel. 1066.

774, **Verb. claytoni**? Mx. this rare plant of Carolina omitted by many, chiefly differs from V. blattaria, by leaves larger lanceol. notcordate, often duplicate serrate and flowers spicate not racemose, lower leaves cuneate 6 to 8 inches long.†

775, **Verb. undulatum** Lam.—Creta,

776, **Verb. flocosum** L.—Germania.

777, **Verb. austriacum** Jaq.—Germania.

778, **Verb. pulverulentum** L.—Europa.

779, **Verb. pheniceum** L.—Germania.

780, **Verb. nigrum** L.—Europa.

781, **Verb. spicatum** Raf. glabrum, fol. amplex, cordatis ovatobl. acum. argute dentatis, fl. spicatis remotis solitariis, bracteis lanc. acum,
cal. eq.—sent me from Europe as V. virgatum, but fl. not agregate, nearer V. nigrum.†

783, Verb. collinsi Raf. glabriusc. fol. cordatis, radicalis petiol. caulinis amplexic. dentatis undulatis acutis, florib. spicatis ramosis pulverulentis, bract subul.—Europa australis, cultivated by Collins and deemed medial between V. nigrum and virgatum, leaves ample, lower 6 inches, spike paniculate, flowers small.

784, Verb. pyramidale (quid ?) vel macrophyllum Raf. fol. amplis glbris ellipt. obt. subcord. sinuato repandis, florib. panic. pyram. ramulis racemosis virgatis elongatis puberis, bract. obl. acum. ped. eq.—Asia? leaves pedal very large yet thin, flowers incarnate.

785, Verb. phlomoides L.—Italia, type of subg. Flomosia, see fl. tellur.

786, Hyosciamus aureus L.—Creta, Syria.

787, Hyosc. muticus L. betafolia Lam. datura Forsk—Egypt, Arabia.

787, Hyosc. albus L—Europa austr. sent me also under the false name of H. mutabilis.

789, Hyosc. niger L—Europa, Amer. bor.

790, Hyosc. physalodes L—Sibiria, some leaves repand in my specimen misnamed H. orientalis. †

791, Scopolia carniolica Jaq, Hyosc. scopolia L. &c—Carniolia, Illyria. I restore this G. improperly abolished because the capsule was like Hyosciamus; but the corolla is totally different, as in Atropa, campanulate entire, calix camp. 5fid. stamens 5 equal at base corolla, anthers linear, very rare. †

792, Blenocoes glutinosa Raf. fl. tel. 716, Nicotiana do O—Peru.

793, Nicotiana paniculata R. P. fl. per—Peru.

797, *Petunia longiflora* Raf. glabra, fol. amplex. oblongis acutis, corolla tubo longissimo, limbo acuto—Uruguay, M. Video, tall plant, leaves 3 to 6 inches flowers quite as long white.

798, *Petunia odorata* Raf. glabra, fol. obl. repandis acutis sessilib. florib. racemosis, cor. limbo obtuso—Brazil, leaves large, flowers small uncial incarnate fragrant.


This 8th Century includes 12 New Genera of mine, whereof 8 are now described, besides 50 new species, whereof 40 are now first described, chiefly akin to *Pyrolides* and *Solanides*.

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**CENTURIA IX.**

801, *Mentha capitata* Raf. glabra fol. remotis petiol. ovatis serratis acutis, fl. capitatis, subsess. term. stam. et stylis vix exsertis—Oregan, very fragrant, stem bisulcate, leaves uncial, flowers incarnate in a short elliptic head sessile between 2 leaves, or rounded a little apart.


803, *Mentha citrata* W. odorata Sm—Anglia, near to my capitata, differs by leaves elliptic. subcordate. head of fl. small, stamens inclosed.


806, *M. gentilis* Sm.—Anglia.

807, *M. gracilis* Sm.—Europa.

808, *M. viridis* L.—Europa.

809, *M. rotundifolia* L.—Sicilia.

810, *M. hirsuta* L.—Anglia, blended with next by Sm. but leaves subsess. ovate cordate, stem retrose hispid, spike oblong.


812, *M. acutifolia* Sm. verticillata Hoffm.—Europa.


814, *M. crispa* L.—Europa.


816, *M. arvensis* L. vel ciliata—Europa.

817, *M. agrestis* Raf.—Europa, deemed a var. of last by some, but stem erect retuse pilose, leaves larger broadly ovate.

818, *M. alopecuroides* Sole—Hungaria, near *M. crispa*, but hirsute, leaves sessile round ovate serrate, spikes oblong, stamens inclosed.


820, *M. canadensis* L.—Canada and Alleghanies, but less distinguished by short stamens, than hairy lanceolate leaves.

821, *M. borealis* Mx.—Am. bor. not var. of
M. acutifolia as deemed by Persoon, nearer the last, more common, humble or procumbent, leaves punctate pubescent.

822, *M. lycopoides* Raf. glabra, fol. pet. lanceol. acumin. ineq. inciso serratis rugosis, fl. vertic. pedic. stam. exertis—Ohio, Kentucky &c, erect ramose. leaves uncial or less narrow, flowers whitish, aspect of *Lycopus*.

823, *M. traxigona* Raf. glabra, caule angulis scabris, fol. petiol. margine scabris, oblongis serratis, basi integris, subtus glaucis punctatis, florib. vertic. pedic. hirsutis stam. exertis—Lake Erie to Illinois, variable, leaves large or small, always rough stem.

824, *M. glauca* Raf. glabriusc. fol. pet. lato lanceol. utrine. acumin. remote serratis, basi integris, tenuis, subtus glaucis ciliolatis, fl. vertic. pedic. pubescens, stam. exertis—Mt. Alleghanies, erect, leaves large biuncial very thin, calix canescent, corolla pale incarnate.

825, *Var. parvifolia* Raf. diff. glabra, fol. parvis ovatobl. non acumin.—Pennslyv. this was labelled by Muhlenberg *M. gracilis* in Collins herb. altho' mixt with last, leaves semiuncial,

827, *Lycopus vulgaris* Pers. europeus L—Europa: it has stem and leaves above with nerves below pubescent, leaves petiolate ovate sinuate serrate.

828, *Lycopus exaltatus* O—Bohemia, Hungary, sent me as L. europeus, stem rough, but leaves smooth sessile pinnatifid at base, acuminate at end.

829, *Lyc. pinnatifidus* Raf. heterophyllus Raf. med. fl. exaltatus Pursh El. sinuatus! El.—glaber, fol. pinnatifidis, inferis petiolatis, pinnulis angustis subdentatis, superis lanceol. sessilib. sinuato laciniatis, axilis barbatis pauciflo-
ris—Carol. Virg. Kent. very distinct sp. some lower leaves triuncial almost pinnate, gradually smaller and less divided above; nodes bearded around or hairy ring around the axils. Several var. *Heterophy us, traxigonus, dissectus &c.*


834, *Lyc. amplexens* Raf. glaber, caulib. virgatis simpl. angulis obt. fol. arcte sessil. subamplex. basi dilatatis oblongis acum. remote serratis, axilis nudis paucifl.—Alabama, pedal sesquipedal leaves uncial, pale beneath, this sp. differs from all by obtuse angles and leaves not attenuate at base.

EUHEMUS Raf. diff. Lycopus, cal. brevis muticus 4sidus, sem. exertis crenulatis—I made it a subg. 1830 in my medical flora 2 p. 27, but it must be a G. at last, Lycopus having 5sid. spinose calix: such characters are generic, the calix making the best Genera of Labiate.

utrinque acut. serratis, scabriusculis subitus punctatis, axilis multifl. et paucifl.—see my long account in med. flora, several var. gracilis, microphyllus, ruber, latifolius &c, found from Canada to Louisiana.

836, Euhemus sylvaticus Raf, caulib. elatis glabriusc. fol. subpetiol. ovatis vel obovatis. acut. grosse serratis, subitus glaucis, axilis paucifl.—Kentucky Ohio. In woods, bipedal leaves large triuncial thin. I made it a var. in 1830, but it deserves to be deemed a sp. altho' probably a sylvatic deviation, removed from waters.

837, Euhemus uniflorus Raf. Lyc. do Mx. glaber pusillus, angulis obt. fol. sess. inferis ovatis obt. subcrenatis, superis lanceol. obtuse serratis, axilis 1-2floris—Mts. Alleghany 4 to 6 inches high, deemed a var of Lyc. virg. by Torrey, but no such thing, leaves semiuncia ob-tuse.

838, Galeopsis ochroleuca Pers. grandifl. W. villosa Sm.—Europa, pectoral like Euhe-mus.


840, Gal. ladanum O—Europa.
841, Gal. angustifolia Pers. Europa.

844, Galeobdolon luteum Sm. vulgare Pers. Sylvis Europa.

845, Galeobd. montanum Hofm.—Mont. Europa.

846, Leonurus multifidus Raf. fol. petiolatis cordatis ovatisque palmatis 5fidis incisis acutis, subitus pubescens, superis lanceol. trifiidis, corollis lanatis cal. longior—Novacas area ad Kentucky,
bipedal, leaves large and broad, flowers small, neither L. cardiaca nor crispus.

847, *Leonurus reticulatus* Raf. pumilus, fol. petiol. 3-5fidos lobis serratis acum. superis cuneatis, omnis subtus rugosis reticulatis glabris, cor. lanatis cal. longior—Mts. Alleghanies, semipedal, annual, leaves small, flowers as large.†


**PANZERIA** Moench (non Wild. est *Eperua* Aublet) diff. *Leonurus*, cor. galea fornicata, labium 3-part. medium cordatum.

849, **Panzeria villosa** Raf. Leon. tataricus? L—caule villoso, fol. pet. trifidis acutis vix dentatis supra rugosis, subtus glaucis villosis, cal. corollisque villosis—Sibiria, sent me as L. Sibiricus, more like L. lanatus or Panz. multifida M. leaves uncial, flowers ochroleucous.

850, **Panzeria angustifolia** Raf. Leon. Sibiricus? L—glabra, fol. petiol. tripart. lobis ineq. linearibus integris vel lacin. cal. corolisque pubescentes—China, sent me as L. tataricus, but nearer to L. sibiricus, leaves slender, flowers red and small.

851, **ATIRBESIA** Raf. (n. antiqu.) diff. Marrubium, cal. 5dent. équalib—the G. Marrubium must be divided in many G. like Phlomis by the multiform calix.


853, Beringeria plicata Raf. Marub. do Forsk. Vitm. undulatum Sieber.—Palestina, Egypt, singular plant, stem simple with crowded whorls of flowers, leaves sessile round crenate rugose tomentose, calix large, limb scarioso reticulate undulate. †

854, Phlomis salwifolia Jaq.—Syria, Sicilia &c, often blended with P. fruticosa.

855, Phlomis sanicola Sieber.—Palestina, tomentosa, fol. sess. obl. crenat. bract. subul. pungens, ut calicibus. †

856, Phlomis reticulata Raf. (pungens! Dec. non Wild.) caule scabro brachiato, fol. sessil. ovatobl. acutis glabris crenatis subtus 5nervis reticulatis, bract. subul. ciliatis, calicib. pungens.—Podolia, large plant, leaves 2 or 3 inches, flowers short yellow. Sent me by Decandole with a wrong name like many other plants, blended with P. pungens of Persia having leaves petiolate lanceolate tomentose.


858, Hemisodon leonurus Raf. fl. tel. 776. Phl. do L. Léonotis do Br.—Africa austr. †

859, Blephiloma amplifolia Raf. fl. tel. 2 apx.—Arkansas. †

860, Origanum vulgare L. var. humile—Sibiria. †
870, *Nep. levigata* Raf. glabra, fol. sessil. lanceol. serratis acutis, fl. racemosis vertic. bract. subul. pedunc. 3-5fl.—Illyria. sent. me as *N. nepetella* (with tomentose cordate leaves) and also as *N. tuberosa*! pedal, leaves uncial, flowers white in compound racemes.
871, *Nep. heliotropa* Lam.—Persia. Sent me as *N. graveolens*! humble branched, leaves entire, flowers secund adscendent on axillary racemes longer than leaves.


879, *Vleckia nepetoides* Raf. 1808, Hyssopus do L—Novanglia ad Missouri—My G. Vleckia was ascertained in 1802 published 1808, it is *Lophanthes* of Benth. much later and name preoccupied. see fl. tel. 786.


882, *Vleckia incarnata* Raf. caule angulis acutis puberis, fol. omnis ovatis lanceol. superis sessilib. argute serratis acum. subtus puberulis, spica basi interrupta, bract. lanceol. coloratis fl. brevior—Pennsylv. a beautiful sp. discovered 1804, found again lately, 3 to 4 feet high, leaves remote 2 to 4 inches long, bracts and calix incarnate, corols ochroleucous.
883, *Vleckia albescens* Raf. caule acutangulo apice piloso, fol. petiol. ovatis vel oblongis glabriusc. acum. dentatis, spica basi interrupta, bract. brevis scariosis albescens ut calix—Pensylv. ad Illinois, near last, perhaps a deviation, leaves variable, some quite narrow, flowers more or less white.

884, *Vleckia discolor* Raf. *Hyssop. anisatus Nut. Stachys feniculum Pursh—Upper Missouri, leaves not cordate in my specimen, oblong remote serrate, beneath white smooth. †


887, *PERXO Raf. diff. Ocymum, cal. camp. 4fid. subeq. corolla ut Mentha, 4fida subequalis, fl. racemosis vertic. subnudis—the name is one of Dioscorides for Mentha—Type *Perxo polystachya* Raf. *Ocymum do Mur. O. fol. longe pet. ovatis obtuse dent. racemis term. gracilis—Hindostan, branched 6 to 10 inches high, each branch has a raceme.


897, *Glutinaria acuminata* Raf. caule apice vilioso, fol. subsess. ovatis acumin. medio serratis, glabriusc. florib. vertic. bract. ovat. acum. integris brevis, calicib. villosis—Sibiria, leaves biuncial with a long acumen, flowers incarnate large. Sent me as *Salvia glutinosa*!
898, *Sclarea* (Heister) *acuta* Raf. hirsuta, fol. sessil. amplis ovatis acutis dentatis, spicis compositis obl. bracteis ovatis acum. ciliatis scariosis coloratis imbricatis—Sibiria? sent me as *Salvia sclarea* but quite unlike, leaves 4 to 6 inches, spike ample compound.
899, *Larnastyra* cuneifolia Raf. glabriusc. fol. radic. sessilib. cuneatis obtusis subdentatis, caule subnudo, fol. 2 obl. linearib. parvis subintegris, verticillis remotis, calicib. membranosis angulatis—Mts. Alleghany, habit of *L. lyrata*, but yet very unlike, smaller 8 or 10 inches high, corollas blue elongate.

**FENIXANTHES** Raf. diff. *Salvia*, cal. camp. gibbosus non angul. trifidus bilab. corolla tubulosa elongata basi attenuata, galea angusta emarg. labium brevis 3loba, stylus glaber, apex eq. bifidus, stam. galea eq. antheris linearib. appendicis filiformis, ft. racemosis comosis coloratis—another G. of the Salvides tribe, the name applies to the flowers totally scarlet even calix and bracts.

acum. media serratis, racemo apice comoso, fl. oppos. nudis, cal. pubescent. bract. term. ovatis acum. coccineis ut fl.—Texas, Mexico &c. fine plant, leaves biuncial, flowers scarlet large, often erroneously called Salvia coccinea.

