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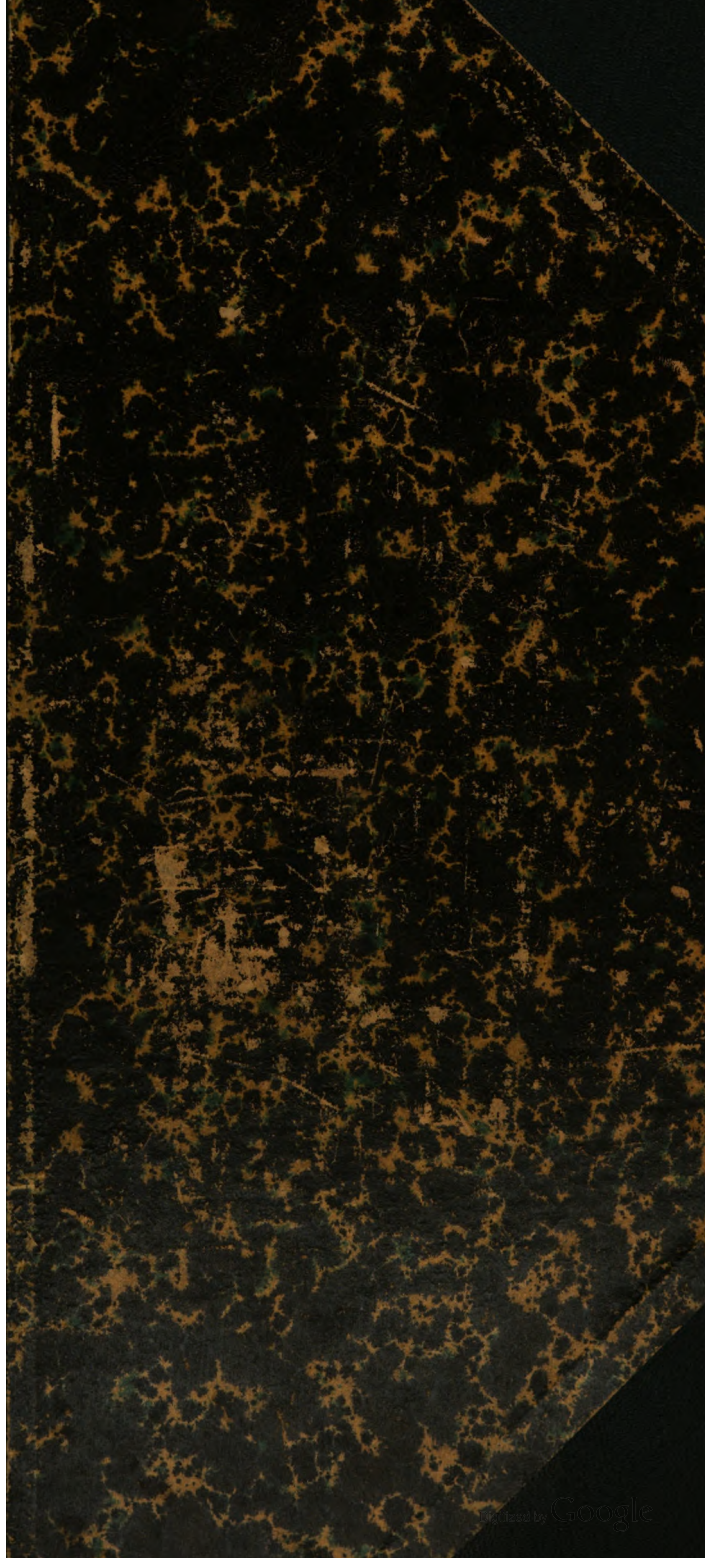
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FLORULA LUDOVICIANA.

FLORA

OF

LOUISIANA.

BY

ROBIN AND RAFINESQUE.

WITH A

SUPPLEMENT AND APPENDIX.

BY

C. S. RAFINESQUE.



NEW-YORK:

PUBLISHED BY C. WILEY & CO.

NO. 3 WALL-STREET.

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1817.

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Asa Gray.

FLORULA LUDOVICIANA ;

OR,

A FLORA

OF THE

STATE OF LOUISIANA.



TRANSLATED, REVISED, AND IMPROVED,

FROM THE FRENCH OF C. C. ROBIN,

BY C. S. RAFINESQUE,

Of the Royal Institute of Naples, the Academy of Natural Sciences of Philadelphia, the Literary and Philosophical Society of New-York, the Lyceum of Natural History of New-York, &c. &c. &c. Author of the Analysis of Nature, &c. &c. &c.



Quand les matériaux sont imparfaits, l'édifice ne peut pas être complet.



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NO. 3 WALL-STREET.

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1817.



C. S. VAN WINKLE, PRINTER,
No. 101 Greenwich-street.

THIS FLORA

IS RESPECTFULLY INSCRIBED TO

DEWITT CLINTON, LL. D.

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BENEVOLENT SOCIETIES, &c. &c.

BY

C. S. RAFINESQUE.

A*

FLORULA LUDOVICIANA;

OR,

FLORA

OF THE

STATE OF LOUISIANA.

—*—*—*—

PREAMBLE.

Mr. C. C. ROBIN published in Paris, in 1807, in 3 vols. 8vo. and in French, his *Travels in Louisiana, West Florida, and the West Indies*, performed between 1802 and 1806. At the end of the third and last volume, from page 311 to 525, he has inserted his *Flore Louisianaise*, or Descriptions of the Plants observed in Louisiana, classed according to the method of Jussieu. In perusing this Flora, I was astonished to find, among many blunders in nomenclature and classification, several accurate descriptions and valuable additions to the knowledge of plants, their geography, utility, and natural history. Having, therefore, compared with attention all his descriptions with the Floras of North America of Michaux and Pursh, I became convinced that a great number of new genera and species, unknown to those authors, were described by Robin. Pursh, having published his Flora in 1814, might have availed himself of this

valuable work ; but had he even had a knowledge of it, it is probable that the circumstances of its being written in French, classed naturally, and often destitute of accurate botanical names, would have been considered by him as sufficient grounds for his neglect, since he has been pleased to neglect other descriptions of plants wrote in English and well named.

Considering, therefore, that a revisal and translation of Robin's Flora, might be a desirable addition to Pursh's Flora, and our knowledge of North American Botany, I have undertaken this task, which has, in many instances, proved an arduous one, owing to the numerous misnames and errors of the author, who does not appear to have been a professed Botanist, but a mere observer and collector ; his observations and descriptions are, however, generally accurate, which is proved by his descriptions of well known plants. I have preserved, throughout, the classification of Jussieu, adopted by Robin, and the order in which he has enumerated his plants, adding merely numbers to each ; this conformity has appeared to me desirable, in order to facilitate a comparison of our different labours, and to show at once many of Robin's mistakes: I was, however, inclined to change the whole classification of this Flora, and adopt my improved natural arrangement, but as this would have upset altogether the plan of Robin, I was induced to prefer the actual order.

The nomenclature of the whole Flora has been new modelled and accurately fixed, so far as Robin's descriptions would allow ; for in some instances he has not described the plants he mentions, and in some

others his descriptions are too short, or not characteristic ; it was then merely by presumption, and with doubt, that the real names could be stated. The names of Robin are always added in synonymy, and with reference to the page in his *Flora*, or third volume of his travels.

To each specie, all the interesting particulars mentioned by Robin are added ; likewise, such parts of his descriptions as are not found in Michaux and Pursh. When the species are new, a botanical name is given to each, which is followed by a Latin specific definition or diagnosis, and a translation of the whole of Robin's observations, on the plan of Pursh's *Flora*.

New genera have been properly named and characterized by generic denominations and definitions, to which appropriate observations on their natural affinities are added, together with the etymology of their name. It may not be amiss to observe, that although Robin has, in a few instances, mentioned that the plants he describes appeared to be new genera or species, he has in no instance given them proper Botanical names.

The result of this labour consists in the enumeration of more than 400 species, whereof 196 are new, and in the introduction of 30 new genera, besides several, such as *Aretia*, *Peucedanum*, *Acanthus*, *Lantana*, *Chrysophyllum*, &c. which had not yet been introduced in the North-American Flora. Among the 196 new species, are to be reckoned 15 new trees of the genera *Celtis*, *Laurus*, *Tilia*, *Fraxinus*, *Ulmus*, *Gleditschia*, *Hicorius*, *Chimanthus*, &c. and 18 shrubs, principally of the genera *Arbutus*, *Chrysophyllum*, *Prunus*,

Frangula, Ptelea, Cassia, &c. The useful plants mentioned by Robin, are 46, most of which are new, and may be added to the *Materia Medica* of the United States; some others have alimentary or economical qualities; among those useful plants, the following deserve particular notice :

Asclepias serpentaria, Gleditschia heterophylla,
Dolichos lacteus, Celtis alba,
Verbesina Virginica, Cephalanthus occidentalis,
Gynema balsamica, Psedetalon glandulosum, &c.

Besides those valuable plants, a great number among the new species of this Flora will claim our notice, as ornamental and worth cultivation in gardens; the elegant *Pancratium lirisme*, unites to beauty the fragrant smell of the lily; several, such as *Monarda citrodora, Pycnanthemum rosmarinoides, Pleurandra alba, &c.* deserve cultivation for their sweet scent; and the following for the elegance of their forms, or the beauty of their flowers :

Nelumbium codophyllum, Polymnia macrophylla,
Cleome speciosa Eupatorium violaceum,
Sarracenia leucophylla Diplonyx elegans,
Ananthopus clandestinus, Bradburya scandens,
Mentha farinosa, Darwinia exaltata, &c.

All the plants of this Flora, have been observed by Robin in the southern parts of Louisiana, which now forms the state of that name, and particularly near New-Orleans, and the county of Atakapas, except a few which are from the neighbourhood of Pensacola.

Considering how rich the State of Louisiana must be in plants, this labour will only be considered as a mere specimen of its Botany, whence I have named it *Florula Ludoviciana*; but this specimen; where so many new and interesting objects are introduced and described, will, I hope, claim the attention of our Botanists, and particularly of those who may reside or travel in Louisiana: it is to their future exertions that the correction and complement of the Flora of Louisiana must be entrusted. Let me suggest to them, that as Louisiana must produce at least as many species of plants as Georgia, say about 2000, a vast field is open to their researches, since only one fifth of that number is here described or enumerated; should new genera and species exist yet, in the same proportion as in this *Florula*, more than 100 new genera and 700 new species will reward their exertions, many of which may be common to Mexico, since Louisiana, lying on the borders of that empire, must of course possess a Botany partly Mexican, and consequently highly interesting. I wish and hope, that these hints may induce some Botanists to dig again into that rich mine, and I look forward with confidence to the period, when the vegetable productions of the south-west corner of the Union, will be equally known with those of the opposite quarter.

C. S. R.

FLORULA LUDOVICIANA.



DIVISION I.—CLASS I.—ACOTYLEDONES.

ORDER I.—FUNGI.

1. *Mucor*—Several species not described. Rob. p. 326.
2. *Agaricus campestris* L. Champignon comestible. Rob. p. 327.
3. *Agaricus odoratus* ? L. Mousseron. Rob. p. 327. perfumed.
4. *Boletus cinnabarinus* ? L. Agaric rouge du Liquidambar. Rob. p. 328.
5. *Morchella odorata* Raf. N. Sp. ? Conica, plicata, exarata, fulva, odorata, magna, Raf. Morille Rob. p. 327.
6. *Lycoperdon bovista* ? L. Rob. p. 327.
7. ——— *pratense* ? L. Vesse de Loup globuleuse pediculée. Rob. p. 327.

ORDER V.—FILICES.

8. *Adiantum pedatum* L. Rob. p. 329.
9. *Osmunda Spectabilis* Wild.—Osmonde Rob. p. 329.

10. *Asplenium ebeneum* Ait. Rob. p. 329
11. *Equisetum prealtum* Raf. N. Sp. ? Caulibus simplicibus erectis scabris fistulosis : vaginis nigrescens, crenulatis, corona emulans—Prele. Rob. p. 330. A large specie akin to *E. hyemale*, grows on the banks of the Mississippi, in large bushes rising about six feet ; the stems are as thick as the finger : the cattle are fond of it in winter, and the joiners employ it to polish wood.

ORDER VI.—NAYADES.

12. *Hippuris polyphylla* Raf. Caulibus erectis, emer-
sis foliis 10-12 nis, linearibus ; floribus sessili-
bus axillaris Raf.—Pesse commune Rob. 330.
Common in smooth waters : stem rising nearly
a foot above the surface.
13. Chara,
14. Myriophyllum,
15. Potamogeton,
16. Lemna,
- } Several species. Rob p. 330.

DIVISION II.—MONOCOTYLEDONES.

CLASS II.—M. HYPOGYNES.

ORDER I.—AROIDES.

17. *Sarracenia leucophylla* Raf. Foliis tubulosis, strictis, elongatis, teretis, albo coloratis, rubro venatis, intus retrorsum hirsutis, fauce undulata, appendice fimbriata dilatata opercularis Ratpathe velu ! Rob. p. 332. and V. II. p. 48. Grows in swamps near Pensacola ; leaves smelling like honey, and decoying insects, who seeking for the honey, are entrapped within the leaves, and prevented to come out by the rigid thick hairs. Robin took the leaves for a flower or spatha.
18. *Arum virginicum* L. Gouet à racine tubéreuse blanche, feuilles échanrées en lobes ovales et à fruit rouge. Rob. p. 332.
19. *Arum atrovirens* Wild. Rob. p. 332.
20. *Podophyllum callicarpum* Raf. Caule furcato bifolio unifloro, foliis peltatis sexlobatis, lobis obovatis fissis inequaliter dentatis, floribus pedunculatis nutantibus hexapetalis subdecandris Raf.

Gouet odorant et comestible! Rob. p. 332. Stem petioles and leaves about five inches long; the flower grows at the bifurcation of the stem, and smells like orange flowers; the petals are white, large and concave: fruit oblong, size of a large filbert, white coloured of rose, sweet, good to eat, and of which good preserves are made. Very different from *Arum*.

ORDER II.—TYPHE.

21. *Typha angustifolia* L. Rob. p. 332.

ORDER III.—CYPEROIDE.

- | | | |
|--|---|---|
| <p>22. <i>Scirpus</i>,
23. <i>Cyperus</i>,</p> | } | <p>Many species. Rob. p. 332, not described: a species of <i>Scirpus</i>, which might be called <i>S. Bicolor</i>, rises five feet, and has the flowers yellow and red.</p> |
|--|---|---|

ORDER IV.—GRAMINE.

24. *Phalaris arundinacea* L. Rob. p. 335.
25. *Paspalum compressum*. Caule compresso scabro, spiculis secundis, spicis alternis sessilibus horizontalis. Raf.—Panic 1. Rob. p. 335. Stem rising six feet, rough above; about nine or ten purplish spikes, with unilateral spicules, leaves rough.
26. *Paspalum geniculatum*. Raf. Caule gracile geniculate glabro, foliis margine scabro, spicis op-

positis pedunculatis, spiculis elongatis. Raf.—
Panic 2. Rob. p. 335. Rises about two feet,
the spikes are brown, the spicules longer than
those of the foregoing, the leaves only rough on
the edges.

27. *Triticum estivum* L ? s. *Elymus* Sp. on the Ri-
ver Vermillon. Rob. p. 335.

28. *Miegia macrosperma* Pers.—Cannes. Rob. p.
336. It rises fifteen to twenty feet; the cattle
feed on their leaves in winter, and the Indians
employ their seeds for food: their creeping
roots are spongy and knobby; walking canes
are made with them: they indicate by their size
and number the quality of the ground, and that it
is no longer overflowed.

CLASS III.—M. PERIGYNES.

ORDER I.—PALME.

29. *Sabal adansoni*. Pers.—Palmier nain ou Lata-
nier. Rob. p. 337. Spadix ensiform elastic, ris-
ing seven feet, stem like, branched, flowers
trifid white sessile odorate, blossoming in June:
berries like a pea, black and sweet. The fi-
brous netting of the short canex are used as
canvass to clear and scour: the leaves are used
to make hats and thatch houses, &c.

30. *Sabal ? adiantinum*. Raf. Acaule, foliis inermis bipartitis, flabellatis, plicatis. Raf.—2. *Latanier*. Rob. p. 338.

ORDER II.—ASPARAGI.

31. *Asparagus officinalis* L. naturalized spontaneous. Rob. p. 338.
 32. *Smilax hastata* Wild.—Smilace 1. Rob. p. 339.
 33. ——— *walteri*. Pursh. Salseparrille. Rob. p. 339.
 34. ——— *bonanox*. Wild. Smilace 3. Rob. p. 339.
 35. ——— *ovata*. Pursh ? Smilace 4 Rob. p. 339.
 36. *Dioscorea ?* *Igname du pays à bulbes colorés de rouge farieneux dont les Indiens font usage*. Rob. p. 339.

ORDER III.—JUNCI.

37. *Juncus* Several species, not described.
 38. ——— *albus*. Raf. *Jonc de la Riviere Vermillon à bractées blanches*. Rob. p. 340. not described, probably new.
 39. *Alisma odorata*. Raf. *Foliis cordatis parvis, levis, tenuis, scapo striato ramoso flexuoso, floribus subspicatis*. Raf.—*Herbe à malo*. Rob. p. 340. Grows in shady swamps ; flowers white odorate : stem two feet high, white : the whole plant has a faint smell, which keeps by drying : it is employed for wounds and many other disorders.

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40. *Sagittaria* ? *cerulea*. Raf. (vel *Unisema sagitata* Raf.) Fléchière à feuilles en flèche, à fleurs en épi. Rob. p. 340.

ORDER IV.—LILIA.

41. *Lilium superbum* L. Rob. p. 341.
 42. ——— *canadensis* L. Rob. p. 341.
 43. ——— *philadelphicum* L. Rob. p. 341.
 44. ——— *catesbei*. Mx. Rob. p. 341.
 45. *Yucca filamentosa* L. Rob. p. 341.

ORDER V.—BROMELIE.

46. *Tillandsia usneoides* L.—Barbe espagnole, Mousse. Rob. p. 342. Blossoms in April; grows on all the trees except the willow; much liked by the Herbivores in winter; by dipping it in foul water during a fortnight, it loses its bark, and a strong elastic fibre, similar to horse hair, remains, which is employed for mattresses, packages and slime.
 47. *Agave virginiana* L.—The Indians use its fibrous leaves to make baskets, &c. Rob. p. 344.

ORDER VI.—ASPHODELL.

48. *Aletris farinosa* L. Rob. p. 345. The Indians eat its bulbs.
 49. *Allium canadense* L.—In Atakapas. Rob. p. 345.
 50. ——— *porrum* L. var. *bulbiferum*, cultivated.

ORDER VII.—NARCISSE.

- 51 *Allium hyemale*. Raf. Caule tereti umbellifero, foliis linearibus basi vaginatis, umbella pauciflora, floribus erectis campanulatis, filamentis pyramidalis equalibus stylo brevioribus. Raf.—Anonyme! Rob. p. 346. Blossoms in January and February; grows in the meadows; umbel with six to ten white flowers.
52. *Pancretium Liriosme* Raf. Scapo ancipiti, umbella pauciflora, laciniis perigonalis angustis canaliculatis, nectarium campanulatum dentibus 18. sex staminiferis, staminibus longe exsertis. Raf.—Pancreais. Rob. p. 346. Beautiful plant, growing in moist grounds and round the small lakes; its bulb is about an inch in diameter, black outside and white within; radical leaves deep green, shining, similar to those of the *Narcissus*. Stem compressed, nearly winged; two feet high; umbel of about six white large flowers (8 inches diameter) each with a spatha, and having a fragrant smell, nearly similar to that of the common lily: the anthers are long and yellow: it blossoms in March. It has some affinity with the *P. Rotatum* of Ker and Pursh.

ORDER VIII.—IRIDES.

- 53 *Sisyrinchium mucronatum*. Pers.—*S. bermudiana*. Rob. p. 347. Blossoms in February.

54. *Iris virginica* L.—Iris violet pourpre. Rob. p. 348.
55. *Iris brevicaulis*. Raf. Imberbis, caule angulato paucifloro foliis brevioribus, floribus lateralibus solitaris, terminalibus geminatis, stigmatibus angustatis antheris longioribus, capsulis hexagonis. Raf.—Iris blanche. Rob. p. 349. Stem only rising one foot and a half at utmost, while the large flowers are half a foot in diameter, they are white, washed and striped of violet, with their base yellow.
56. *Iris rubescens*. Raf. Imberbis, caule foliis longioribus paucifloro, floribus lateralibus solitaris, terminalibus geminatis, stigmatibus antheris brevioribus. Raf.—Iris à fleurs rouge de brique. Rob. p. 349. It has some affinity with *Iris cuprea*, Pursh; stems two or three feet high, flowers entirely of a brick-red, blossoms in March and April, as well as the foregoing species.

IV. CLASS. M. EPIGYNES.

II. ORDER.—CANNE.

57. *Canna flaccida* Rosc. Pursh. *Canna glauca*. Rob. p. 350.

III. ORDER.—ORCHIDEE.

- I. N. G. ANANTHOPUS. Raf. *Spatha gelatinosa*, pedun-

culo abortivo floribusque involvens; perigonus 6 partitus, sepalis 3 exterioribus scariosis, binis interioribus majoribus, inferiora labelliforme convexa, stamina 6 inequalia, antheris diversis una lanceolata stylo adnata. Ovarium ovale superum? Stylo reflexo, stigma unicum. Fructus.....Obs. This extraordinary new genus is but imperfectly described by Robin, who deems it an *Ophrys*, while it does not even belong to the order of *Orchidæ*; but, is rather more akin to the genus *Tradescantia*, unless indeed the ovary should be inferior, when it would range itself in the order *Musæ*, of Jussieu. I have derived the name from three greek words, meaning a pedicle without flower. The general habit of this genus is perfectly natural, and may be stated thus: Radices repentes, caulibus ramosis cylindricis geniculatis, pubescentibus; foliis alternis, uninervis, retrorsum ciliatis, petiolis vaginatis: floribus spatha intus gelatinosa, pedicellis floriferis flexuosis, pedunculo abortivo stricto rigido. Raf.

58. *Ananthopus clandestinus*. Raf. Foliis lanceolatis, retrorsum scabris, subtus glaucis; floribus terminalibus, spatha saccata mucronata, demum plana basi reniforme. Raf.—*Ophrys* *premiere*. Rob. p. 351. Stems rising two or three feet, leaves eight or nine inches long; the three exterior sepals of the perigone whitish, the interior ones blue; the spatha is first oval compressed, hollow, with a bill on the exterior side, and full of a gelatinous matter: after the blossom is over, the

peduncles recurve themselves and hide the ovaries in that jelly ; but, when the fruit is ripe, the jelly dries, the spatha splits interiorly, and assumes a flat shape reniform at the base, and double in breadth than in length : grows in shady and swampy soils.

59. *Ananthopus cordatus*. Raf. Caulibus virgatis, foliis lanceolatis supra basi echinatis ; floribus axillaribus terminalibusque, spatha cordata. Raf.—*Ophrys secunde*. Rob. p. 352. This species is more common, grows in open fields, it has longer and thinner stems, smaller leaves and flowers. A variety of it found near the woods, is taller and with larger flowers.
60. *Cypripedium spectabile* Sal. Pursh. Found near Ouachita or Washita. Rob. p. 353.

ORDER IV.—HYDROCHARIDES.

61. *Nuphar lutea*. Smith. *Nymphaea lutea*. Rob. p. 354.
62. *Nymphaea odorata*. Ait. Rob. p. 354.
63. *Nelumbium luteum*, Wild. Rob. p. 354.
64. ————— *codophyllum*. Raf. Petiolis scapisque muricatis, foliis emersis, peltatis, campanulatis, integris, subtus tomentosis, nervosis ; calice tetraphyllo, petalis numerosis elongatis inequalibus, ovarium sulcatum, apice marginatum. Raf.—*Napoleone!* Rob. p. 355. and Vol. II. p. 322 and 441. This wonderful plant grows in the lakes of Louisiana. It has long and thick creeping roots,

which are acrimonious when fresh; but are easily deprived of their dangerous juice by washings, as those of the *Jatropha*, and of which the Indians are very fond. The petioles are cylindrical with a furrow inside, they rise from six to nine feet, are thick in proportion, and grow thicker towards the top. The leaves reach over six feet in circumference, and two feet in diameter, they are shining inside, nearly fringed on the edge by the down of the outside, which is longer than the edge, the nerves are radiated and ramified. Scape cylindrical, covered with acute and rough tubercles, like the petioles of the leaves, flowers yellow, larger than those of the *Nelumbium luteum*. The fruit contains about 20 nuts good to eat; it is obconical, flat above with a raised margin, and above three inches in diameter.

DIVISION III.—DICOTYLEDONES.



CLASS V. D. APETALES EPIGYNES.

ORDER I.—ARISTOLOCHIE.

45. *Aristolochia tripteris*. Raf. Sarmentosa, foliis cordatis levis, floribus axillaribus spicatis bracteatis, perigonis tubulosis tripteris. Raf.—Aristolochie de la Louisiane. Rob. p. 356. Stems running 10 to 20 feet, covering the shrubs and bushes with their branches, nearly herbaceous, smooth, strong, reddish green; leaves yellow green, two inches long, one and a quarter wide; flowers very small and white, the three wings of the perigone grow broader near the top, six or eight stamina, stigma nearly sessile and lobed.



CLASS VI. D. APETALES PERIGYNES.

ORDER I.—ELEAGNI.

66. *Nyssa denticulata*, Wild. Rob. p. 358.

ORDER II.—THYMELÆA.

67. *Dirca palustris* L. Rob. p. 358.

ORDER III.—PROTEÆ.

68. *Celtis alba*. Raf. Ramulis tomentosis, foliis distichis obliquis, lanceolatis, integris, petiolatis; floribus axillaribus, pedunculatis, solitariis ternisque. Raf.—L'Incoau! Rob. p. 359. This tree does not certainly belong to the Proteæ, but is a real *Celtis*, by Robin's whole description; he, however, mentions two characters, the anthers opening from bottom to top, as in *Laurus*, and the hairy stigma, which might lead to believe it a peculiar sub-genus, to which the name of *Dastima* might be given. It is a fine shady tree, forty feet high, bark whitish and scaly, wood white, compact and fine; the young branches are slender, and by bearing distichal leaves, assume the appearance of a pinnate leaf; leaves alternate, two inches long; flowers small, green, berries red, sweet, size of a grain of pepper. The leaves fall in winter; it blossoms in March; the bark is often used in decoction as cooling and anodyne.

