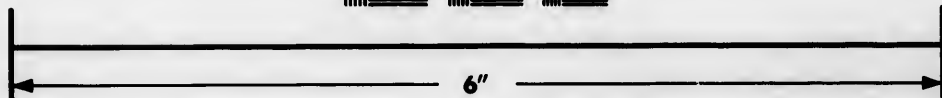
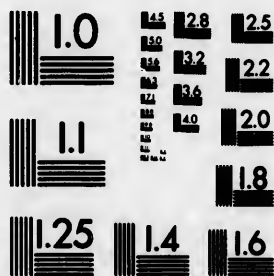


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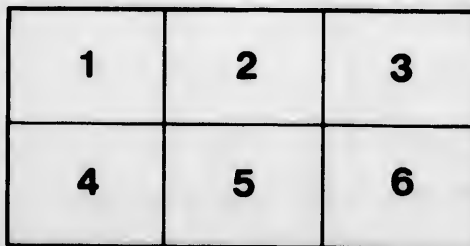
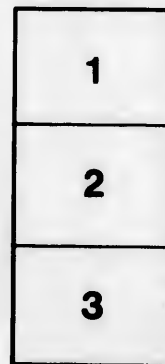
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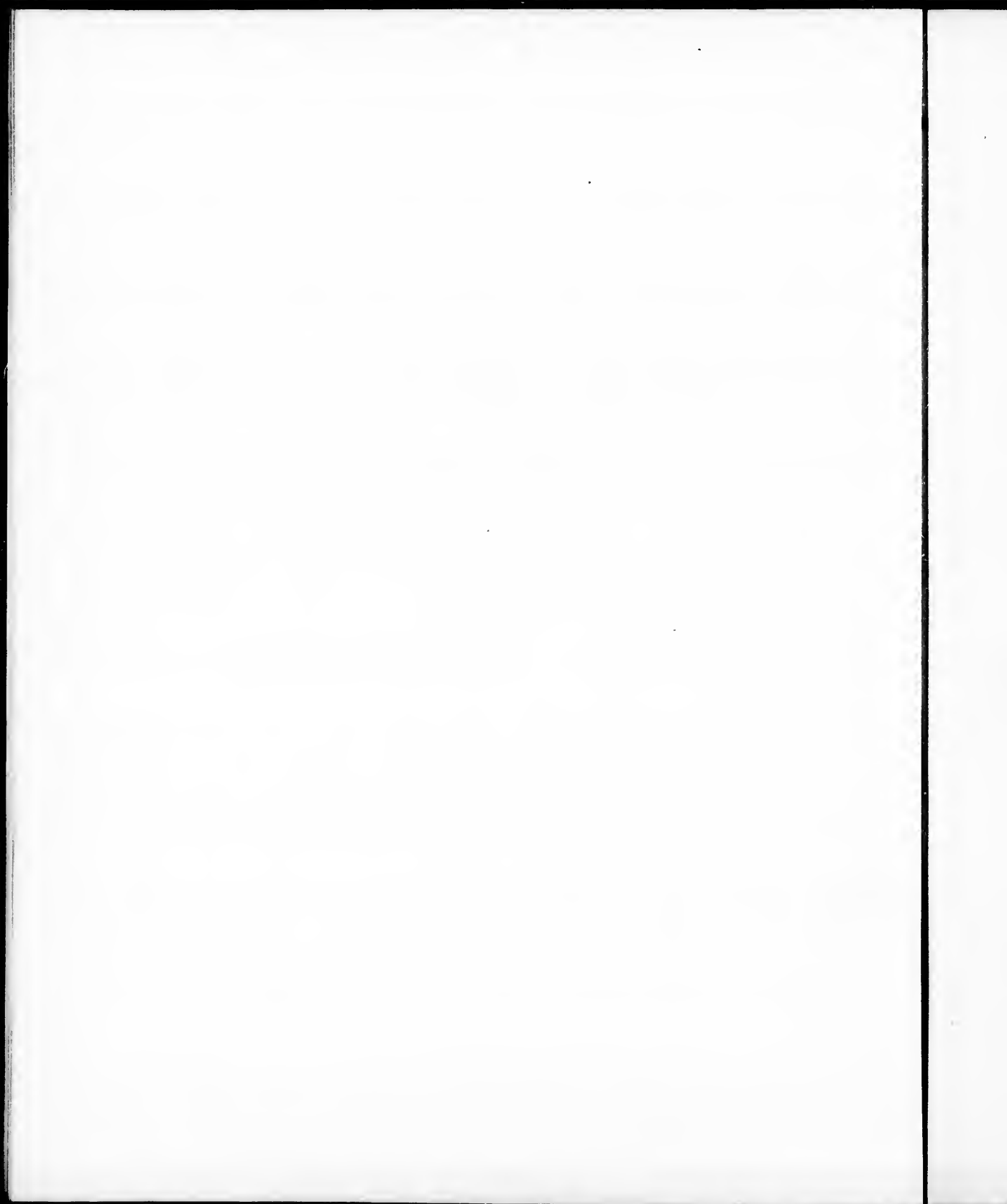
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**BOTANICAL APPENDIX**

TO

**CAPTAIN FRANKLIN'S NARRATIVE**

OF A

**JOURNEY TO THE SHORES**

OF

**THE POLAR SEA.**

By **JOHN RICHARDSON, M.D.,**

**SURGEON TO THE EXPEDITION.**

---

**LONDON:**

**PRINTED BY W. CLOWES, NORTHUMBERLAND-COURT.**

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**1823.**

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## BOTANICAL APPENDIX,

BY

JOHN RICHARDSON.