This Century includes 24 new Genera, where-of 6 now described, and 36 new species, where-of 30 now first described; all of Labiate Order, which shall be continued hereafter with the Salvides family.

CENTURIA X.

ENDOGENOUS OR MONOCOTYLE.

901, Argolasia tomentosa Raf. Lophiola aurea Sims, Conostylis americana Pursh, Torrey, Elliot, Nuttal, Eaton!—Florida ad Novaces. fine rare plant, put in an Australian Genus! Lophiola was employed, Argolasia is good; often blended with next by similar habit.


903, Crocus aureus Sims, floribundus Haworth—Hisp. Aquitania, beautiful sp. fl. golden.

904, Crocus suzianus Curtis b. m. 656—Italia, Grecia, fl. small yellow with purple stripes, leaves long.

905, Crocus vittatus Raf. bulbo unico reticul. fol. fl. eq. setaceis glaucis subcanalic. recurvis acutis, spatha membr. bivalvis acutis, tubo cor. eq. limbo vittato acuto—Austria, sent me as Cr. vernus which once included a dozen sp. near Cr. luzianus, fl. similar same size small pale grey with 3 to 5 ribbon like stripes dark purple: whole plant only 3 inches.
906, *Crocus grandiflorus* Raf. bulbo... fol. tubo fl. eq. lato inear. obtusis planis vittatis, spatha unifl. tubo brevior membr. ineq. obt. limbo ampol obtuso non striato--Sibiria? sent me again as *Cr. vernus*, 6 inches high, flower very large, white or blue.

907, *Crocus biflorus* Curtis b. m. 845, Andrew rep. 362--Thracia, Phrygia, very distinct sp. once *Cr. vernus* also! fl. white base blue.

908, *Crocus versicolor* Curtis b. m. 1110---Orientalis.


910, *Eubotrys odorata* Raf. *Hyacinthus racemosus* L.---Europa australis, this G. was *Muscari* of Tourn. Ad. lately restored, but the name is inadmissible being formed of *Mus-cari* and *Musca-ri*!!


913, *Hyacinthus orientalis* L.---Oriens, only type of the G. fl. white, rose or blue.

914, *Lagocodes nutans* Raf. fl. tel. 62 *Hyacinthus cernuus et non scriptus* L. *Skilla cernua* L. *Sk. nutans* Sm!---Europa, a plant shuffled by blunderers, with 3 names in Linneus!

915, *Lagoc. belgica* Raf. *Hyacinthus belgicus* Bory! fol. lato linearib. planis longissimis scapo equante, racemo obl. multifl. florib. cernuis, bracteis 2 ineq. scariosis coloratis ad pedic. eq. petalis angustis apice reflexis---Belgia &c, sent me by Bory, perhaps the *Skilla hyacinthoides* of Jaq. I describe it to compare, leaves 8-10 inches long, one third inch wide, flowers pale blue size of *Hyacinth.*
916, *PELOTRIS* Raf. very singular monstrous deviation of *Hyacinthus comosus* L. with paniculate flowers chiefly abortive, without corolla, anthers sessile—Type *P. paniculatus* Raf. Hyac. do et monstruosis auctoris—Italia, very rare. †


919, *RAYANIA cordata* O---Cuba.
920, *Ray. mucronata* O---Cuba. †
921, *Ray. quinquenervia* Raf. fol. petiol. longe lanceol. basi obt. apice obt. cuspidatis, subtus pallidis pilosis 5nervis, racemis fol. breviar—Cuba, leaves biuncial narrow, flowers minute. †

924, *DANAE racemosus* Moench Pers. Ruscus do L.—Grecia, Creta. †

SMILAX, I have divided this G. into 3 ever since 1825 neog. dividing *Parilax* and *Nemexis*, 1 shall now add 2 others *Aniketon*, *Dilax*. Rhipogonum of Forster must be restored and the real *Smilax* includes 2 subg. *Oplax* more or less aculeate, *Luiste* inerme. The sp. of North and South America are in utter confusion. I shall begin to elucidate them. See Elliot and till 952.

925, *SMILAX* O. *hispida* Raf. ramis striatis hispidis basi teretis, apice angulatis, fol. corda-
tis petiol. tenuis concolor acutis 5nervis reticul.
levigatis margine scabris —West Kentucky, very
distinct by many flexible bristles instead of
prickles, leaves very thin, well cordate, 2 or 3
inches long, edges very rough. †

926, Sm. O. caduca L. vel dichotoma R.
twigs dichotome angular with strong prickles,
not flat, leaves ovate acum. edge smooth, Lin.
says stem terete, Canada to Carol.

927, Sm. O. platoplis Raf. 4angularis non-
nullis non omnis auct.—ramis angul. 4gonis,acu-
leis paucis compressis, fol. ovatis vel subcord.
brevi petiol. acum. cuspid. 5nervis reticul. levis
marg. scabris, pedunc. petiolis longior 3-5fl.
baccis nigris globosis—Pensylv. ad Kentucky
et Carol. easily known by the few flat prickles,
leaves 2 or 3 inches.

928, Sm. O. glauca Walt. Mx. sarsaparilla
of bot. N. Amer. but not L. which is a South
American Plant with hooked prickles and re-
tuse evergreen leaves—Carol. to Kentucky—
subangular, prickles few strait compressed,
leaves uncial ovatobl. glaucous beneath acute
mucronate trinerve peduncles longer than pe-
tiols, commonly 2-3flore, berries black ovate or
obovate.

929, Sm. O. rotundifolia L. ramis subang. acu-
leis paucis rectis brevis, fol. brevi petiol. latova-
tis vel subrot. cordatisque, retusis vel obt. mu-
cronatis, 5nervis vix reticul. subtus fulvo glaucis,
margine glabro, pedunc. petiolis longior multi-
floris umbellatis, baccis globosis cerulescens—
Canada to Carol. near last, blended by Walter,
leaves larger often biuncial, Ombels of 10 to 15
flowers and berries.

930, Sm. O. reniformis Raf. rotundif. nonu-
lis non L.—ramis 4gonis flexuosis, aculeis pau-
cis rectis validis subcompressis, fol. lato reniformis vel subcord. retusis vel acutis, levis margine glabris, 5nervis retic. subtus pallidis, pedunc. pet. longior 3-7fl. baccis globosis rubescens—New Jersey to Kentucky, remarkable by always some leaves broadly reniform, 4 inches broad, differs from *Sm. platoplis* by smooth edges.

931, *Sm. O. deltifolia* Raf. ramis teretis vel subcompr. aculeis parvis rectis, fol. brevipet. ovatis deltoideis obtuse mucronatis, levis margine glabris, 5nervis reticul. subtus pallidis, pedunc. pet. longior 5-8fl. florib. nutans—Allegh. Mts. and Wasioto Mts. probably the original *Sm. caduca* of L. but very different from 926, prickles very small, leaves deltoid, flowers large.

932, *Var. compressa*, stem compressed, leaves large triuncial, very thin quite deltoid or subcordate acute mucronate—Wasioto Mts. perhaps a peculiar sp. but I have not the flowers, as I mistook it for the last, prickles similar. +

933, *Sm. O. muricata* Raf. ramis 5gonis, muricatis aculeis brevis rectis, petiolis dilat. amplexic. fol. lanceol. basi acutis vel truncatis, apice acutis cuspid. perennis levigatis 3nervis vix retic. margine glabris, subtus glaucis—Florida, leaves biuncial, very different from last, yet blended with it by authors, stem often spotted with close short thorns. My specimens not in bloom.

934, *Sm. O. pandurata* Raf. (an tamnifol. nonnulis ?) ramis 5gonis muric. aculeis curv. petiolis dilat. amplexic. fol. perennis parabolicis panduratis, basi truncatis vel subcord. apice obtusis deinde acum. 3nervis vix reticul. margine glabris—remarkable sp. found by Collins in South New Jersey, stem virgate very prickly
below, axils with tendrils, leaves biuncial: the real tannifolia has terete stem.†  

935, *Sm. O. lomoplis* Raf. hastata W. P. N. E. non Jaq. aspera variabilis Lam. Pers.—ramis 4gonis, aculeis rectis compressis, fol. perennis petiolis nervisque et margine spinosis, lanceol. vel obl. acutis mucronatis, basi acutis vel truncatis dilat. auric. vel bilobatis, 3nervis reticul.—Carol. ad Florida, leaves biuncial. Mistaken by Lamark for a var. of aspera, and blended by the N. Amer. Botanists with the previous *Sm. dentata* of Jaq. Am. having stem inerme terete, leaves cordate hastate, long racemes &c.  

936, *Sm. O. dilatata* Raf. ramis angul. sulcatis inermis, petiolis contortis, fol. perennis basi dilatatis truncatis, dein de oblongatis acutis, margine undulatis remote spinulosis, 5nervis reticul. nervo medio spinoso, subtus glaucis lucidis—Alabama, one of the sp. blended in *Sm. bonanox*, some warts on the stem instead of prickles, leaves somewhat as in last, broader still, not cordate nor auriculate.†  

937, *Sm. L. compressa* Raf. inermis, ramis compressissub4gonis, petiolis rectis, fol. ovatis deltoideis tenuis, acutis levis concolor, marg. glabris, 3nervis reticul. pedunc. pet. longior subfloribus—Alabama, very distinct, leaves thin not perennial uncial or over, stem really compressed altho' angular 2 sides broader,  

938, *Sm. L. heterophyla* Raf. inermis, ramis sabangul. contortis, petiolis contortis fol. perennis coriaceis, cuneatis obovatisque vel elipt. panduratisque, perennis coriaceis, apice obtusis-cuspidatis, nonulis retusis vel obcordatis 3nervis reticul. marg. glabris undulatis; pedunc. pet. subeq. apice capitatis, umbela 5-8fl. ferens
Florida, found by Baldwin, who states it was wrongly blended with *Sm. hastata*, leaves uncial, flowers in a small ombel arising out of a small globular ball ending the peduncle as in *Parilax* and *Aniketon*, is it of that Genus? but flowers on long pedicels, sepals linear.

939, *Sm. L. membranacea* Raf. inermis, rami 4gonis, fol. ovatis acumin. cuspidatis basi rotundatis tenuis sive membranaceis 5nervis non reticul. concolor, levissimis; pedunc. pet., subeq. 5-6fl. fl. longe pedic. nutans—Alabama, leaves large 3 to 4 inches very thin, flowers rather large campanulate as in most Amer. Sp. petals lanceolate.

940, *Sm. L. rhombifolia* Raf. inermis, caule subangul. fol. ovatis rhombeis vel sublanceol. vel subauricul. acutis perennis, trinervis reticul. glabris marg. levis—sent me as *Sm. china*, quite unlike it, more akin to *Sm. lanceolata* L. Sibiria? leaves uncial.†

941, *Sm. L. cynanchifolia* Raf. inermis, rami gracilis subang. sulcatis, fol. cordatis acutis cuspidatis levigatis tenuis trinervis, axilis cirrhiferis, pedunc. geminatis 5floris, ad pet. longior—Sibiria? sent me also as *Sm. China*, yet quite different, almost herbaceous, leaves uncial.

942, *Sm. L. farinosa* Raf. pseudochina L. (bad name) Car. to Florida, very useful cereal plant.

943, *Sm. L. lanceolata* L. Elliot—Carol. Florida, leaves really lanceol. base acute, end obtusely acum. ombels multifl. on very short peduncles, berries red globose.

The *Sm. cicindifolia*, Walteri, ovata, and alba, are doubtful Sp. not yet procured by me.

944, *Parilax laurifolia* Raf. neog. 36. Smi-
lax do L. Virg. to Louisiana, stem terete rugose leaves obl. thick coriaceous reticul. 3nerve, smooth acute at both ends, ombels multifl. sub-sess. on a capitate peduncle, formed of abortive fl. This G. differs fr. Smilax by berry mono-sperm, one stigma, fem. fl. with 3 abortive stamens &c. Lofty vine.

945, Parilax pumila Raf. neog. 36 Sm. pumila Walt. Elliot, pubera Mx. humble prostrate Vine, leaves obl. cordate acute hairy beneath, ombels as in last, berries ovate acute red, Elliot calls them white—I suspect that Sm. lanceolata and heterophylla belong to this G. the ombels are similar.

ANIKETON Raf. diff. Smilax. fl. capitatis calix parvus tripartitus, masc. stam. 3? fem. ca-lix brevissimus, baccis monosp. capitatis—near Parillax, habit similar but fl. not umbellate, the name is grecian for Smilax.

946, Aniketon coriaceum Raf. inermis, ra-mis angulatis flexuosis, petiolis amplex. fol. perennis coriaceis ellipt. obtusis vel retusis undatis glaucescens, glabris, 5 nervis, rugoso-re-ticulatis, capitulis petiolis subeq. brevissime peduncul. baccis globosis rubris—Cuba, found by Jalambic, leaves uncial, flowers and berries minute.

NEMEXIS Raf. neog. 37, distinct habit, her-baceous, some leaves opposite or vertic. flowers in multiflore ombels on long peduncles, sepals reflexed, stamens filiform, 6 sterile in fem. fl. 3lo-bate stigmas, berry 3loc. 6sp. by abortion 3-4sp.

—The name means 6 threads, I had only 2 types in 1825, I now have 4 species if not 5.

947, Nemexis nigra Raf. neog. Smilax her-bacea L. O. known by cordate leaves, pubes-cent beneath, acum. 5-7nerved, peduncles com-
pressed, berries black, ombels globose. often 100 flowers. N. Amer.

948, Nemesis cerulea R. neog. Sm. peduncularis Mg. O.—It differs by leaves smooth ovate acute cuspidate glaucous beneath, berries blue, stem angular, fewer flowers. N. Amer.

949, Var. oblongata, differs by stem slender terete, leaves ovatoblong concolor—is it a sp? fl. not seen. Alleghanies.

950, Nemesis elliptica Raf. humilis angulosa, fol. apice quaternis, omnis ellipt. utrinque acutis concolor, 5nervis erosis; pedunc. compressis fol. brevior, umbellis non globosis—Alabama, 6 to 12 inches high, leaves uncial, petiols as long, pedicels of fl. flexuose, petals lanceol. acute, berries not seen.

951, Nemesis glauca Raf. humilis, caule tereto gracilis, fol. alt. longe pet. deltoideis oblongis acutis trinervis utrinque levigatis glaucis, basi truncatis—Florida, neither fl. nor fruits, but evidently distinct, leaves half size of others narrow uncial, glaucous on both sides, petiols filiform.

DILAX Raf. diff. Smilax, 6 sepals lanceol, reflexed, stam. 6 erect equal, fl. fem. stig. 2 ligulatis simplex, baccis ovalis compr. 2loc. 2sp. fruticosus erectus, fol. alt. pedunc. longissimus umbellatis—near Nemesis by peduncles, but differing as Clintonia does from Vagnera.

952, Dilax muricata Raf. (an Sm. tamnifol. nonulis?) caule basi fruticoso angulato, angulis muricatis, fol. brevi pet. ovatis, basi subcord. acum, 5nervis retic. margine scabris, glaucescens; pedunc. compressis longissimis, umbellis 10-15floris, baccis ovalis—Florida, quite different from Sm. muricata, perhaps one of the ob-
scure Sm. tamnif. flowers green on filiform pedicels. †

TRILLIUM L. of this fine American G. I gave a monograph in my Medical Flora 1830, with 34 sp. in 3 subg. Sessilium, Anthophium and Delostylis, I have since increased them still; but I lack a few of the Apalachian Mts. yet I shall illustrate here nearly 40 sp. and var. the numbers shall refer to my Monograph.