ORDER IV.—LAURI.

69. *Laurus Sassafras* L. Rob. p. 361. This tree rises over 30 feet high in Louisiana, it blossoms

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in February and March ; it grows any where in woods, fields, roads, sands, &c. The leaves are dried at the end of summer, and ground, in order to be boiled with meat ; they communicate to the broth a glutinous consistence, much relished. This dish is called *Gombo Sassafras*.

71. N. G. CHIMANTHUS. Raf. Floribus diclinis, Fl. M. Calyx urceolaris quinquefidis coloratus, laciniis spatulatis reflexis, petaloideis, stamina perigyna 12—15, filamentis conicis divaricatis, antheris oblongis longitudinaliter dehiscens. Fl. F..... Fructus Drupa carnosae, ovalis, monosperma, nucleus acutus vix reniformibus. Raf.—Obs. This new genus, whose name means winter-flower, belongs to the natural family of *Amygdalia*, and has no sort of likeness with the *Lauri*, except by its ever-green leaves. It appears to differ materially from the genera *Prunus*, *Amygdalus* and *Chrysobalanus*, by the dicline flowers, shape of calyx, and stamina, want of petals, &c. Raf.
70. *Chimanthus amygdalina* Raf. Foliis alternis subdistichis, petiolatis, supra lucidis, subtus pallidis, perennantibus, oblongis, integris, utrinque acutis, uninervis; floribus axillaribus, racemosis, bracteolatis. Raf.—Laurier Amande. Rob. p. 362. A tree about 30 feet high, and one foot in diameter; branches long, slender, bending, with a brown bark; leaves thickly set, three inches long, one inch broad; flowers small, white, yellow inside at the bottom; berries black. The leaves have the taste

of almonds, and they are used to give that taste to milk, &c. as in Europe with the *Prunus lauro-cerasus*. It loves the shade, and blossoms in winter, even when it freezes.

71. *Laurus? Ludoviciana*. Raf. Arboreus, foliis petiolatis, perennantibus oblongis, integris, unipervis, supra lucidis subtus glaucis; floribus terminalibus, racemulosis, quinquefidis, baccis nigris. Raf.—Laurier. Rob. p. 363. A tree 30 or 40 feet high, with a grey bark, and numerous diverging slender branches; leaves alternate, three inches long, one wide, petiols red. Flowers small, white, in small lateral and terminal bunches at the extremity of the branches, with only five sepals! The leaves are used instead of those of *Laurus nobilis*, although their smell is less agreeable.

ORDER V.—POLYGONE.

- III. N: G. STYLURUS. Raf. Calyx 0; Petala 4, Stamina 4—6, divaricata, receptaculum plumosum, ovariiis multiplicis divaricatis, stylis longis plumosis deciduis. Semina nuda. Raf. This new genus, which does not belong to this order; (nor has any affinity with *Atraphaxis*.) is connected with the genera *Clematis* and *Thalictrum*, and belongs to the natural order of *Ranunculacea* as well as they; it differs from *Clematis* by the naked seeds, from *Thalictrum* by the hairy styles, and from both by the hairy receptacle and few sta-

ments. The generic name means *Styles tail-shaped*. Raf.

72. *Stylurus fistulosus*. Raf. Caulis erecto fistuloso striato; foliis amplexicaulis impari tripinnatis, foliolis oppositis petiolatis cordatis tridentatis glabris; floribus umbellatis involucreatis invol. monophyllum, petalis acuminatis. Raf.—Atraphace fistuleux. Rob. p. 364. Stem two feet high, leaves alternate, the middle tooth of the folioles and the middle folioles the longest, petioles and peduncles slender, flowers small and whitish.
- IV. N. G. ANTENORON. Raf. Calyx quadrifidus, Corolla 0, Stamina 4, Ovarium unicum liberum, Stylis 2 persistentibus. Achenus monospermus, ovatus striatus stylis coronatus. Raf. This new genus belongs to this order, differing from the genera *Tovara*, *Adans*, and *Atraphaxis*, L. by the shape of the calyx and fruit. The name was an ancient one for some *Atriplex* or *Atraphaxis*.
73. *Antenoron racemosum*. Raf. Hirsutum, foliis petiolatis oblongis acutis; racemo longissimo, floribus remotis bracteatis, bracteis scariosis vaginatis. Raf.—Atraphace renouée. Rob. p. 364. Branches cylindrical, leaves with short vaginated petioles; flowers small and white, on short peduncles.
74. *Ceanothus Americanus* L.—*Polygonum frutescens*. Rob. p. 365! Found on the banks of the Teiche, blossoms in April, this plant does not belong to this order.

75. *Polygonum bicorné*. Raf. Caulibus ramosis, ramis geniculatis, patulis teretibus intus crenulatis; foliis petiolatis, lanceolatis, glabris; floribus spicatis confertis octandris, distylis, staminibus inclusis, stylis exertis elongatis. Raf.—Renouée 1. Rob. p. 366. Large plant, four or five feet high, branches purplish, every one of which bears a fine, thick spike, about three inches long, of rose coloured flowers. This species, and all the following, grow in swamps, moist grounds, and along the rivers; they are called vulgarly *Curages*, in Louisiana; all their flowers smell like honey, and afford it in plenty to the bees. Blossoms from August to December.
76. *Polygonum maculatum*. Raf. Caulibus ramosis; foliis petiolatis, oblongis, glabris, maculis fuscis adpersis; floribus spicatis confertis, octandris distylis, staminibus exertis, stylis inclusis. Raf. Renouée 2. Rob. p. 367. Smaller than the foregoing; flowers rose coloured; it blossoms also from August to December.
77. *Polygonum pachistachyum*. Raf. Caulibus ramosis; foliis petiolatis, lanceolatis, scabriusculis; floribus spicatis, spicis densis abbreviatis; floribus octandris tristylis, stylis stamina brevioribus. Raf.—Renouée 3. Rob. p. 367. Stems of a light green, flowers white, in short thick spikes, about one inch and a half long, blossoming in September.
78. *Polygonum hydropiperoides* Mx. Pursh.—Renouée 4. Rob.

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79. *Polygonum verum*. Raf. Caulibus ramosis ; foliis subsessilibus ovato-lanceolatis, nervis margineque revolutis scabris ; spicis paniculatis gracilibus brevibus, floribus octandris distylis. Raf.—Renouée 5. Rob. p. 367. This species blossoms in April and May ; it has low stems, short leaves, and its small spikes are short, slender and thickly paniculated : the flowers are of a rufous white. This species, as well as the *P. bicornis* and *P. maculatum*, above, belong to the subgenus *Diocetus*, distinguished by having eight stamina, a compressed ovary and seed, two styles or stigmas, &c.
80. *Rumex Ludovicianus*. Raf. Hermaphroditus, caule striato ; foliis lanceolatis acutis integris petiolatis crassis sub-undulatis ; floribus racemosis paniculatis verticillaris, perigonis sepalis interioribus latioribus graniferis. Raf.—Patience. Rob. p. 368. It grows in shady, moist and swampy grounds ; has a pleasant bitter acidity, and is good in soups ; stems strong, reddish, rising two or three feet ; leaves six inches long, one and a half wide ; flowers in long branched spikes, on loose peduncles and greenish ; the inside sepals are yellowish, the stamina are yellow and as long as the projecting branched stigmas.
81. *Rumex acetosa* L. cultivated.

ORDER VI.—ATRIPLICES.

82. *Phytolaca decandra* L. Rob. p. 369. Vulgar name in Louisiana *Chou-gras* (Fat cabbage), its roots are purgative ; boiled with urine it dyes of a fixed blue : the leaves are eaten boiled, in soup, &c. They are particularly employed in the Creole dish called *Gombo*.
83. *Spinacia oleracea* L. cultivated. Rob. p. 370.
84. *Beta vulgaris* L. cult. Rob. p. 370.
85. *Chenopodium bonus-henricus* L. ?—Anserine. *Sagittée*. Rob. p. 370. Leaves farinaceous, flowers in terminal racemes, rising two or three feet, and forming a large bush.
86. *Chenopodium anthelminthicum* L. Rob. p. 370. Rising two or three feet, branches strong, striated and pubescent ; leaves oval, rather rough, sinuated by deep unequal teeth. Used against worms in Louisiana.
87. *Brunnichia cirrhosa* Mx. Pursh.—Anserine liane. Rob. p. 371. His description is pretty good : This vine appears to be frutescent in Louisiana ; it rises to the summit of the highest trees ; its bark is rusty ; young branches are green and striated ; flowers aggregated four or five together, and bracteated on short axillar panicles ; the calyx is white inside and campanulated, not with reflexed sepals, as in some authors : the ovary and capsul is oblong and striated.
88. *Amaranthus diacanthus*. Raf. *Caulibus striatis glaucis, foliis longe petiolatis, ovalis, utrinque*

acutis, crenatis, scabris ; floribus pentandris axillaribus glomeratis spicatisque, terminalibus, glomerulis bispinosis, spinis opatulis. Raf.—Arroche ou Epinard du Tropique. Rob. p. 372. This plant is not an *Atriplex* but a real *Amaranthus*, very akin to *A. spinosus* L. Stems two or three feet thick, branched ; male flowers mixed with the female, calyx scarious, three stigmas. The leaves are good to eat as spinage.

CLASS VII.—D. APETALES HYPOGYNES.

ORDER I.—AMARANTHI.

89. *Amaranthus leucanthus*. Raf. Cœule paniculato ; foliis oblongis emarginatis ; floribus axillaribus glomeratis bracteolatis, coloratis, masculis triandris. Raf.—*A. albus*. Rob. p. 374. The real *A. albus* differs from this species, by its stem simple and quadrangular ; leaves obovate, &c. This species has whitish stems, rising two or three feet ; small leaves and small white flowers.
90. *Amaranthus grecizans*. Wild.—*Amaranthe* 2. Rob. p. 374.
91. *Amaranthus sanguineus* L.—*Amar.* 3. Rob. p. 374.
92. *Iresine celosioides* L. Rob. p. 374. Stem branched, three feet high, thin, geniculated ;

leaves small, oval, entire and smooth; flowers yellowish.

ORDER II.—PLANTAGINES.

- 93 *Plantago cordata?* Lam. Pursh.—Grand Plantain à 7 nervures. Rob. p. 374.
- 94 *Plantago Ludoviciana* Raf. Foliis lanceolatis pubescentibus denticulatis; scapo tereti Raf.—*P. virginica* Rob. p. 375; but that species differs by angular stems and ovate lanceolate leaves.
95. *Plantago elongata*. Bradb. Pursh.—Plaintain 3. Rob. p. 375.
96. *Plantago accedens* Raf. Foliis ovatis obovatisque subdenticulatis, trinervis, glabriusculis; scapo tereti, spica cylindrica Raf.—Plantain 4. Rob. p. 375. This species is found also in the Atlantic states, where it is taken for the *Pl. media* of Europe; it has small leaves, and resembles *Pl. Virginica*.

CLASS VIII.—D. MONOPETALES HYPOGYNES.

ORDER I.—LYSIMACHIAE.

97. *Hydrophyllum? trilobum* Raf. Caulibus diffusis compressis, foliis petiolatis trilobis, crenatis; calyx sinibus appendiculatis. Raf.—Mouron 1. Rob. p. 376. This plant cannot be an *Anagallis*,

- having alterne leaves, a bipartite style, &c. It may perhaps be a *Phacelia*, or ought rather to form a new genus or section, with *Hydr. appendiculatum*, which affords the same singular character in the calyx, to which I shall give the name of *Decemium*. This species has fleshy stems and white flowers.
98. *Anagallis arvensis* L. var. fl. albis.—Mouron 2 Rob. p. 377.
99. *Aretia alba* Raf. Villosa; foliis patulis sessilibus cuneato-spathulatis, obtusis, integris; floribus pedunculatis, sub-racemosis; calyx ventricosus, corolla tubo inflato, lacinis emarginatis. Raf.—*Aretia* Rob. p. 377. Not unlike the *Androsace occidentalis* of Nuttal and Pursh, in the leaves; but differs in the flowers and inflorescence. The whole plant is thickly covered with hairs; the leaves are all radical, two inches long and half an inch wide; flowers small, white, calyx quinquefid persistent, capsul five seeded. The genus *Aretia* was not known to be found in America.
100. *Amsonia latifolia*. Michx.—Menyanthe 1. Rob. p. 377. Stem strong, round, smooth; leaves numerous, alternate, smooth, glaucous underneath, oval and on short petiols: flowers pale lilac; calyx urceolated, five toothed, partitious of the corolla linear acute, tube hairy inside, stigma globular with a circular flat edge underneath. Common in the meadows above the river Vermillon: blossoms in April.
101. *Dichondra carolinensis*. Michx.—Menyanthe 2.

Rob. p. 378. Leaves round cordate petiolate, five or six lines in diameter, flowers two lines in diameter, white, anthers bilobe and red.

ORDER II.—PEDICULARES.

V. N. G. *ENSLERIA*. Raf. Calyx 5 partitus, sepalis 3 majoribus; Corolla limbo rotato 5 lobo, lobis inequalis, Stamina 5 equalia tubo inserta, antheris transversis. Ovarium superum, stylus stamina longior, stigmata bina uncinata. Capsula bilocularis bivalva, polysperma, elastice dehiscens, disspimento valvulis contrariis. Raf. It is by a most egregious mistake, that Robin has called this plant *Polygala*: it must form a new genus, which has some faint similarities with *Verbascum*, but the stigma, fruit and habit are totally different, and agree with the order *Pediculares* of Jussieu, while all the other characters would appear to render it a stranger thereto: it will probably be the type of a new family next to the family *Veronica* in my natural order *Plasyrgia*, class *Mesogynia*. I have dedicated it to Ensen, a German botanist and traveller, who has visited Louisiana, and some of whose discoveries are recorded in Pursh's Flora.

102. *Ensenia bibracteata*. Raf. Villosa, foliis oppositis, petiolatis, ovato lanceolatis, integris, nervosis; floribus axillaribus subsessilibus bibracteatis. Raf.—*Polygala*! Rob. p. 378. Stem a foot high, quadrangular, grooved, calix hairy, di-

visions lanceolate acute, corolla violet, stamina and anthers white, ovary and fruit oval oblong : in blossom from October to February ; Robin mentions two varieties of this plant, one with white flowers, another very hairy all over.

103. *Phlox amplexicaulis*. Raf. Caulibus gracilibus pubescentibus, teretibus assurgentibus, foliis amplexicaulis lineari subulatis rigidis ; panicula confertiflora, calyx striatus pilosus, dentibus ovatis acuminatis, corolla tubo filiformi, laciniis spatulatis. Raf.—Manulea ! Rob. 379. Another mistake of Robin ; this plant is a real *Phlox*, akin to *P. pilosa*. Stems a foot high, flowers lilac on short peduncles, blossoming in April.

ORDER III.—ACANTHI.

104. *Acanthus? rubens*. Raf. Foliis inermis molli-
bus, latis sinuatis, amplexicaulis. Raf.—Ac. mol-
lis. Rob. p. 380. This plant is certainly not the
A. mollis of Europe, I even suspect it is not an
Acanthus, no species of this genus being known to
grow in America ; it is perhaps a *Podicularis* ; but
as Robin does not describe it at length, I am un-
able to decide. The stem rises three or four feet,
and the flowers are pale red : it grows plentifully
on the banks of the Mississippi near New-Orleans.
There is a smaller variety, with the leaves still
more sinuated, and the flowers more distant.

- VI. N. G. NIBORA. Raf. Calyx 4 partitus persistens.
Corolla tubo curvo intus pilosus, limbo 4 fido

laciniis superiora latiora. Stamina 2 infra tubum corolla, antheris subsessilibus. Ovarium superum, stylus 1, stigma simplex. Capsula globosa sulcata quadrivalvis, unilocularis, polysperma, semina oblonga tenuis, axis centrale globosum affixa.—
 Obs. This new genus, which I have dedicated to Robin, by a transposition of the letters of his name, (there being already a genus *Robinia*,) does not belong to this order; but to the family *Gratiolina*, in the natural order *Chasmanthia*: it differs from *Gratiola* by the calyx and the capsul, which is similar to those of *Calceolaria*, *Pederota*, &c. but the *Nibora* has not a ringent corolla. Raf.

105. *Nibora aquatica*. Raf. Glaberrima, foliis oppositis, sessilibus, ovalis, acutiusculis subserratis; floribus axillaribus, solitaris, pedunculatis, bracteatis. Raf.—Acanthe des Marais. Rob. p. 381. Grows in swamps and in waters; the stems are thick, fleshy, a little branched, about a foot high: sepals of the calyx linear, corolla white: blossoms in March.

ORDER IV.—JASMINEA.

106. *Fraxinus discolor*. Raf. Foliis plerumque 7 phyllis, rachis tereti, petiolis sulcatis, foliolis ovatis, acuminatis, denticulatis, subtus tomentosis. Raf. Frene gras. Rob. p. 382. Perhaps one of the supposed varieties of *F. pubescens* or *nigra*. A large tree, over 60 feet; its wood is brittle and difficult to split, the folioles are very large, about

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eight inches long and three broad, the upper side is dark green, and contrasts with the woolly under side.

107. *Fraxinus undulata*. Raf. Foliis plerunque 7 phyllis, foliolis ovatis acuminatis, integris, undulatis, lucidis, subtus glabris. Raf.—Frene 2. Rob. p. 382. Nearly as large as the foregoing; its wood is better, more dry and elastic; it is employed for carts: the folioles are only four inches long and nearly two broad. The Frene 3. Rob. p. 382, is a variety only, of this species, differing by larger folioles, broader and less acuminated. I shall call it *var. latifolia*.
108. *Fraxinus lacera*. Raf. Foliis 3—5 phyllis, rachis filiformibus, foliolis glabris, ovatis, acutis, inequaliter dentato-laceris, lateralibus extus laceris, terminalibus subtrilobis. Raf.—Frene 4. Rob. p. 383. About 40 feet high, foliage more shady; bark white, smooth, wood very compact, very fit to make screws: leaves and branches opposite as in all the other species, branches slender, folioles light green, thin and small.
109. *Olea Americana*. L. Rob. p. 383. Fine tree of a conical shape, growing in swamps, leaves petiolated, thick, shining above, flowers polygamous; fruit ovate, nut wrinkled. Robin mentions a variety with smaller leaves.

ORDER V.—VITICES.

110. *Callicarpa Americana*. L. Rob. p. 384. Bushy shrub reaching over 12 feet, branches slender,

black grey, young branches brownish green, hairy and rough. It grows in the sands of the sea-shore near Pensacola, on the banks of the Mississippi, along the woods of Atakapas, on the red soil of the Red river, in the pine barrens, and on the high hills of Mobile.

111. *Lantana annua*. L? Rob. p. 385. Blossoms in summer; vulgar name *Caille eau* in Louisiana, from a belief that it coagulates water. A common plant, many creeping stems quadrangular, hairy; leaves opposite, ovate, acuminate, toothed, undulated, sinuated, the umbels become gradually thick spikes with bractees, the calyx is hairy and striated, stamina sessile. Is it really this specie? or even a *Lantana*? a variety is odoriferous.
112. *Verbena urticifolia*. L. Rob. p. 385.

ORDER VI.—LABIATA.

113. *Justicia*? *Chelionida*. Raf. Foliis oppositis sessilibus, lanceolatis, acutis, levis, subtus pallidis; floribus axillaribus pedunculatis subgeminatis labium superiore corolla dentatum. Raf.—*Amethystea*, Rob. p. 386. This plant cannot be an *Amethystea* since the description of the corolla does not agree; it is probably a *Justicia*. The roots are creeping, stems less than a foot, angular and geniculated: the flowers are only three lines in diameter, the calyx is five parted, with long narrow divisions; the corolla is white; but the inside of the lower lip is violet, with white veins

imitating a tree, this corolla is campanulated, the upper lip is narrow, upright, toothed and reflexed at the top, the lower lip is three times broader, horizontal, with three lobes nearly equal; a little reflexed at the top, the middle lobe a little larger. It grows in shady places.

114. *Monarda punctata*, L. Rob. p. 287.

115. ———— *citrodora* Raf. Foliis subsessilibus, cordato-ovatis, villosis; capitulis pedunculatis, multifloris, involucris hexaphyllis. Raf.—Monarde vulg. Citronelle. Rob. p. 387. Stems three feet high, with few branches, hairy; flowers white very numerous in each capitulum, seeds very small; the whole plant has an agreeable smell of citron; the leaves are used frequently as tea in Louisiana; they are stomachical, the dried flowers are strongly errhine; vulgar name *Citronelle*.

116. *Pycnanthemum ? alatum* Raf. Foliis oblongis, acutis, dentatis, subtus tomentosus, longe petiolatis, petiolis alatis, capitulis longe pedunculatis, involucris 13 phyllis, alternis longioribus. Raf.—Monarde bouton Rob. p. 388. Stems four feet high, four angular, grooved and branched, leaves green above, flowers white, unfolding gradually. Faintly aromatic and bitter; vulgar name *Herbe à bouton*; Robin owns it has four stamina; but says, it has all the other characters of *Monarda*: it is perhaps a *Hyptis*.

117. *Pycnanthemum rosmarinoides* Raf. Caule suffruticoso, foliis sessilibus, linearibus, integris, acutis, glabris, capitulis pedunculatis globosis. involu-

cratis. Raf.—*Romarin!* nain Rob. p. 388. Its shrubby stems rise only one foot and a half, they are upright and branched; the flowers are white, and unfold gradually; the upper lip of the corolla is slightly bifid, the lower trilobe, the middle lobe longer; the stamina and styles are projecting. It has the smell of *Rosmarinus officinalis*, but sweeter and weaker; this and its shrubby stem are the only similarity with that genus.

118. *Salvia ciliata* Raf. Caule obtusangulo pubescens, foliis petiolatis, oblongis, integris, ciliatis: floribus racemosis verticillatis, calyx pubescens, ciliatus, corolla extus pubescens. Raf. Stems four feet high and grooved, calyx bilabiated, upper lip broader, corolla of a fine blue, upper lip concave upright, lower lip larger trilobe, reflexed, middle lobe notched and veined of white at the base, tube of the corolla compressed. It has much affinity with *S. azurea* Lam. Pursh.
119. *Collinsonia verticillaris* Raf. Caule villosa, foliis ovalis subintegris, floribus tetrandris paucicillatis verticillatis. Raf.—*C. Scabriuscula* Rob. p. 390. Grows near woods, stem scarcely two feet, flowers yellowish. The variety of *C. Scabra* found by Mr. Lyons with four stamens and larger flowers (see the Flora of Pursh) belongs perhaps to this species, which together with *C. Anisata* might properly form a sub-genus (or a new genus) having four fertile stamina, to which the name of *Hypogon* might be given.

120. *Teucrium undulatum*. Raf. Repens, caulibus erectis, velutinis; foliis omnibus petiolatis, oblongis, serratis, acutis, undulatis, supra velutinis, subtus cano tomentosis; floribus spicatis, verticillatis. Raf.—Germandrée. Rob. p. 300. Many stems, two or three feet high, angular; leaves three inches long, approximated. Grows near woods; flowers white diluted with red.
121. *Mentha? farinosa* Raf. Foliis sessilibus ovatis, acutis, interdum subdentatis, imis subtus canis, summis utrinque canis, verticillis multifloris, staminibus exertis remotis. Raf.—Menthe panachée Rob. p. 380. Stems bushy, brown, three or four feet high, leaves soft; the middle ones are partly white above, which give the whole plant a singular appearance of being sprinkled with flour; flowers nearly all terminal, calyx five-toothed, nearly labiated; the three upper divisions approximated and concave: corolla large, white, slightly dotted of purple. Blossoms in August and September. The whole plant is very odoriferous, and it has a taste nearly similar to *M. piperita*; however, the habit of the plant and the flowers, make me doubtful of its being a real *Mentha*; it might be a *Stachys*? It has much likeness with *Stachys feniculum* of Pursh.
122. *Lamium amplexicaule* L.—*L. purpureum* Rob. p. 391.
123. *Stachys crenata* Raf. Caulibus assurgens, angulosis, cano tomentosis: foliis oblongis, crenatis tomentosis, floribus verticillatis, dentibus caly-

cinis spinulosis. Raf.—Stachide laineuse et à feuilles oblongues. Rob. p. 392. Stems two feet high ; flowers purplish.

124. *Marrubium vulgare* ? L. Rob. p. 392. Stems flexuous, square, two or three feet high ; leaves petiolated, wide, undulated and unequally crenated ; flowers white, calyx with ten furrows. Common on the banks of the Mississippi. Is it a N. Sp. ? In that case, the name of *M. flexuosum* might be given to it.
125. *Dracocephalum nervosum*. Raf. Caule ramoso, fistuloso, foliis cordato-lanceolatis, acutis, dentatis, scabris, nervosis, floribus verticillatis spicatis, dentibus calycinis aristatis. Raf.—Dracocephale 1. and 2. Rob. p. 393. Stem two or three feet square ; the second species of Robin differs only by the upper lip of the corolla being notched.
126. *Dracocephalum denticulatum* ? Wild.—Dracocephale 3. Rob. p. 393. Stem a foot and one half, square, furrowed, angles spinescent, leaves nearly sessile, lanceolate, denticulated, flowers sessile, verticillated and lilac, blossoming in April, calyx with five long mucronated teeth.
127. *Scutellaria deltoidea* Raf. Caulibus simpliciusculis, pubescentibus ; foliis petiolatis, cordato-deltoides, crenatis, undulatis, tomentosis, subtus canis. Raf.—Toque 1. Rob. p. 393. Blossoms in April, has large flowers : stems one or two feet, upright, square, striated, large leaves.

128. *Scutellaria hastata* Raf. Pubescens, foliis petiolatis, imis hastatis, dentatis, summis ovalis integris; floribus axillaribus solitaris, pedunculatis. Raf.—Toque 2. Rob. p. 894. Blossoms in April and May; stem rising only a foot, corolla light violet, lower lip white at the base.

ORDER VII.—SCROPHULARIÆ.

129. *Scrophularia hastata* Raf. Foliis oppositis longe petiolatis, oblongis, hastatis, serratis, canescens, subtus canis, floribus paniculatis, laxis. Raf.—Scr. marilandica? Rob. p. 395. Stem five or six feet, square, striated.
130. *Antirrhinum canadense*? L.—Linaire Rob. p. 396. Stems round, smooth, leaves filiform, sessile, thick, the lower ones ternated, flowers in raceme, distant.
131. *Mimulus pteropus* Raf. Caule ramoso, foliis semi-amplexicaulis, solitaris, rigidis, alatis Raf.—*M. alatus* Rob. p. 396. This plant is not the *M. alatus* which has winged stems and sessile flowers. Stem smooth, purplish, two or three feet high.

ORDER VIII.—SOLANÆÆ.

132. *Verbascum thapsus* L. Rob. p. 397. Common.
133. *Nicotiana tabacum* L. cultivated.
134. *Datura stramonium* L. Rob. p. 397. Common, especially near New Orleans.

135. *Physalis pensylvanica* L. Rob. p. 398. Stem branched, one foot, leaves petiolated with small teeth, berries small, red.
136. *Physalis obscura* Michx.—Phys. 2. Rob. p. 397. Stems procumbent, flowers with brown spots; berries oblong violet.
137. *Solanum ludovicianum* Raf. Ramis diffusis, foliis longe petiolatis, ovatis, acuminatis, integris, subtus tomentosus, baccis racemosis, pisiformis, nigris. Raf.—Morelle 1. Rob. p. 398. Large plant three or four feet high.
138. *Solanum mammosum* L. Rob. p. 398. Common along the Mississippi; blossoms from April to September. Stem two or three feet high, with few round branches; flowers white or bluish; fruit yellow, reckoned a poison, interior glutinous.

ORDER IX.—BORRAGINES.

139. *Heliotropium indicum* L.—Heliotrope des marais Rob. p. 399. Two feet high, branches thick furrowed, leaves large, oval, on long petiols; spike blue; blossoms in summer.

ORDER X.—CONVOLVULI.

140. *Calystegia villosa* Raf. Volubilis, villosa, foliis hastatis, acuminatis, floribus axillaribus solitaris, stamina corolla longitudine. Raf.—Liseron à fleurs blanches Rob. p. 400. Flowers white.

141. *Calystegia matabilis* Raf. Volubilis hirsutissima ; bracteis acuminatis, sepalis calycinis fiiiformis hirsutissimis Raf.—Liseron blanc à limbe bleu Rob. p. 401. Corolla white below, blue above, becoming lilac after the anthesis. Robin does not describe the leaves, nor the inflorescence.
142. *Convolvulus nervosus* Raf. Rigidus, procumbens, petiolatis, cordatis ; pedunculis axillaribus bifloris, sepalis calycinis carnosis, nervosis. Raf.—Liseron blanc à fond pourpre Rob. p. 400. Stem red, flowers white with a violet purple bottom, filaments inserted at the base of the corolla. Perhaps an *Ipomea*.
143. *Convolvulus capitatus* Raf. Caule volubile, ramoso scabro ; foliis cordatis, mollibus ; floribus pedunculatis, capitatis, bracteatis, bracteis inequalibus calycibusque acuminatis pilosis. Raf.—Liseron ombellifere à fleurs bleus Rob. p. 401. Branches brownish, pubescent, numerous, peduncles of the flowers cirrhiform ; flowers small blue, white with five bents, looking like a star ; they unfold themselves gradually. It is a real *Convolvulus* with five unequal stamina, white anthers, stigma bipartite white setting across, capsul round with two cells, and four seeds angular on one side. The hairy bracteas and calyx take after maturity the appearance of a tuft. This specie has much likeness with the *C. cauariense* L.
144. *Echites tomentosa* Raf. Fruticosa, volubilis, foliis oppositis, ovatis, integris, subtus tomentosis ;

floribus racemosis, calyx angulatus, dentibus acuminatis Raf.—Liseron ligneux Rob. p. 402. Shrubby vine; bark yellow brown; leaves deep green above; corolla yellow, swelled above the calyx. The whole plant affords a glutinous milk; it blossoms in April. It is a real *Echites*, and not a *Convolvulus*.

145. *Ipomea avicularis* Raf. Volubilis, cordatis, trilobis, longe petiolatis, lobis acutis; floribus solitaris? sepalis calicinalis, capsulis monocularis trispermis Raf.—*Ip. hederifolia* Rob. p. 402. Stems slender, round, forming a shady vine; flowers white, rather small, stamina inserted at the base of the corolla, stigma elliptic entire, capsul round, seeds black angular interiorly, white and mealy inside; they float in winter on the rivers, and are greedily eaten by water fowls, who fatten on this food. This useful vine grows on the banks of rivers, and blossoms in September and October. It does not appear to be the *I. hederifolia* of South America, as Robin thinks: it may form a section in the genus *Ipomea* by its capsul one celled, which may be called *Ornithosperma*.

ORDER XI.—POLEMONIÆ.

146. *Phlox carolina* L. Rob. p. 404.
 147. ——— *uniflora* Raf. Foliis ovatis acutis scabris,
 floribus solitaris Raf.—*Phlox* 2, Rob. p. 404.
 Stems only one foot high, flowers light red.

ORDER XII.—BIGNONIE.

- VII. N. G. *DYSOSMON* Raf. Calyx urceolatus 5 dentatus, basi biglandulosus bibracteatus, corolla tubo apice inflato, limbus patens plicatus unilabiatus, labio inferiore; stamina 4 didynama, stylo stigmatoque simplex. Capsula tetragona, quadrilocularis, bivalvis, polysperma.—Obs. This genus belongs to the natural family *Sesamia*, along with the genera *Sesamum*, *Mirtynia*, *Cranioilaria*, &c. it has also some affinity with *Acanthus*, but none with *Chelone*, to which Robin joins it. The name is derived from an old Greek name, for some species of *Teucrium*. Raf.
148. *Dysosmon amœnum* Raf. Pubescens, foliis oppositis, petiolatis, oblongis, acuminatis, undulatis, inequaliter dentatis, subtus tomentosis, imis trifoliatis, floribus axillaribus subsessilibus, calyx corollisque extus pubescens. Raf.—Grande Gallane ou Chelone Rob. p. 405. Fine plant, rising six or seven feet on strong grooved stems, leaves with round petiols, lateral folioles of the lower leaves smaller; great many flowers, with two yellow glands at the base of the calyx, as in *Sesamum*, covered by a bractea: corolla an inch long, first greenish, next white. The whole plant has an unpleasant smell.
- VIII. N. G. *PAGESIA* Raf. Calyx 5 partitus, inequalibus; corolla tubo apice inflato, limbo patens bilabiatus, labium superius reflexum planum amar-

- ginatum, inferius trilobo. Stamina 4 didynama; stylo stigmatoque simplex: capsula bilocularis bivalvis polysperma.—Obs. This genus differs from the *Gerardia* by its irregular and deep cleft calyx, labiated corolla, &c. and by the first and last characters from *Seymeria* of Pursh and *Dasanthera* Raf. (*Gerardia fruticosa*, Pursh.) The *Gerardia cuneifolia* of Pursh, may belong to this genus, or to *Dasanthera*. I have dedicated it to Pages, a traveller round the world, and to both polar regions, who visited Louisiana, and who has noticed many natural objects. Raf.
149. *Pagesia leucantha* Raf. Caulibus debilibus quadrangulis ramosis; foliis oppositis, sessilibus, ovali oblongis, serrulatis, glabris, axillis foliosis; floribus racemosis, longe pedunculatis, lacinis calycinis striatis, superiora majora. Raf.—Chelone 2. Rob. p. 406. Many weak stems, bent and rising over one foot, two small leaves on each side of the axilla of the leaves, corolla white, capsul oval.
150. *Tecoma radicans* Juss.—Bignone vulg. herbe a puce Rob. p. 409. A vine rising over 40 and 50 feet, covering whole trees; bark whitish and scaly, young branches smooth and green, flowers dark aurora, calyx thick and coloured, five toothed.
151. *Bignonia capreolata* L.—Bignone toujours verte Rob. p. 407. A very large vine, bark grey, leaves firm and shining, with purplish nerves underneath; flowers blossoming in February, axillar pedunculated, as many as four together, calyx

- round entire, corolla scarlet, orange inside on the edge.
152. *Bignonia crucigera* L.—Petite Bignone Rob. p. 408. A small vine 10 or 12 feet, leaves glaucous underneath, flowers bracteated.
153. *Gerardia leucanthera* Raf. Caule ramoso virgato quadrangulo, foliis oppositis sessilibus, linearibus integris, uninervis; pedunculis axillaribus filiformis rigidis foliis brevioribus, staminibus binis brevissimis. Raf.—Bignone cocarde Rob. p. 409. Stems three feet; calyx small five toothed, corolla light purple, two long hairy stamina of the length of the style, bearing white bilobed anthers, forming a cockade with the oblong stigma on the upper lip of the corolla. It is not a *Bignonia*.
154. *Ipomea quamoclit* L.—Tombekbe Rob. p. 409. Found on the river Tombekbe in Florida, an elegant vine rising 15 to 20 feet, leaves pinnated pectinated, flowers scarlet, calyx fleshy with five unequal and scarious laciniæ, corolla with flat starry limb, stigma globular white; as well as the anthers and exerted.

ORDER XIII.—GENTIANEA.

155. *Sabbatia angularis* Pursh. *Chironia angularis* Wild.—Centaurelle Rose Rob. p. 410. Used also in Louisiana against fevers.

ORDER XIV.—APOCINEÆ.

156. *Hydrolia verticillata* Raf. Caule fruticoso spinoso canescens; foliis verticillatis subsessilis, ovali oblongis, acutis, integris nervosis; floribus subcorymbosis. Raf.—Apocinée épineuse Rob. p. 411. Small shrub growing in swamps, stem crooked, spines axillar, becoming branches towards the top of the plant; flowers lateral and terminal, of a fine violet blue, pedunculated, about an inch diameter, smelling like *Cyanus*: calyx hairy with five subulated teeth, divisions of the corolla ovate acute, stamina violet, anthers bilobed striped of yellow, the two styles are horn-shaped, white and hairy at the base, smooth and violet at the top, stigmas simple; capsul round bivalve, bilocular, partition parallel with the valves, and bearing on each side a large receptacle.
157. *Asclepias revoluta* Raf. Pilosa, foliis oppositis, subsessilis, linearibus, acutis, undulatis, margine revolutato cillato; umbellis bracteatis, corolla reflexa, corniculis exertis incurvis Raf.—Asclepiade 1. Rob. p. 413. Stem three or four feet, leaves with the ramifications of the nerves flexuose, a few ombels of orange flowers.
158. *Asclepias? procumbens* Raf. Caule procumbens, foliis crassis.....floribus quinque-glandulosis, auriculis corniculisque nullis Raf.—Asclepias 2. Rob. p. 413. *Herbe à la Houatte* vulgarly, pro-

ducing a silky down, flowers reddish. This specie, (unless it is an *Apocynum*,) must form along with *A. pedicellata* and *A. viridis* of Walter, a sub-genus (or new genus) to which I propose to give the name of *Anthanotis*.

159. *Asclepias parviflora* Wild. *Asclepias* 3. Rob. p. 414. Grows near the waters, stem slender, frutescent round, reddish at the knobs, leaves three or four inches long; flowers white, each ombel of about 20, faintly coloured of rose, similar but smaller than those of *A. revoluta*.
160. *Asclepias verticillata* A.—L. à fenilles de Romarin Rob. p. 414. Every whorl of four or six leaves petiolated with the margin revolute.
161. *Asclepias serpentaria* Raf. Caule erecto simplex, foliis lanceolatis acutis glabris, umbellis laterali-bus, corollis reflexis, auriculis discolor Raf.—*Asclepiade à cornets pourpres* Rob. p. 415. A fine species, growing near waters, stem low, flowers with orange corolla and purple nectaries. The Indians have communicated to the creoles of Louisiana the knowledge of employing it against the bite of venomous snakes.
162. *Spigelia marilandica* L.—*Ophioxylon* Rob. p. 415. Leaves ciliated, corolla scarlet outside, yellow inside. Blossoms from May to September: vulgarly *Serpentine*.
163. *Gelsemium sempervirens* Juss. Rob. p. 415.

ORDER XV.—SAPOTÆ.

164. *Bumelia chrysophylloides* ? Pers. Wild.—*Sideroxylum tenax*. Rob. p. 416. Shrub 20 feet high with flexible branches and short spines, leaves fasciculated ovate lanceolate, silky and silvery underneath afterwards gilt; flowers small. By the shape of the leaf it should be *B. lanuginosa* Pers.
165. *Chrysophyllum ludovicianum* Raf. Spinosum, foliis oblongo-lanceolatis acutis, subtus sericeis, floribus fasciculatis axillaribus. Raf.—*Chrysophyllum glabrum* Rob. p. 416. It is not that species, which has smooth leaves underneath and grows in the West-Indies. This genus had not yet been found in North-America. A shrub eight or ten feet high, flowers small greenish, calyx five parted, a sessile stigma, berry globular, seeds compressed.



CLASS IX.—D. MONOPETALES PERIGYNES.

ORDER I.—GUIACANÆ.

166. *Diospiros virginiana* L.—*D. guiacana* Rob. p. 417. In shady and even in sandy soils, in Louisiana and Florida.
167. *Styrax glabrum*. Cavan. Pursh. *St. levigatum*.

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Wild.—*St. americanum* Rob. p. 419. A shrub twelve or fifteen feet high, grows near water, leaves petiolate ovate; flowers white, calyx five toothed, tube of the corolla short.

168. *Hopea tinctoria* L. Rob. p. 419.

ORDER II.—RHODOBENDRA.

169. *Kalmia latifolia* L. Rob. p. 419.

170. ——— *angustifolia* L.—Rob. p. 420.

ORDER III.—ERICÆ.

IX. N. G. *DUPRATZIA*. Raf. Calix tubulatus striatus 6 dentatus persistens, Corolla infundibuliformis, tubus calice longitudine, limbus 6 fidus, laciniis ovatis: Stamina 6? Stylus 1? Capsula.....
Obs. Robin describes only the calyx and corolla of this plant, and by omitting the remainder, leaves me doubtful as to its natural order; but by the habit it appears to have little affinity with the American genera of this order: I therefore suspect it to belong to the *Gentiana*, and it has a real affinity with some species of *Sabbattia*; but appears to be a distinct genus by the different shape of the calyx. It might also be akin to *Phlox*. I have named it after Dupratz, who has wrote on the natural history of Louisiana.
 Raf.

171. *Dupratzia scoparia* Raf. Ramis fastigiatis virgatis quadrangulis, angulis alatis, foliis sensilibus

linearibus glabris adpressis, floribus spicatis verticillatis. Raf.—Balayeuse Rob. p. 420. An annual plant, rising three or four feet, the branches are long slender, forming a thick brush, yellowish; flowers terminal; numerous, sessile forming a handsome violet spike: the corolla is light violet, each division with a red line.

172. *Arbutus obtusifolius* Raf. Arborescens, foliis petiolatis ellipticis, obtusis, integris, lucidis margine revolutis; racemis terminalibus, secundis, paucifloris Raf.—*Arbutus* Rob. p. 421. Shrub about twelve feet high, leaves at the end of the branches, racemes of ten or twelve flowers, calyx urceolated five-toothed, corolla white ovate angular, anthers hairy laying on the style, stigma elliptic. Grows in shady woods. It has some affinity with *A. laurifolius* by the inflorescence and with *A. menziesii* by the leaves; however, as Robin does not say that the fruit is a berry, it might be an *Andromeda* instead of an *Arbutus*, but yet a new species.

ORDER IV.—CAMPANULACE.

173. *Campanula angulata* Raf. Villosa, Caule procumbens angulatus ramosus; foliis radicalibus elongatis oblongis crenatis-ciliatis, caulinis semi-amplexicaulis ovatis remotis; floribus axillaribus sessilibus. Raf.—*Campanula*. Rob. p. 422. Leaves with all the nerves beginning at the base, calyx and corolla three to five cleft, three to

five stamina inserted on the corolla, filaments broad at the base, upper part divergent, stigma trilobed; capsul three to five celled, lengthened, probably belonging to the sub-genus *Legouzia* along with *C. amplexicaulis*.

- X. N. G. *ADNARIA* Raf. Calyx adhaerens, urceolatus 5 fidus, corolla tubo brevi, limbus 5 partitus reflexus; stamina 10, disco glanduloso inserta, filamentis conniventis, anthera intus adnatæ muticæ; stylo stigmatoque simplex: Bacca 5 locularis?—Obs. This new genus does not belong to this order, but to the order *Vaccinia*, being intermediary between the genera *Oxycoccus* and *Vaccinium*. Its name is derived from the remarkable insertion of the anthers.
174. *Adnaria odorata* Raf. Fruticosum, foliis petiolatis oblongis glabris, sub-dentatis, floribus 2-3, breviter pedunculatis, lacinis corollinis lanceolatis acuminatis. Raf.—Campanula 2. Rob. p. 422. A shrub rising about nine feet and growing in swamps, blossoming in April; bark brown, branches slender, leaves alternate with a few teeth, flowers white, two or three together, with a faint smell, anthers yellow.

CLASS X.—D. MONOPETALES EPIGYNES
SYNANTHERES.

ORDER I.—CICHORACE

175. *Krigia? oppositifolia* Raf. Caulibus cespitosis, foliis oppositis integris, angustis, radicalibus sinuatis, foliolis perianthus patulis. Raf.—Anonyme Rob. p. 324. A small smooth plant of a light green, only four inches high, perianth with nine equal divisions, after the anthesis they become connivent, and include the oblong seeds; without down! By the opposite stem leaves, this plant differs in habit from *Krigia*, and indeed from the whole order. If the seeds are naked it may form a new genus under the name of *Serinia*. Raf.
176. *Prenanthes? glauca* Raf. Caule ramoso, striato glauco, foliis sinuato-pinnatifidis, obtuse dentatis, glaucis supra scabris, foliolis calicularis filiformis Raf.—Chicorée usuelle Rob. p. 424. A species akin to *P. serpentaria* of Pursh; stem three feet high, flowers yellow, perianth polyphyllous: down feathery according to Robin, which might determine the formation of a new genus under the name of *Esopon*. Raf. This species is used in Louisiana in decoction instead of Chicory.
177. *Troximon bulbosum* Raf. Caule ramoso, foliis sinuatis dentatis, perianthus simplex, radicibus

- fibrosis bulbiferis* Raf.—*Leontodon bulbosum* Rob. p. 425. Robin says it resembles the preceding, but differs by the perianth without calicle and the simple down: bulbs white, small, hard and bitter.
178. *Lactuca elongata* Wild. Pursh.—Laitue à feuilles de Chene Rob. p. 426. Stem over seven feet high.
179. *Lactuca fistulosa* Raf. Foliis sessilibus, runcinatis, glabris, glaucis crassis, caule pedunculisque fistulosis Raf.—Laitue 2. Rob. p. 425. Two feet high, flowers large, numerous; the hogs are very fond of it; it is possessed of a medium quality between Lettice and Chicory. Grows at Atakapas.
180. *Troximon odoratum* Raf. Hispidum, ramis fastigiatis, foliis sessilibus ovato-oblongis acutis integris ciliatis scabris, floribus racemosis nudis, perianthis pilosis 8 partitis, sub 12 floris Raf.—Chicoracée fenouillette Rob. p. 425. Stems four feet high, round milky; leaves a little thick. flowers pale yellow, sweet-scented, ligules five-toothed, anthers and stigmas very projecting, deep yellow; seeds oblong compressed striated with a thick and long down. This species together with *Tr. virginicum*, *Tr. pallidum* and *Tr. bulbosum* will form the genus *Troximon*; the other species which are acaules and with an embriicated calyx, must form a peculiar genus which I shall call *Agoseris*. Raf. Found in woods.
181. *Sonchus macrophyllus* Wild?—Laitron Rob. p.

426. Stem six or seven feet high, hollow, striated glabrous large leaves unequally runcinated, flowers large blue on large peduncles, down sessile. This is perhaps a new species, it grows in woods.
182. *Traxinnon pallidum* Raf. Hispidum, foliis sessilibus ovato-oblongis acutis integris ciliatis crassis, floribus axillaribus pedunculatis adpressis, perianthis pilosis 8 partitis sub 12 floribus. Raf.—*Helmintia echioides* Rob. p. 426. This species scarcely differs from *Tr. odoratum*; but it grows in meadows, has inodorous whitish yellow flowers not forming a naked raceme. Every thing else similar.

ORDER II.—CYNAROCEPHALES.

- XI. G. ONOPRIX Raf. Perianthus ventricosus imbricatus caliculatus, caliculus parvus squamosus, squamis perianthis apice carinatis mucronatis plerumque spinosis. Phoranthus carnosus pilosus. Flosculis, tubulosis inequalibus quinquefidis, laciniis linearibus, interiora magis incisa, stigma simplex: pappus pilosus.—Obs. This genus which belongs to the family *Cynaridæ* having a division of the corolla more deeply cut, differs from *Cynara* and *Pternix* by the caliculate perianthe and simple down: some species of *Cnicus* or *Cirsium* may perhaps be found to belong to it; their habit is similar. The name was an ancient one for some species of *Carduus*. Raf.

183. *Onopix sericeus*. Raf. Caule ramoso striato, foliis angustis remote-pinnatifidis, subtus cano-sericeis, pinnulis oblongis apice spinosis; floribus solitaris, caliculis paucis filiformis, mucronis perianthi spinosis Raf.—*Atractylis* Rob. p. 427. Stem four feet high, white at the top, leafy; blossoms in September and October, flowers of a rose violet, the phoranthe of this plant tastes like that of Artichoke. There is a variety or akin species which blossoms in April and rises only two feet.
184. *Onopix intybaceus* Raf. Caule ramoso sulcato, foliis pinnatifidis spinosis utrinque glabris, floribus solitaris, caliculis imbricatis, mucronis perianthi aristatis reflexis Raf.—*Chardon à feuilles de chicorée* Rob. p. 428. It rises over six feet, with many furrowed branches, the leaves are larger, broader, and thicker than in the foregoing species, which it resembles entirely in the fructification.
185. *Eryngium tuberosum* Raf. Radice tuberosa, foliis angustis indivisis serrato spinosis enervis, caulinis amplexicaulibus; floribus corymbosis, perianthus spinosus octophyllus Raf.—*Chardon tubéreux* Rob. p. 429. This plant is a real *Eryngium*, stem round, a little knobby, one or two feet high, the radical leaves are thick, striated and elongated. Perianthe plane, phoranthe globular, with acute and concave scales, calyx with five acuminate divisions; seeds compressed winged.

A variety rises four feet, has radical leaves a foot long, and only four flowers.

176. *Liatris linaria* Raf. Caule simplici sulcato pubescens, foliis adpresis lineari-lanceolatis imbricatis, spica densa, perianthis oblongis quinquefloris, squamis ciliatis acutis squarrosis Raf.—*Cynarocephale élégante sans épines* Rob. p. 429. Stem two or three feet high, blossoms in August, spike thick, six or eight inches long, flowers purple, two stigmas, seeds striated, acute, compressed; akin to *L. pycnostachya*.
177. *Marshallia bulbosa* R. Bulbosa scabra, caulibus simplicibus striatis, foliis lanceolatis acuminatis ciliatis, perianthus oblongus, squamis acutis, externis coloratis Raf.—*Sarrette bulbeuse* Rob. p. 430. Many stems rising two or three feet (uniflore?) bulb scarious hairy, corollas purple, swelled above, two stigmas, seeds oblong, tipped with scales, which makes it a real *Marshallia*.

ORDER III.—CORYMBIFERA.

178. *Cacalia pubescens* Raf. Caule pubescens, foliis oppositis, longe petiolatis hastatis puberulis dentatis, dentibus elongatis, perianthis sub 12 floris Raf.—*Cacalia 1.* Rob. p. 432. This is perhaps a variety of *C. suaveolens*, which however is a smooth plant, or an *Eupatorium*. Stems four or five feet high, round, bushy, the leaves are covered with a fine down, flowers white, sweet scented.

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189. *Eupatorium perfoliatum* L.—*Cacalia* 2. Rob. p. 432.
190. *Eupatorium violaceum* Raf. Foliis oppositis petiolatis cordatis dentatis undulatis hirsutis, floribus pedunculatis, pedunculis squamosis Raf. —*Cacalia violette à feuilles d'Ortie* Rob. p. 432. Many small round and weak stems, branches fastigiated, flowers small, violet, the stigmas of the same colour. A fine plant, growing in shady and weedy places, blossoms in October.
191. *Mikania angulosa* Raf. Caule scandente, ramis angulosis sulcatis, foliis oppositis petiolatis deltoide-reniformis obtusis tenuis, obtuse-dentatis, corymbis axillaribus, perianthis tetraphyllis caliculatis quadrifloris Raf.—*Cacalia* 4. Rob. p. 433. Very similar to *Mikania scandens*, rising 15 to 20 feet, leaves thin and feeling soft, about 20 flowers in each corymb of a yellowish white, two small folioles for calicule, anthers brown. The species of *Mikania* with caliculate perianthe and simple down, like this, scarcely differ from *Cacalia*. This blossoms in September and October.
192. *Eupatorium crassifolium* Raf. Caule ramoso pubescens, foliis oppositis sessilibus linearibus crassis, perianthis quinquefloris Raf.—*Eupat.* 1. Rob. p. 433. Is it a variety of *E. linearifolium* Wild? Stem two or three feet high, round, flowers white, very small, blossoming in August; vulgar name *Herbe à chevreuil*, reckoned good for wounds.
193. *Eupatorium altissimum* L. Var. *longifolium*.—Rob. p. 433. Smaller, with longer leaves, perianthe five angular, five leaved, five flowered.