953, TRILLIUM S. rotundifolium Raf. mon 2—Lake Erie to Tennessee, many varieties.
954, Var. orbiculatum R. Kentucky.
955, Tril. S. longiflorum R. m. 1. Lake Ontario to Alabama.
956, Tril. S. maculatum R. m. 34. Florida to Illinois.
957, Tril. S. membranaceum R. m. 8. Ohio, Kentucky &c.
958, Tril. S. isanthum R. m. 3. Ohio to Arkansas.
959, Var. parvisflorum Raf. Kentucky.
960, Tril. S. unguiculatum Raf. 9, an recurvatum Beck? Kentucky, Missouri.
961, Tril. S. angustifolium Raf. m. 7, Kentucky.
962, Tril. S. lancifolium Raf. caule elato, fol. sess. lanceol. acutis trinervis patulis planis sepe maculatis, calicib. patulis vel reflexis, petalis erectis longior rubris unguic. lanceol.—Florida to Alabama and Apalachian Mts. stem often pedal leaves 3 inches, flowers uncial.
963, Tril. S. stenanthes Raf. caule maculato, fol. sessilib. ellipt. acum. planis patulis 5nervis concolor, petalis cal. vix longior utrinque erectis linearib. lanceol. elongatis acutis—striking sp. leaves 4 inches long, not spotted, flowers 2 inches, petals hardly different from calix green-
ishred. yet very distinct from Tr. viride of Beck. Arkanzas.

964, *Tril. S. cuneatum* Raf. caule elato, fol. sessilib. ovatobl. acutis trinervis planis concolor, calicib. erectis obl. petalis cuneatis duplo longior acutis purpurascens—Unaka Mts. of Cherokis, pedal, leaves 3 inches, flowers large akin to those of Tr. maculatum, but leaves very different.

965, *Tril. A. flavum* Raf. mon. 16. Allegh. Mts. very rare, add to descr. stem striate purplish, leaves biuncial nearly as broad, calix obl. acum. petals nearly twice as long obl. acute yellow. †


967, *Tril. A. nutans* Raf. 15. erectum and rhomboideum of many botanists, like all the akin. Kiskatom Mts. of New York and Ohio, stem pedal, leaves 3 or 4 inches long and broad glaucous beneath, peduncle long strait, fl. large rosate.

968, *Tril. A. flexipes* Raf. caule sulcato, fol. sessil. obovatis acuminatis undul. 3nervis, pedunc. equante inclinato flexuoso, calix lanceol. acum. petalis albis eq. obl. acut. undul.—West Kentucky and Tennessee, rare, pedal, leaves 3 inches long, 2 broad, flowers middle size. †


970, *Tril. A. amblopsis* R. 13, Mts. Allegh. near to last, but very long obtuse acumen to leaves, calix and petals very narrow obtuse.

971, *Tril. A. acuminatum*. R. 11. leaves biuncial quite sessile and undulate, peduncle inclined, petals pale red—Apalachian Mts. Alabama &c. described by me since 1808,

972, *Tril. A. rhombifolium* Raf. caule levis,
fol. sessilib. rhombeis subobovatis longe acum. basi acutis. planis 3nervis, ped. inclin. elong. cal. lanc. acum. petalis brevier lanc. undul. obt.—Wasioto Mts. akin to many, but distinct from all, leaves thin, realy rhomboid, sides rounded, fl. medial, petals pale, red veined.

973, Tril. A. brevipetalum R. 19. Lake Erie, near Tr. flexipes, peduncle flexuose, but petals short ovate, leaves broadly rhomboid.

974, Tril. A. atropurpureum Raf. caule brevis crasso subc. purpurascens, fol. sessil. ovatis subrhombeis acum. planis 3nervis. pedunc. elong. erecto curvato, cal. et pet. subeq. ovato lanc. acutis planis—Mts. Allegh. often mistaken for var. of nutans even by myself, but perfectly distinct, 4 to 6 inches high, leaves biuncial, peduncle long, flower large, petals of a very dark purple.

975, Tril. A. brevipes Raf. caule striato, fol. sessil. ovatis ellipt. utrinq. acutis, undul. 3nervis; ped. brevissimo erecto, cal. et pet. subeq. ellipt. obtusi undul—Alabama, stem 3 inches, leaves biuncial, not so thin as usual, fl. large, petals white.†

976, Tr. A. pusillum Mx. R. 14. West Kentucky, near last, but smaller, 3 inches, petals incarnate.

977, Tril. A. obovatum Pursh R. 21, Canada, Ohio, near Tr. grandifl. but leaves more rhomboidal nearly obovate, petals quite obovate, some fl. 3 inches wide.


979, Var. roseum, peduncle curved, flowers smaller rosate, Kentucky.

980, Tril. A. lirioides R. 23. Mts. Wasioto, West Pennsylv. and Virg. chiefly different from
Tril. grandiflorum by leaves petiolate.
985, *Tril. A. balduinianum* Raf. caule filiformis, fol. petiol. oblongis acumin. undul. pedunc. curvo nutans, cal. petalisque subeq. oblongis recurvatis undulatis—Florida, Georgia, discovered by Baldwin, by a note of his, Muhlenberg deemed it the real Tr. cernuum of L. near to Tr. declinatum but smaller slender, leaves small uncial fl. rather large incarnate; perhaps a var. of Tr. nervosum Elliot.
986, *Tril. A. medium* Raf. 30, Novanglia ad Virg. the Tr. cernuum of many of our botanists.
987, *Tril. A. glaucum* R. 31. Pensylv. to Alab. another Tr. cernuum!
990, *Tril. A. nivale* Riddell. Ohio, very distinct sp. 3 or 4 inches. leaves petiolate ovate
ellipt. obt. uncial, peduncle recurved, fl. white, similar to Tr. grandifl. quite pendulous, †

991, Paris quadrifolia L. Europa, singular G. akin to the Trilliums, but with 4 leaves, sessile obov. acum. fl. erect. peduncled, 4 petals, 8 stamens.

992, Stratigades aloides L. Europa, remarkable aquatic Genus.

993, Aletris aurea Mx. Carol. Alab. rare.


995, Aloes variegata O—Africa, the sp. with terete strait flowers must alone remain in this G.†

ATEVALA Raf. diff. Aloes perigonis incurvis sepe basi inflatis—this includes A. maculata, carinata, disticha, linguiformis, &c, with the 2 next. The name is oriental.

990, ATEVALA imbricata Raf. fol. ensatis margine uncinato spinosis, apice obtusis, scapo simpl. crasso, racemo obl. imbricato, bract. imbric. obl. obt. pedic. subeq. perigonis sepe medio contractis—African fine sp. leaves 6 inches thick glaucous; flowers quite large in a short thick raceme nodding. Sent me as Al. perfoliata name applied to 20 sp. †

997, Atevala remotiflora Raf. fol. ensatis inermis integris acutis, margine et carina membranaceis, scapo simplex gracilis, racemo remotifl. bract. reflexis lanceol. acutis brevis, perigonis horizontalis basi inflatis—Africa, sent me as Al. listicha quite unlike, leaves 4 to 6 inches, scape sesquipedal, raceme of 12 to 15 flowers far apart, smaller than in last, more curved and swelled.


1000, TULISTA Raf. diff. Aloes, perig. tubul. 6gonis dentib. 6 ineq. vix labiatis fol. *verrucis vel maculis albis feras*—another G. the flowers are racemose, the type is *T. margaritifera* Raf. Aloes do Auct. African. leaves which pearly warts, fl. small in a slender spicate raceme—a 2d sp. of this G. is Al. *variegata* of authors. 

All these Aloes are very rare in Herbals being so difficult to dessicate—there are 2 others G. yet blended in Aloes,—My *Papilista* with clavate fl. type *A. verrucosa*—and my *Sucrosaria* with campanulate fl. type *A. spicata* &c.

This Century includes 12 N. G. whereof 6 now first described, and 53 N. Sp. whereof 33 are now described.

Therefore this second part or series of the *Au- tikon* contains the illustrations of as many as 91 New Genera, of which 31 are now first described and nearly 220 new species, whereof 156 are herein described for the first time.
Addition—I omitted to state at Article of Euphorbia in 7th Century, that I had added 3 other Genera to the long account of the G. mingled in Euphorbia; they are in my Sylva Telluriana of 1838, articles 708 to 715, G. Endoisila, Peccana and Ditritra, all of Antilles, this last G. with 3 sp. is akin to Aclarina and Xamesuke.

Correction to 935, for previous Sm. dentata Jaq. read previous Smilax hastata of Jaquin.

Add 763. if the generic name of Parmentieria has been employed already for some other Genus, of which I have a faint idea, then this cluster of Solanums, that include the Patato, must be called Artorhiza meaning Bread-root, Raf.

END OF SECOND PART.
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AUTIKON BOTANIKON

OR

BOTANICAL ILLUSTRATIONS,

by self figures of 2500 trees and plants chiefly American.

THIRD PART.—CENTURIES XI to XV.

BY C. S. RAFINESQUE, Prof.

Philadelphia 1815 to 1840.

CENTURIA XI.

ARB. ET FRUT.—TREES AND SHRUBS.

Autikow 1001, ICMANE Raf. perigono 4part. segm. ineq. linearib. involutis, apice dilat. cochleatis subrot. ferens antheris 4 sessilib. pistillum brevi pedic. ovat. stylus declinatus incurvus elongat. stigma capit. obliquatum. fruct. ut Protea vel Hakea. frut. fol. alt. simpl. integris fl. axil. fascicul. umbellatis, involucratis, squamis persistens scariosis—fine G. of Proteides family, near to Hakea, sent me under 2 erroneous names, my name was an ancient one of Nerium, the leaves being similar, 2 types.

Icmane nerifolia Raf. ramulis verrucosis fuscatis, fol. subsess. angustis lanceol. utrinque acutis glaucis integris coriaceis rigidis, umbellis sessilib, squamis obt.—Australia, leaves binuncial firm scattered crowded hardly nervose, flowers small fuscate like the twigs. Sent me by German Botanists as Erica! incana and Banksia gibbosa!
1002, *Icmane? heterophyla* Raf. Banksia do Hortis. Ramulis rugosis apice pubens, fol. sessil obl. lanceol. vel cuneatis cuspidatis, integris glaucis coriaceis—Australia, not in bloom, but habit quite like the last, some leaves exactly similar, but all cuspidate.†


1004, *Banksia serrata* L. var. *latifolia*. Australia, leaves broadly cuneate, grossly serrate.

1005, *Banksia grandis* Hortis, fol. obl. pinnatifidis apice truncatis, pinnulis alternis deltoidis incurvo acuminatis, subtus rubiginosis, 5nervis reticulatis—Australia, singular large leaves 6—10 inches long, similar to some ferns.†

1006, *Embothrium linearisfolium* Cav. ramulis angul. fol. sessil. linearib: elongatis cuspidatis glabris margine revol. florib. term. corymbosis—Australia, nearest to *E. lanceolatum* of Chili, leaves slender biuncial, wrongly united to next by some.

1007, *Embothrium sericeum* Sm. W. cytisoides Cav. fol. ternis et simpl. alt. petiol. cuneatis cuspidatis integris, utrinque adpresso sericeis, fl. term. racemosis coarctatis—Australia, my specimen has all the leaves simple alterne.†

1008, *Protea rugosa* Raf. *pallens* Thunb. non L.) glabra, ramulis subangul. fol. alt. sess. cuneatis acutis callossis integris, utrinque rugosis glaucis, involucris elongatis similis vel lancelol. capitulis globosis—South Africa, leaves 1 or 2 inches rigid.

1009, *Protea pilosa* Raf. tomentosa Hortis non Thunb. dense pilosa, fol. imbric. obl. spatulatis obtusis callosis rugosis, involucris brevis similis, capitulis hemisphericis—South Africa,
leaves small one third of inch thick, the upper almost cuneate. †

1010, *Hura crepitans* L. O. South Florida, Anti.les &c, leaves subcord. acum. dentate, spike oval. †


1016, *T. riparia* R. americ. glabra, canad. of authors! Canada to Virg. banks of rivers.


1020, *Q. fusca* R. als. 67. N. Amer.

1024, *Q. aurea* R. als. 71. Arkanzas, Texas,†
1025, *Q. granulata* R. als. 72. Ark. Texas,†
1026, *Q. longifolia* R. als. 73. Allegh. Mts.,†
1027, *Q. pandurata* R. als. 74, Alabama.
1030, *Q. angulizans* R. als. 77. Alab.

1035, *Q. pagoda* R. als. 82, falcata var. E. Carolina.
1037, *Q. ilexoides* R. als. 84. Florida.
1038, *Q. heterophyla* Pursh O. Florida, see als. 87.
All these are true Oaks, the following belong to subg. *Dryopsila* with double styles.
1042, *Dr. verrucosa* R. als. 93, imbricaria Mex. Carol. Louisiana.
1043, *Var. obliqua* R. als. 94, Florida.
1044, *Dr. laurina* R. als. 95. laurif. var. auct. Carol. Florida.
1045, *Dr. maritima* R. als. 96. not of all authors, Florida.
1046, *Dr. cuneisolia* R. als. 97. incana Bartr. Florida.
1047, *Dr. cinerea* R. als. 98, cinerea et vi- rens of some. Flor. Carol.
1048, *Dr. virens* R. als. 99. Flor. Louis.
1049, *Dr. oligodes* R. als. 100. Louisiana.
1050, *Eleagrus orientalis* O. Arabia, Persia
1051, *El. angustifolius* O. Hisp. ad Grecia.
1052, *Nemělaïa* Raf. Cal. 5 part. eq. deciduus, petalis 5 connivens basi subcoalitis cuneatis obt. stam. 5 hypogynis ad petalis oppositis et eq. filam. lanceol. antheris linearib. pistil obl. villosa, stylo tereto, stig. capitato emarg. capsula obov. 2 loc. polysp. *Frutex fol. sparsis laurinis, fl. corymbosis term.*—curious G. near to my *Junia* see 15, but both of family Myrsinides probably, by opposite stamens, the
name means *not a daphne*, having been sent me as one, although so unlike. Type.

*Nemelaiia laurina* Raf. *ramulis flexuosis*, *fol. petiol. lato lanceol. coriaceis acuminatis, margine revolutis erosis, corymbis term. sessilib. paucifloris, capsulis obovatis granulatis*—sent me by a good botanist as *Daphne alpina!* of Pyrenees *Mts.* locality probably as much mistaken as the name, unlike any European shrub by flowers, but habit of *Daphne laureola*, leaves biuncial, flowers white rather large, capsule very large.†

1053, *Daphne lateriflora* Raf. *ramis cinereis obtusangulis punctatis, fol. fascicul. sess. obov. vel cuneatis subobt. integris levigatis, florib. ramis lateralis sparsis sessilib. pubescens*—Alps of Carinthia, one of sp. blended in *D. alpina* which has leaves tomentose and flowers among the leaves: fl. white, leaves uncial.†

1054, *D. altaica* Pall. W. Altaic *Mts.* of Siberia, this was also blended once in *D. alpina*, but quite smooth even the flowers, leaves scattered not opposite as wrongly stated by some.

1055, *D. laureola* L. South Europe.


1057, *D. odorata* O. China.


1059, *D. mezereon* O. Europe.


1061, *D. gnidium* O. Italy &c.