- XII. G. GYNEMA Raf. Perianthus cylindricus imbricatus, foliolis scariosis coloratis. Flosculis feminis numerosis filiformis 2—3 dentatis, hermaphroditis centralis tubulosis quinquefidis. Phoranthus nudum, pappus pilosus.—Obs. This genus is intermediary between *Conyza*, *Disynanthus* Raf. and *Argyrocome*, it has the perianthe of the latter, the shape of flowers of the second, and they are nearly disposed as in the first. The name means *filiform female* flowers. Many species of *Conyza* may belong to it, particularly among the sweet scented ones. Raf.
194. *Gynema balsamica* Raf. Caule pubescens, foliis petiolatis decurrentibus, ovato oblongis, integris, viscosis; floribus coarctatis, squamis perianthi subrotundis Raf.—Gnafale lilas ou Baume des Sauvages Rob. p. 433. Akin to *Conyza camphorata*: a fine plant, stem rising three or four feet, round, leaves alternate, deep green, large; flowers large, of a fine lilac colour, female floscules very numerous, surrounding seven or eight hermaphrodite central floscules. It blossoms in September and October: the whole has a strong aromatic smell, which becomes sweet sometimes after touching it, it is stomachic and sudorific, the Indians deem it a powerful remedy.
195. *Gynema? argentea* Raf. Foliis sericeo-argenteis floribus albis Raf.—Gnafale 2. Rob. p. 434. Robin does not describe this elegant plant; he merely says, that the stem rises three or four feet, the leaves are silvery, the flowers small and white,

the whole plant has a fragrant smell, and it is employed in infusion like tea. It may be a real *Conyza* or an *Argyrocome*.

196. *Gynema*? *parviflora* Raf. Caule procumbens, foliis canis, floribus minutissimis. Raf.—Gaafale 3. Rob. p. 434. Robin only says of this species that it has small trailing stems; leaves and flowers white, these exceedingly small, growing in fields and open wild grounds.

197. *Chrysocoma purpurea* Raf. Herbacea, foliis sessilibus oblongis acutis denticulatis glabris, floribus pedunculatis, corymbis laxis. Raf.—Grande Chrysocome Rob. p. 434. Stem six or seven feet high, leaves thickly scattered, of a dark green, flowers purplish, floscules five cleft. As Robin does not describe the fructification, it may be an *Eupatorium* instead of a *Chrysocoma*.

198. *Chrysocoma heterophylla* Raf. Fruticosa, foliis petiolatis uninervis coriaceis crassis lucidis acutis imis oblongo-rhomboidalis apice remote dentatis, summis oblongo-linearibus integris. Raf.—Chrysocome 2. Rob. p. 435. A shrub 15 feet high, wood brittle knobby, bark tawny, young branches green, flowers straw colour, perianthe with about 20 flowers, short styles and seeds. Perhaps a species of *Baccharis*?

XIII. N. G. ARNOGLOSSUM Raf. Perianthus periphylus oblongus denudatus coloratus pentagonus 5 florus, flosculis hermaphroditis, limbus infatus 5 fidus reflexus, staminibus styloque bifidus exertis; semina oblonga, pappus sessilis pilosus.—This

genus differs from *Mikania* by the shape of the perianthe and corolla. Robin himself declares it ought to be a new genus. The name was an ancient one for some species of *Plantago*. Raf.

199. *Arnoglossum plantagineum* Raf. Caule glabro canescens sulcato, foliis radicalibus ovatis obtusis nervosis, caulinis remotis, corymbis gracilibus Raf.—Chrysocome à feuilles de Plaintain Rob. p. 435. Stem three or four feet high, smooth white, anthers brown, styles yellow: perennial, growing along the woods, blossoming in March.
- XIV. N. G. ERECTITES Raf. Perianthus carnosus periphyllus (vel polyphyllus foliolis conniventis) deudatus, sulcatus, multidentatus multiflorus: flosculis hermaphroditis 5 dentatis; pappus sessilis pilosus.—Obs. Differing from *Senecio* by the perianthe neither caliculate nor sphacelate. The name was one of those given by Dioscorides to the *Senecio*. Raf.
200. *Erechtites prealta* Raf. Caule stricto sulcato pubescens, foliis alternis sessilibus basi attenuatis, oblongis, inequaliter dentatis, acuminatis glabris, subtus nervis pubescentibus; floribus corymbosis pedunculatis Raf.—Anonyme Rob. p. 435. Fine plant, stem rising over seven feet, strong, upright, large leaves over a foot long, flowers large white; it grows near woods and blossoms in September. It has some similarity of habit, &c. with *Senecio hieracifolius* L.
201. *Erigeron hyemale* Raf.—Hirsutum, caule striato,

- foliis oblongis inequaliter remote dentato-sinuatis, radicalibus sessilibus patulis, caulinis semiamplexicaulibus ; perianthis hemisphericis, foliolis apice scariosis albis, ligulis disco brevioribus Raf.—Vergerolle 1. Rob. p. 436. Very similar to *E. philadelphicum*, but differing in the perianthe; which is similar to that of *Chrysanthemum*, and the flowers, which have a yellow disk and white linear rays ; they blossom in February : Stem only one foot high and corymbose, floscules five-toothed.
202. *Erigeron ramosum* Raf. Pubescens; caule paniculato-ramoso, tereti, foliis sessilibus linearibus : floribus paniculatis. Raf.—Vergerolle 2. à rayon blanc, disque grisatre Rob. p. 437. Similar to *E. divaricatum* Mx. ; stem three or four feet high, branches numerous, leaves alternate short, flowers with white rays and grey disk, half an inch in diameter, perianthe with unequal subulate folioles ; it blossoms in October, and bears a multitude of flowers.
203. *Aster paniculatus* Wild?—Aster 1 Rob. p. 437. Stem pubescent round, branches slender and weak, disk yellow or brown : grows among bushes.
204. Aster.....A. 2. Rob. p. 447. Habit of the foregoing, leaves sessile, narrow, rough, flowers larger. This species and the two following not being described by Robin, cannot be ascertained ; they may be known or new : observers will decide.

205. Aster.....A. 3. Rob. 437. This differs by smaller smooth leaves, and a pyramidal disk.
206. Aster.....A. 4. Rob. p. 437. Small, pubescent leaves, flowers of a lilac colour.
207. *Aster pratense* Raf. Caule frutescens paniculatus foliolatus, foliis semiamplexicaulibus oblongis integris uninervis Raf.—A. 5. à grandes fleurs Rob. p. 437. Stem round stiff, flowers over one inch in diameter, terminal, with violet rays and yellow disk; it blossoms in October and grows in meadows.
208. *Solidago canadensis* L? Solid. 1. Rob. p. 438. A fine plant growing in meadows and rising over six feet, leaves trinerved rough, panicle handsome conical, racemes spreading and with unilateral flowers: it blossoms in October.
209. *Solidago*....., S. 2. Rob. p. 438. This second species is not described by Robin, he only says it is lower and not so handsome as the foregoing, blossoming together.
210. *Jacobeia opuntifolia* Raf. Caule fistuloso, foliis obovatis carnosis integris, floribus corymbosis radiatis Raf.—*Senecio radié à feuilles de raquette* Rob. p. 438. A fine plant growing along the Mississippi, under trees, and blossoming in winter; stem three feet high; flowers large yellow. It belongs to the genus *Jacobeia*, differing by its radiated flowers from *Senecio*.
- XV. G. *MNESTREON* Raf. Perianthus periphyllus turbinateus quadrifidus, laciniis radiatis foliaceis radio longior: phoranthus nudum: synanthus radi-

atus, flosculis hermaphroditis quadrifidis tetrandris. Semina compressa alata membranacea, apice margine crasso coronata.—Obs. A singular genus, having a striking similarity with *Eclipta* L. *Cenia* Jussieu and *Bupthalmum* L. but different from either, and also from *Calendula*, to which Robin joins it. The name was an ancient one for some species of *Bupthalmum*. Raf.

211. *Mnesiteon Album* Raf. Scabrum, ramis diffusis, foliis (alternis?) linearibus integris, floribus geminatis. Raf.—*Calendula* 1. Rob, p. 439. Stem three or four feet high, leaves narrow with only one nerve: flowers small lateral and terminal, half an inch in diameter, entirely white both rays and disk, anthers grey, stigmas yellow; seeds oblong blackish, the upper margin deep green. It blossoms in June, the branches are juicy, and the juice becomes black as soon as it comes in contact with the air? This species has some analogy with *Bupthalmum angustifolium* of Pursh, which perhaps belongs here, and also with *Eclipta erecta* Wild. which is *Verberina alba* L.
212. *Mnesiteon album* var. *pumilum* Raf.—*Calendula* 2. Rob. p. 439. Only four or five inches high, blossoming in April; probably a distinct species to which the name of *M. pumilum* may be given.
213. *Mnesiteon luteum* Raf. Pubescens, ramis divaricatis teretibus, foliis oppositis serratis, floribus longe pedunculatis, discus conicus Raf.—*Calendula* 3. Rob. p. 439. This rises two or three feet and the flowers are entirely yellow. Strikingly different from *M. album*.

214. *Eclipta ciliata* Raf. Caule erecto tereti levis, foliis alternis sessilibus remotis linearibus glabris ciliatis crassis, perianthus conicus. Raf.—Radiée anonyme Rob. p. 449. Stem two or three feet high. Flowers terminal, less than one inch in diameter, rays white, disk yellow, perianthe with many rows of folioles. Seeds compressed notched, with a few small aristas. This plant blossoms in September; it has the smell of *Cicuta* and a very acrid taste, therefore must be deleterious.
215. *Artemisia dracunculus* L. Rob. p. 440.
216. ———— *amorpha* Raf. Foliis linearibus, perianthis oblongis, paucifloris, ligulis flosculis intermixtis.—A. 2. Rob. p. 440. Similar to the foregoing, having the same smell and an acrid taste, perianthe oblong instead of globular, and containing four or five small mixed flowers, some of which are five-toothed floscules, and some ligular floscules! This being so imperfectly described by Robin, might be the *A. cana* of Pursh, or the *A. integrifolia* of Willdenow, but it differs from either by the flowers which are not ovate, and the singular character of some floscules becoming ligular, makes it very remarkable.
217. *Galardia amara* Raf. Caule apice paniculato, ramis unifloris, foliis linearibus reflexis glabris, ligulis apice dilatatis tridentatis Raf.—*Anthemis* Rob. p. 440. This plant has not the habit of *Anthemis*, but rather of a *Galardia*; as Robin describes it imperfectly, it may, however, be either,

or even an *Helensium*. Stem rising one foot and an half, round and smooth, with many long leaves of a deep green. . . Perianthe small embri- cated with unequal leafy folioles, rays much longer, phoranthe spherical (seeds perhaps naked). The whole plant is odoriferous and intensely bitter, it gives an abominable bitter taste to the milk of the cows that feed upon it in summer, when the plant thrives and keeps green notwithstanding the greatest drought. It grows at Atakapas near roads and houses, but was brought there accidentally.

218. *Verbesina Siegesbeckia* Wild?—*Anthemis* vel *Verbesina* Rob. p. 441. Not described, common along the Mississippi, stem winged branched, two or three feet high, flowers yellow, odoriferous. It is errhinous.
219. *Helianthus procumbens* Raf. Scaber, caulibus procumbentibus subrepens, foliis oppositis peti- olatis ovalis dentatis; floribus axillaribus solitaris. Raf.—*Bupthalmum* Rob. p. 441. But certainly not of that genus, although the habit is a little different from *Helianthus*. Stems round with a rough pubescence, flowers yellow, blossoming all summer, perianthe oval embri- cated with unequal folioles, phoranthe conical, with coloured paleas, membranaceus and toothed. This is per- haps the *H. prostratus* of Willdenow.
220. *Polymnia macrophylla* Raf. Caule sulcato, foliis oppositis petiolatis, petiolis alatis amplexicaulis, sinuato-angulosis acutis supra scabris; radiis

abreviatis oblongis tridentatis Raf.—*Polymnia* Rob. p. 441. Stem over nine feet high, spotted of purple, leaves two feet long and nearly as broad, with five or seven large sinuated angles; flowers yellow pedunculated, exterior perianthe 4 phylle, interior 10 phylle, crown with 10 rays, 10 seeds oval, angular, size of a pea, covered by the folioles of the interior perianthe: 20 male central floscules, anthers brown. It grows among trees and blossoms in August.

221. *Bidens frondosa* L.—B. 1. Rob. p. 442. Stem brown angular branched, three or four feet high, interior perianthe scariose and coloured; seeds compressed with two hooked awls. It blossoms in October.

222. *Bidens bipinnata* L. Rob. p. 443. Stem blackish, rising four or five feet, branches slender and long, three or four neutral rays short and toothed, seeds forming a globular head with hooked awls, they are disseminated by the herbivorous animals to whose skin they cling; grows in woods.

223. *Verbesina virginica* L.—*V. alata* Rob. p. 443. Stem about seven feet high, round canescent rough, leaves rough above, tomentose underneath oblong acuminate; perianthe tomentose striated, folioles squarrose, four small white lacinated rays, anthers grey, (phoranche hairy!) Vulgar name, *Herbe à trois quarts*. The roots of this plant are a valuable sudorific and deparative, they are

- used in decoction; the Indians were those who discovered those properties.
224. *Verbesina coreopsis*, Mich?—*Verbes.* 2. Rob. p. 444. Also winged, with yellow flowers, two or three feet high; it possesses the qualities of the foregoing, but in a less degree.
225. *Coreopsis aurea* Wild?—*Coreopsis* 1. Rob. p. 444.
226. *Coreopsis angustifolia* Wild?—*C.* 2. Rob. p. 444.
227. *Coreopsis scabra* Raf. Ramis remotis elongatis subulatis, foliisque imis oppositis, summis alternis, foliis integris (lanceolatis?) scaberrimis: seminibus oblongis angulatis Raf.—*Coreopsis* 3. Rob. p. 444. About six feet high, leaves five inches long, flowers yellow, over two inches diameter, 12 to 15 rays; perhaps *C. acuta* of Pursh.
228. *Silphium perfoliatum* L. Rob. p. 445. A beautiful plant of which Robin gives an elegant description, and which he thinks may suggest the idea of a new order, or at least new ornaments, of architecture. Stem simple, rising over nine feet, angular-rhomboidal, leaves undulated acuminate.
229. *Helianthus giganteus* Wild?—*Soleil vivace* Rob. p. 447.
230. *Helianthus pubescens* Wild?—*H. doronicoide* Rob. p. 447.
231. *Helianthus multiflorus* Wild? Hel. 3. Rob. p. 447.
- XVI. N. G. HELIOPHTHALMUM Raf Perianthus planiusculus, laxis polyphyllus, foliolis inequalibus, externis elongatis angustatis: phoranthus planus

paleaceus, paleis scarideis coloratis duplice ordini dispositis, externe radiis circumdatis, interne disco. Radio aequalis 8 ovatis neutris, pappus marginatus dentatus.—Obs. This genus differs from *Rudbeckia* by the shape of the perianthe, disposition of the chaffs, flat phoranthe, &c. The name means *Sun's eye*. It is, however no wonder, that Robin united it with *Rudbeckia* since so many heterogeneous species have been united to it. All the species with naked seeds as *R. pinnata* &c. must form my genus *Obelistecca*, and those with a simple perianthe, such as *R. columnaris* Pursh, my genus *Ratibida*. Raf.

232. *Helioptalmum cicutefolium* Raf. Caule ramoso, sulcato tetragono, angulis obtusis; ramis unifloris, foliis oppositis bipinnatis, foliolis lanceolatis laciniatis Raf.—*Rudbeckia* à feuilles de cigue Rob. p. 447. A fine plant, with pretty leaves, and large flowers. Stem three or four feet, branches opposite, numerous, slender but stiff: flowers two inches in diameter, yellow, anthers brown.
233. *Galardia bicolor* Wild?—*Galardia* Rob. p. 447. Stem two or three feet high, branched diffuse, leaves oblong crenulated rough, disk brown, conical, seeds with eight chaffy scales, common on the delta of the Mississippi, in open fields. Perhaps a different species; but the colour of the flowers agree.
234. *Elephantopus flexuosus* Raf. Caule ramoso flexuoso, foliis radicalibus caulisque sessilibus ovatis denticulatis acutis, subtus tomentosis, mar-

gine revoluta Raf.—Fausse Radiée Rob. p. 448. Stem round, branches distant alternate flexuose, radical leaves over half a foot long, stem leaves smaller; glomerule triangular, with three branches, containing eight or nine flowers, perianthe quadrifid and quadriflore, corollas of a pale lilac colour, tubulate filiform five cleft, the five divisions all on one side, forming a sort of radiated flower with 20 rays; seeds striated downy. It blossoms in August.

CLASS XI.—D. MONOPETALES EPIGYNES
ELTRANDRES.

ORDER I.—DIPSACEA.

XVII. N. G. DIPTOTHECA Raf. Perianthus polyphyllus, foliolis imbricatis scariosis: phoranthus globosus paleaceus, paleis scariosis coloratis. Calyx adherens bifidus, corolla irregularis quadrifida, lacinia superiora breviora emarginata, inferiora longiora. Staminibus 2 brevis, tubo corolla insertis. Stylo stigmatouque simplex. Seminibus achenis ovatis monospermis.—Obs. This new genus is perfectly distinct, it has some affinity with *Allionia* and still more with *Morina* from which it only differs by the shape of the Perianthe, besides the whole habit. The name of

- Diottotheca*, was given by Vaillant to the *Morina* of Tournefort and Linnæus. Raf.
235. *Diottotheca repens* Raf. Caulibus repentibus pubescentibus tetragonis, foliis oppositis petiolatis ovalis dentatis scabris, floribus axillaribus. Raf. —Scâbiosa Rob. p. 449. A small plant only eight inches long, folioles of the perianthe large, chaffs violet, the divisions of the calyx broad at the base. It grows along the banks of the Mississippi in open grounds.
236. *Cephalanthus occidentalis* L.—Bois de Marais Rob. p. 450. Shrub 12 to 16 feet high, growing in swamps and near the waters, bark grey, wood brittle, leaves half a foot long, oval opposite petiolate shining above, whitish underneath, flowers sweet scented, white, corolla hairy inside. The leaves, flowers, and principally the bark of its roots, are frequently employed as a febrifuge, a cathartic, and incisive.

ORDER II.—RUBIACEA.

237. *Galium uniflorum* Michaux ?—G. 1. Rob. p. 452. A small species seven or eight inches high, whorls four or five leaved, leaves nearly linear, smooth, one nerved, stem angular only rough at the base, seeds smooth, blossoms in March and April. Perhaps a new species; but Robin does not describe the inflorescence. Flowers white.
238. *Galium longicaule* Raf. Caulibus longissimis angulatis, foliisque aculeatis, verticillis 6—8 phyllis,

- foliis obovatis acuminatis; floribus axillaribus terminalibusque, seminibus triapidis Raf.—Galium. 2. Rob. p. 452. Flowers white, blossoming in March and April. Perhaps the *G. brachiatum* of Parsh?
239. *Galium trifidum* Wild.—G. 3. Rob. p. 452.
240. *Diodia oblonga* Raf. Caulibus procumbentibus tetragonis geniculatis pubescentibus, foliis subsessilibus oblongis integris acutis glabris, floribus solitariis geminatisque, corollis intus barbatis Raf.—Crucianella 1. Rob. p. 452. Stem two or three feet long, flowers white, stamina projecting, style bifid, anthers oblong and transversal: corolla infundibuliform.
241. *Spermacoce lasiantha* Raf. Caule debili; ramis diffusis, foliis sessilibus oblongis acutis integris nervosis, nervis scabris, floribus verticillatis, corolla intus lanata. Raf.—Crucianella. 2. Rob. p. 453. Stem about two feet long, leaves two or three inches long, flowers small white sessile glomerated, calyx with four teeth; stamina sessile hidden in the wool of the corolla. It blossoms in August.
242. *Rubia techensis* Raf. Caule debili diffuso quadrangulo, angulis aculeatis, foliis quaternis subsessilibus ovalis lucidis, margine piloso scabro. Raf.—*Rubia* Rob. p. 453. Found on the eastern side of the river Teche, root red and yellow; stem scarcely two feet high, leaves one inch long. Robin did not see the flowers, it might be a species of *Galium*?

243. *Hedyotis crassifolia* Raf. Ramis tenuis divaricatis sulcatis unifloris, foliis sessilibus oblongis acutis glabris integris carnosis, floribus longe pedunculatis. Raf.—Anonyme 1. Rob. p. 454. This plant although resembling very much the *Houstonia*, is a real *Hedyotis* having a capsul two celled and polysperme. It blossoms in February, it varies with white, deep violet and pale violet flowers, stem only two inches high, tube of the corolla filiform, four stamina in the tube nearly sessile, style short, stigma oblong, capsul heart shaped, with many minute seeds.
244. *Hedyotis ? rosea* Raf. Repens, floribus roseis.—Anonyme 2. Rob. p. 454. This may be the *Houstonia tenella* of Lyon and Pursh ; Robin does not describe it, but he merely says it is still smaller than the foregoing, creeping, and with flowers of a pale rose colour.
245. *Cornus florida* L.—*Cephalanthus* Rob. p. 454. Vulgar names *Bois-bouton* and *Bois-de-flèche*. It rises 30 feet, blossoms in February. Robin gives a long description of this common tree, which evidently proves his mistake in taking it for the *Cephalanthus* ; he says that the calyx is angular 4 toothed, the corolla 4 parted reflexed, the stamina opposed to its divisions ! the stigma sessile ; but these two last characters are erroneous.
246. *Viburnum prunifolium* Wild. Pursh ?—*Cornouiller monopétale* Rob. p. 455. It blossoms in March, is very common, rises often over 30 feet, it likes the shady grounds, fruit bluish black,

good to eat, stamina projecting, one sessile stigma ! Many American species of this genus have only one stigma ; they must form a sub-genus, which I shall call *Lentago*.

247. *Cornus polygamus* Raf. Ramis strictis levis rubris, foliis oppositis sessilibus oblongis integris, oblique acuminatis, subtus canis, floribus femineo-polygamis. Raf.—*Cornus* 2. Rob. p. 456. A shrub about 15 feet high, branches slender, red, opposite, smooth, leaves deep green above, umbels small, terminal, calyx entire ! petals acute and white, anthers grey, style shorter than the stamina, stigma globular ; many flowers, and even whole umbels, have no stamina. Fruit black, very good to eat. It blossoms in April.

ORDER III.—CAPRIFOLIA.

248. *Caprifolium rubrum* Raf. Foliis deciduis cartilagineis subtus glaucis, floribus verticillatis pallide rubris. Raf.—*Caprif.* 1. Rob. p. 437. Not described by Robin, therefore a doubtful species ; but yet differing from all the American species.
249. *Caprifolium sempervivens* Pursh. *Lonicera* do. L. Wild.—*Caprif.* 2. Rob. p. 457.
- XVIII. N. G. KARPATON Raf. Calyx adherens 4 dentatus, corolla tubulosa quadrifida bilabiata ; stamina 2, antheris bilobis, lobis remotis ; ovarium inferum, stylo sub labio superiore corollæ, stigma simplex : capsula calice coronata (monocularis ?) 4-spermis.—Obs. A remarkable new genus of this

order, differing by the stamina and fruit from all the other genera: it will, however, come next to *Diervilla*. The name was an ancient one for some species of *Caprifolium*. Raf.

250. *Karpaton hastatum* Raf. Caule anguloso, ramis fastigiatis, foliis oppositis sessilibus oblongis hastatis basi inequaliter dentatis, acuminatis glabris; floribus verticillatis sessilibus. Raf.—Anonyme Rob. p. 457. Rising three feet, flowers small, glomerated at the axillas.
251. *Viscum leucarpum* Raf. (*V. album* Walter. *V. flavescens* Pursh.) Caule articulato ramosissimum foliis oppositis sessilibus oblongis obtusis, floribus axillaribus sessilibus glomeratis, glomerulis 3-4 floris, baccis albis. Raf.—*Viscum* Rob. p. 458. Very different from the *V. album* of Europe, and the *V. flavescens* of South America, by its axillar few flowered glomerules.

CLASS XII.—D. POLYPETALES EPIGYNES.

ORDER I.—ARALIE.

- XIX. N. G. TRICLINIUM Raf. Monoicum triclinatum. Fl. hermaphrod. Calyx adherens 5-dentatus, Petala 5 inflexa; Stamina 5 incurvis; Ovarium adherens globosum echinatus; Stylis 2 longissimis recurvis: Fructus achena bilocularis disperma, calice coronata, extus echinata, setulis

incurvis. Fl. Fem. Similis sed stamina carens. Fl. Masc. Similis sed ovarium carens, calyx urceolatus 5 fidus.—Umbellis simplicibus involu-cratis.—Obs. This genus is certainly not a *Panax*, as Robin says; but it has the greatest analogy with *Sanicula*, from which it differs by the divided calyx, crowned fruit, and double polygamy. The name means three beds. The *Sanicula marilandica* must belong to the same genus.

252. *Triclinium odoratum* Raf. Ramis divaricatis angulatis; foliis longe petiolatis trifoliatis glabris, foliolis oblongatis inequaliter dentatis apice lobatis, radicalibus subpalmatis, foliolis lateralibus bipartitis; flosculis omnibus pedunculatis, hermaphroditis paucis. Raf.—*Panax* Rob. p. 469. It grows in the woods, stem 12 to 18 inches high, smooth, angular, purplish at the base, with few distant branches, petiols vaginated, umbels small, lateral, and terminal, flowers greenish, having the sweet scent of *Reseda odorata*. Stamina with bent filament, and yellow anthers, ovary with many rows of stiff curved filaments, styles curved and reaching the base of it. Blossoms in March and April.

ORDER II.—UMBELLIFERE.

253. *Sison trifoliatum* Michx. ?—*Ægopodium* Rob. p. 460. Roots fasciculated, yellow, similar to Parsnip, stem round, smooth, geniculated, 2 feet

high, leaves trifoliated on long petioles, smooth, lateral folioles bilobe, terminal trilobe, flowers white.