1062, *Daphne? undulata* Raf. *ramulis angulatis fuscatis, fol. alt. et opp. obov. vel subrot. undulatis retusis reticulatis glabris subsess*—Sibiria? sent me as *D. laureola*, although quite unlike, perhaps not even a Daphne, flowers lacking.†
1063, TARTONIA Raf. perigon. vix colorato urceolato 4fido, tomentoso sepe caliculatus, antheris 8 sess. duplice ordine perigynis, stylus subnullus, stig. capit. fruct. bacca sicca monosp. nuculacea. Fruct. fol. imbric. sempervirens sessil. integris, fl. sessil. mixtis.—In my flora telluriana 1135 to 1147 I reformed the Genera blended in Daphne, Passerina, Gnidia &c, yet omitted this, which differs from Sanamunda and Pausia by flowers and fruit, the name derives from Tartonaira, 3 types

Tartonia ovatifolia Raf. Passerina hirsuta (of some, perhaps not all) ramis tomentosis, fol. ovatis carnosis obt. extus glabris rugosis, intus tomentosis, florib. subterm—Creta, undershrub, leaves minute erect densely crowded, flowers whitish outside, yellowish inside.

1064, Tartonia oborata Rnf. Daphne tartonaira L. Passerina do Lam. Ramis basi nudis scrobiculatis, apice rufo tomentosis, fol. obov. obt. canis pubens crassis nervosis patulis, fl. axil. adregatis—South of France, Spain &c, branches knobby by large tubercles when leaves fall, these semiuncial crowded but spreading, fl. small pale canescent.

1065, Tartonia cuneifolia Raf. ramis verrucosis glabris, fol. cuneatis obt. patulis crassisculis glaucis supra glabris, subtus subtoment. fl. axil. et term. adreg.—Italy and Greece, blended with last and sent me as such, but larger leaves almost uncial narrow and thinner, flowers larger, twigs smooth &c.

1066, Sanamunda grandiflora Raf. Passerina do L. Africa, in this G. of Clusius and Adanson, the flowers are as in Daphne, but the fruit not a berry.

1067, Sanam. axillaris Raf. Passerina late-
riflora Hortis, ramis fuscatis rugosis, fol. imbric. sess. ovatobl. acutis adpresso pilosis crassiusc. fl. axil. solit. sessilib. fol. equante—South Africa, small shrub, leaves and fl. one third of inch long.


1069, Sanum. umbellata Raf. Passerina filif. nonnullis! non L—ramulis flexuosis rugosis hirsutis, fol. densis sparsis patulis glabris linearib. planis acutis rigidis uninervis, umbelis terminalibus sessilib. 5-10 floris fl. pubens—South Africa very distinct from last, although sent me as the same by a good botanist! leaves green very crowded but not imbricate, flowers white or incarnate rather large forming very pretty ombels.

1070, Sanum. subulata Raf. ramulis virgatis hirsutis, fol. imbric, subul. acutis sparsis scabris, fl. term. subcapit. involucris lanceol. fl. subeq. adpresso pilosis—South Africa, sent me by two botanists as Gnidia pinifolia, but not a Gnidia, having no petals, very near the last, even Linneus had 2 different plants as Gn. pinifolia! it is neither of them; flowers incarnate hirsute, 7 to 15 in a small head.

1071, Stellera passerina L. Europe, habit of Thesium.

1072, Strusiola virgata L. South Africa. I have modified the Strusiola derived from Struthium: I had wrongly called it Dessenia at 62; but my G. Dessenia sylv. tel. 1145, is formed
by the decandrous Gnidas, and 62 must be Strusiola scoparia. Griselina of Forster must be restored instead of Scopolia 1146 fl. tel. since the original Scopolia is a good genus, as I have shown at 791.

1073, Melaleuca linearifolia Sm, Australia.

1074, Ozandra Raf. (branched stamens) diff. ad Melaleuca, stam. phalangis 5 ad petalis oppositis planis intus ramosis fol. oppos.—singular N. G. and character, indicating a transition to the opposition of isomeral stamens; 3 types, the O. or Mel. thymifolia and the two next.

Ozandra hyssopifolia Raf. Melaleuca do Sm. Australia.†

1075, Ozandra granulata Raf. Mel. thymifolia nonnullis non Sm. ramulis gracilis virgatis biangulatis, fol. adpressis linearib. acutis ex-tus convexis enervis granulatis, intus concavis glabris, spicis 4fl. lateralis, calicib. granulatis obt.—Australia, leaves minute one fourth of inch, flowers red small, the glandular granulations of leaves and calix very striking, protuberant like minute tubercles. Sent me as M. thymif. that differs by many characters. †

1076, Leptospermum scoparium O. Australia.

1077, Lept. thea O. the Australian Tea.

1078, Lept. juniperinum Sm. Australia. †

1079, Lept. ambiguum Sm. Australia. †

1080, Myrsine africana L. South Afr.

1081, Myrs. retusa L. Azores. †

1082, Schizandra coccinea Mx. Florida, Carol. very rare. †

1083, Philadelphus grandiflorus Wild. Apalachian Mts. twigs patent sub4gone 1-2flore often blended with Ph. inodorus.

1084, Phil. villosus Mg. hirsutus Nut. West
Pensylv. and New York, branches virgate pubescent 4gone, fl. rather small subaxillary.

1085, Phil. discolor Raf. ramulis teretis gravis palenis, fol. latovatis vel subcord. acum. sub-serratis supra glabris, subtus canescens pilosis fl. term. subracemosis, stylis coalitis—Apalachian Mts. Carol. &c, very different from last by twigs. leaves and flowers larger.

1086, Phil. coronarius L. Europe, near the last, but twigs striate leaves acute at base. 4 styles &c.

1087, Myrtus biflora L. Cuba, Jamica.

1088, Myrtus italica Raf. sylv. tel. 637, one of the sp. blended in M. comunis, Italy, Sicily, Spain &c.

1089, Fusticus glabra Raf. new fl. 580. Morus et Broussonetia tinctoria of some, but different from Fusticus vera 581. I have in my new flora shown that this Genus is peculiar and indicated 4 types. This is from Cuba and South Florida.

1090, Broussonetia papyrifera Duh. Morus do L, see my new fl. 584, and my monograph of Mulberries—Japan and Polynesia.

1091, Toxylon maclura Raf. new fl. 578, pomisetum Raf. 1817, Maclura aurantiaca Nut. 1818, Brousson. tinct. of Kunth and Torrey! described and well named by me one year before Nuttal, and Maclura has another Genus—Texas, Arkanzas &c.


1093, M. reticulata Raf. mon. 18. Ohio to Tennessee.

1094, M. riparia R. M. 22. Susquehannah R.

1095, M. parvifolia R. m. 23, Apalachian Mts.
1096, *M. vitifolia* Raf. scabra R. m. 20, but not of Wildenow, which is the *M. canadensis*, here the leaves are deeply trilobe, with interjected large teeth, ample cordate thin roughish, lobes ovate acum. equally serrate—Louisiana.

1097, *M. petiolaris* R. m. 10. laciniata? Miller. Polynesia?

1098, *M. multicaulis* Perotet, Raf. mon. 9. China &c, it has a var. with crisp concave leaves.

1099, *M. italic a* Lam. R. m. 2. Italy.

1000, *M. cretica* Raf. m. 4, Creta, sent me as *M. byzantina*, but very different by granular leaves &c. † In my complete monograph of this G. I have ascertained 25 sp. whereof 7 of North America, and 16 of the old continent.

This Century contains 8 New Genera whereof 4 are now first described, and 55 new species whereof 12 now described, all trees and shrubs.

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CENTURIA XII.


1102, *NEVROLIS* Raf. cal. duplex scarioso fuscato persistens, ext. 2-3 sq. ineq. brevis, internus 5part. segm. ineq. lanceol. acut. carinatis 3-5nervosis. Stam. 3 subul. erectis, liberris, antheris utrinque emarg. Pistillum ovato conico, stylo brevis, stig. obt. simplex. capsula unilocul. monosp. oblonga, *Herba, fol. alt, pet. stipulis o, fl. glomer. axil. et term*—I must add this G. to the numerous G. that I established in my flora tellur. ont of the Celosides and Achyranthides tribes, very peculiar by stamens, nervose calix, whence the name, monotype.

*Nevrola fuscata* Raf. (*Celosia virgata* Hortis.) glabra caule simplex angul. fol. longe petiol. ovatis acum. integris, basi acutis decurrents
in pet. glomerulis axil. et term. subsessil. pauci-floris—Borneo or Moluccas? not virgate, upper leaves gradually smaller and subsessile, remarkable shining brownish flowers.†

1103, Blutaparon breviflorum Raf. new fl. 845, Illecebrum vermicul. Mx. non L. Florida.†


1105, Herniaria besseri Hortis, prostrata hirsuta, fol. obl. linearib. acutis ciliatis, glomerulis sessilib. 3-5floris, fl. hirsutis canescens—Carpathian Mts. one of the sp. blended in H. hirsuta, leaves patent or reflexed, one third of inch long.†

1106, Herniaria laxa Raf. prostrata dichot. pubens, caule basi glabro, fol. lineari cuneatis obtusis ciliolatis, glomerulis laxis 2-5fl. fl. subsess. hirsutis canescens—Podolia, another blended sp. in H. hirsuta, that has leaves ovatoblong, nearer the last, leaves longer often uncinal.

1107, Herniaria glabra L. Europe.

1108, Amorgine albescens Raf. new fl. 842, Florida.†

1109, Oplotheca floridana Nut. O. Florida.

1110, Celosia pumila Raf. humilis glabra, fol. petiol. ovato lanceol. acum. integris, stipulis nullis, spicis term. ovatis conicis acutis albis—Florida, only 3 to 4 inches high, simple or branched, each branch with a pretty white spike.

1111, Cel flexuosa Raf. glabra erecta caule flexuoso simplex sulcato, fol. petiol. ovatis acum. basi decurrens, stipulis nullis, spicis term. obl. conicis obt. albo carneis, interdum spiculis minims similis axilaris—Asiatic, semipedal, leaves large.

1112, Cel. cordata Raf, glabra, caule erecto
fuscatoteres, fol. longe petiol. ovatis cordatis-que acum. basi sepe obliquatis, stipulis nullis, axilis foliosis, spicis ovatob. axil. et term. acutis carneis—East Indies, large plant bipedal, leaves ample, spikes small.†

1113, *Cel. rosea* Raf. glabra, caule stricto angul. fol. brevi petiol. ovatob. acum. basi acutis; stipulis nullis; spicis axil. subpedic. petiolis longior, ovatis acum. spicis term. major oblongis roseis—Ceylon, fine sp. pedal, annual as all, flowers of a pretty rose color. All these are blended in our gardens with *Cel. cristata* a very different luxuriant sp.

1114, *Gomphrena ciliata* Raf. *(globosa nonulis non L.)* caule sub4gonó pubescens, fol. subpetiol. ellipticis acutis furfurceis ciliatis, capitulis globosis longe pedunc. involucris diphylis ovatis acum.—East Indies, blended in gardens with *G. globosa*, leaves 3 to 4 inches long, flowers of a pale flesh color almost fulvous.

1115, *Gomphr. lanceolata* Raf. ramis striatis hirsutis, fol. petiol. angustis lanceol. acutissimis glabriusc. ciliolatis, capitulis sepe term. globosis depressis, involucris nullis—Brazil, sent me as *G. brasiliensis*, but very different, small plant much branched, leaves uncial, some almost linear, heads white very small.


1122, *A. capillaris* Nut. New England to Kentucky, all these were blended in *Queria* or *A. canadensis*.
1124, *Par. polygonifolia* Dec. Illec. do Vill. Mediterranean, as far as Palestine.
1127, *Illecebrum verticillatum* L. Europe.
1128, *I. filiformis* Raf. glabrum prostrat. caulib. filif. ramosis. fol. renonis obov. obtusis, verticillis paucifl. fol. brevior calicib. cuspidatis—West Europe blended with last which has crowded leaves ovate and rounded, flowers as long &c, fl. white in both,
1129, *I. spinosum* Raf. caulib. prostratis geniculatis, fol. linearib. acutis margine scabris, verticillis paucifl. brevis, calicib. spinosis—Spain, sent me as *I. alsinefolium*, which has ovate leaves with scariose bracts, leaves quarter of inch, fl. greenish. †
1130, *I. lanatum* Raf. ramosa canescens, ramis-virgatis, fol. alt. petiolatis obov. acutis fimbriatis, verticillis glomeratis lanatis axil. calicib. obt.—Sibiria near Jakut, very different from the others, leaves not opposite, perhaps of a peculiar G. but it is too difficult to analyze the minute wooly flowers.
1131, *Cadularia sicula* Raf. fl. tel. 541. Si-
cily and North Africa, very different from the other sp. blended in *Achyranthes argentea* and *aspera* see my flora: this is a small shrub, leaves petiol. ovate lanceol. acum. branches te-rete divaricate, flowers reflexed greenish white.

1132, *Cadelaria argentea* Raf. *Achyranthes* do L. non omnis, ramis 4gonis, fol. petiol. ovatis acum. scabris ciliolatis subtus glaucis, spicis axis hirsutis, fl. glabris reflexis argenteis—South Africa, near last but twigs 4gone, leaves larger broader.†

1133, *Mollia diffusa* Dec. very singular G. habit of *Mollugo*, dichotome, leaves vertic. spatulate acute, fl. white in compound glomerules, secund and recurved. Sent me by Decandole without locality.†

1134, *Lahayeamemphitica* Raf. *Polycarpea* do Delille. Egypt, banks of Nile. This G. was miscalled *Hagea* by Ventenat, being dedicated to Lahaye. *Polycarpea* is inadmissible being posterior and identic to *Polycarpon*! this is hairy with leaves oboval, flowers congested.


1138, *ANTHIRINUM* L. Pers. *Linaria* of nearly all others, bad name derived from *Li-num*; the Linnean G. was absurd, this was re-
stricted to the sp. with spur and valvate capsule; but has yet several anomalies. *Nemesia, Anarhinum, Peloria, and Asarina* have been divided by some botanists, I must further propose the *G. Termontis, Bucranion, Tursitis, Antrizon, Probatea, Misopates &c*, and indicate besides 4 doubtful *G.* not seen by me—1 *Uncopsisolon cordatum* Raf. *Antir. hexandrum* Pers. *Linaria hexandra* Wild! probably not even of this tribe, 6 stamens never occur among didynamous plants, is it a pelorian *G.* near to *Tursitis?*—2 *Porfuris pinnatifida* Raf. *Antir. pinnatum* L. habit quite unlike—3 *Ditulium pinnatum* Raf. *Antir. unilabiatum* L. differing from *Termontis* by cor. with 2 warts for upper lip, habit peculiar—4 *Etornotus* (cordate back) diff. ad *Termontis* cal. inequaliss. lac. sup. cor. magna, ceteris lanceol. cor. lab. sup. bifido, inf. trifido, *fol. carnosis alt. fl. axil*, type *E. persicus* Raf. *Antir. papilionaceum* L.

*Antirhinum canadense* L. *P. Linaria do W. &c*—Canada to Carolina, several var. *simplex. ramosum, surculosum, gracile &c.*


1140, *Ant. genistifolium* L. *P. Sibiria ad Helv.*

1141, *Ant. simplex* Pers. excl. syn. Europa, stem. simple, base surculose, raceme paucifl. capitate. †


1144, *Ant. parvisflorum* Jaq. non Desf. stem branched virgate, fl. racemose small, capsule 6valve. South of Europe, would *A. junceum* be a better name?
1145, *Ant. minor* L. P. Europa.
1149, *Ant. sparteum* L. P. Hisp.
1152, *Ant. purpureum* L.P.—Vesuvius, Etna.†
1154, *Ant. pelisserianum* L. P. Italia. †
1155, *Ant. triphyllum* L. P.—Sicilia, Grecia
1156, PELORIA *linaria* L.—Europa, wonderful generic deviation, supposed to be produced by *Ant. linaria*, and referred to it as a var. by most botanists, although deemed a peculiar G. by Lin. which I restore as type of the Pelorian Genera, of which I have observed several. This has a regular corolla with 3-5 spurs and 3-5 stamens, very rare. †
1157, Peloria *genistifolia* Raf. Europa, produced by *Ant. genistif.* still have rare. †
Tursitis *cymbalaria* Raf. *Ant. do* L. P.—Europa Austri. In this the capsule has 4 valves: perhaps a Genus! Cymbalina *rupestris* Raf.
1159, Tursitis *elatine* Raf. *Ant. do* L. P.—Europa: the calyx is bivalve and less unilocular, as in all the next sp.
1160, *Tursitis flilfera* Raf. pubescens, cauli- lib. punctatis prostr. petiolis brevis, foli: ovatis sagittatis acutis, pedunculis filif. flexuosis ramo- sis bracteis ovatis, calicibus ovatob. subequ. caps. bivalvis—Louisiana, Alab. blended with last by our botanists, differing by smaller leaves, peduncules long slender branched bracteate, as in the next.

1161, *Tursitis egyptiaca* Raf. Antir. do L. P.—South Europe, North Africa, differs from last by being smooth suberect, leaves narrow hastate, fl. minute. †

1162. *Tursitis rotundifolia* Raf. Antir. spurium L. P. non omnis pilosa, caulibus asurrentes, foli: subsessilib. ovatis subrotundis obtusis in- tegris vel subdent. pediculis breviis. calicibus ovatob. calcar obt. caps. bivalvis—Europe, stem 3 to 6 inches, leaves uncial, the name of spurium is absurd and has been applied to the 2 next also.


1164, *Tursitis reniformis* Raf. pilosa, cauli- lib. prostr. erectis, foli: brevi petiol. reniformis integris obt. mucronulatis, superis acutis hastatis, pedic. foli: breviar. calib. ovatob. subequ.—Si- cily, long stiff stem, densely pilose, leaves often one inch broad, shorter than broad.

1165, PROBATEA Raf. Asarina Moench (ad asarum) diff. *Antirhimum*, corolla basi sac- cata, ventricosa clausa, caps. 2valvis, valvis in- tegris, sem. centralis muricatis—*Prostrata, fol. oppos. pet. fl. axil.*—very distinct G. habit
of Cymbalaria, flowers of Termontis, several blended sp.


1166, Probatea lobata Raf. pubescens, fol. subrot. vel dilat. basi subrenif. lobatis, lobis dentatis acutis ciliatis, pedunc. pet. eq. calicib. linearib.—Sibiria, leaves large ultra uncial, flowers small, less than one inch, incarnate or purplish. ♦

1167, MISOPATES Raf. diff. Antirh. cal. digitatus lateralis, cor. basi gibbosa, apice hians, caps. obliq. ovata gibbosa, apice biporosa, poris semivalvatis vel 3dent. fol. alt. sessil. fl axil. —blended by authors with Termontis, altho' unlike in habit &c.


1168, TERMONTIS Raf. Orontium Pers. non L. Antirhinum W. Dec. Those who adopt the Linaria of old, commonly retain the Antirhinum for this, Persoon unfortunately employed the name of Orontium! belonging to another G. Termontis is an old Grecian name of the very plant, and all my N. G. of this group have similar classical names.

1169, *Termontis tricolor* Raf. fol. petiol. ovatis lanceol. acutis fl. subspicatis, ped. bract. eq. calicib. ovatobl. obt. pubens, capsulis ovatis pubens cal. longior—Apenines of Italy, often blended with last, but leaves broader, fl. still larger white with red and yellow mouths, very handsome.†


1171, *BUCRANION* Raf. diff. *Termontis et Antirhinum*, cal. urceolatus semi 5fidus ineq. cor. tubulosa hians, semi 5loba, lobis subdent. stylus exsertus, stig. capit. caps. 2valvis? *Aphyllum*, ramis florisq. oppos.—very distinct *G. the Antirh. aphyllum* L. probably belongs to it, but has a capillary scape: it may be called *B. capense* Raf.

*Bucranion spicatum* Raf. caule ramoso teres scabriuscule, fl. spicatis oppos. sessilib. bracteis caducis obl. obt. brevis—*Africa*? sent me mixt with akin plants, annual triuncial. fl. purple, tube of corolla thick exceeding the calix.

1172, *ANTRIZON* Raf. diff. Antir. corolla sacata calcarata, calcar conico obt. faux hians, lab. sup. bifidum, inferum trifidum, stylus exsertus, stigma capit. caps. compr. emarg. 2valvis fol. sess. opp. et alt. fl. racemosis alt. vix bract—another *G.* blended, medial to many, habit of *Antirhinum*. Monotype? is *A. micronanthas* a sp. of it?

*Antrizon tenuifolium* Raf. glabrum, ramis sepe oppos. virgatis fol. opp. alternisque lineare. acutis racemis gracilis, bracteis brevissimis, calicib. obl. capsulis brevier—sent me as *A. orontium*! leaves uncial or less very narrow, flowers purple small. *Sibiria*?

1174. *Mel. lanceolatum* Raf. caule ramosissimo brachiat, fol. petiol. lanceol. obtusis integris, bractealis sessil. dilatatis cristatis acutis—Mt. Alleghany, New Jersey to Kentucky. Often mixt with the last as a var. but apparently distinct, although fl. similar white with yellow tips, stem 1-2pedal, leaves 1 or 2 inches long.

1175, *Mel. radiatum* Raf. caule stricto simplex sulcato pubens, fol. sessilib. scabric. ovatolanc. acum. repandis, superis cordatis acum. basi cristato radiatis, fl. axil. secundis—Sibiria, sent me as *M. sylvaticum*, see next, leaves uncial, longer and narrower below, fl. purplish.†

1176, *Mel. nemorosum* L. Europe, it differs from last by stem smooth terete, leaves lanceol. upper entire or subdentate.


1180, *Scrophularia pectinata* Raf. caule obtusangulo atropurp. fol. petiol. ovatolanc. utrinque acutis pectinato serratis vel sinuato laciniatis superis alt. paniculis corymbosis, bract. linearib. integris—New Jersey and Long Island 2 or 3 feet high, stem thick dark purple, flowers purplish.

1181, *Scroph. lanceolata* Pursh &c. New York to Virg. differs from last by acute angles, leaves lanceol. inequaly or doubly serrate.

1182, *Scr. marilandica* L. (or glauca R.) Canada to Carol. differs from *pectinata* by leaves ovate or subcordate glaucous beneath, simply serrate petiols ciliolate, fl. paniculate
purlplish, bracts oblong. Several var. *pumila*, *latif. obliquata, longifolia* &c. All our Amer. sp. were once blended in this!

1183, *Scr. diversifolia* Raf. caule ramosq obtusang. ramis acutang. fol. petiolis levis, duplicato serratis subacum. infimis cordatis, medialis ovatis obliquatis, superis lanceol. equaliter serratis, panicula laxa, bracteis linearib—Delaware to Virg. in woods, stem 4-6pedal, fl. green, leaves ample, some semipedral.


1185, *Scr. serrulata* Raf. caule obtusang. ramoso, fol. brev petiol. lanceol. elongatis utrinque acutis equaliter serrulatis, paniculis laxis, bracteis brevissimis subulatis—Mts. Allegh. it has more lanceolate leaves than the sp.-of Pursh, they are narrower longer, slightly serrate. stem and bracts also different,


1187, *Scr. nodosa* L. 3 or 4 european plants have been sent me under that name, even *S. peregrina*, the real answers well to the linnean character.

1188, *Scr. triflora* Raf. pubens, caule simpl. obtusang. fol. pet. ovatis acutis laciniatis, lac. extus serratis, pedunc. axil. 3floris, fol. longior
erectis, caps. ovatis—Sibiria, very distinct, nearer to Scr. peregrina, leaves uncial, flowers pale.†

1189, Scr. peregrina L. Italia Hisp. smooth, leaves cordate serrate, peduncles 1-3 flore nodding.

1190, Scr. truncata Raf. glabra, fol. obl. deltoideis acutis, basi truncatis in medio acutis, in-equaliter serratis, tenuis subt. glaucis, panicula racemosa, sepe alternans flexuosa glandulosa, bracteolis subulatis, caps. glutosis—Russia, Hung. bipedal, leaves thin triunciial, fl. small brown.

1191, Scr. vernalis L. Europe, many Sp. also blended.†

1192, Scr. capitata Raf. caule crasso simplex obtusang. atropurp. albo hirsuto, fol. longing petiol. lato cordatis obt. duplicato dentatis labriuse. fl. term. capitatis bracteatis, stam. exsertis—Alps of Bavaria blended with last, nearer to Scr. cordata of Pers. pedal, leaves 2 or 3 inches long and wide, upper subsessile, fl. large crowded, bracts ovate serrate. †

1193, Scr. crenata Raf. glabra, caule acutea-long. fol. brevi petiol. ovatis ellipt. obtusis cre- natis, fl. racem. panic. bract. lanc. obl. acutis caps. glutosis—Europe, blended with S. aqua-tica, but stem not winged, leaves not cordate, base obliqua or truncate or obt. panicula ample, branches opp. or alternate.

1194, Scr. scorodoniosa L. Ital. Hisp.†

1195, Scr. canina L. Europa Austr. Sicilia.†

1196, Scr. lyrata Raf. puberula, caule tereto, fol. lyratis pinnatifidis, pinnulis obl. media amplior ovata duplic. serrato, pedunc. axill. unifl. cal. lobis rotund. marginatis—Central America, beautiful plant called Scr. coccinea in many gardens, but quite unlike the linnean sp. with
whorled ovate leaves, spikes &c. Habit peculiar, fl. large red, almost campanulate, but as in the Genus, calix with a membranaceous undulate margin.


1198, *Volkameria inermis* L—India. †


1200, *Wulfenia carinthiaca* Jaq. Pederota wulfeni Lam. Alps. of Carinthia very rare. †

This Century includes 14 New Genera, whereof 6 now first described, and 37 new sp. whereof 32 now first described.

**CENTURIA XIII.**

*Potentilla* L. a very prolific G. to which some authors have wrongly united *Tormentilla, Camarum, Sibbaldia, Bootia* and even *Fragaria*! while it may even be rendered more exact and simple by separating my G. *Dasiphora* It still will include 2 subg. 1 *Pentorila* petals cordate or emarginate, 2 *Aplenta* petals entire: each divisible in 3 sections, with pinnate, digitate or ternate leaves, this last is the Tridophylum of Necker.

1201, *Potentilla dichotoma* Raf. erecta pilosa, caule dichot. compresso, fol. sessilib. ternatis simplicisisque, stipulis ovatis subintegriss adnatis subdecurrents, foliolis lanceol. acutis remotae serratis, florib. term. et ad dichot. pedunc. calicib. ovatolanc. subacum. pilosis, petalis obcordatis cal, longior.—Origon, pretty sp. bipedal, leaves small remote, uncial, flowers incarnate, the stipules are adnate to the whole short petiol.

101.urr.

HOT.
simpl.
subnudis trifloris. fol. radic. petiolatis quinatis subrot. foliolis sess. proximis obov. laciniiatis, ciliatis fol. caulinis sessil. ternatis parvis, stipulis obl. integris, calicib. obl. obtusiunc. petalis obcord. cal. subeq.—In Labrador, near P. emarginata Pursh, but several disparities, stems 4 to 6 inches with only 2 leaves, flowers rather large pale yellow, perennial.

1203, Pot. tridentata O. from Greenland to Matawan Mts. in the South only on Mts. and larger, 4 to 8 inches high. flowers white.

1204, Pot. pectinata Raf. Pensylv. L. Tor. rare sp. of Canada and Boreal America, not of Pennsylvania: leaves hardly pinnatifid, rather digitate, 3·7folioles cuneate narrow pectinate, stipules lanceol. 2·3 parted. stem bifurcate, calix linear lanceol. hirsute.† The pensylvanica of Beck is a very different plant see 1244.

1205, Pot. hirsuta Mx. O. Canada and Alleghanies, stem simple erect often semipedal, in Labrador only 2 or 3 inches, annual.


1207, Pot. A. norvegica O. boreal Europe, Asia und America, here extending as far as Carolina, large plant 2 or 3 feet high, it varies with leaves thin or broad and narrow. Of subg. Aplenta,

1208, Pot. A. flexuosa Raf. glabriuscula, caule crasso flexuoso ramoso, fol. petiol. terna-
tis, stipulis ovatobl. subintegris, foliolis obl. vel cuneatis crenatis obtusis, pedunc. axil. et term. cal. subeq. ellipt. obtusis, petalis obov. integris cal, eq.—Labrador, very distinct from last by smoothness, leaves and calix, stem 8-10 inches, folioles uncial, petals pale yellow, pistils red.†

1209, Pot. canadensis O. all over North America, very variable and parent of the next probably.

1210, Pot. simplex Mx. caroliniana Poiret. North Am. hardly different from last, not mose, less silky.

1211, Pot. argentea L. Europe, Sibiria and Canada, several sp. are blended with it, this is erect, leaves quinate pinnatifid, stipules broad.

1212, Pot. argyrops Raf. (cinerea Raf. 1817 non Villars) prostrata vel assurgens, caulib. filif. apice cinereis paucifl. fol. subt. cinereis tomentosis, stipulis subulatis, foliolis 3-5 cuneatis linearib. apice 3flidis vel cristatis, fl. dichot. bract. linearib. cal. toment.—New England and New York, perennial, small, 3 to 6 inches, leaves minute slender, fl. small: deemed P. argentea by our botanists.

1213, Pot. multifida L. O. Alps and Sibiria, very distinct, yet sent me also as P. argentea!

1214, Pot. nepalensis Raf. pilosae erecta, fol. 3-5natis, stipulis adnatis ovatis acum. integris, foliolis sessil. obov. serratis, fl. brevi pedic. calib. subeq. obl. acum. petalis eq. obcord—Asia in Nipal and Himalaya Mts. with the next, names from gardens, not seen described any where: this appears to represent in Asia our P. canadensis, flowers yellow.

1215, Pot. atrosanguinea Raf.(quid ?) caule erecto compresso tortilis furfuraceo, fol. ter- natis, radic. longe petiol. foliolis sess. ovatis ser-
ratis subtus canis toment. caulinis subsess. stipulis lanceol. &cum. integris, fl. corymbosis, cal. ovatis acum. subeq. petalis amplis obcord.—Himalaya Mts. beautiful sp. leaves large like strawberries white beneath, fl. large dark purple.

1216, *Pot. aurea* O. Alps, pretty sp.
1219, *Pot. brauniana* Hoppen Sieber—Alps of Tyrol &c. not a variety of *P. frigida*, very rare. †

1221, *Pot. egyptiaca* Raf. supina Suber non alis—erecta glabriuscula ramosa, fol. pinnatis, foliolis pinnatifidis vel laceris obl. acutis, stipulis ovatobl. acut. integris, pedunc. axil. nutans, cal. obl. acutis, petalis obov. integris—Egypt, leaves quite dissected, flowers small, of subg. *Aplenta* like *P. supina* that differs by stem decumbent, leaves and stipules serrate &c.