254. *Cherophyllum*.....Not described; grows in swamps.
255. *Daucus? fetidus* Raf. Robin, p. 461. only says of this species, that it has white roots, a strong disagreeable smell, and that it grows in meadows.
256. *Peucedanum verticillatum* Raf. Foliis decompositis, foliolis filiformibus, inferioribus subverticillatis. Raf.—Peuced: Rob. p. 461. It grows in moist ground.
257. *Hydrocotyle incrassata* Raf. Caulibus submersis strictis fistulosis, foliis peltatis orbiculatis lucidis natantibus petiolis, basin ad apicem incrassatis. Raf.—Hydroc. Rob. p. 461. On the lakes and quiet rivers, growing in immense and thick groups; calyx entire, petals spreading.

CLASS XIII.—D. POLYPETALES HYPOGYNES.

ORDER I.—RANUNCULACEÆ.

258. *Clematis flavescens* Raf. Caule scandens tereti geniculato, foliis ternatis, foliolis ovatis subtrifidis glabris, foliola lacinioque media majoribus; floribus dioicis axillaribus glomeratis. Raf.—*Clematis* 1: Rob. p. 462. Similar to *Cl. virgi-*

nica, stem slender, 8 to 10 feet high, leaves opposite, petiolate, flowers yellowish.

259. *Clematis striata* Raf. Caulibus procumbentibus striatis; foliis oppositis, petiolis vaginatis, imis simpliciusculis, summis remote bijugis; floribus hermaphrodits, corymbis terminalibus paucifloris; petalis coriaceis crassis striatis revolutis. Raf.—*Clematis* 2. Rob. p. 462. Stem weak slender, four or five feet long, bark yellow brown, four or five pedunculated flowers, violet or whitish, seeds bearded. Grows in the woods and meadows.
260. *Anemone virginiana* L?—*Anemone* 1. Rob. p. 463. Stem branched hairy, two or three feet high, leaves with three large folioles and two smaller ones, flowers small yellowish on long peduncles, fruit long.
261. *Anemone anomala* Raf. Foliis ternis sessilibus incis, floribus pentapetalis, petalis inequalibus Raf.—*Anemone* 2. Rob. p. 463. Stem about a foot high.
262. *Ranunculus robini* Raf. Pubescens, foliis radicalibus ternatis, caulinis lanceolatis, floribus 5—6 petalis, petalis patulis oblongis Raf.—*R. flammula* Rob. p. 463. Stem only four or five inches high coloured of violet: a doubtful species not well described. *R. alismifolius*
- ? 263. *Ranunculus megarthus* Raf. Caulibus erectis pubescentibus unifloris, foliis radicalibus ternatis trilobisque, caulinis tenuis subfiliformibus, petalis patulis oblongis, nectaris lamellosis Raf.—*Ran.*

2. Rob. p. 463. Stems only half a foot high violet, calyx coloured, a large yellow flower about two inches in diameter, five petals thrice longer than broad.
264. *Ranunculus polypetalus* Raf. Caulibus erectis glabris bifloris, foliis ternatis trilobisque, floribus 6—8 petalis, petalis patulis oblongis, nectaris lamellosis. Raf.—Ran. 3. Rob. p. 463. Same size as the foregoing, flowers one inch in diameter, calyx coloured, anthers oblong and crenulated!
265. *Ranunculus leptopetalus* Raf. Caule erecto pubescens multiflorus, foliis trilobis obtusis crassis, petalis minutissimis stamina brevioribus, stylis recurvis. Raf.—Ranunc. 4. Rob. p. 464. Stem six to eight inches high, flowers exceedingly small, and petals scarcely visible, receptacle globular, much larger than the stamina. It blossoms in March. *? R. recurvatus, var*

ORDER II.—PAPAVERACEA.

266. *Argemone alba* Raf. Caule foliisque spinosis, foliis runcinatis, capsulis oblongis pentagonis spinosis semi-5-valvis Raf.—Argemone Rob. p. 464. A beautiful plant introduced in the gardens of Louisiana from Mexico, with snow-white petals, yellow stamina and violet stigma, stems three feet high. The variety of *A. mexicana* with white flowers mentioned by Pursh, is perhaps this species.

267. *Papaver* A species with red flowers is found along the woods, undescribed by Robin, probably new, unless it be the *P. rheas* naturalized.

ORDER III.—CRUCIFERÆ.

268. *Sisymbrium leptopetalon* Raf. Foliis pinnatis, foliolis lobatis glabris, impari majoribus, racemis laxis, petalis calice staminibusque brevioribus, calyx oblongus clausus Raf.—Cardamine 1. Rob. p. 466. This species belongs to the section, (or peculiar genus?) of this genus, with closed calyx and cylindrical siliques, which I call *Descuria*, stem eight to ten inches high, with very small yellowish flowers, petals and anthers yellow, stigma sessile flat, silique long. It grows near waters and blossoms in February.
269. *Cardamine reflexa* Raf. Foliis pinnatis glabris, foliolis apice dentatis, racemo elongato, petalis calice longioribus reflexis, siliquis compressis Raf.—Cardam. 2. Rob. p. 466. Not well described by Robin, perhaps it is the *C. Pensylvanica*. It grows near waters and blossoms in February, stem over a foot high, flowers white.
270. *Cardamine angustifolia* Raf. Foliis pinnatis glabris, foliolis lineari-filiformibus, siliquis teretibus Raf.—Card. 3. Rob. p. 466. A small species, grows and blossoms as the foregoing.
271. *Nasturtium tuberosum* Raf. Radice tuberosa caule erecto ramoso glabro, foliis radicalibus pinnatis, foliolis dentatis, impari majore hastata,

caulinis sessilibus lineari-lanceolatis dentatis, racemis laxis, petalis calice longioribus Raf.—Cochlearia 1. Rob. p. 466. The genus *Nasturtium* of Tournefort, Ventenat, &c. to which this plant belongs, differs from *Lepidium* by having a notched silicule, the stigma sessile in the notch; stem about a foot high, flowers white, calyx open with four concave folioles, silicule compressed, rounded, notched. The root is white, juicy, elongated, of a sweeter taste than the leaves, it might become comestible. Blossoms in February.

XX. *N. G. DILEPTIUM* Raf. Calyx 4 phyllus, foliolis concavis clausis, corolla 4 petala, petalis linearibus integris. Staminibus 2. angulis ovarium alternis: ovarium compressum emarginatum, stigma sessile emargina insertum. Siliculis subrotundis compressis emarginatis bilocularis dispermis, valvis carinatis.—Obs. This genus differs from *Nasturtium* by the number of stamina, small petals, &c. The name means *two minute* stamina. The *Lepidium Virginicum* L. belongs to this genus.

272. *Dileptium diffusum* Raf. Caulibus procumbentibus diffusis ramosissimis, foliis pinnatifidis, pinnulis dentatis, racemis laxis axillaribus terminalibusque, petalis minutissimis calice brevioribus Raf.—Cochlearia 3. Rob. p. 467. It forms thick turfs of a foot or two in diameter, many small leaves. It blossoms at the end of March, and grows like grass, covering often large spaces of ground; it is eaten as cresses.

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273. *Dileptium precox* Raf. Caulibus erectis ramosis ; foliis radicalibus pinnatis, caulinis pinnatifidis, petalis calice equalibus Raf.—*Cochlearia* 2. Rob. p. 467. This resembles the *Nasturtium tuberosum*, and blossoms in February ; flowers white.
274. *Nasturtium rotundifolium* Raf. Caule erecto ramoso, foliis subrotundis sinuato-lobatis crassis, petalis elongatis calice longioribus Raf.—*Cochlearia* 4. Rob. p. 467. A large plant with thick juicy leaves, good to eat, but tasteless. It resembles *Arabis rhomboidea*.

ORDER IV.—CAPPARIDES.

275. *Cleome edulis* Raf. Caule inermi ramoso albo punctato, foliis imis quinatis, summis ternatis, foliolis ovalis acutis, media majore, floribus verticillatis terminalibus pedunculatis, petala 4, unguiculata deflexa Raf.—Mozambe comestible Rob. p. 468. Stem one or two feet high, round, reddish. juicy, leaves alternate petiolate, calyx with four narrow sepals, petals white, inserted on a glandular disk with long filiform nails and spatulated limb, all deflexed on one side ; on the opposite side a long red gynophore with 6 stamina, stigma sessile, pod long acute. It grows on open grounds and blossoms in June. It has much affinity with *Cl. pentaphylla* L.
276. *Cleome speciosa* Raf. Caule inermi ramoso, foliis digitatis, foliolis oblongis acuminatis ciliatis transverse nervosis ; floribus racemosis bracteatis

Raf.—Grand Morambe lilas Rob. p. 468. The beautiful plant has been introduced from Mexico into the gardens of Louisiana. Stem four or five feet high, bushy, leafy, folioles of the leaves regularly smaller laterally, racemes one or two feet long and six inches in diameter, peduncles red, as well as the petals when young, and becoming gradually white, which affords a beautiful appearance, flowers very large, probably with the same structure as in the foregoing.

ORDER V.—SAPIND.

277. *Cardiospermum halicacabum* L.

ORDER VI.—ACER.

278. *Paviana flava* Raf. *Esculus flava*, Willd. L. Pursh.—Pavia à fleurs jaunes Rob. p. 470. Shrub 15 to 20 feet high, bushy, irregular, grows near Pensacola, blossoms in April.
279. *Paviana coccinea* Raf. *Esculus pavie* L.—Pavia à fleurs rouges Rob. p. 470. A smaller shrub.
280. *Acer rubrum* L. Rob. p. 471. It rises over 60 feet, blossoms in March, it is diuical and monoical.

ORDER VIII.—HYPERICA.

281. *Ascyrum grandiflorum* Raf. Caule frutescens, ramis teretis gracilis, foliis sessilibus oblongis

obtusis, floribus axillaribus terminalibusque, sepalis calicinis binis minutissimis, stigmatibus binis subsessilibus Raf.—*Ascyrum* Rob. p. 472. Pretty shrub, three feet high, bark yellowish, scaling off, flowers large, four yellow petals, capsuls oblong with many minute seeds inserted on the central receptacle.

- > 282. *Hypericum rostratum* Raf. Caule frutescens apicite, foliis sessilibus ovalis, utrinque acutis, margine revolutis, punctatis, corymbis axillaribus terminalibusque, calyx bibracteatus, ovarium rostratum pentastylum Raf.—*Hypericum galioides* affine Rob. p. 473. Small shrub one or two feet high, branches straight and slender round with two opposite angles, bark reddish; flowers large and yellow, stamina very numerous, capsul five angular. This species belongs to the sub-genus *Centeria*, which contains all the species with five styles, and ought perhaps to be made a peculiar genus.

283. *Hypericum fulgidum* Raf. Caule frutescens tetragono, ramis gracilis, foliis sessilibus linearibus patulis; floribus subsessilibus axillaribus terminalibusque Raf.—*Millepertuis doré* Rob. p. 473. A small shrub, less than two feet high, branches few, slender and quadrangular, flowers of the brightest yellow. Robin does not say if this species has five or three styles.

ORDER X.—AURANTIA.

284. *Citrus aurantium* L. var. *acida-spinosa* Rob. p. 474. Common in hedges, the fruit left on the tree in winter, becomes juiceless and soft; but gets again its size and juice in the spring!
285. *Citrus chinensis* Persoon—Orange myrtle Rob. p. 474. A small tree cultivated in Louisiana, the branches are bent by the great number of small fruits.

ORDER XII.—VITES.

286. *Vitis integrifolia* Raf. Foliis subrotundis integerrimis. Raf.—Rob. p. 476.
287. *Vitis rotundifolia*. Mich.
288. — *cordifolia*. Mich.
289. — *estivalis*. Mich.
290. *Ampelopsis bipinnata*. Mich. *Vitis arborea* L. Rob. p. 476. *Cissus stans* Pursh. Very common.

ORDER XIII.—GERANIA.

291. *Geranium Ludovicianum* Raf. Caule tortuoso, geniculato villosa, foliis orbiculatis quinquelobis, floribus umbellatis Raf.—*Geranium* Rob. p. 477. Stem redish, flowers white, a little rose coloured, anthers yellow, beak over an inch long.
292. *Oxalis sanguinolaria* Raf. Caule cespitoso erecto, foliis ternatis, foliolis obcordatis pubescens,

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umbellis 3—4 floris involuocratis, petalis apice reflexis intus maculatis Raf.—Surelle 1. Rob. p. 477. Rising from three to ten inches, leaves petiolate, flowers with yellow petals having bloody spots inside, connected at the base, sepals of the calyx oblong, filaments flat, capsul oblong. Used as sorrel : blossoms nearly all the year.

293. *Oxalis violacea* L. ? Rob. p. 477. Found in blossom in March in the meadows of the river Momentao, the leaves are thick, and violet coloured also.

ORDER XIV.—MALVACEA.

294. *Malva caroliniana* L. Rob. p. 478. Stem creeping, leaves heart-shaped, lobed, incised, hairy ; corolla brick red. This species is very mucilaginous, and is employed instead of common mallow.
295. *Hibiscus grandiflorus* Mich.—Guimauve des Marais Rob. p. 479. Stem three or four feet high, leaves on long petioles, heart-shaped, unequally toothed, velvety, flowers solitary, terminal, over half a foot in diameter, exterior calyx with 10 linear sepals, petals white, red at the base, stamina white, capsuls tomentose rough, seeds round. Grows in swamps.
296. *Hibiscus hastatus* Mich. *H. militaris* Wild. Pursh.—Guimauve 2. Rob. p. 479. Found in dry grounds.
297. *Sida cardanisea* Raf. *Ramis pubescens rigidis gracilis, foliis remotis lineari-lanceolatis serratis,*

- floribus terminalibus subsessilibus glomeratis, petalis patulis oblique obcordatis. Raf.—*Sida* 1. Rob. p. 480. Stem about three feet, branches alternate, round, slender, distant, leaves alternate two inches long, three or four flowers together, large, yellow, nearly two inches diameter, petals unequally obcordated, assuming the appearance of an irregular cross.
298. *Sida bicallosa* Raf. Caule frutescens ramosissimo, foliis oblongis dentatis, axillis bicallosis, floribus solitaris axillaris terminalibusque, longe pedunculatis Raf.—*Sida* 2. Rob p. 480. The flowers are yellow and small, the two acute eminences assimilate this species with *S. spinosa*, although it resembles more *S. rhombifolia*.
299. *Sida spinosa* L. Rob. p. 480. Rises three or four feet.

ORDER XV.—MAGNOLIA.

300. *Magnolia grandiflora* L. Rob. p. 481 and p. 265.
301. *Magnolia frugrans* Raf. Arborea, foliis perennantibus petiolatis oblongis utrinque acutis, subtus pallidis, ramis unifloris Raf.—*M. glauca* Rob. p. 481. A small tree 20 to 30 feet high, bark grey, branches many, green, buds silky, flowers white, sweet scented, over four inches in diameter: grows on the margins of water. This is the *M. glauca* var. *longifolia* of Pursh.

ORDER XVI.—ANNONÆ.

302. *Percelesia triloba* Pers. Pursh. *Annona triloba* L.—Assimnier Rob. p. 482. It rises about 20 feet, grows always in shady woods, branches brown and smooth, leaves odoriferous, flowers brown red lateral pedunculated. The fruit is excellent odoriferous; it never hurts and is a sedative.

ORDER XVIII.—BERBERIDES

303. *Rhexia ludoviciana* Raf. *Hispida*, caule ramoso striato, ramis incurvis, foliis sessilibus oblongis acutis integris rigidis trinervis, nervis ciliatis; floribus terminalibus pedunculatis nutantibus. Raf.—Anonyme Rob. p. 483. Perhaps a variety of *R. mariana*? It does not belong to this order. Scarcely a foot high, forming a small bush, branches nearly horizontal, but uprighted at the top, and bearing each four or five flowers, petals rose, filaments long flat, anthers yellow.

ORDER XIX.—TILIACEÆ.

304. *Tilia stenopetala* Raf. Foliis base obliquis denticulatis glabris, petalis oblongis acutis integris. Raf.—Tilleul de la Louisiane Rob. p. 484 Large tree over 60 feet high, and two feet diameter, bark thin and rough, wood soft and light,

peduncles long and slender on a bractea, flowers small, very fragrant.

ORDER XX.—CISTI.

305. *Viola pedata* L.—Rob. p. 485.
 306. ——— *lanceolata* L.—Rob. p. 485.
 307. ——— *sagittata* L.—Rob. p. 485.

ORDER XXII.—CARYOPHYLLE.

308. *Alsine media* L.—*Alsine* Rob. p. 486. Blossoms in February.
309. *Spergula punila* Raf. Glabra, caule diffuso geniculato, foliis oppositis sessilibus filiformis acutis, floribus pedunculatis, petalis obovatis concavis. Raf.—*Spergula* Rob. p. 486. A very small plant scarcely one inch high, flowers white, blossoming in February, 10 stamina, 5 styles, capsul globular.
310. *Saponaria villosa* Raf. Caule stricto gracile tereti villosa, foliis lanceolatis, calycibus cylindricis, petalis dentatis Raf.—*Saponaria* Rob. p. 486. Stem a foot high, flowers white.

CLASS XIV.—D. POLYPETALES PERIGYNES.

ORDER IV.—PORTULACEA.

311. *Portulaca oleracea* L. Rob. p. 486. A variety with red, slender stems, and leaves, grows in the streets of New-Orleans, the common sort grows in gardens and fields.
- XXI. N. G. *HYDROPYXIS*. Calyx persistens 5 partitus, extus bibracteatus, laciniis binis interioribus minoribus. Corolla peripetala crateriformis, limbus inequaliter 5 lobus. Stamina 4. didynamis epicorollis, antheris hastatis. Ovarium superum stylo simplex, stigma capitatum trilobum. Capsula unilocularis polysperma triangularis *circumscissa*, receptaculum centrale liberum.—Obs. This genus does not at all belong to this order nor class; but it has some slight affinity with *Miscranthemum*, *Gratiola*, *Pinguicula*, &c. in the order *Chasmanthia*. The name means *water pyxidium*, which last name has been given to the circumscissed capsuls. Raf.
312. *Hydropyxis palustris* Raf. Caulibus repentibus prostratis, foliis floribus axillaribus solitaris pedunculatis Raf.—Pourpier des marais Rob. p. 488. Common in the swamps and ditches near New-Orleans; Robin does not describe the leaves, but they are probably similar to those of *Portulaca*, corolla white shaded with violet, stigma large and green.

ORDER VI.—OENOTHERÆ.

✓ 313. *Oenothera alata* Raf. Ramis alatis, foliis sessilibus ovali-lanceolatis integris glabris, floribus sessilibus, petalis unguiculatis, stigma globosum, capsulis tetrapteris Raf.—*Oenothera* 1. Rob. p. 489. Stem four feet high, branched, fleshy, leaves thin, of a fine green, large, flowers yellow, calyx four partite, stigma globular entire. The flowers only last from noon to 4 o'clock. ?

XXII. N. G. PLEURANDRA. Calyx adherens tubulosus apice bifidus, laciniis reflexis caducis. Corolla petalis 4 spathulatis unilateralis erectis. Staminib. 8 pistilloque declinatis horizontalis petalis oppositis, stigma 4 lobum. Capsula 4 locale polysperma.—Obs. This genus appears to differ from the *Chamerium* (which contains all the species of *Epilobium* with irregular flowers) by the bifid calyx, lobed stigma, and probably by the naked seeds. The name means *lateral stamina*. Raf.

✓ 314. *Pleurandra alba* Raf. Suffruticosa, ramis teretibus virgatis fragilis, foliis sessilibus angustis integris acutis; floribus axillaribus terminalibusque, brevi pedunculatis, genitalibus elongatis, capsulis ovalis canaliculatis. Raf.—*Oenothera* 2. Rob. p. 490. Stem 7 feet high, bark rusty, tube of the calyx very long, petals white; the flowers have a fragrant smell in the morning.

✓ XXIII. N. G. ONOSURIS. Calyx adherens tubulosus

apice bifidus, laciniis reflexis caducis. Corolla 4 petala plana. Stamina 8 erectis, filamentis crassis, antheris longis, stylo unico, stigmata 4. Capsula 4 locularis polysperma.—Obs. This differs from the foregoing by the regular petals, stamina, &c. 4 stigmas, and from *Oenothera* by this last character, and the bifid calyx. The name was an ancient one for some species of *Oenothera* or *Epilobium*, and means *Ass's tail*. Raf.

315. *Onosuris acuminata* Raf. Caule hirsuto, foliis confertis sessilibus lanceolatis acuminatis subdentatis, dentibus remotis obtusis, floribus axillaribus, calicibus angulatis petalis obcordatis. Raf.—*Oenothera* 3. Rob. p. 490. Stem thick seven feet high, flowers yellow.
316. *Oenothera viscosa* Raf. Caule ramoso decumbens tereti villosa viscosa, foliis sessilibus lanceolatis nervosis dentato-sinuatis; floribus axillaribus, sessilibus petalis obcordatis, stigma 4-lobum, capsulis cylindricis canaliculatis. Raf.—*Onagre visqueuse* Rob. p. 491. Stem three or four feet long, flowers pale yellow, opening in the evening, and folding in the morning, blossoming in March and April, calyx with a long tube and four divisions. = *sinuata* ?
317. *Jussieva grandiflora* Mich.—*Onagre des marais* Rob. p. 419. Stem round, thick, nearly procumbent, roots creeping, leaves petiolate ovate; flowers axillary on long peduncles, five yellow petals cuneiform, two bracteas under the ovary, capsul round and curved. Blossoms in May.

ORDER VII.—MYRTI.

318. *Decumaria sarmentosa* Wild.—Rob. p. 493.
 319. *Philadelphus inodorus* L.—Rob. p. 492.

ORDER IX.—SALICARIA.

320. *Frangula fragilis* Raf. Foliis alternis petiolatis oblongis cuneatis acutis integris, floribus fasciculatis pedunculatis Raf.—Salicaire Rob. p. 493. Shrub reaching 15 feet, stem and branches slender and brittle, bark brown, leaves terminal with regular nerves. Flowers 12 to 15 in each bundle, peduncles short and stiff: calyx urceolated with five white stiff teeth, five petals short, but longer than the calyx, five stamina of the length of the petals, opposed and laying on them. One ovary, one style, one furrowed stigma. Blossoms in April. Of course it does not belong to this order, but to the *Rhamnoides*; the genus *Frangula* contains all the species of *Rhamnus* with only one style and stigma.

ORDER X.—ROSACEA.

321. *Crategus coccineus* L?—Aubepine Rob. p. 494. The leaves are used as a tea against indigestion.
 322. *Agrimonia parviflora* L?—Aubepine Rob. p. 494.
 323. *Potentilla strigosa* Pallas.—P. Pensylvanica, var. *strigosa*, Pursh. P. Pensylvanica Rob. p. 494.
 324. *Fragaria* Rob. p. 494. A species com-

mon in the meadows of Washita, has leaves similar to the Chili strawberry, but the fruit small and unpleasant.

325. *Geum agrimonioides* Pursh ?—Rob. p. 494, differing from *G. virginianum* by longer petals.
326. *Rubus nitidus* Raf. ?—Ronce 1. Rob. p. 495. I have found this species in the Atlantic states, it resembles much the *R. flagellaris* Wild. Robin only says that it has round stems, with numberless unequal prickles, the leaves quinate and ternate, smooth, shining above, deeply toothed, fruit oblong.
327. *Rubus angulatus* Raf. ? Caule angulato, foliis quinato ternatisque, foliolis latis ovatis dentatis glabris Raf.—Ronce 2. Rob. p. 495. A doubtful species, leaves larger and broader than in the foregoing.
328. *Prunus virginianus* L. Rob. p. 495 and 318. Fine upright tree, rising over 60 feet.
329. *Prunus stenophyllus* Raf. Fruticosus, erectus, foliis lanceolatis, pedunculis geminis ternatisque, drupis globosis nigris dulcis. Raf.—*Cerasus canadensis* Rob. p. 495. A shrub eight or ten feet high, leaves narrow, flowers white, berries sweet and black. Grows near Washita.
330. *Prunus* Rob. p. 495. He says there are several species of plumb trees in the woods of Louisiana, some of which are large trees with a thick foliage, the fruits are of several colours, some are good to eat, but some are intolerably astringent. As he does not describe them, it is

impossible to ascertain the species, but they are probably new.

ORDER XI.—LEGUMINOSA.

331. *Mimosa eburnea* L. ? Rob. p. 496. Common in the southern parts of Louisiana and Florida ; it grows in fields and sands, forming a large bush, it blossoms all the year round, and is at the same time covered with flowers and fruits. The branches are slender, brown, and covered with geminated straight thorns, one or two inches long, diverging and of a shining white ; the flowers are yellow, in a globular head, of the size of a filbert, the calyx and corolla are irregular, there are many stamina and one style, the pods are round, clammy, longer than a finger, with transverse partitions and oblong seeds. The *M. eburnea* being a native of the East-Indies, this is probably a different species, to which the name of *M. chionacantha* might be given ; but Robin omitting to describe the leaves, the following imperfect definition could only be framed, which I have to regret, is not sufficiently comparative. *M. chionacantha* Raf. Fruticosa cespitosa aculeata, aculeis geminatis stipularis divergentibus patulis strictis niveis lucidis, (foliis bipinnatis, foliolis 6 jugis,) capitulis globosis, floribus irregularis polyandris, lomentis strictis teretis glutinosis. Raf.
332. *Gleditschia heterophylla* Raf. Ramis patulis strictis, aculeis ramosis basi fasciculatis, foliis pinnatis bi-

pinnatisque, floribus spicatis, lomentis longissimis compressis. Raf.—Fevier Rob. p. 497. Large tree 70 feet high, bark smooth and blackish, stem straight and round, branches beginning very low, the longest 20 feet long, quite straight; the thorns are six to eight inches long, surrounded with shorter ones at the base. In winter this tree has an unpleasant aspect with its long naked and thorny branches, the buds come out from the bark in March, the first leaves are only pinnated with about 17 pairs of folioles, those coming out in April, are bipinnate: the flowers open in April, they are male and hermaphrodite on some individuals, female only on some others: the spikes are catkin-like, three or four inches long, M. Fl. calyx four parted hairy at the bottom, four petals seven stamens double in length. Herm. Fl. five parted, six petals opening like a cup, six stamina equal to the petals, pistil longer than the corolla and hairy, stigma peltated. Pods 12 to 15 inches long, one broad, pulp sweet, next acrid. The cattle like the pods, and a good beverage is made with the pulp.