1223, *Pot. recta* L. Europa: this sp. is often blended with *P. pilosa* and *obscura*, all these as well as the 2 next and also my *P. pectinata* appear to form a group with similar habit and leaves.

1224, *Pot. pallida* Raf. caule erecto piloso apice dichot. fol. 3-5natis brevipetiol. stipulis amplis ovatobl. integris, foliolis sess. obl. vel cuneatis inciso serratis glabriusc. subtus glaucis; fl. corymb. ped. cal. lanceol. pilosis, petalis obcord. equante—Carpathian Mts. sesquipedal, leaves 2-3 inches, thin, petals bicolor, outside incarnate, inside white. †

1225, *Pot. canescens* Raf. sent me from Bo-
hernia by Tratenick under this name, I have seen no description; near last, differing by foliolo
eles narrower pectinate serrate, with adpressed canescent hairs, almost silky on the flowers,
petals longer than calix and of a dirty yellow.†

1226, Pot. bifurca L. O.—Sibiria, very rare sp. of subg. Aplenta, petals almost cuneate.

DASIPHORA Raf. differs from Potentilla by receptacles villose or wooly, involving the seeds in dense wool, and the seeds themselves such instead of rugose. This striking character deserves to be Generic here as in other Genera. All the sp. were Potentilla of L. and Authors, and many others belong here besides the following, also the whole 3d section of W. Pers. &c.

1227, Dasiphora riparia Raf. Pot. fruticosa L.—Boreal Europe, Sibiria, leaves pinnate, 3-5foliolo lanceol. or cuneate, petals shorter, seeds wooly. This and the 2 next are fruticose, forming a subgenus Thamnila Raf. by calix with 5 segments linear elongate, and 5 ovate shorter.

1228, Das. floribunda Raf. Pot. do Pursh &c, fruticosa of many bot.—Boreal America, Origon &c, very distinct by leaves narrow, linear or oblong. petals equal to calix, seeds villose.

1229, Das. speciosa Raf. P. do O—Creta, fine rare sp. suffruticose, fl. congested, petals white equal to calix, the 3 ovate segments broad large, the narrow segments not longer.

1230, Das. valderia Raf. P. do Allioni L.—Alps of Italy, very rare, habit of D. speciosa, calix as in D. riparia.

1231, Das. nitida R. (Wulfen Pot.) Alps of Tyrol, Carinthia, small uncial, with large fl. ca-
lix lanc. and linear, seeds with long hairs and styles.

1232, **Das. subacaulis** R. (Lin.) Sibiria ad Bohemia et Gallia, small biuncial, petals obcord. longer than calix, seeds pubescent.

1233, **Das. alba** R. (L. O.) Alps, cal. lanceol. petals white obcordate

1234, **Das. jaquini** R. Pot. caulescens Jaq. L—Austrian Alps, cal. linear, petals obov. entire.

1235, **Das. cristata** Raf. reptans, fol. pinnatis, stipulis membran. folioli ovatis cristato pec- tinatis, subtus sericeis, pedunc. axil. fol. eq. cal. ovatis et obl. petalis obov. integris longior—Si- biri, near to **D. anserina** and **pimpineloides**, fl. yellow, seeds pubescent.†

1136, **Das. anserina** Raf. (O) Europe and boreal America till New York, foliolo oblong deeply serrate, peduncles longer than leaves, petals retuse.

1237, **Das. reptans** R. (O) Europe from England to Sicily.

1238, **Tormentilla erecta** L. Europe, it has stem erect dichotome, leaves sessile, upper op- posite, all ternate, foliolo obvate cristate,flow- ers lax medial &c. This G. essentialy differs from Potentilla not only by often 4 petals, but by a small dry gynophore, seeds smooth, nei- ther rugose nor villose.

1239, **Torm. reptans** L. Europe, creeping, leaves petiolate, flowers large.

1240, **Torm. parviflora** Raf. humilis diffusa procumbens, fol. subsessil. ternatis, superis op- pos. simplicib. subintegris, folioli oblongis vel cuneatis cristatis, fl. term. pedunc. filif.—Eu- rope, often blended with the last, sent me as **T. repens**, **officinalis**, perhaps the **alpina** of some.
Small 3-4 inches high, leaves and flowers very small yellow.

1241, *Torm. fragaroides* Raf. *Fragaria sterilis* L. *Potentilla fragariastrum* Ehr. Pers. *Comarum* do Roth—Europe, paradoxical plant, more akin to this G. by habit and gynophore than to *Comarum*; but very different from *Fragaria* and *Potentilla*, leaves and flowers as in *Fragaria*, 5 white petals.


1245, *Comarum palustre* L. Raf. fl. tel. 198
Potentilla comarum Dec, Europe and Sibiria. This G. differs from Potentilla by a large spon- 
giose gynophore and petals acuminate. Pancovia of Heister and Adanson would be the best 
name unless Arum becomes again Arisarum as in Tournefort; but W. has a Pancovia.

1246, Com. tomentosa Raf. var. villosum Pers. more robust than last, with broader leaves 
obl. ellipt. tomentose beneath—North Europe

1247, Com. digitatum Raf. fl. tel. 199—bo-
real America to New York, blended with last 
by our botanists. very distinct by leaves obl or 
lanceol. smooth, large flowers &c.

1248, Com. angustifolium R. fl. tel. 200, 
Origon and Boreal America, Ohio: very pecu-
liar, leaves narrow smooth, fl. small &c.

1249, Var. parvifolium Raf. folioles 5-7small 
smooth cuneate or elliptic, petiols membranose, 
flowers very small, branches uniflore; Labra-
dor, 3 to 10 inches high, folioles less than un-
cial.

1250, Dryas integrifolia Vahl. tenella 
Pursh—Canada, Labrador, Norway. Leaves 
avatobl. acute, base cordate, margin revolute.

1251, Dryas crenata Raf. Spetala O.—Alps, 
Canada; leaves subcordate elliptic obt. crenate 
lobate or crenate serrate: both sp. have 8 pet-
tals.

1252, Alchemilla alpina O—Alps, Canada, 
Mts. of New England.

1253, Alch. vulgaris O—Labrador, Europe.

1254, Alch. pubescens Lam. hybrida of others 
Europe.

1255, Aphanes arvensis L. Alchem. Apha-
nes Lam. Europe.

1256, Poterium angustifolium Raf. caule 
sulcato folioso, stipulis cristatis, foliolis 5-9 lin-
eari lanceol. argute serratis, superis subintegris capitulis ovalibus—Sicily and Greece, pedal folioles uncial narrow, heads purplish brown.

1257, Poterium microphyllum Raf. caule angulato subnudo, fol. radicalib. petiolis pilosis, foliolis 11-17 minutis subsess. ovatis obovatis cristatis, capitulis obovatis—Scotland, Norway &c, mixt with the next, but quite distinct, stem naked or only one leaf at base, folioles one fourth of inch only, heads brownish.

1258, Pot. heterophylum Raf. caule angul. foliosis, fol, radic. petiolis pubescens, foliolis 9-15 sessil. subrot. cristatis, caulinis foliolis 7-11 petiol. parvis angustis oblongis serratis, stipulis subintegris, capitulis subrot. —Alps of Bavaria, Austria &c, also sent me as P. sanguisorba, smaller semipedal, folioles hardly semiuncial, flowers dark purple.

1259, Pot. sanguisorba O. Europe, I add the common Burnet for contrast with my 3 new sp. it is 1 or 2 feet high, folioles ovatoblong grossly serrate petiolate quite smooth often uncial, heads oval &c.

1260, Sanguisorba stipulata Raf. herb. 47, S. offic. var. auriculata? Origon, Sibiria large plant, folioles triuncial cordate ovate dentate stipulate, heads oblong red.

1261, Sang. palustris Raf. atl. j. 153. swamps of Alleghany Mts. near S. canadensis, differs chiefly by folioles obliqual elliptic cordate pectinate serrate, bracts subulate, stipules cristate, flowers similar.

1262, Sang. canadensis O. Canada to Pensylv, folioles oblong serrate often truncate, heads cylindrical, bracts lanceol. stamens clavate flowers white.

1264, *Sang. officinalis* O. Europe, leaves oblong oblique, heads short elliptic red. A singular var. deserves to be a sp. *S. nudicaulis* Raf. caule angul. nudo simplex, petiolis sulcatis, foliolis ovatis cord. obt. capitulis globosis—Carpathian Mts. leaves all radical, folioles 9-15 small not oblique, 2 or 3 rudiments of leaves on stem, fl. red.

1265, *Geum* L. O. Caryophilata Tourn. Ad. this G. must be divided in 4 including *Bernullia* of Necker and *Sieversia* with my *Styliopus* with calyx camp. 5fis (see 30): Geum is rather too short a name, would not *Geuncus* be better? expressing the uncinate character of the seeds in the real G. neither twisted nor plumose.

*Geum pecki* Pursh, rare sp. of the Wapani Mts of New England, fruit undescribed, my specimen not in fruit: is it a *Bernullia*? very near B. acaulis 1274.

1266, *Geum renifolium* Raf. fol. radic. longissime petiol. reniformis lobatis ineq. serratis, subtus villosis, fol. cauliniis sepe 2 breviss. petiol. trifidis incisis, stipulis lanceol. integris, cymabifida paucifl. petalis obov. cal. subeq.—Origon or Sibiria, stem. semipedal nearly naked, lower petiols as long, leaves nearly as in *Alchemila*, flowers 8 to 6 white on short peduncles, calix lanceolate.

1267, *Geum latifolium* Raf. fol. brevipetiol. dilatatis trifidis incisis, adpresso hirsutis, stipulis ovatis laciniatis, florib. congestis, petalis obov. emarg. calix acumin. subeq.—Sibiria, sent me as *G. macrophyllum* name not in my books and not aplying, leaves and flowers close, petals ochroleucous.
1268, *Geum hirsutum* Waldstein. Hungary, pilose, leaves ternate, lower subpinnate, rhomboidal, stipules ovate laciniate, stem uniflore, fl. small, petals equal to calix. +

1269, *STREPTILON* Raf. (twisted awn) at least a subg. differs from *Geum* by twisted awn, not plumose as in *Bernullia*, seeds smooth —*Geum Str. odoratum* Raf. G. urbanum L. Europe.

1270, *BERNULLIA* Necker, differs *Geum* by seeds villose and awns geniculate or contorted and plumose, petals often 6 &c.

*Bernullia rivalis* Raf. Geum do L. Mts. of Europe.


1272, *Bern. hybrida* Necker. Geum. riv. var. L. very different also, leaves trilobe not trifoliate, calix often foliose, petals obvate incarnate, awns only plumose at the end above the twist. Mts. of Europe. +

1273, *Bern. montana* N. Geum L. Alps, 6 large petals. +


1275, *Bern. reptans* N. Geum. L. summits of Alps, petals 6 or 7, very rare.

radic. cordatis subpinnatis vel trifoliatis petiolis et subtus villosis, foliolis cordatis obovatisque, lobatis dentatis, fol. caulinis subsess. trifol. vel simplicib. obovatis rhombicis vel lanceol. incisis, vel integris sepe glabris ciliatis, stipulis vix integris, petalis obov. albis, aristis apice barbatis—Canada to Carolina, Kentucky &c, stem 1 or 2 pedal simple or dichotome, leaves quite variable on same root, flowers small white: the most permanent characters are the lower leaves villose beneath, upper simple, petals and awns. A var. integrifolia has leaves mostly simple lanceolate entire.

1277, **Bern. media** R. Geum intermedium Tr. caule petiolisque hirsutis, fol. rad. interrupte pinnatis, foliolis obovatis incisis, ultima trifida, fol. caulinis trifoliatis, stipulis laciniatis, fl. term. paucis, calicib. lanceol. acum. obt. aristis apice plumosis—Sibiria, stem simple, leaves nearly smooth small, flowers incarnate?

1278, **Bern. confluens** Raf. Geum canadense, strictum, geniculatum of various authors, of which the synonymy is in utter confusion as in others, every author describing some peculiar variety: I have therefore concluded to change all the names. This is known at once by the radical leaves not villose, pinnatifid or pinnate oblong upper pinnules confluent, all oblong or obovate duplicate serrate outside, the stem leaves pinnatifid or tripalated, seldom simple, stipules laciniate, flowers and awns as in 1276. Mts. Allegh. Pensylv. &c.

1279, **Bern. acuminata** Raf. Geum strictum, canadense of some, Potentila pensylv! of others—hirsuta, caule stricto virgato paucifl. fol. radic. et caulinis pinnatifidis, pinnulis oblongis incisis acuminatis, stipulis incisis, florib. confer-
tis, aristis apice villosis—Ohio, Kentucky, Tennessee... very distinct habit by narrow sharp leaves, blended with the last: it blackens by drying while the others do not.


1281, Dalibarda repens L. Necker, Beck, violeoides Mx. cordata Steph. Rubus dalibarda also—Canada, New England and Alleghany Mts.

1282, Cylactis montana Raf. 1817, Rubus Canadensis of some botanists, Tor. not of L. says Hooker, it has received 5 other names! R. triflorus Rich. Hook. saxatilis Mx. and others, parviflorus Nut. egopodioides Dec! but is the type of a real G. by angular calix 5-7fid. 5-7petals emarg. few acins. Boreal America to the Northern Alleghanies. I have not yet revised my numerous sp. of Rubus, but in 1830 I divided it in many other Genera, Dictisperma, Selnorition, Cumbata, Ampomele, Ametron, Mantea, see sylva tel. p. 160.

1283, Pheremeranthus teretifolius Raf. 1808, Talunum do auct. Pers. to Alabama on magnesian rocks, rare.

1284, Enemion biternatum Raf. 1820, Dec. Tor. Isopyrum thalictroides Hooker and some others but not of L. wrongly blended by the mere habit, flowers and seeds unlike. Ohio, Kentucky Illinois, vernal.

1285, Isopyrum thalictroides L. Alps. †
1286, Isop. fumarioides L. Sibiria. †
1287, Telephium imperati L. South Eu-
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rope and North Africa, rare; leaves alt. obov.<sup>+</sup>

1288, Corrigiola littoralis L. South Europe, North Africa.

1289, Minuartia dichotoma L. Hispania.

1290, Pharnaceum bellidifolium Lam. &c. Cuba, South Florida, very rare.<sup>†</sup>

1291, Neurada procumbens L. O. North Africa, Arabia: rare and singular G. of doubtful affinities, put near Sanguisorba by Jussieu; but belonging to my order Ascadia and nat. family Gastonides differing from Aralides by a capsule. <sup>†</sup>

1292, Proserpinaca serrata Raf. palustris L. O. fol. omnis lineari lanceol. serratis, capsulis angulis subalatis—New England to Kentucky, all the sp. are palustral, the G. also belong to Gastonides.

1293, Proserp. pectinata Lam. fol. omnis pectinatiis pinnatis, pinnulis tenuis subulatis, capsulis angulis levis—New Jersey to Alabama.

1294, Proserp. heterophyla Raf. fol. inferis pectinatiis pinnatidis pinnulis lanceol. fol. superis lanceol. vel cuneatis argute serratis, capsulis levis—New York, New Jersey: it is not a var. of serrata as wrongly deemed by many, it blossoms a month earlier.

1295, Proserp. tuberculata Raf. fol. omnis lineari lanceol. integris vel remote subserratis, capsulis angulis tuberculatis—Alabama. <sup>†</sup>

1296, Tribulus dimidiatus Raf. trijugatus Nut. terrestris and maximus of others not L. Carol. Florida, folioles 6 or 8 nearly dimidiate oblique.

1297, Trientalis europea O. boreal Eur. Amer.

1298, Tr. americana O. Alleghany Mts.

1299, Polycarpon tetraphylum L. South of Europe, Carolina &c.
1300, Stipulicida setacea Mx. Polycarpón stipulifidum Pers. Carol. to Louisiana, rare. This Century contains 7 New Genera, whereof 3 now first described, and 33 new species whereof 30 now first described.

CENTURIA XIV.

1301, Asclepias quadrifolia Jaq. O. New Engl. to Kentucky, flowers smelling like Vanilla and Heliotropium peruvianum.

1302, Var. oppositifolia R. Ascl. vanillea Raf. dec. 1818, Maryland to Kentucky, all the leaves opposite.


1304, Ascl. albiflora Raf. n. fl. 893, nivea and incarnata of some, Unaka Mts. in Apalachians.†

1305, Ascl. nivea L. Carol. Alab. it differs from last by stem flexuose, leaves ovate elliptic subacute at both ends, ombels lateral pedunc.

1306, Ascl. lancifolia Raf. glabra, caule simplex fistuloso, fol. oppos. brevi petiol. lanceol. utrinque acum. subtus glaucis, umbellis term. sepe geminis, multifl. pedicelis pubens, corniculis extertis—Florida, mistaken also for nivea by some; stem ultrapedal, leaves four inches long, flowers with corol pale incarnate or greenish, nectaries white near to A. curassavica and incarnata.

1307, Ascl. obtusifolia Mx. New York to Florida, very distinct sp. leaves clasping elliptic obt. undulate, some are acute.

1308, Ascl. amplexicaulis Mx. humistrata? Walt, Pers. Carol. to Arkanzas, rare, leaves clasping, cordate acute &c.
1310, *Ascl. gonalis* Raf. caule teres sulcato latere uniangulato, apice pubens, fol. brevi pet. lanceol. utrinque acutis subtus villosis, umbelis term. sepe geminatis multifl. auriculis obl. elongatis, corniculis inclusis—Arkansas, leaves 3uncial, flowers incarnate. †

1311, *Ascl. amaena* L. Virg. rare, leaves sub-sess. ovate ellipt. mucronate, nerves pubescent beneath, fl. large purple, cornicles short not exert.

1312. *Ascl. lasiotis* Raf. an pulchra? nonulis? caule striato, fol. subsess. obl. lanceol. acum. basi acutis, subtus villosis glaucis, umbelis term. auriculis ovatis villosis, corniculis insertis—New Jersey rare, peculiar auricles whence the name, *A. pulchra* and *purpurascens* are both doubtful sp. badly described, leaves 3 or 4 inches. fl. rather large purple. †

1113, *Ascl. maritima* Raf. dec. 1817. (pulchra? incarnata of Am. bot) sea shores and near waters in the Atlantic States from Long Island to Carol. it differs from last by stem and leaves beneath villose, not glaucous, base obt. or subcordate, flowers small smooth pale incarnate, cornicles exert.

1314, *Ascl. incarnata* L. mixt with last by many, but branched, quite smooth &c, banks of streams, *riparia* would have been a better name.

1315, *Ascl. exaltata* Mg. phytolacoides Pursh, acuminata and nivea of others! New York to Kentucky rare.


1317, *Ascl. variegata* L. hybrida Mx. New Jersey to Carol. Louis &c, it has several var.
almost specific deviations, *pumila, undulata, rotundif*.


1319, Var. *latifolia* Raf. fol. ovato lanceol. acum. umbelis paucifl. Florida, leaves shorter and broader 2 or 3 inches only, while in var, longifolia they are 6 to 8 inches linear lanceolate.

1320, *Ascl. verticillata* L. very distinct sp. same wide range as the last, but quite local also.

1321, *Ascl. tuberosa* L. decumbens L. all over North America, many var. *erecta, decumbens, pauciflora, obtusifolia, cordata, undulata, latifolia &c* is not *A. rubra* another? all have orange blooms, leaves obl. petiolate.


1324, *Ascl. elliptica* Raf. fol. subsess. ellipticos utrinque obtusis, apice retusis vel mucronatis, subtus villosis, umb. term. geminatis, pedic. villosis, corniculis discolor ovatis obt. auriculis inclusis—Pensylv. to Kentucky, blended with last, but leaves not obl. acute, and flowers bicolor, corola red, nectaries pale, large leaves and flowers.

1325, *Ascl. paupercula* Mx. New. Jersey to
Florida, pretty sp. fl. bicolor red and yellow, some var. *longifolia*, *latifolia*.

1326, *Asclepias acuminata* Pursh, cordata Walt. *laurifolia* Mx. *periplocolis* Nut.—How many names! they all appear var. with leaves ovate lanceol. acum. fl. similar, New Jersey to Florida, the var. are *latifolia*, *longifolia*, *angustifolia*.

1327, *Gomphocarpus fruticosus* R. B. Asclepias do L. Africa. ♩

1328, *Otanema latifolia* Raf. new fl. 889 Ascl. obovata ♩. E. this G. differs from *Asclepias* by cornicles lacking, it was my *Acet-otis* of 807, Allegh. Mts. Kentucky, Carol.


1339, Vincet. luteum Sieber—Creta, leaves sess. ovate acute smooth, fl. axil. congested yellow.

1340, Apocynum androsemisfolium L. North America, leaves broad ovate acute quite smooth, var. paucifl. parvifolia, latifol. &c.


1345, Ap. clandestinum Raf. caule erecto subteres rubicund. elato, fol. subsess. ovatolanc. vel ellipt. basi rotund. vel subcord. apice acutis
mucronatis, subtus glaucis pubescens, fl. term. paucis in ramis reconditis—New Jersey, habit of next, leaves large 2 or 3 inches, fl. white few hidden among terminal leaves and sterile branches.


1350, *Cynanchum microphyllum* R. new fl. 882. Florida.†


1352, *Cyn. erectum* L. Syria, Creta.†


1356, *GonoL. mictophylus* Mx. Carol. to Kentucky. leaves oblong cordate acum. pubesc. fl. greenish, purple, segments linear obt.

1357, *GonoL. obliquatus* Mg. Pens. to Kentucky, differs by leaves oblique, shorter acute ciliate glaucous beneath, segments of corolla obliqualy acute.

1358, *GonoL. carolinensis* E. N. Cynanch. do W. Carol, differs by leaves obl. cord. acute
rough above, pubesc. beneath, fl smaller fewer yellow, segments ovate undulate.

1359, Gonol. hirsutus Mx. leaves realy cor-
date not oblong, acum. fl. large crowded dark purple.

1360, Gonol. levigatus Raf. (non levis Mx.)
glaberrimo, fol. obl. cordatis abrupte breviss. 
acum. levisissimis, umbelis axil. paucifl. cal. segm. 
ovatis acutis, corola segm. obl. acutis—Carol. Florida, very distinct sp. by flowers pale red or 
icarnate smaller not cymose, leaves very thin 
quite smooth even on the nerves: it is not the 
G. levis of Mx. see 1337.

1361, Ampelamus riparius Raf. Enslenia 
albida Nut. 1818 non Enslenia Raf. 1817. 
Sands of banks of streams Ohio to Missouri, the 
name means Sandvine.

1362, Ansonia tenuifolia Raf. n. fl. 880, 
Florida.

1363, Ans. angustifolia Mx. Carol. Flor.

1364, Ans. ciliata Walt. Carol. Flor. I have 
shown how these 3 sp. differ in my new flora.

1365, Ans. salicifolia Pursh. Carol. to Ken-
tucky.

1366, Ans. latifolia Pursh, leaves ovatobli. 
acum, Carol. to Louisiana. All these were 
blended in Tabernemontana ansonia L. the G. 
has usually been mispelt Amsonia, it is dedica-
ted to Anson the navigator.

1367, Echites salicifolia Raf. n. fl. 881, 
Florida.

1368, Ech. diffformis L. Carol. to Louis. 
leaves ovate acuminate, sometimes rounded or 
oboivate.

1369, Ech. biflora L. Cuba, Antilles.

1370, Periploca americana Raf. Greca 
Pursh non L. ramis levibus, fol. ovatis acum.
subtus glaucis, fl. cymosis villosis—New Jersey to Carol. blended with next by Amer. botanists, woody vine with smooth bark, leaves larger bicornial, fl. larger, tomentose white inside.

1371, Periploca greca L. rami rugosis, fol. ovatobl. acutis concolor, fl. cymosis villosis—South of Europe, bark rough, leaves uncinal.

1372, Pervinca rosea L. sub Vinca! Madagascar.

1373, Perv. major L. Europe, leaves petiolate ovate acute, stem smooth.

1374, Perv. sicula Raf. caule hirsuto, fol. subsess. latovatis, subcordatis acutis nervis et marg. ciliatis, pedunc. nutans fol. eq. calicib. linearib. acutis—Sicily, leaves uncinal. fl. large purple stem erect.

1375, Perv. heterophyla Raf. glabra, fol. petiol. subrotundis vel obov. obtus. vel retusis reticulatis: pedunc. fol. longiorib. calicib. obl. obt. England and Ireland where it is blended with P. major, fl. small as in P. minor, stem elongate weak fuscate.

1376, Perv. minor L. (not of all) Europe, smooth, leaves subsess. obl. elliptic obtuse, peduncles equal to leaves, calix linear obtuse.

1377, Perv. repens Raf. glabra, repens stolonifera, fol. subsess. lanceol. obl. acutis, pedunc. fol. longiorib. calicib. lanceol. acutis—Europe, naturalized in Pensylv. leaves uncial or less, very small and subovate on the running stems, fl. small as in last.


1379, Zeliauros Raf. cal. 6-7 part. ineq. corolla rotata subeq. 6-7partita, stam. 2 remota deflexa filif. stylus filif. pers. stig. capit. caps. ovata in cal. inclusa, fol. oppos. fl. axil. pe-
—singular G. of tribe Veronicoides, the name was an old one of Anagalis.


—Spain or Morocco? small plant 3 to 4 inches high, leaves few small, fl. large incarnate, calix with segments obt. quite unequal in size and form, some oblong smaller.

MEADIA Catesby, Adanson, Dodecatheon L. &c fine G. chiefly American, now very prolific. Linneus changed the good previous name to one meaning 12 gods instead of 12 flowers, become quite absurd since these are even sp. with 1 or 3 or few or 20 flowers! I gave a monograph of it in 1836 Herb. Raf. which I have since improved and increased to 15 sp, all blended under D. meadia and integrifol. Hooker has even in bot. mag. 3620, as D. integrif. a beautiful New G. of Origon Mts. with stamens monadelphous in a tube, stamens connivent unilocular &c, which I have called EXINIA pulchella Raf. fol. petiol. cuneatis integris acutis, umbella 8-10fl. bract. ovatolânc. fl. purp. contortis.

1381, MEADIA cordata Raf. monogr. 1. Sibiria, very distinct sp. with leaves pet. cord. lobate.
1384, M. obovata R. 4. Virginia, Kentucky, var. brevifolia.
1388, M. longifolia R. 9. Kentucky, Illi-
nois, Missouri, Louisiana, leaves from 5 to 10 inches long, petiolate entire, var. cuneif. elliptica &c.

1389, M. crenata R. 10. Illinois, leaves sess. obl. acute, subcrenate or denticulate.


1393, M. dentata Raf. fol. petiol. lato lanceol. utrinque acutis, inequaliter dentatis, scapo paucifl. bract. ellipt. obt. pedunc. erectis—Oregon, leaves semipedal, scape ultrapedal, flowers 5 or 6 large white.†

1394, M. pendula Raf. fol. sessil. obl. obtusi ineq, dentatis. scapo multifl. bract. ovatis obt. pedunc. reflexis pendulis—Sibiria and Oregon, singular sp. the Sibirian has smaller leaves 3uncial, fl. purple; the American larger leaves 5 inches long, larger flowers incarnate, 10 to 12.

1395, M. polyanthes Raf. fol. sessil. obl. vel cuneatis obt. subrepandis denticulatis,bract. ovatis acutis, umbela 15-20flora, pedunc. ineq. flexuosis diffusis—Sibiria, beautiful sp. leaves 4 to 6 inches inches long, ombel very ample,some peduncles 3 to 4 inches long, fl. incarnate or pale.

1396, Androsace occidentalis Pursh. Upper Missouri, very different from next.

1397, Andr. elongata L. Europe, Sibiria.

1398, Andr. septentrionalis L. boreal Eu-

1399, Andr. villosa L. Alps.

1400, IPOSUES Raf. cal. campanul. 4dent. corolla 4partita crassa, lac. erectis angustis, stem. 8, filif. erectis subineq. antheris ovatis,
stylus brevis. fruct. capsula? fol. oppos. fl. term.—Singular G. that I cannot refer to any tribe lacking the fruit, but having affinities with the Heaths and Menziesia: the name was a synonym of Hipophae.

_Iposues obovata_ Raf. pumila suffruticosa, squamulis peltatis vestita, fol. opp. petiol. obov. obt. crassis subenervis, ramis unifl. fl. brevi pedunc. cal. dentis brevib. acutis, corolla squamulosa, lac. lanceol. obt. staminib. glabris—Asiatic, sent me without name, leaves semimucial, fl. as large fulvous, the whole plant even the corolla covered by minute peltae scales.†

This Century contains 6 New Genera whereof 2 now first described, with 30 new sp. whereof 15 now first described.

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**CENTURIA XV.**

ENDOGENOUS OR MONOCOTYLES.

1401, _SMIDETIA_ Raf. _Schmiedtia_ Trattenick. Lepanthium uniglumis univalvis unifl. stam. unica elliptica, ovar. obl. stylus unicus incurvus simplex. Semina obl. _Herbula cyperoidea subscaposa, folia vel invol. unicum. ad scapis, fl. verticillatis subpaniculatis_—very singular habit, fl. not spiculate but solitary as in grasses: it is akin to the monandrous and monostyle grasses, but stems not articulate, I have modified the barbarous german name. Monotype.

_Smiedetia humilis_ R. Schm. _subtilis_ Tr. annua pumila, glabra, fol. radic. gramineis angustis canalicul. basi dilatatis, involucro similis latiorib. falcatis basi vaginatis, panicula tripartita, verticilis multifl. fl. pedunculatis—Bohemia piscinis exsicatis. Small plant 2 inches high, leaves shorter, fl. many fuscate. †
1402, RHIZAKENIA Raf. fructific. radicalis, scapo incurvato unifloro, capsula akeniformis monosperma globosa, apex stigmatiformis lobato umbilicato perforato fol. radic. petiol—singular G. of the Rhizosperous family near to Pilularia, Isoetes &c.


1403, HYDROCHARIS morsus L. O. Europe, quite unlike the last in every thing.

1404, Eriocaulon longifolium Raf. fol. gramineis longissimis pedalis latiusculis obtusis, scapis fol. sepe breviorib. usque ad medium vaginatis, apice contortis costatis, capit. depressis, bract. ovatis acutis scariosis fulvis pubens—South New Jersey in swamps, leaves pedal, scapae slender rigid, heads small, fl. pale.