333. *Gleditschia triacanthos*, var. *inermis*, Pursh. Perhaps a variety of the foregoing, not described by Robin, p. 498.
334. *Cassia ciliata* Raf. Caule ramoso, foliis 6 jugis, petiolis uniglandulosis, foliolis oblongis acutis glabris ciliatis, pedunculis axillaribus trifloris Raf. —Anonyme Rob. p. 499. Stem five or six feet high, smooth, folioles about three inches long, pe-

tiols geniculated at their insertion, and with a red elliptic gland, flowers yellow, the upper division of the calyx broader, shorter, and concave; five petals nearly equal, the upper a little larger, ten unequal stamina, two longer and curved along with the ovary, pods long with many seeds, which the countrymen use instead of coffee. This plant has only become common of late.

335. *Cercis canadensis* L. Rob. p. 499. It rises 20 to 25 feet; the flowers are small and rose coloured.

XXIV. N. G. *DIPLONYX* Raf. Calyx urceolatus bilabiatus, labium sup. fissum, labium inf. tridentatum. Corolla papilionacea, vexillum reflexum, unguiculus glandulosus, alæ biunguiculatæ emarginatae calcarata, carina biunguiculata. Stamina 10 (diadelphia?) Leguminibus teretibus polyspermis.— Obs. This new genus, whose name means *double nails*, is strikingly different from all papilionaceous plants; it has merely some slight analogies of characters and habit with *Apios* and *Indigofera*, but none with *Cytisus*. Raf.

336. *Diplonix elegans* Raf. Fruticosum volubile, foliis impari pinnatis, foliolis oppositis hastatis, margine revolutis, subtus tomentosis, racemis teretibus, elongatis, calycibus villosis, leguminibus arcuatis. Raf.—Cytise vulg. liane blanche Rob. p. 500. An elegant vine, rising 30 to 40 feet over trees, and with numerous suspended branches; found in the islands between the Mississippi and Atakapas. The leaves have 13 folioles, the flowers

are of a light violet, and form beautiful long, large, and thick bunches, the vexillum is white in the middle, the seeds are oval. It blossoms at the end of April.

337. *Lupinus perennis* L. Rob. p. 500.
338. *Psoralea melilotoides* Michx.—*Psoralea* Rob. p. 500. Rising 15 to 18 inches, stem striated, leaves rather rough, flowers purplish, spikes an inch long, on very long and stiff peduncles; calyx turbinated, with five acuminate and ciliated teeth, vexillum reflexed, keel divided into two petals, pod compressed, round, wrinkled, one seeded. It blossoms in March and April.
339. *Trifolium ludovicianum* Raf. Caulibus ramosis prostratis striatis pubescentibus, foliis obcordatis denticulatis, capitulis globosis longe pedunculatis, leguminibus pedunculatis ovatis inflatis tetraspermis. Raf.—Trefle 1. Rob. p. 501. A small species, very common in meadows, flowers of a dirty white.
340. *Trifolium repens* L. Rob. p. 501. Very useful; introduced from the northern states; it increases with rapidity, and destroys the weeds; it keeps green in the greatest heats, and even in winter.
341. *Trifolium pensylvanicum* Wild.—Trefle 3. Rob. p. 501. Rare, in the meadows.
342. *Melilotus robini* Raf. Caule tereti levi, foliis oblongis emarginatis denticulatis, spicis axillaribus, vexillum erectum, leguminibus inflatis levis 2-3 spermis. Raf.—Mélilot des Indes Rob. p.

502. Stem two or three feet high, many spikes of yellow flowers; it blossoms in April.
343. *Dolichos lacteus* Raf. Caule erecto tereti glabro, apice ramoso, ramis horizontalis; foliolis oblongis, mollibus: racemis elongatis, leguminibus caliculatis oblongis turgidis. Raf.—Josephine, Rob. p. 502, and 267. Fine perennial plant, sending every year a shoot similar to that of asparagus and glaucous; the folioles are ternated and stipulated, the flower of a milk white, seeds yellow and small; grows in meadows. It is said that it possesses the property of mitigating acute pain, and purifying the blood; the seeds may be eaten.
344. *Dolichos tomentosus* Raf. Caule gracile volubile, foliolis cordatis subtus cano-tomentosis, floribus brevi pedunculatis, calycibus bracteatis coloratis villosis. Raf.—Dolic tomenteux Rob. p. 502. Flowers white, bractees scaly, calyx white, urceolated, four toothed, the lower tooth the longest.
- XXV. N. G. XYPHANTHUS. Raf. Calyx 5 dentatus coloratus crassus; Corolla papilionacea, vexillum acinaciforme plicatum, alæ carinaque amplectens; Stamina 10 monadelpha? Legumen elongatum torulosum.—Obs. This genus differs from *Erythrina* by the shape of the calyx, which is not bilobated; the *E. herbacea* belongs perhaps to it. The name means *Sword-flower*.
345. *Xyphanthus hederifolius* Raf. Radice tuberosa, caule herbaceo spinoso tereti fistuloso levi sanguineo; foliolis subtrilobis acuminatis; racemo

spicato terminali elongato, floribus brevi pedunculatis, verticillatis fasciculatis, fasciculis trifloris. Raf.—*Erythrina* Rob. p. 503. A remarkable plant, having much affinity with *Erythrina herba-cea*; the stem is thick, four feet high, the thorns axillary, the folioles similar to the leaves of the ivy; the calyx, corolla and fruit are scarlet, the spike is very long, the corolla is an inch long, similar to a sabre, of which the calyx appears to be the handle; the vexillum alone is visible.

— XXVI. N. G. BRADBURYA. Calyx campanulatus inequaliter 5 fidus, Corolla papilionacea resupinata, Vexillum magnum subrotundum emarginatum planum unguiculatum basi callosus, Alæ angustæ intus reflexæ carina conniventes, Carina brevis erecta emarginata. Stamina 10 diadelphis apice uncinatis: Stylo stigmatoque planis depressis. Leguminibus angusto linearibus polyspermis. *Foliis ternatis, pedunculis axillaribus geminatis vel bifloris, vexillis maculatis.*—Obs. I dedicate this new genus to Mr. Bradbury, who in his travels up the Missouri discovered so many new plants. It is perfectly distinct from *Glycine*, to which Robin unites it. Raf.

346. *Bradburya scandens* Raf. Scandens, foliolis oblongis; floribus geminatis ternisque, calycibus bibracteatis, alæ carinaque hirsutis. Raf.—*Glycine* 1. Rob. p. 503. Stem rising 12 feet upon trees, blossoming in August and September, with fine large flowers, vexillum white outside, violaceous inside, with a white spot in the centre.

Two divisions of the calyx under the keel longer and sickle shaped, pods three or four inches long, only two lines broad, flowers one inch and a half in diameter.

347. *Bradburya erecta* Raf. Caule erecto fruticoso, foliolis petiolatis ovatis, pedunculis bifloris, floribus glabris ebracteatis. Raf—*Glycine* 2. Rob. p. 504. Stem less than two feet high, smooth and slender, flowers of a pale violet, the vexillum striped of a deep violet and with an oblong white spot; the two upper divisions of the calyx smaller, one inferior, longer and narrower. Blossoms in May.
348. *Amorpha? lutea* Raf. Caule herbaceo ramoso, ramis teretibus levis, foliis pari-pinnatis stipulatis, foliolis oblongis macronatis, spicis pedunculatis paucifloris bracteatis. Raf.—*Amorpha* 1. Rob. p. 504. Stem four or five feet high, flowers yellow, four or five on slender peduncles; vulgar name, *Indigo sauvage*; used as an astringent topic. Perhaps not an *Amorpha*; Robin does not describe the flowers, but says that the corollas have the aspect of a Rosaceous! Unsimilar to any North American leguminous by its abrupt leaves and yellow flowers, except the following genus and *Sesbania*.
349. *Amorpha tomentosa?* Raf.—*Amorpha* 2. Rob. p. 505. A doubtful species, of which Robin only mentions its being tomentose: probably similar to the foregoing in other characters.

XXVII. N. G. DARWINIA. Calyx 5 dentatus, corolla papilionacea, carina unicalcarata, calcar subulatum, staminib. 10 diadelphis, leguminibus longissimis linearis angustis planis polyspermis, seminibus oblongis.—Obs. This genus differs from *Indigofera* by not having a double spur, nor a round pod. I dedicate it to the celebrated Darwin, who ought to have already received such an honour from his countrymen; but should any genus have lately and previously been named after him, unknown to me, then I propose to substitute thereto the name of *Monoplectra*.

350. *Darwinia exaltata* Raf. Caule exaltato stricto tereti pulverulento, apice ramoso, foliis paripinnatis, foliis numerosissimis petiolatis subtus glaucis, pedunculis bifloris. Raf.—Indigotier de la Louisiane Rob. p. 505. Beautiful plant, from eight to ten feet high, stem smooth, without branches, except at the summit; leaves very long, having upwards of 50 pair of folioles, green, smooth and soft above, on round petiols, articulated at their insertion. Flowers of a dirty yellow outside, and of a gold yellow inside, pods eight, inches long, two lines broad, seeds brown and small. A variety has the vexillum variegated outside (*thordoré*.)

351. *Robinia pseudacacia* L. Rob. p. 505.

352. *Crotalaria ovalis* Pursh.—Bagnodier herbacé, Rob. p. 505. Leaves oval, thick, nearly sessile, calyx with five unequal teeth, and two appendages or auricles.

353. *Hedysarum* several species not described.

ORDER XII.—TEREBINTHACEA.

XXVIII. N. G. PHILOSTEMON. Calyx urceolatus 5 dentatus, corolla 5 petala, petalis perigynis linearibus reflexis. Stamina 5, filamentis conniventibus perigynis, antheris oblongis. Ovarium liberum, stylo stigmatoque simplex. (Fructus Drupa monosperma?)—Obs. This genus differs from *Rhus* by the connection of the stamina, and the simple stigma, Robin does not describe the fruit: the name means *Friend to Stems*. Raf.

354. *Philostemon radicans* Raf. Caule scandens radicans, foliis ternatis, foliolis ovatis villosis, binis sessilibus, media petiolata; floribus pedunculatis Raf.—Terebinthacée liane Rob. p. 506. This plant is so much like the *Rhus radicans* of Lin. that I had at first an idea of their identity; but, besides the generic characters, the *Rhus radicans* differs by being poisonous and having dioical flowers in compound racemes. This vine rises 20 to 30 feet, is very woody, the wood has white and close fibres, the bark is marbled of grey and brown, the leaves are pale underneath, the flowers are green and blossom in March.

355. *Rhus typhinum* L. }
 356. — *copallinum* L. } Rising to 30 feet.

XXIX. N. G. PSEUDOPETALON. Dioicum. Fl. Masc.
 Calyx minutus 5 partitus, Parapetalis 5, longiore,
 sepalis calycinis oppositis, intus inflexis, stamina 5,

sepalis calycinis alterna, filamentis basi incrassatis, antheris didymis. Ovarium rudimenta abortivum Fl. Fem. ut masculis, parapetalis angustior, stamina 0. Ovarium difforme sepe didymus, stylis sepe 2, interdum unicum, brevis, stigmata capitata. (Fructus capsul. 2—1. monosp?)—Obs. Very near to *Zanthoxylum*, differing by the remarkable parapetals, situation of stamina and few pistils. The name means false petals. Belonging probably to the family of Rhamnoides Raf.

357. *Pseudopetalon glandulosum* Raf. Arboreum, foliis alternis impari pinnatis, petiolis inermis, foliolis 11—13 oppositis dentatis, dentibus glandulosis; floribus terminalibus cymosis. Raf.—*Zanthoxylum* Rob. p. 507. It has some analogy with *Z. fraxineum*, but is yet very different: It is a tree from 30 to 40 feet high, with a large round head, the stem is straight, the branches are nearly verticillated, the thorns are short and straight, fixed on a thick pyramidal knob, the bark is whitish. The flowers are small and green. This tree has a strong smell in all its parts, and a burning taste, even in the bark and wood; it is employed for the aromatic baths, but delicate persons are apt to feel indisposed by its use. The roots have been employed successfully as a vermifuge for horses.

358. *Ptelea? tomentosa* Raf. Arborescens, ramulis tomentosis, foliis ternatis, foliolis lanceolatis integris subtus cano-tomentosis, media majore; floribus terminalibus paniculatis, stigma unicum!

- Raf.—*Ptelea* Rob. p. 509. A large shrub 30 feet high, branches long with few leaves, bark greyish white, leaves on long petiols : flowers greenish, petals linear patent, longer than the calyx, a short style and only one stigma ! Samare white. The leaves have a strong and disagreeable smell, from which it is called vulgarly *Bois puant* (Stinking wood ;) but the flowers have a most fragrant smell. Perhaps a new genus ?
359. *Juglans nigra* L. Rob. p. 509. Rising to 80 feet, diameter three to four feet, blossoms in April.
360. *Hicorius amara* Raf. ? *Juglans amara* Mich.—*Juglans alba ovata* Rob. p. 510. Robin describes with accuracy the fructification of this tree ; but scarcely notices the leaves. It rises to 100 feet, the bark is grey, the leaves have nine to eleven small folioles, male flowers trifid tetrandrous, female with a longer division in the calyx, blossoms in April. My genus *Hicorius*, long ago proposed, contains all the species of *Juglans* which have trifid male flowers (instead of six cleft) generally tetrandrous, and fruits with angular and quadrifid shells.
361. *Hicorius integrifolia* Raf. Foliolis 9—11 lanceolatis acuminatis integris glabriusculis, ramulis petiolisque tomentosis ; floribus 6—8 andris, lacinia media lepigonalis elongata acuminata, sepalo femineo-elongato acuminato, nucibus 4-gonis Raf.—Noyer pacanier amer Rob. p. 511. It is very different from the real *Pacancier* or *Hicorius oliviformis*. It is a very tall tree, with a brown

bark, wood white heavy close, and employed by wheelwrights and joiners; it blossoms in April.

362. *Celastrus bullatus* L.—*C. scandens* Rob. p. 512. This vine is the real *C. bullatus* which Pursh thinks a doubtful species, therefore it will be well to translate Robin's whole description, which will fix the species. A large woody vine, stems two or three inches in diameter, wood compact tough and elastic, bark smooth black, on young branches yellowish green shining, branches horizontal, leaves alternate petiolated oval acute scarcely toothed, smooth, nerved, shining above: flowers small greenish in terminal panicles, calyx with five open lobes, five petals (opposed to the calyx, says Robin!) with inflexed margin, each holding a stamina with straight oblong filaments and very small anthers; ovary small dipt in a large glandular flat disk, style very short; berry red, next becoming black, fleshy with many seeds!
363. *Cassine ramulosa* Raf. *Fruticosa ramulosa sem-pervirens, foliis alternis lanceolatis crassis lucidis sub-serratis; floribus axillaribus fasciculatis* Raf.—*Cassine* Rob. p. 513. This shrub is a real *Cassine*; that genus had been blotted out of the North-American flora, but must now be restored thereto. It rises about 12 feet, it bears branches from the base to the top: the flowers are white, the calyx is small, five-parted, persistent, five petals longer than the calyx, five stamina subulated, with simple anthers, three sessile and reflexed stigmas; berry red, three locular, with three om-

bilics and three ovoid seeds. It grows on the sea shore near Pensacola, and at Opelousas. The Indians use it as the *Ilex vomitoria*.

364. *Ilex opaca* Aiton.—*Ilex* Rob. p. 514. Fine tree 50 feet high, stem straight, bark smooth, whitish, foliage pyramidal and thick, flowers dioical, corolla white, rotate, four stamina opposed to its divisions! filaments subulated, anthers oblong: in the female flowers corolla deeply four parted, four sterile stamina, one sessile stigma; berry red round four seeded. The species of *Ilex* with only one stigma, ought to form at least a subgenus, and the genera *Pultoria* and *Maurocenia* ought to be re-established.



CLASS XV.—DICOTYLES APETALES
IDIOGYNES.

ORDER I.—EUPHORBIE.

365. *Euphorbia corollata* L. *Tithymale* Rob. p. 515. It is the *Ipecacuana* of Louisiana, the Indians who use it as such call it *Pe-cca*.
366. *Euphorbia ludoviciana* Raf. *Glabra, caule dichotomo diffuso prostrato, ramis divaricatis, foliis sessilibus carnosis denticulatis; floribus solitaris, perianthus oblongus turbinatus quadrifidus, laciniis integris intus coloratis, capsulis longe pedicellatis, nutantibus.* Raf.—*Euphorbe couchée ou tithy-*

- male dichotome Rob. p. 515. Stems four feet long, similar to those of *Portulaca*, flowers small white, blossoming in July and August.
367. *Euphorbia helioscopia*. L.
368. *Acalypha fruticulosa* Raf. Fruticulosa, ramis divaricatis rufo-tomentosis, foliis petiolatis ovatis dentatis, flore femineo unico in pediculum spica mascula, involucris involutis inequaliter dentatis Raf.—*Acalyphe monoique* Rob. p. 516. Small shrub less than two feet high, with many slender branches, flowers solitary axillar, a single female flower setting on the male pedicel.
369. *Acalypha digynia* Raf. Caule herbaceo ramoso tomentoso, foliis petiolatis oblongo-lanceolatis dentatis villosis, floribus femineis binis in pediculum spica mascula, involucris planis ciliatis. Raf.—*Acalyphe 2*. Rob. p. 516. Stem two feet high, flowers solitary axillar, anthers forming a long spike, involucels bent at the edge with thick upright hairs, two opposite female flowers on the male pedicel.

ORDER II.—CUCURBITACEA.

- | | |
|---|--------------------------|
| 270. <i>Cucumis melo</i> L. | } Cultivated in Gardens. |
| 371. <i>Cucurbita pepo</i> L. | |
| 372. _____ <i>pötiro</i> Pers. | |
| 373. _____ <i>melo pepo</i> L. | |
| 374. _____ <i>citrullus</i> L. | |
| 375. _____ <i>lagenaria</i> L. | |

376. *Passiflora lutea* ? Grenadille Rob. p. 518. Perennial, not described, grows on bushes.
377. *Sicyos acuta* Raf. ? Scandens, foliis lobatis, fructibus glomeratis ovatis acutis setosis, setis echinatis intertextis. Raf.—Cucurbitacée Rob. p. 518. A doubtful species, perhaps only a variety of *S. angulata*. Its herbaceous stem rises 30 to 40 feet upon trees! the fruits are of the size of filberts, united eight or ten together, they contain one white seed.

ORDER III.—URTICE.

378. *Morus rubra* L. Rob. p. 518.
379. *Morus tomentosa* Raf. Foliis lato cordatis acuminatis dentatis, supra lucidis scabris, subtus tomentosis; floribus monoicis, amentis plerumque androgynis, apice femineis. Raf.—Murier à fruit blanc. Rob. p. 518. Perhaps only a variety of the foregoing, but with white fruit; a large tree, upright and handsome, bark whitish and smooth; it blossoms in March; the male catkins are cylindrical and loose, the female catkins are shorter and thicker, but they are generally united.
380. *Urtica rubra* Raf. Caule stimuloso, foliis ovatis subtus atro purpureis, floribus monoicis verticillatis glomeratis, femineis basillaris, masculis apicularis. Raf.—Ortie rouge Rob. p. 519. Two feet high, vulgar name *red-nettle*.

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381. *Urtica alba* Raf.—Ortie blanche Rob. p. 519. Not described; size of the foregoing; perhaps it is the *U. dioica*?
382. *Urtica leucotrys* Raf. Foliis cordatis, paniculis axillaribus albis horizontalis planis lanceolatis. Raf.—Ortie 3. Rob. p. 519. A rare species, taller and with broader leaves than the foregoing, scarcely described.
383. *Humulus lupulus* L. naturalized.
384. *Cannabis sativa* L. Near New-Orleans.
385. *Mylocarium ligustrinum* Wild. ?—Anonyme, Rob. p. 519. Not described; Robin only says, that it is a shrub seven or eight feet high, of the family of *Pepper*! with leaves faintly scented, and small white sweet scented flowers.
- XXX. N. G. LASCADIUM. Monoicum, Fl. Masc. plurimis umbellatis flore femineo circumdans, Calyx lanatum integrum, corolla 0, staminib. circiter 12, filamentis brevis, antheris crassis. Fl. Fem. unicum centrale, calyx ut mascul. ovarium trilobum, stylis 3 partitis. Capsula trisperma ovata levis.—Obs. This is a remarkable new genus, having merely some faint analogy with *Stillingia*; the name was an ancient one for some hairy plant with monoical flowers. It does not belong to this order, but to the order of *Euphorbia*. Raf.
386. *Lascadium lanatum* Raf. Totum lanatum, caule erecto tereti ramoso, foliis alternis petiolatis hastato-cordatis; floribus glomeratis pedunculatis terminalibus. Raf.—Atakapace Rob. p. 519. Found only in Atakapas; the whole plant has a

strong-smell, the stem rises about four feet, the leaves set on long petiols, they are five inches long and two broad, the fruit is of the size of a pea and the shape of an egg, greenish marbled and smooth.

ORDER VI.—AMENTACEA.

387. *Ulmus alba* Raf. Arboreus, ramis pendulis levibus albidis, foliis oblongis, basi acutis inequalibus, duplicate dentatis, supra lucidis scabriusculis, subtus villosis. Raf.—Orme 1. Rob. p. 520. A common tree about 60 feet high, with long flexible branches, wood white, used by wheelwrights. Robin thinks that it is nearly similar to what he calls *Ulmus Americana alba*, or the *American rough leaved elm*, and I strongly suspect it is the *U. americana*, var. *pendula*, of Aiton and Pursh, but at any rate it ought to form a distinct species.
388. *Ulmus pinguis* Raf.—Orme 2. Rob. p. 521. Not described; perhaps it is the *U. fulva* of Michaux, but I strongly suspect it to be a peculiar species. Robin says that it is less common than the foregoing, of a smaller size, and with smaller leaves, the branches more slender and more pendulous; it grows in shady woods. The boiled bark affords a yellow and transparent mucilage, very thick and abundant, similar to glue, whence its vulgar name of *Orme gras*, (Fat Elm;) this mucilage is used in the manufacture of indigo.

389. *Salix denudata* Raf. Arboreus, ramis sub apice denudatis, foliis (oblongis?) amentis masculi elongatis floribus hexandris triglandulosis. Raf.—Saule 1. Rob. p. 321. Rising to 60 feet, branches thick, covered with small branches, and leaves only at the top, where the foliage is thick; leaves not described.
390. *Salix ludoviciana*? Raf.—Saule 2. Rob. p. 521. not described, Robin only says it has narrower leaves than the foregoing!
391. *Populus angulata* Wild. ?—Peuplier Liard Rob. p. 521. One of the largest and handsomest trees of Louisiana; pirogues more than 40 feet long and six wide, are made from a single trunk.
392. *Populus trepida* Wild. ? Peuplier 2. Rob. p. 522. A rare and small tree.
393. *Myrica cerifera* L. Rob. p. 522. Above 15 feet high.
394. *Myrica caroliniensis* Wild. ? Both species common near waters in maritime regions, some inhabitants spend some months in collecting the berries and making the wax.
395. *Liquidambar styraciflua* L. Rob. p. 520. Vulgar name *Copal*, the most majestic tree of Louisiana, rising nearly 100 feet, foliage very thick, it blossoms in February. It produces an aromatic resin, which was burnt as incense by the Mexican priests. The wood is compact, tough, and takes a fine polish. They employ its buds and the *Tillandsia usneoides* growing on it, in the sudorific baths. These stately trees are often cut

down and wasted for the mere purpose of getting that parasitical plant.

396. *Quercus virens* Mich. Wild.—Grand Chene vert Rob. p. 264. Large lumps cover this tree, and spoil its shape, its branches grow also very irregularly.
397. *Quercus phellos* L.
398. ——— *laurifolia* Michaux.
399. ——— *nigra* L.
400. ——— *macrocarpa* Michaux. Many other species of oaks grow in Louisiana.
401. *Platanus occidentalis* L. Rob. p. 524.

ORDER V.—CONIFERE.

402. *Cupressus disticha* L.—Cyprés de la Louisiane Rob. p. 525, and vol. 2. p. 274.
403. *Pinus tæda* L.
404. ——— *palustris* Lambert. Rob. p. 525, says there are several species of pines in Louisiana, and he mentions one with four leaves, which may be distinct,

THE END.

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<i>Lantana</i> ,	111		
* <i>Laurus</i> ,	69-71	* <i>Pancratium</i> ,	sp. 52
<i>Lenticula</i>	16	<i>Papaver</i> ,	267
<i>Liatris</i> ,	186	* <i>Paspalum</i> ,	25-26
<i>Lilium</i> ,	41-44	<i>Passiflora</i> ,	376
<i>Liquidambar</i> ,	395	<i>Paviana</i> ,	278-9
<i>Lupinus</i> ,	337	* <i>Peucedanum</i> ,	256
<i>Lycoperdon</i> ,	6-7	<i>Phalaris</i> ,	24
		<i>Philadelphus</i> ,	319
* <i>Magnolia</i> ,	sp. 300-1	* <i>Phlox</i> ,	103. 146-7
<i>Malva</i> ,	294	<i>Physalis</i> ,	135-6
<i>Maruorum</i> ,	124	<i>Phytolaca</i> ,	182
* <i>Marshallia</i> ,	187	<i>Pinus</i> ,	403-4
* <i>Melilotus</i> ,	342	* <i>Plantago</i> ,	93-6
* <i>Mentha</i> ,	121	<i>Platanus</i> ,	401
<i>Miegia</i> ,	28	* <i>Prenanthes</i>	176
<i>Mikania</i> ,	191	* <i>Prunus</i> ,	328-30
* <i>Mimosa</i> ,	331	<i>Psoralea</i> ,	338
* <i>Mimulus</i> ,	131	* <i>Ptelea</i> ,	358
* <i>Monarda</i> ,	114-115	* <i>Podophyllum</i> ,	20
* <i>Morchella</i> ,	5	* <i>Polygonum</i> ,	75-79
* <i>Morus</i> ,	378-9	* <i>Polymnia</i> ,	220
<i>Mucor</i> ,	1	<i>Populus</i> ,	390-91
<i>Mylocarium</i> ,	385	<i>Porcelia</i> ,	302
<i>Myrica</i> ,	393-4	<i>Portulaca</i> ,	311
<i>Myriophyllum</i> ,	14	<i>Potamogeton</i> ,	15

Potentilla,	323	*Solidago,	208-9
*Pycnanthemum,	116-17	*Sonchus,	181
Quercus,	sp. 396-400	*Spergula,	309
*Ranunculus	sp. 262-3	*Spermacoce,	240
*Rhexia,	303	Spigelia,	162
Rhus,	353	Spinacia,	85
Robinia,	351	*Stachys,	123
*Rubia,	242	Styrax,	167
*Rubus,	326-7	Tecoma,	sp. 150
*Rumex,	80-81	*Teucrium,	120
*Sabalum,	sp. 29-30	*Tilia,	304
Sabbattia,	155	Tillandsia,	46
*Sagittaria,	40	*Trifolium,	339-41
*Salix,	389-90	Triticum,	27
*Salvia,	118	*Troximom,	177.180.182
*Saponaria,	310	Typha,	21
*Sarracenia,	17	*Ulmus,	sp. 387-8
Scirpus,	22	*Urtica,	380-2
*Scrophalaria,	129	Verbascum,	sp. 132
*Scutellaria,	127-8	Verbena,	112
*Sicyos,	377	Verbesina,	218.223-4
*Sida,	296-8	Viburnum,	246
Silphium,	228	Viola,	305-7
Sison,	253	*Viscum,	251
Sisyrinchium,	43	*Vitis,	286 9
*Sisymbrium,	268	Yucca,	45.
Smilax,	32-35		
*Solanum,	137-38		

SUPPLEMENT

TO THE

FLORULA LUDOVICIANA.

SUPPLEMENT
TO
THE FLORA OF LOUISIANA,
BY C. S. RAFINESQUE.

WHOEVER shall have the opportunity of comparing my labour with the fragments of Robin, will soon perceive the wide difference between our works. The numberless defects of his Flora were of such a nature as effectually precluded the possibility of ever being practically employed by the botanist. I have endeavoured to collect, name, and describe the objects which he had merely pointed out, and to select among materials, generally drowned in useless and superfluous details, those that appeared new, important, or characteristic. My work is, therefore, quite different from Robin's, and very far from a mere translation or compilation: having, however, derived the materials from him, it is just to give him credit for them, so far as he deserves.

In order to render this *Florula* less incomplete, I mean to add in this Supplement, the enumeration of all the plants already mentioned by authors as natives of the State of Louisiana, and omitted by Robin: those authors are principally Bartram, Michaux, Pursh, Muhlenberg, &c.

Bartram visited the shores of the Mississippi, and has noticed some of the plants found there, in his travels to Florida, &c.

Michaux never visited Louisiana, and has very few plants from the shores of the Mississippi.

Pursh never went there ; but received some communications from Enslin, who had visited that State.

Muhlenberg has enumerated in his Catalogue of the plants of North America, many sent him from the shores of the Mississippi and Washita, by Dunbar, Moore, &c. some of which are even new ; but he has not described them.

This addition will not be very considerable, yet it may be considered as another step towards the knowledge of the vegetation west of the Mississippi. About 120 species, whereof several appear to be new, are here added, making a total of 525 species, hitherto known as natives of the State of Louisiana.

This Supplement shall be classed according to the improved natural method, already published in my *Analysis of Nature*, in 1815. The *Flora of Robin* was the first work ever published on American plants, according to the natural method of Jussieu, though with all its defects and without corrections. This shall be the first attempt on its improved plan : the natural classes only will be given here, since the small number of plants to be enumerated requires no further extension of the method. Its full application and the characters of the natural orders and families, will soon appear in my *Flora Missurica*, or *Flora of the regions west of the Mississippi*, and in the natural classification of all European and American genera, two works which may speedily follow this.

CLASS I.—ELTROGYNIA.

Stem or caudex vascular and fibrous, vessels and fibres in concentric layers, surrounding a central pith or hollow.

Flowers with one or many ovaries unconnected with the perigone. Stamina never inserted on a peripetal corolla. (monopetal! L.)

Bodies with a root and caudex, commonly a stem, often a woody one, stem branched, always with leaves or scales, and conspicuous flowers, fruits and seeds; germination generally isocotyle dicotyle and opposite, seldom polycotyle or heterocotyle.

405. *Rubus flagellaris* Wild. On the Mississippi, according to Muhlenberg's catalogue.
406. *Delphinium azureum* Mich.
407. *Magnolia acuminata* L. On the Mississippi, Mg.
408. ——— *macrophylla* Mich. On the Mississippi, Mx. Mg. Bartr.
409. *Illicium floridanum* L. On the Mississippi, Mx. Mg. Bartr.
410. *Liriodendron tulipiferum* L. Near Natchez and Manchac, Bartram, and on the Red-River, &c.
411. *Planera gmelini* Mich. *P. aquatica* Mg.
412. *Carpinum americana* Wild. On the Mississippi, Bartram.
413. *Acer negundo* L. On Lake Maurepas, Bartram.

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414. *Acer dasycarpum* Wild.—*A. glaucum* Bartram, On Lake Maurepas.
415. *Acer nigrum* Mich. On the Red-River, where it is called sugar-tree : it produces sugar as the *A. Saccharinum*.
416. *Castanea americana* Raf.—*Cast. vesca americana* Wild. Pursh. On the Mississippi and the Red-River.
417. *Fagus alba* Raf. *F. Sylvatica* Pursh. On the Pearl-River and the Mississippi, Bartram.
418. *Laurus persea* L. In Louisiana, Mg.
419. ——— *carolinensis* Mich.—*L. Borbonia* Bart. On the Mississippi Mg.
420. *Hamamelis virginica* L. On the Mississippi, Mg.
421. *Illecebrum polygonioides* Wild. On the Mississippi, Mg.
422. *Agrimonia pumila* Mg. Cat. On the Mississippi, not described.
423. *Euphorbia cyathophora* Wild. On the Mississippi, Pursh.
424. *Euphorbia thymifolia* Wild. On the Mississippi, Pursh. and Mg.
425. *Papaver rhoeas* L. On the Washita, Mg.
426. ——— *somniferum* L. On the Washita, Mg.
427. *Pachysandra procumbens* Mich. On the Mississippi, Mg.
28. *Hibiscus manihot* L. On the banks of the Mississippi, Mg. Pursh. Mich.
129. *Jatropha manihot* L. Cultivated in Louisiana.
430. *Croton glandulosum* Wild.
431. *Stillingia sylvatica* L. ? Found by Bartram.

432. *Ficus carica* L. Cultivated.
433. *Juniperus barbadensis*? L.—J. Americana! Bartram.
434. *Rhamnus* *R. frangula*! Bartram.
435. *Zanthoxylum clavaherulis* L. Bartram.
436. *Cleome pentaphylla*? L.—*Cl. lupinifolia* Bartram, p. 425. perhaps it is the *Cl. edulis*. Fl. sp. 275. Bartram found it on the Taensapaoa, and merely says, that it has a strong scent somewhat similar to Assafetida, notwithstanding which, the inhabitants give it a place in soups and sauces.
437. *Azedara speciosa* Raf.—*Melia azedarach* L.
438. *Rivina levis* L. On the Washita, Mg.
439. *Fraxinus juglandifolia* Wild?—*F. excelsior*? Bartram.
440. *Prunus coccinea* Raf. Arborescens spinosus, foliis lato-ovatis serratis nervosis mucronatis; drupis oblongis coccineis. Raf.—Plumb. Bartram, travels, p. 424. Grows on Pearl Island, and probably on the other Islands of Louisiana. It rises about 12 feet high, with a spreading top and spiny branches, the leaves are broad and terminated by a subulated point. It produces abundance of large crimson fruits, of a very enticing appearance; they are rather tart, yet are an agreeable eating, at sultry noon; and they afford a most delicious marmelade, when preserved in sugar; they make also excellent tarts.
441. *Vitis riparia* Mich.
442. *Sida rhombifolia* L.
443. ——— *aleccides* Mich.

444. *Acacia glandulosa*? Wild.—*Mimosa glandulosa* Mich.—*Mimosa virgata* Bartr. trav. p. 421. On the banks of the Mississippi. Bartram found his *M. virgata* on the Sea Islands, and his imperfect description does not agree altogether with that of *A. glandulosa*: I shall therefore copy it, as it may happen that his species shall prove different. Perennial plant, sending up many nearly erect stems, dividing in many ascending slender branches, with double pinnated leaves, of a most delicate formation. The flowers are of a pale greenish yellow forming small oblong heads, upon a long slender peduncle: the legumes are large lunated and flat, placed in a spiral or contorted manner, each containing several hard compressed little beans. If different from *A. glandulosa* it may be characterised as follows: *Acacia virgata* Raf. Caulibus erectis ramosis, ramis virgatis, foliis bipinnatis; capitulis oblongis, longe pedunculatis, leguminibus lunatis latis depressis contortis. Raf.
445. *Schrankia intsia* Wild?—*Mimosa horridula* Mich.—*Mimosa pudica* Bartr. trav. p. 430. Found by Bartram, near Manchac on the Mississippi. This species is not described by Bartram; he merely says, that it grows five or six feet high, rambling like briar vines over the fences and shrubs in gardens, the inhabitants say it is indigenous, but is not found in forests and fields, and resembles entirely the *M. pudica* of the hot houses. It is considered as a weed, for wherever it gets footing, it spreads itself by its seeds, in so great abund-

- dance as to oppress and even extirpate more useful vegetables.
446. *Erythrina herbacea* L. On the Mississippi, Mg.
447. *Lathyrus pusillus* Mg. N. Sp. (not described.)
On the Mississippi, flowers purple, blossoming in June.
448. *Sesbania platycarpa* Mg. Flowers red! On the Mississippi, Mg.
449. *Sesbania macrocarpa* Mg.—*S. platycarpa* Pers. (and *Phaca floridana*.)—*S. disperma* Pursh.—*Eschynomene platycarpa* Michaux.—*Robinia vesicaria* Jacquin. On the Mississippi, flowers yellow, Mg. These two species are merely distinguished by Mg. in his catalogue, by the colour of the flowers and shape of the pods.
450. *Polygonum aviculare* L.
451. ———— *coccineum* Raf. *Folius ovato-oblongis acuminatis, ochreis truncatis glabris; spica cylindrica, floribus pentandris digynis* Raf.—*P. historta*, Walter.—*P. coccineum*, var. *terrestre* Pursh. Very different from the *P. amphibium* Michaux, which Willdenow has called also *P. coccineum*, and has obtuse leaves.
452. *Brassica washitana* Mg. Cat. not described, found on the Washita, by Dunbar, flowers red.
453. *Tilia heterophylla* Ventenat. On the Mississippi, Pursh.
454. *Podalyria alba* Wild.—*Sophora* and *Crotalaria alba* L.
455. *Ricinus communis* L. On the Washita, Mg.

456. *Wendlandia populifolia* Wild.—*Androphylox scandens* Wendland.—*Menispermum carolinianum* Walter. (*Cissampelos smilacina* Wild.!) On the Mississippi.
457. *Menispermum dubium* Mg. Cat. perhaps the *M. lyoni* of Pursh. On the Mississippi.
458. *Sida Washitana* Mg. Cat. On the Washita.
459. *Bivonea stimulosa* Raf. In Mirror of Sciences.—*Jatropha stimulosa* Mich. Pursh. Sea-shore of Louisiana.

CLASS II.—MESOGYNIA.

Stem or caudex vascular and fibrous, vessels and fibres in concentric layers, surrounding a central pith or hollow.

Flowers, with one or many ovaries, unconnected with the perigone. Stamina constantly inserted on a paripetal corolla, (monopetal!)

Bodies with a root and caudex, commonly a stem, seldom woody, often branched, always with leaves or scales, and conspicuous flowers, fruits, and seeds: germination commonly isocotyle, dicotyle, and opposite.

460. *Lithospermum apulum*! L.—Pursh. On the Mississippi.
461. *Hydrophyllum pusillum* Mg. Cat. In Louisiana, undescribed, perhaps the *H. tribolum* Fl. sp. 97?
462. *Scutellaria cordifolia* Mg. Cat. Undescribed, on

- the Mississippi, perhaps the same with *S. deltoides*.
Fl. sp. 127.
463. *Martynia proboscidea* L. On the Mississippi, Mg.
464. *Dianthera pedunculata* L. On the Mississippi,
Mich.
465. *Lamium hispidulum* Mich. On the Mississippi.
466. *Catalpa amena* Raf.—*Bignonia catalpa* L.—
Catalpa syringifolia Pursh. On the Mississippi,
Mich.
467. *Verbena subletia* Wild?—*Buohnera canadensis* L.
—*Glandularia carolinensis* Gmelin, &c.—*Verbena*
anonyma Bartr. trav. p. 136. Found by Bartram
near Pointe Coupée: he says, that it is a beautiful
species, with decumbent branches and lacerated
deep green leaves, the branches bear corymbs
of violet blue flowers. It grows in fields, in good
soil, and blossoms in Autumn.
468. *Lycium carolinianum* Mich.—*L. Salsum* Bartr.
469. *Gentiana puberula* Mich.
470. *Bumelia lycioides* Mich. *Sideroxylon* Bartram.
471. *Convolvulus jalappa* L. In Louisiana Mg.
472. *Ipomea tamnifolia* Wild? On the Mississippi, Mg.
473. *Ipomea coccinea* Mich. In Louisiana, Pursh.
474. *Cantua aggregata* Pursh. On the Mississippi.
475. *Gonolobus leve* Mich. On the Mississippi, Mg.
476. *Apocynum hypericifolium*? Aiton.
477. *Diospyros pubescens* Pursh.—*D. caroliniana*
Mg. On the Mississippi near Natchez.

CLASS III.—ENDOGYGIA.

Stem or caudex vascular and fibrous, vessels and fibres in concentrical layers, surrounding a central pith or hollow.

Flowers with a single ovary, connected with the calyx or exterior perigone. Stamina constantly inserted on the interior perigone, which is a peripetal corolla.

Bodies with a root and caudex, commonly a stem, seldom woody, often branched, always with leaves or scales, and conspicuous flowers, fruits and seeds: germination commonly dicotyle, isotyle, and opposite.

478. *Sambucus canadensis* L. On Lake Maurepas and on the Taensa, Bartram.
479. *Viburnum molle* Mich.
480. *Spermacoce glabra* Mich. On the Mississippi.
481. *Halesia tetraptera* L. On Lake Maurepas and at Pointe Coupée, Bartram.
482. *Triosteum angustifolium* L.
483. *Carthamus tinctorius* L. Cultivated.
484. *Taraxacum densleonis*, Decandolle.—*Leontodon taraxacum* L. On the Washita, Mg.
485. *Jacobeia balsamita* Raf.—*Senecio lyratus*, Mich.—*S. lobatus*, Pers. Mg.—*S. balsamita* Wild. Pursh.—*S. glabellus*, Lam. On the Mississippi, Mg.
486. *Eupatorium altissimum* Willd. On the Mississippi, Pursh.
487. *Rudbeckia amplexifolia* Willd. In Louisiana, on the banks of the Mississippi, Mg. Pursh.

488. *Zinnia multiflora* L. On the Mississippi, Pursh.
 489. *Bœbera chrysanthemoides* Wild — *Tagetes pap-
 posa* Mich. On the overflowed banks of the
 Mississippi, Mich. and Pursh.
 490. *Helenium canaliculatum* Lam. In Louisiana.
 491. *Mesodetra alata* Raf. — *Rudbeckia alata* Jacq. — *He-
 lenium quadridentatum* Wild. Pursh. On the
 banks of the Mississippi, Pursh. It must form a
 new genus, which differs by the perianth, sta-
 mina and flowers from *Rudbeckia* and *Helenium*.
 Stamina 4.
 492. *Silphium laciniatum* L. On the Mississippi,
 Pursh.
 493. *Silphium terebinthaceum* L. On the Mississippi,
 Pursh. Mich.
 494. *Scorzonera pinnatifida* Mich. On the Missis-
 sippi, Mg.

CLASS IV.—SYMPHYGYNIA.

Stem or caudex vascular and fibrous, vessels and fibres in concentric layers, surrounding a central pith or hollow.

Flowers with a single ovary, connected with the calyx or the perigone; stamina never inserted on a peripetal corolla, or interior peripetal perigone.

Bodies with a root and caudex, commonly a stem, sometimes a woody one, often branched, always with leaves or scales, and conspicuous flowers; fruits and

seeds; germination generally dicotyle, exscotyle, and opposite.

495. *Lobelia fulgens* Pursh. On the Mississippi.
496. *Momordica echinata* Wild. Pursh. *Sicyos lobata* Mich. On the Mississippi, Pursh.
497. *Eryngium fetidum* L. In Louisiana, Mich.
498. *Cactus opuntia?* L.
499. *Cnathora glauca* Mich.
500. *Nyssa villosa* Wild. Pursh.—*N. multiflora*, Walter and Bartram.
501. *Nyssa biflora* Wild. Pursh.—*N. aquatica*, L. Bartr.—*N. integrifolia* Aiton. Both species were found by Bartram on the banks of the lake Maurepas.
502. *Punica granatum* L. Cultivated; Mg.
503. *Malus coronarius* Dec.—*Pyrus coronarius* L. Near White Plains and Pointe-Coupée, Bartram.
504. *Quercus hemispherica* Bartr. Wild. Pursh. Near lake Maurepas, Bartr.
505. *Hicorius* *Juglans exaltata* Bartr. Found near Pointe-Coupée; perhaps *H. amara* Fl. sp. 360.
506. *Ammania ramosior* L.

CLASS V.—ANGIOGYNIA.

Stem or caudex vascular and fibrous, vessels and

fibres fasciculated, interwoven, and mixed with the pith.

Flowers with a single ovary, connected with the perigone.

Bodies with a root and caudex, often a stem, seldom woody, not often branched, frequently with leaves, scales or sheaths; flowers, fruits, and seeds conspicuous: germination commonly monocotyle and lateral.

507. *Canna elegans* Raf.—*C. angustifolia* Pursh.—*C. glauca* Walter.—*C. indica* Bartram trav. p. 426.

Found by him on the banks of the Amete and near Lake Maurepas, where it grows with luxuriance, the stems rising from six to nine feet, bearing beautiful spikes of scarlet flowers.

508. *Leptanthes ovalis* Mich.

509. *Iris cuprea* Pursh.—*I. fulva?* Mg. Found by Enslen near New-Orleans.

CLASS VI.—GYMNOGYNIA.

Stem or caudex vascular and fibrous, vessels and fibres fasciculated, interwoven, and mixed with the pith.

Flowers with one or many ovaries, unconnected with the perigone: always a perigone, no glumes nor spadix.

Bodies with a root and caudex, often a stem, scarcely ever woody, seldom branched, often with leaves, scales or

sheaths; flowers, fruits, and seeds conspicuous: germination commonly monocotyle and lateral.

510. *Juncus tenuis* Wild.

511. *Polyanthes tuberosa* L. Cultivated, Bartram.

CLASS VII.—PHANEROGYNIA.

Caudex or chaff vascular and fibrous, vessels and fibres fasciculated; interwoven, and mixed with the pith.

Flowers with one or many ovaries, seldom a perigone, commonly a glume or spadix: stamina visible.

Bodies with a root and caudex or chaff, seldom woody or branched, often with crowning or sheathing leaves; flowers, fruits, and seeds conspicuous: germination commonly monocotyle and lateral.

512. *Trisiola paniculata* Raf.—*Uniola paniculata* L.

Pursh.—*Uniola maritima* Mich. In Louisiana, Mich. The genus *Trisiola* is triandrous, and the *Uniola* is monandrous.

513. *Tripsacum dactyloides* L.

514. *Panicum virgatum* L. On the Mississippi, Mich.

515. *Panicum hirtellum* L.—Scotch grass. Bartr. trav. p. 430. Near Manchac, &c. This valuable grass was introduced in Louisiana from the West Indies; they mow or reap it at any time,

- and feed the cows or horses with it, in its green state : it is nourishing food for all cattle. Bartram.
516. *Paspalum paniculata* Walter. On the Mississippi, Mg.
517. *Paspalum floridanum* Mich.
518. *Alopecurus geniculatus* L. On the Mississippi, Mg.
519. *Uniola gracilis* Mich. Pursh. Mg.—*Holcus laxus* Wild. On the Washita, Mg.
520. *Arundo donax* L. Naturalized, Mg.
521. *Agrostis mexicana* L.
522. *Elymus europeus* L! On the Mississippi, Mg.
523. *Miegia tecta* Mg. *Arundo tecta* Walt. On the Mississippi, Mg. The *M. gigantea* of Muhlenberg, *A. gigantea* Walt. is the *M. macrosperma* Pers. and Fl. sp. 28. the *Arundinaria* Mich. or *Ludolfia* Wild.

CLASS VIII.—CRYPTOGYNIA.

Caudex or stirpes vascular and fibrous, vessels and fibres fasciculated, interwoven, and mixed with the pith.

Flowers with invisible ovaries, no perigone nor real stamina.

Bodies with a caudex or stirpes, commonly with a root, often a frons instead of leaves ; flowers, fruits, and seeds inconspicuous · germination lateral, often monocotyle or irregular.

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CLASS IX.—MYCOSIA.

Cellular bodies, not fibrous, without pith : vessels inconspicuous.

Living in the air.

Bodies variously expanded, without stem or leaves, seldom a frons ; no flowers, ovaries, nor stamina ; fructification inconspicuous, concealed : germination acotyle, expansive.

CLASS X—ALGOSIA.

Cellular bodies, not fibrous, without pith, vessels inconspicuous.

Living in the water.

Bodies variously expanded, often a frons and branches, no real stem nor leaves ; no flowers, ovaries, nor stamina ; fructification inconspicuous, concealed ; germination acotyle, expansive.

No species belonging to those three last classes (which correspond with the Cryptogamy of Linnæus,) have been stated to grow in Louisiana, besides those found by Robin !

Two plants have been mentioned without names, which cannot be classed ; they are

524. An arborescent aromatic vine, Bartr. trav. p. 436. Found at Pointe-Coupée and Baton-rouge ; it mounts to the top of the highest trees, by twisting spirally round them ; they grow on the rich highlands on the banks of the river ; some of them are as thick as a man's leg, of a soft spongy texture and flexible, covered with a cinnamon coloured bark, which is highly aromatic or spicy, the leaves are large, oblong, opposite, and of a full deep colour, Bartram.—Perhaps it is the *Schisandra coccinea* Mich. ?
525. A Crab-apple, tasting like Raspberries, found by Ker on the Red-river —Perhaps it is a species of *Crategus* ?



ADDITIONS

1. Sp. 17. *Sarracenia leucophylla*. The genus *Sarracenia* has not the least affinity with the order or tribe of Aroides, it is because Robin mistook the singular leaves of this plant, for the spatha of an *Arum*, that he has united it thereto.
2. N. G. I. *ANANTHOPTIS*. This genus has also much affinity with *Commelina* and the ovary is probably free.
3. Sp. 69. *Laurus sassafras*. Bartram found it on the White plains; he says that it grows to a vast tree, 40 to 50 feet, straight trunk; its timber is found to be very useful, sawn into boards and scantling, or hewn into posts for building and fencing.
4. Sp. 109. *Olea americana*. On the banks of the Mississippi according to Muhlenberg.
5. Sp. 119. *Collinsonia verticillaris*. Its real name must be *Hypogon verticillatum* Raf. and the *C. anisata* must be called *Hypogon anisatum* Raf. since the number of stamina is constant and generic in this tribe, else the genera *Salvia*, *Rosmarinus*, *Lycopus* &c. ought not to exist! *Hypogon* means *beard beneath*.
6. Sp. 139. *Heliotropium indicum*, is also mentioned by Muhlenberg, as native of the banks of the

Mississippi. Is the American species identic with the East Indian?

7. Sp. 145. *Ipomea avicularis*. This plant must be called and characterized as follows. *Ornithosperma serotina* Raf. Volubilis, foliis cordatis trilobis longe petiolatis, lobis acutis; floribus solitariis, sepalis calicinalis acuminatis. Raf. Very distinct from *Ipomea* by the capsul and stigma. The name means *Bird's seed*.
8. Sp. 150. *Tecoma radicans*, add *Bignonia radicans* L. &c.
9. Sp. 158. *Asclepias procumbens*, must be called *Anthanotis procumbens* Raf. Mr. Elliot has given to the genus *Anthanotis*, the name of *Acerates*, meaning *without horns*; my name means *flowers without ears*, and is rather better, since there is already a genus of plants called *Aceras* by Brown.
10. Sp. 163. *Gelsemium sempervirens*, add *Bignonia sempervirens* L. *Gels. nitidum* Mich. Pursh. Mg. This last author mentions that it is found on the banks of the Mississippi.
11. Sp. 168. *Hopea tinctoria* L. add *Simplocos tinctoria* L'Heritier and Mg. who says that it grows near Natchez.
12. Sp. 175. *Krigia oppositifolia*, must rather be called *Serimia cespitosa* Raf. The genus *Serimia* differs from *Krigia* by the naked seeds; the name means *small chicory*.
13. Sp. 176. *Prenanthes glauca*, must rather be called *Esopon glaucum*, differing from *Prenanthes* and

R*

Troximon by the feathery down. *Esepon* is an ancient name.

14. N. G. XII. GYNEMA. This genus has also much affinity with my genus *Gymnostyles*, the type of which is the *Conyza marilandica* L. but in this last the female flowers have no corolla.
15. Sp. 237. *Galium uniflorum*, add.- Obs. The name of *Galium* being so similar to *Allium*, *Galactia*, *Gallus*, *Gallinula*, &c. ought perhaps to be superseded by the anterior and better name *Aparine* of Tournefort.
16. Sp. 246. *Viburnum prunifolium*. Is it not rather the *V. lentago*?
17. Sp. 280. *Acer rubrum*. Seen near Lake Maurepas by Bartram.
18. Sp. 295. *Hibiscus grandiflorus*. Found near Natchez by Michaux.
19. Sp. 300. *Magnolia grandiflora*. Common on the Red-river, the Mississippi, Lake Maurepas, &c.
20. Sp. 324. *Fragaria* Bartram in his travels, p. 432, mentions a species of Strawberries found on the White plains, which bear very large fruit, of a fine red colour, delicious and fragrant. It may be a peculiar species, which might be called *Fragaria ludoviciana*.
21. Sp. 333. *Gleditsia triacanthos*. Muhlenberg mentions that the *Gl. monosperma* grows near Natchez, and Bartram found the *Gl. triacanthos* on the White-plains.
22. Sp. 378. *Morus rubra*. Seen by Bartram on the White plains and near lake Maurepas.