1406, Erioc. serotinum Walt. fol. semiped angustis glaucescens, obt. scapis elongatis, basi vaginatis, contortis sulcatis costatis, capit. globosis umbilicatis, bract. latovat. acum, vel lace- ris glabris—New Jersey to Carol. blended with
the last in *Erioc. decangulare* of authors, none of them has 10 angles! this has 12 to 15 grooves and ribs, fl. white.

1407, *Erioc. gnaphaloides* Mx. compressum Lam. decangulare Walt. bracts or scales ellips-tis obt. fl. cinereous.

1408, *Erioc. brevifolium* Raf. fol. subul. brevissimis acutis, scapo elong. gracilis contor-to sulcato, basi vaginato, capit. globosis, bract. ovat. acut. glabris fulvis—South New Jersey and Texas, leaves uncial or less, scape 5 to 8 inches few ribs, heads small, fl. grey.

1409, *Erioc. pellucidum* Mx. Canada, Alleghanies, New Jersey, leaves 1-2 inches, scape 3 to 6, scales often fuscate, fl. grey.

1410, Var. *pumilum*, leaves uncial, scape 3 uncial, head small, on Mts.

1411, *Erioc. flavidulum* Mx. New Jersey to Carol.

1412, Var. *cinereum* Raf.—Florida, Alaba-ma, leaves broadly subulate 2 inches, scape 3 to 4, fl. dark grey, bracts greenish.


1414, *Xuris* or *Xyris*, see my fl. tel. 18 to 21, where the G. is reformed into 4, with *Synoliga, Ramotha, Jupica—X. brevifolia* Mx. New Jersey to Florida, very distinct.

1415, *X. caroliniana* W. jupicai Mx. an-ceps Pers. indica of others—New Jersey to Alab. Kentucky &c, scapes unequal some short equal to leaves, bracts only scariose on the margins.

1416, *X. flexuosa* Mg. indica Nut. Eat. &c, not L.—New Jers. to Car. it differs from last by leaves slender spiral glaucous, head globose, bracts quite scariose &c.

1418, *X. spiralis* Raf. glauca, fol. erectis brevis filiformis semiteres vel canalic. spiralis, scapis filif. spiralis vel contortis subbiangul. capitulis parvulis ovatis acutis, bract. subrot. scariosis integris—South New Jersey, pedal or less, habit of next, leaves 2 to 4 inches.

1419, *X. fistulosa* Raf. juncea Baldw. El. non RBr—Florida to Louisiana, leaves filiform terete hollow recurved 3 to 6 inches, scape and fl. as in last.

1420, *X. or JUPICA? albiﬂora* Raf. (X. cylindrica Baldw. mpt.) fol. strictis ensatis lato-planis striatis, scapis duplo longior teres anceps sulcatis, capitulis ellipt. subcyl. obt. bract. dilatatis integris vel. emarg.—Florida, disc. by Baldw. in 1815, not yet described, unless *X. fimbriata* of Elliot be very badly so, and appears rather an akin sp. leaves pedal, scape bipedal. fl. white by a note of Baldwin, while all others are yellow, except *Jupica cerulea*.†

1421, *Tristemon repens* Raf. Juncus do Mx. O—Carol. to Louis. this G. indicated 1815 (see fl. tellur. 887) is nearer *Elegia* than Juncus, having 3 stamens only, fl. commonly capitate.

1422, *Trist. echinatum* R. Junc. do El. N. Jersey to Carol. &c one of the blended sp. in *J. nodosus* and *polyceph.* stem terete smooth, leaves filiform not nodose. heads 1 to 6 echinate brownish.
1423, Var. *prolifera*, with neutral glumes among the heads, they are lanc. acum. elongate, 3 to 4 imbricate.

1424, *Trist. fulvum* Raf. J. nodosus O. Canada to Virg. all the akin sp. are often blended in this by our botanists, it differs from last by stem less leafy, leaves nodose, heads 1 to 3 not echinate nor globose, fulvous not brown.


1428, *Trist. macrocarpon* Raf. J. acum. Mx. O. sed non El. sylvaticus Mg. non Wild.—Canada to Alabama: the synonymy of all these sp. is in utter confusion, I have set aside the specific names nodosum, polyceph. acum. &c which apply to nearly all.


1431, Var. *paradoxum* Raf. stem subangular, all the flowers glomerate sessile utriculose neutral stellate very large, formed by imbricate glumes lanceol. acumin. I consider this singular deviation as an hybrid by *Scleria*, the fl. nearly similar but sterile. Kentucky hills.

1432, *Trist. marginatum* Raf. J. do Rost. —Canada to Carol. this and 2 next are akin with flat leaves, heads 5-10flore in this.


1436, *Trist. falcatum* Raf. caule teres subfolioso, fol. falc. compr. subnodosis, umbella decomposita paniculata, capit. sess. et ped. 3-5flor. ris, cal. acutis, caps. eq. 3fidis 3costatis—Europe, sent me as *Juncus campocarpus*, name not in books. †

1437, *Trist. uliginosum* Raf. J. do Roth—Europe, blended by many with *J. vertic*. quite different, humble triuncial erect, heads sessile paucifl. capsule longer than calyx.


1439, *Luzula nivea* Deç. *Juncus* do L.—Alps, very pretty. This G. was united to *Juncus*, it differs by 3spperm fruits fl. calicate.
1440, *Luz. albida* Dec. Europe. †
1441, *Luz. forsteri* Dec. Alps rare. †
1443, *Luz. spicata* Dec. Mts. of Europe and Canada, the Wapani or white Mts. &c.
1444, *Luz. lutea* Dec. Alps. †
1446, *Luz. campestris* Dec. Europe and N. Amer. several var. often blended with *L. pilosa*. var. punila, cepitosa, bicolor, pallida, purpurea, elatior &c.
1447, *Luz. acuminata* Raf. repens, glabra, fol. lanceol. acum. striatis nervosis spiculis corymbosis congestis paucifloris fuscatis, calic. acum.—Boreal America, perhaps *J. pilosus* Mg. often blended with last, leaves broader and shorter, 3 uncial, stem semipedal, corymb. not exceeding the leaves, fl. small. †
1449, *Luz. labradorica* Raf. glabra, fol. lato gramineis acum. fl. corymbosis panicul. pedunc. 1-2fl. cal. acum. fulvis—Labrador near to *L. spadicea*, semipedal, leaves 3-4inches, fl. small. †
1450, *Luz. callosa* Raf. pilosa, caule filif. fol. angustis apice callossis, fl. corymb. dichot. ped. ineq. cal. scariosis fuscatis, albo marginatis cuspidatis caps. longior, stylis cal duplo longior—Mts of Sicily, deemed *L. pilosa* by Sicilian botanists, quite unlike, semipedal, leaves uncial, 3 long styles filiform, calix caliculate by 2 scales as in all.
1453, *J. acutus* Sm. Europ. N. Amer.
1454, *J. setaceus* Rost. Canada to Carol.
1456, *J. floridanus* Raf. caule filiformis striato foliosus. fol. filif. compressis unisulcatis corymbo term. paucifl. dichoto, cal. carinatis acutis caps. eq. obov. rufo-ferugineis—South Florida, pedal, 2 or 3 slender leaves on the stem, corymb. of 10-12 fl. of a rusty color like the capsules.
1457, *J. fuscatus* Raf. caule filiformis levis foliosus, fol. setaceis canaliculatis elongatis, fl. cymosis vel umbelatis dichot. cal. linearib. obtusis semiteres fuscatis ad caps. longior—Kentucky, Tennessee &c, pedal, very slender stem and leaves, fl. quite peculiar.
1458, *J. secundiflorus* Raf. caule subnudo spiraliter sulcato, fol. radic. tenuis canalic. nervosis, fl. spicatis unilateralis, spicis dichot. multifl. cymosis, invol. unifolio, cal. glaucis latolanc. cuspid. marg. membranaceis, capsulis obl. subeq. —West Kentucky, Arkanzas &c, nearly pedal, leaves 3-5uncial. fl. large glaucous, very distinct from *J. tenuis* like the two last.
1460, *J. recurvatus* Conrad, Raf. dichot. Tor! it differs by being smaller more slender, umbel. or cyme with many branches dichot. divaric. recurvate flexuose, fl. remotely spicate; glades of New Jersey.
1462, *J. aquaticus* W. articulatus et obtusisl. of others. Europe.
1463;* J. filiformis* O. Europe.
1464, *J. sylvaticus* W. P. acutisfl. of others. very diff. from *J. acutus*, Europe.
1465, *J. bulbosus* O. Eur,†
1466, *J. multiflorus* Desf. Barbaria, Egypt,†
1467, *J. maritimus* O. Eur.
1468, *J. comosus* Dav. in Lin. tr. Eur. rare.†
1469, *J. gracilis* Sm. Eur. rare.
1470, *J. triphylus* Raf. caule subnudo filif. striato, fol. sepe 3 tenuis planis nervosis, involucris 3phylis ineq. fl. longior, cyma 3-5fla, ineq. spiculis paucifl. furcatis, cal. fulvis lanceol. acum. subnervosis, caps. ovata rugosa brevior—South New Jersey. near 1458, but smaller semipedal, fl. few fulvous, capsules also.
1471, *J. pauperculus* Raf. caule filif. folioso sulcato, fol. setaceis planis nervosis, invol. 3phylis ineq. longissimis, spiculis 2-3brevissimis umbelatis 1-5fl. cal. allescens membran, acum. ad caps. obl. longior—Mts. Allegh. near *J. tenuis*, still more slender and few flowers, with foliose stem.
1472, *J. virgatus* Raf. glaucus virgatus, caule subnudo compr. levis, fol. tenuis longissimis depressis 3nervis, invol. 3-5phyl. setaceis longiss. ineq. fl. cymosis decom. virgatis fastig. silit. vel geminatis sess. vel ped. caliculus addressus, cal. lanceol. ineq. acutis caps. longior.—Florida, akin to *J. tenuis* and buffonius deemed the real *bicorns* by Leconte, large 15 to 20 inches high, fl. glaucoius.
1473, *J. convolutus* Raf. caule subnudo sulcato. fol. convol. teretib. solidis vix striatis, in-
vol. 3ph. brevis, cyma decamp. congestis, fl. sess. cal. convolutis acutis pallide fuscatis, caps. obov. brevior—Apalachian Mts. sesquipedal, leaves semipedal, fl. pale brown.

1474, J. creticus Raf. caule folioso tenuis, fol. crassis tenuis elongatis subtus striatis, invol. 1-2ph. setaceis, cyma trifida decamp. fl. sessil. calic. scariosis albis lanc. acum. ineq. caps. obl. brevior—Creta, Sicily, 4-6inches: one of the many sp. blended in J. buffonius, which all appear to form a subg. Agathyon Raf. by calix very unequal, well caliculate, to it belong J. grandiflorus, virgatus and all the next.

1475, J. pumilus Raf. caule subnudo pumilo cespitoso furcato, fol. setaceis semiteres, invol. 2ph. fl. subsess. terminalis sepe geminis ternisque, cal fulvesc. lanc. acutis, caps. brevior valvis truncatis retusis—Europe et Amer. bor. 1-2uncial, yet fl. large fulvous.

1476, J. buffonius L. Europe North America, cespitose dichot. fl. spicate, caps. valves obtuse, leaves flat nerve, several var. flexuosa, gracilis, maritima, fulva, but the next appears peculiar.

1477, J. cespifolius Raf. fol. cespitosis tenuis setaceis elongatis canalic. cauliib. subnudis filif. sulcatis ad fol. eq. involucris diphyis ineq. flor. congestis 2-10 sessil. fulvis, cal. linearib. carinatis, caps. subeq. valvis truncatis—Allegh. Mts. 3 to 4 inches, leaves many, stems few, fl. subcymose when more than 3.


1479, Ac. gramineus L. China.

1480, Ac. angustatus Raf. scapis angustis compressis unisulc. apice gladiatis tenuis acutis, spica medialis, fol. radic. scapis brevior angus-
tis vix. nervosis—Alabama, scape bipedal slender like the shorter leaves, spike biuncial.†

1481, *Ac. flexuosus* Raf. fl. tex. 29, new fl. 57—Texas, Arkanzas, smaller than last, scape flexuose 3gone semipedal.†

1482, *Ac. floridanus* Raf. n. fl. calamus Elliot—Flor. Carol. scape short 3gone, spike nearly terminal &c. †

1483, *Orontium aquaticum* L. (vel ellipticum R.) North Amer. leaves elliptic mucronate; var. obliquatum, glaucum, latifolium &c.

1484, *Or. angustifolium* Raf. fol. lanceol. acutis basi angustatis vel petiolatis, scapis gracilis nudis flexuosis vel rectiusculis vix clavatis, spica teres gracilis—Maryl. Virg. Carol. deemed a var. of last, but leaves quite narrow 8 to 10 inches long, only one bread, slender scape and spike.

1485, *Or. vaginatum* Raf. fol. petiol. ovato-lanceol. basi rotundatis apice sensim acutis, scapis brevis rectis vaginati, vagina apice spathaceae, spica brevis parvula—West Kentucky, Arkanzas &c rare, leaves semipedal, scape shorter slender, a long spatha vaginate at base nearly as long as scape. †

1486, *Amidena undulata* Raf. fol. sessilib. elongatis planis lanceol. undulatis obtusis; scapo brevior, spica elliptica, bracteis adnatis concavis—Sibiria, sent me as *Orontium japonicum* the type of the *G. Amidena* of Adanson. see my fl. tel. 822, which has leaves gladiate convolute: this has leaf nearly pedal, fl. yellowish. †


1487, *Typha angustif.* L. Europe, the 2 above Amer. sp. are blended in it and *T. latif.* of our authors.

1488, *Sparganium ramosum* Sw. erectum L. Europe and North Amer. all the following sp. once blended with it.


1491, *Sparg. simplex* Roth, boreal Europe and America.

1492, *Sparg. natans* Sm. Europe.


1496, *Tillandsia bartrami* El. Lec. Florida, rare.†


1498, *Till. cinerea* Raf. (or *Karaguata do*) recurvata Mx. El. non L. canescens of others not of L.—humilis pruinosa villosa cinerea, caule basi folioso fol. cespitosis filiformis recurvatis,
spathis-term. 2ph. striatis brevis 1-2floris, cal. lanc. mucronatis petalis eq.—Florida, mistaken for 2 South Amer. sp. 4 to 6 inches high, the capsule is 1 loc. and thus it is of G. Karaguata of Adanson, as many others.

1499, Till. utriculata L. polystachya Mg. non L. South Florida, well descr. by Leconte, but perhaps a Karaguata also and several sp. blended, if peculiar Till. or K. dilatata R.

1500, Till. convoluta Raf. scaposa, fol. lanceol. acutis rigidis convolutis glaucis, scapo spicato, spatthis imbricatis elong. lanceol. convol. acum. nervosis, florib. inclusis—Brazil, collected by Baldwin, apparently new, leaves 4 to 6 inches, scape hardly longer, spathe biuncial fulvous, parasitical.†

This Century thus contains 6 New Genera whereof 2 now described, and 37 N. Sp. whereof 33 are now first described.

Therefore this third part or series of the Autikon includes in 5 Centuries as many as 41 New Gen. whereof 17 hitherto undescribed, and the illustrations thereof 192, new sp. whereof 122 are described for the first time.

Correction. My G. Nevrolis 1102 is too near my own Nevrilis sylva tel. 881, and Neurola subg. of New Flora 975: therefore let it be changed to Lepiphaia Raf.

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