23. Sp. 383. *Humulus lupulus*. On the Washita, Mg.
24. Sp. 397. *Quercus phellos*. Seen on lake Maurepas, by Bartram.
25. Sp. 401. *Platanus occidentalis*. This tree is called Sycamore by the American settlers. It reaches an immense size; an individual has been seen on the Red-river measuring 69 feet in circumference.
26. Sp. 402. *Cupressus disticha*. Its real name must be *Schubertia disticha*, Mirbel, having been ascertained to form a peculiar genus. It is a wonderful tree, surrounded by knobby pillars, springing from the roots. It grows in all the swamps of Louisiana, and rises sometimes 100 feet without branches. Its timber is very valuable and lasting: they build the wharves with it in Louisiana.

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ABBREVIATIONS OF THE NAMES OF AUTHORS.

Ait.	-	means	-	Aiton.
Bartr.	-		-	Bartram.
Br.	-		-	Brown.
Cav.	-		-	Cavanilles.
Dec.	-		-	Decandolle.
Jaq.	-		-	Jacquin.
Jusa.	-		-	Jussieu.
L.	-		-	Linnæus.
Lam.	-		-	Lamark.
Mich. or Mx.	-		-	Michaux.
Mg. or Muhl.	-		-	Muhlenberg.
Pers.	-		-	Persoon.
Poir.	-		-	Poiret.
Pursh.	-		-	Pursh.
Sal.	-		-	Salisbury.
Sm.	-		-	Smith.
Raf.	-		-	Rafinesque.
Rob.	-		-	Robin.
Walt.	-		-	Walter.
Wild.	-		-	Willdenow.

APPENDIX

TO THE

TREES AND SHRUBS OF LOUISIANA.

WHILE the Supplement of this work was under the press, the Geographical Description of Louisiana, by William Darby, fell into my hands. Having perceived in it, several elaborate Catalogues of the trees and shrubs, growing in the different parts of that State, some of which had not been observed by Robin, Bartram, &c. and some additional geographical and economical remarks on others, I have been induced to enumerate those additions, for which we are indebted to Mr. Darby ; correcting, at the same time, several errors of nomenclature, into which he appears to have fallen. It has been the fate of Louisiana to be explored by individuals, very imperfectly acquainted with Botany, and whose blunders, wherever they attempt to state any thing above mere facts, assume the most singular character. Mr. Darby does not appear to have been acquainted with the work of Robin ; his guide has been the mere Catalogue of Muhlenberg, and Michaux's work on the trees of North America, yet without noticing it. He has not favoured us with the descriptions of his few new trees ; but, by some hasty

O

verbal explanations, I was enabled to form a judgment on them. He has confirmed my ideas on the unexplored vegetable treasures of that State, since he has assured me, that he is partly acquainted with many other new trees and shrubs, unnoticed in his work, and by Robin: he has in particular mentioned a new wild Pear tree, found by him on the north-west parts of the State, which bear small turbinate acid fruits; and whose size and foliage are very similar to the common Pear tree; if really new, it might be called *Pyrus ludoviciana*.

I shall enumerate those Trees and Shrubs, alphabetically, prefixing numbers to those not mentioned by Robin, Bartram, &c.

Acer rubrum, sp. 280. and *A. negundo*, sp. 413.
Used for fuel, common.

Acer nigrum. sp. 415. Rare, called black sugar maple.

526. *Andromeda racemosa* D! Sorrel tree! probably the *Andr. arborea* L. whose vulgar name is such, the *A. racemosa* being called Red-bud. Common near Iberville, &c.

Annona triloba D. sp. 302. Plentiful in Opelousas.

Arundo gigantea D. sp. 28. It is not an *Arundo*. It grows in immense brakes in many parts of Louisiana, in grounds not subject to annual submersion, and is rapidly destroyed by the clearing of the lands. D.

527. *Betula lenta*. Black birch D. Perhaps a different species.

528. *Betula nigra* D. In Washita.

Bignonia catalpa. sp. 466. Its wood is excellent and withstands the action of air and moisture longer than any other, corner posts 30 years old do not exhibit the least appearance of decomposition. Common in Opelousas. D.

529. *Cactus cylindricus* D! probably a different species; found near Texas and Natchitoches.

Carpinus americana D. sp. 412. *Carpinus* containing *Pinus* must be altered into *Carpinum*. In the northern and eastern parts, and in Opelousas. D.

530. *Carpinus Ostrya*. D. Is the *Ostrya virginica* of Mg. and Pursh, too similar to *Ostrea—Zugilus virginica* Raf. In the North-East, and in Opelousas.

531. *Castanea pumila*. The Chincapin tree vegetates in an immense range of Louisiana, and exists in great variety of soils. It is found in the border of overflowed land, often more than a foot in diameter; but always of diminutive elevation, compared to its thickness. D.

532. *Celtis crassifolia*. Blackberry D. Common, used for fuel.

533. *Cerasus caroliniana*. Laurier almond! D. The *Chimanthus amygdalina* sp. 70, is very different, perhaps two species are called Laurier amande in Louisiana, or some blunder has been committed by Robin or Darby!

Chamerops Louisiana! Palmetto or Latania!

D. This Palm which Mr. Darby in a note, p. 81. thinks a new species, and to which he gives two erroneous Latin and French names, is merely the *Sabal adansoni* sp. 29. It marks the limit of annual inundation, as it grows above the reach of it.

Cornus florida, sp. 245. Wherever this tree is found, the maize may be cultivated, its flowering season is a signal for planting the maize, and the fruit of both come to maturity nearly at the same time. D.

534. *Cornus alba*. Swamp dogwood D. doubtful, in Opelousas, &c. in Palmetto lands.

Cupressus disticha Sp. 402. Common in overflowed lands, and the bluffs of the Mississippi.

Diospyros virginiana, Sp. 166. Common in Swamps.

Fagus sylvestris . D. it is probably the *F. alba* Raf. sp. 417. It begins to appear on the northern waters of Opelousas, and decorates the margin of all the streams to the north of that place, as far as Washita. D.

535. *Fraxinus tomentosa*. Red Ash ? On the Washita, at Plaquemines, &c. used for fuel.

536. *Fraxinus aquatica*. Water Ash D. Both may happen to be some of the new species of Robin.

Gleditschia monosperma, rare.

————— *triacanthos*, more common.

Ilex opaca D. sp. 364. rare.

537. *Juglans cathartica* D. This is Michaux's name, the name of Linnæus, *J. cinerea* is better and anterior. Rare, only found on the upper Teche.

538. *Juglans aquatica*. Swamp hickory D. Near the Mississippi, with the following one, west of Natchez.
539. *Juglans laciniosa*. Thin shell-bark hickory.
540. ——— *porcina*. Pignut hickory. On the Washita, Pearl-river, &c.
641. *Juglans squamosa*. Shell-bark hickory. Those names are Michaux's. All the hickories belong to the genus *Hicorius*; they are common all over Louisiana: On the Washita, &c.
542. *Juglans myristiceformis*. Nutmeg hickory, Mx. Along the slopes of hills in rich lands, in the broken fertile country west of Atchafalava, in Opelousas, &c.
543. *Juglans oliveformis*; Paccan. Near Natchitoches, on the Red-river, the Colorado, in Texas, &c.
544. *Juglans tomentosa*. In east Louisiana.
545. *Juniperus virginiana*. Red cedar. On the hills of the Red-river, &c.
546. *Laurus benzoin*. Spicewood D. In Opelousas.
Laurus caroliniensis, sp. 419. Red-bay, D. Common in the south, and in Opelousas. Is the Sweet-bay, the same tree, or the *Laurus ludoviciana*. sp. 71?
Liquidambar styraciflua, sp. 395. Sweet gum, it grows on all sorts of soil, on the high hills, in the deepest swamps, and on the borders of the prairies and overflowed lands, D.
Liriodendron tulipifera, sp. 410. Poplar. On the hills, common near Baton-rouge, and West of Amite, D.

Magnolia grandiflora sp. 300. Common, wood of very little use. Large laurel or Laurel magnolia, D.

Magnolia glauca. Probably the *M. fragrans* sp. 301. White-bay, D.

Morus rubra sp. 378. Scarce.

547. *Morus scabra*. Spanish mulberry. In Opelousas, &c. A shrub, it indicates fertile land.

Melia azedarach, sp. 437. Its growth is extremely rapid, wood as good as that of the Catalpa. Cultivated, D.

Nyssa aquatica. Tupeloo D. It is the *N. biflora*, sp. 501. Vulgar name in Louisiana, *Olive*, from its fruit. Common in cane brakes, ponds, and lagoons, D.

Nyssa sylvatica. Black Gum, D. Probably the *N. villosa*, sp. 500. In Opelousas, and in east Louisiana, &c. in woods.

Pavia lutea D. sp. 278. A dwarf shrub.

Pinus tada. Loblolly pine. On the Amite, &c.

548. *Pinus rigida*. Pitch pine. On the dry hills of the north-east, forming large woods.

Populus angulata, sp. 391. Cotton wood. Common on the banks of all the rivers.

Prunus or *Cerasus virginiana*, sp. 328. Common south and east of the State.

549. *Prunus cerasus*. Cultivated, but does not grow well, even on the hills, the apple-tree is in the same case.

Platanus occidentalis. Common.

Phytolaca decandra. Poke. In Opelousas, it indicates a fertile soil.

550. *Quercus falcata*. This tree announces the transition from the recent, to the ancient alluvions, more abundant near Opelousas, often found on slightly overflowed lands, but it is then out of its congenial soil. D.

Quercus phellos, sp. 397. Common in the southern parts.

Quercus macrocarpa, sp. 400. Common in Opelousas, &c.

551. *Quercus lyrata*. In Plaquemines, &c. good fuel.

552. ——— *tinctoria*. On the Washita, &c. the Pearl river, &c.

553. *Quercus rubra*. Common with the foregoing in the forests of Opelousas, in alluvial soil : also on the Red-river, and in Palmetto-lands.

Quercus nigra, sp. 399. On the Washita. Several sorts of black oaks are found in Opelousas.

Quercus virens, sp. 396. Valuable tree, of slow growth, which is rapidly destroyed : it has a particular range in Louisiana, common in Atakapas, Amite, &c. rare on the Sabine, not found in Opelousas, &c. D.

554. *Quercus alba*. Common. Several sorts of white oak are found in Opelousas.

555. *Quercus obtusiloba*. East Louisiana, rare.

556. ——— *aquatica*. Near New-Orleans, &c.

557. ——— *ferruginea*. Rare.

Robinia preudacacia, sp. 351. Black locust:

- Common on the Washita, Red-river, near Nat-chitoches, &c.
558. *Robinia pumila*. Dwarf locust, D. Near Nat-chitoches, a shrub ; vulgar name, Musquito wood. Perhaps it is the *R. viscosa* or the *R. hispida*, not described.
559. *Robinia bistineau!* Bistineau locust, D. Found on lake Bistineau, a dwarf tree about 20 feet high, without thorns. Mr. Darby thinks it is a new species ; which may be the case, since he told me verbally that it has white flowers, and small few seeded oblong flat legumes : it is perhaps not a *Robinia*. If such, and new, it must be called *Robinia ludoviciana*.
560. *Rubus villosus* or *R. fruticosus*. Blackberry, D.
561. *Rubus pubescens*. Abundant along the banks of the Mississippi, and nearly all the rivers of Louisiana.
562. *Sambucus rubra*, D. Perhaps the *S. ebulus* naturalized. It indicates fertile lands.
563. *Salix nigra*. Common in swamps, lagoons and along the rivers. Used for fuel.
564. *Smilax rotundifolia*. Common in woods, entangling the trees, very troublesome. Green briar, D.
565. *Tilia pubescens*. In the north and east of the State.
Ulmus americana. Mucilaginous Elm. This is probably the *U. pinguis* or *U. alba*, sp. 387 and 388. Common.
566. *Ulmus rubra*. Red-elm, D. Must be the *U.*

Fulva of Michaux. On the north-west parts of Louisiana.

567. *Ulmus alata*. Large leaved elm, D. Near New-Orleans and at Plaquemines.

Ulmus aquatica. Swamp elm, D. This is probably the *Planera gmelini*, sp. 411. Growing in water, together with *Nyssa aquatica*.

568. *Vaccinium arboreum*. Common west of the Delta in thin level woodland.

569. *Vaccinium starmineum*. In pine forests on both sides of the Mississippi, and in Opelousas.

570. *Vaccinium macrocarpon*. Cranberry, D. Or rather *Oxycoccus macrocarpus*, Pursh. Found on the waters of the Mermentau. Is it really that species?

571. *Vaccinium resinsum*. In pine forests, east and west of the Mississippi.

Vitis riparia, sp. 441. In Opelousas, it overhangs the streams together with the following one.

572. *Vitis laciniosa*. In Opelousas.

573. *Vitis verrucosa*. Muscadine grape. Very common in Opelousas; and near Baton rouge.

TRACTS

OF

C. S. RAFINESQUE.

Published or communicated, since the publication of his Circular Address on Botany and Zoology, in 1816, where his former works are ENUMERATED.

1. Description of a new genus of American soft shell turtle, *Aplaxia nasica*, and several other new reptiles, *Anguinus faciatus*, *Triturus fuscus*, *Tr. viridescens*, *Onyxurus atricapillus*, *Ranaria melanota*, &c. communicated to the Literary and Philosophical Society of New-York, 1816.

2. Supplements to the Memoir on the American Sturgeons, where five other species are noticed. Communicated to the Society in 1816 and 1817.

3. Dissertation on the cubic bulk of organized beings, or animals, and plants. Communicated to the same society, 1817.

4. Botanical disquisition on ten native species of grape vines, from the State of New-York, most of which are new, and where it is shown that about 24 species of the genus *Vitis* are found in North America. Read to the same Society, 1817.

5. Notes on the geographical range, or native places of many rare, North American plants. Read to the same society in 1817.

6. Two reports to the Lyceum of Natural history, on the labours of a travelling committee, on the Botany and Zoology of the Highlands, 1817.

7. Report to the same Lyceum, of a botanical excursion on the Catskill mountains, with Mr. Knevels, 1817.

8. Several reports to the same Lyceum on many new species of animals of the genera *Gordius*, *Nereis*, *Gryphea*, *Glomeris*, *Triturus*, *Cymothoa*, *Testudo*, *Tubipora*, *Cellepora*, &c. and same new genera *Prodiplus*, *Nectylus*, &c.

9. Several catalogues of plants collected on Long-Island. Communicated to the Lyceum, 1817.

10. Description of, and Dissertation on, the genus *Xanthium* and the *Xanthium maculatum*, a new American species found near New-York, &c. Communicated to the Lyceum, 1817.

11. Dissertation on the natural classification of the genus *Florkea*, which is proved to belong to the natural tribe *Euphorbinia*, natural family *Galenidia*, next to *Nectris* and *Galenia*. Read to the Lyceum in 1817.

12. First decade of new genera of North American plants, viz. *Clintonia*, *Polanisia*, *Peltandra*, *Cylactis*, *Nemopanthus*, *Amphipogon*, *Diplogon*, &c. Communicated to the Academy of Natural Sciences of Philadelphia, 1817.

13. Several reviews of Botanical works, such as Pursh's *Flora Americæ-septentrionalis*, Barton's Pro-

dromus floræ Philadelphica, &c. In the American Monthly Magazine and Critical Review, New-York, 1817.

All the following Tracts were published in the Museum of Natural Sciences, of the American Monthly Magazine and Critical Review, New-York, 1817.

14. Description of a new American fossil *Tubipora striatula*.

15. Synopsis of ten new American species of the genus *Aphis* and two akin new genera *Cladoxus* and *Loxerates*.

16. Definitions and notes on some new Quadrupeds of Geoffroy, Desmaretz, Azara, &c.

17. Dissertation on Water-snakes, Sea-snakes, and Sea-serpents, including the several species of the genera *Enhydria*, *Natrix*, *Platurus*, *Hydrophis*, *Pelamis*, *Ophinoctes*, and the Sea-serpent *Megophias*.

18. Notes on some new Quadrupeds of the Missouri region, described by Leraie, of the genera *Cervus*, *Felis*, *Lynx*, &c.

19. Neogenyton Siculum, or Descriptions of four new genera of Dicotyle Sicilian plants, viz.

Adoceton saxatile.—*A. maritimum*.

Phedimus stellatus.—*Ph. uniflorus*.

Pternix cynaroides.

Vetrix sicula.

20. Description of seven new species of Sicilian plants.

Ruta fimbriata. *Xylosteon Siculum.*
Euphorbia montana. *Orchis hyemalis.*
Orobanche fragrans. *Herniaria nebrodensis.*
 ——— *obtusata.*

21. Flora albimontana, or of the White mountains of New-Hampshire, by Bigelow and Booth, with six new species, and notes, wherein three new genera are established *Aplostemon*, *Bigelowia*, and *Dimesia*.

22. Synopsis of four new genera and ten new species of Crustacea, from the United States. They are

Nectoceras pelagica, N. G. *Astacus limosus.*
Nectylus rugosus, N. G. ——— *fossor.*
Psammylla littoralis, N. G. ——— *pusillus.*
Pepredo potamogeti, N. G. ——— *ciliaris.*
Grapsus limosus. *Portunus menoides.*
Ocyroda pusilla. *Daphnia dorsalis.*
Pagurus truncatulus. *Cymothena pallida.*

23. First decade of New Species of North American plants.

Acnida salicifolia. *Celtis canina.*
Arabis rotundifolia. ——— *maritima.*
 ——— *parviflora.* *Copodium oxynemum.*
 ——— *mollis.* *Turritis lyrata.*
Lemna dimidiata. ——— *oblongata.*

24. Description of seven New Genera of North American quadrupeds.

Mazama tema. *M. dorsata.* *M. sericea.*
Diplostoma fusca. *D. alba.*
Geomys pinetis. *G. cinerea.*

P

Cynomys sociālis. *C. grisea.*

Anisonyx brachiura. *A. rufa.*

Mynomys pratensis.

Lynx canadensis. *L. montanus.* *L. rufus.* *L. floridanus.* *L. fasciatus.* *L. aureus.*

25. Description of the *Ioxylon pomiferum*, a new genus of North American tree.

26. Second decade of undescribed North American plants.

Asclepias maritima.

Coralorhiza maculata.

Atriplex macronata.

Aristida geniculata.

———— *dioica.*

Panicum uniflorum.

Euphorbia supina.

Polygonum arenarium.

———— *littoralis.*

Scutellaria nemorosa.

27. First decade of new North American Fishes.

Anguilla chrysypa

Cyprinus bullaris.

———— *blephura.*

———— *hemiplus.*

Salmo pallidus.

———— *vittatus.*

Bodianus rupestris.

———— *megalops.*

———— *ashigan.*

———— *melanurus.*

28. Survey of the progress of Natural Sciences in the United States, from 1800 to 1817.

The following Tracts will be published in the third number of the second volume, for January, 1818.

29. An introduction to the Ichthyology of the United States.

30. Description of two new genera of North American Fishes, *Opsanus* and *Notropis*.

31. Second decade of New North American Fishes.

<i>Perca mucronata.</i>	<i>Exocetus rubescens.</i>
—— <i>notata.</i>	<i>Callionymus pelagicus.</i>
<i>Petromyzon leucopterus.</i>	<i>Clupea sapidissima.</i>
<i>Phycis marginatus.</i>	—— <i>megalops,</i>
<i>Sparus erythroptis.</i>	—— <i>neglecta.</i>

31. Third decade of new North American Fishes.

<i>Malus microcarpa.</i>	<i>Neottia plantaginea.</i>
<i>Prunus rupestris.</i>	—— <i>lacera.</i>
<i>Spirea obovata.</i>	<i>Stellaria montana.</i>
<i>Euphorbia vermiculata.</i>	—— <i>tenella.</i>
<i>Equisetum montanum.</i>	<i>Juniperus depressus.</i>

And the following Tracts will be published in the course of 1818.

Fourth, fifth, sixth, seventh, &c. decades of new North American plants.

Description of several new genera of North American fishes, *Cheilobus*, *Miniculus*, *Polyprion*, &c.

Descriptions of 25 new species of North American snakes.

Description of 16 new species of turtles, lizards, and salamanders, from the United States.

Synopsis of 20 other new American species of the genus *Aphis*.

Fragments on the Marine Zoology of Sicily.

Description of the *Tessarops*, a new genus of American spider.

Dissertation on Atmospheric dust.

Dissertation on the ancient Geology of the neighbourhood of New-York.

Memoir on vegetable odours, and a classification of American scented plants.

Description of about 60 new species of North American quadrupeds of the genera *Sciurus*, *Lynx*, *Felix*, *Cervus*, *Atalapha*, *Lemmus*, *Gerbillus*, *Canis*, *Mephitis*, *Mustela*, &c.

Memoir on the ancient Lake of the Hudson.

Synopsis of many new genera and species of North American Polyps, Mollusca and shells.

New natural families of plants.

Florula lyncemontana, or of the Catskill mountains.

Florula Azorica, or of the Azore islands.

Memoir on some prevalent errors in Natural History.

Thoughts on the Mutations of the Earth.

Description of three new diseases of plants, *Sarcantha*, *Sarcomelas* and *Phyllops*.

Memoir on the Duration of Plants.

Memoir on Organic Arithmetic.

New genera of North American plants.

AMERICAN BOTANICAL WORKS.

It may not be useless, or it may at least be grateful, to some of our readers, to hear that several botanical works are publishing, or will soon be published, in the United States; we are therefore induced to notice them; each will add its mite towards the knowledge of our vegetable productions.

Botany of the southern states, Carolina and Georgia, by Stephen Elliot, Esq. Charleston; begun this year. A valuable work, with good descriptions, and many new species.

Descriptio uberior graminum et plantarum calamariarum Americæ septentrionalis, indigenarum et cicutarum. Auctore D. Henrico Muhlenberg, Philadelphia, 1817. One vol. 8vo.

Descriptio uberior plantæ lancastriensis et Americanae. Opus postum. auctore D. Henrico Muhlenberg. —Announced.

Manual of the Botany of the northern states. Albany, 1817. One vol. 12mo.

Flora Novanglica, or Botany of the New-England states, by Dr. Bigelow and Mr. Booth, Boston.—Announced.

Prodromus Floræ Novæboracensis, or Catalogue of the Plants growing within 30 miles of New-York, with

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some new species, by Dr. Eddy, Messrs. Torrey and Knevels, New-York.—Announced.

Flora Philadelphica, by Dr. W. P. C. Barton, Philadelphia.—Announced.

Synopsis of the Botany of the United States, by John Leconte, Esq.—Announced.

Medical Botany of the United States, by Dr. Bigelow, Boston : begun this year.—Another work on the same plan, and bearing the same name, has also been undertaken and begun by Dr. Barton, in Philadelphia! They are both costly publications.

The Journal of the Academy of Natural Sciences of Philadelphia, begun this year, contains some botanical matter.

NOTICES.

THE following works will be published by the same author, as soon as he can make convenient arrangements with some printers and publishers in America, or in Europe.

Second edition of the **ANALYSIS OF NATURE**, or Survey of the Universe and Organized Beings, in English and French : with considerable additions.

AMENITIES OF NATURE, or selection of original Travels and Tracts on Natural Sciences, particularly Geology, Botany, and Zoology.

CRITICISM OF GENERA, or an Alphabetical investigation of generic nomenclature.

The publication of the two periodical works, announced under the name of **ANNALS OF NATURE**, and **SOMIOLOGY OF NORTH AMERICA**, is delayed until the period, not very distant, when an increase of taste for scientific knowledge may countenance and encourage it.

NOTICE

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Mr. C. S. Rafinesque has a few copies of some of his works to dispose of: they are

Principes Fondamentaux de Somiologie, &c. Fundamental principles of Somiology, or the laws of the nomenclature and classification of Organized bodies. Pamphlet, 1814.—Price 40 cents.

Précis des Decouvertes, &c. View of the Somiological Discoveries of C. S. R. with the descriptions of 50 new genera and 190 new species of American and European animals and plants. Pamphlet, 1814.—Price 40 cents.

Caratteri di alcuni, &c. Description of 62 new genera, and 272 new species of Sicilian plants and animals. One volume, 1810, 20 plates.—Price 1 dollar.

Indice d'Ittiologia, &c. Index of Sicilian Ichthyology, containing 390 species; 28 new genera, and 45 new species. Pamphlet, 1810, 2 plates.—Price 50 cents.

Specchio delle scienze, &c. Mirror of Sciences, containing above 60 original Tracts. Two volumes, 1814, 2 plates.—Price 2 dollars.

Analysis of Nature, or Survey of the Universe and the Organized Beings. One vol. 1815.—One dollar.

The Circular Address on Botany and Zoology, (pamphlet, 1816,) is given gratis to those who may ask for it.

He has, likewise, a copy of the two following, rare Botanical Classical works to dispose of.

Persoon Synopsis Plantarum. Two vols.—Price 10 dollars.

Vitman Summa Plantarum. Six vols. 8vo.—Price 9 dollars.

He offers to exchange any of his works, including this, and sets of the *American Monthly Magazine and Critical Review*, for any work on Natural Sciences, with the authors thereof, and he will take several copies of any late or new work, on those conditions.

Should any one send him specimens of plants, from Louisiana or elsewhere, he will furnish in return their proper names, or northern plants in exchange. He invites gentlemen residing in Louisiana and the western states, to collect every thing they meet, drying the specimens between sheets of coarse paper: should they only be superficially acquainted with Botany, by sending duplicates of their specimens, they may ascertain at once what grows in their neighbourhood, and make many discoveries.

Such specimens, or any package and letters, must be sent by private conveyances, and may be left in New-York, at the office of the *American Monthly Magazine*, Wall-street.



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