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THE following list of plants is not offered, as containing any thing like a full catalogue of the Flora of the country through which we travelled. During our summer journeys, only a small portion of time could be allotted to Botanical researches, and the constant and more important duties of the other officers prevented them from aiding me in collecting objects of Natural History, which they were otherwise anxious to do. Under such circumstances, a large proportion of plants must have escaped our notice, and the disasters attending our return across the Barren Grounds from the sea-coast, caused us to leave behind the whole collection made during the summer of 1821, with the exception of a few plants collected during the descent of the Copper-Mine River, which were intrusted to Mr. Wentzel's care when he left us. The part of the collection, which is lost, contained some plants, which I deemed to be new or curious.

In drawing up the list, imperfect as it is, I have received much assistance from able botanists. To Mr. Brown, I am under the greatest obligations, not only for the liberal use of the Herbarium and Library, which, so happily for science, have been placed in his possession; but, also for the friendly manner in which he aided my researches, and condescended to solve the doubts so frequently presenting themselves to one little versant in these pursuits. In addition to this general assistance, he kindly superintended the botanical drawings, and has enriched my catalogue with the lists of the Cyperoidæ (including the Carices) the Gramineæ, Junci and Filices, and, with the accounts of the genera *Eutoca*, *Heuchera*, and *Cryptogramma*.

The collections of Pallas and Pursh, now belonging to Mr. Lambert, rendered the power of referring to his valuable Herbarium an object of the utmost importance to me; and the desire of promoting the science, which so eminently distinguishes his character, induced him cheerfully to accord it.

Professor Schwægrichen, when in London, named the Musci, which renders that part of the list of high authority; and Professor Hooker, by undertaking the examination of the Lichenes and Fungi, has stamped a value upon a portion of the catalogue, upon which it was peculiarly desirable to have the opinion and authority of an eminent cryptogamic botanist.

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To reduce the size of the catalogue, the particular habitats of the plants have been omitted and letters placed in brackets, at the end of the references, to denote the districts in which they were found.

(H.) Denotes the country about York Factory, which includes a small portion of the sea-shore of Hudson's Bay, and the lower part of Hayes' River.

(S.) Distinguishes some plants that were collected on the banks of the Saskatchewan, but were not observed farther to the northward.

(C.) Denotes the sandy plains in the neighbourhood of Carlton, strongly resembling the plains of the Missouri, upon which the American botanists have lately made extensive collections.

(W.) Denotes the wooded country from latitude 54° to 64° north.

(B.) Denotes the Barren Grounds from Point Lake to the Arctic Sea.

(A.) Denotes the Arctic Sea-Coast.

For an account of these districts, I must refer to the geological notices at the commencement of the Appendix. The necessity of reducing the size of the Appendix has also compelled me to omit some remarks on the geographical distribution and limits of some of the plants, and of the effect of the Hudson's Bay climate upon vegetation, and also many descriptions of the new, or less known, species. Other more important omissions and mistakes will, doubtless, be detected, for which I can only plead the haste with which the work has been got out.

#### MONANDRIA.

1. *Hippuris vulgaris*: *Willd. Spec. Plant.* i. p. 26. *Pursh. Fl. Amer.* i. p. 3. (W.)
2. *H. tetraphylla*: *Willd.* i. p. 27. *H. maritima*: *Vahl. Enum.* i. p. 14. (H.)
3. *Blitum capitatum*: *Willd.* i. p. 30. *Pursh.* i. p. 4. (W.)

#### DIANDRIA.

4. *Veronica peregrina*: *Willd.* i. p. 76. *Pursh.* i. p. 11. (W.)
5. *Pinguicula vulgaris*: *Willd.* i. p. 110. (W. B.)
6. *Utricularia intermedia*: *Wahlenberg. Fl. Lapp.* p. 11. (W.)
7. *Lemna trisulca*: *Willd.* iv. p. 193. (W.)
8. *L. minor*: *Willd.* iv. p. 195. *Pursh.* i. p. 22. (W.)

#### TRIANDRIA.

9. *Valeriana sylvatica*: floribus triandris hermaphroditis, foliis caulinis pinnatis acutis; radicalibus oblongis integerrimis. *MS. Herb. Banks.*

*Hab.* on the Clear-water River. Specimens of this plant were brought from Newfoundland by Sir Joseph Banks, in 1781.

10. *Sisyrinchium anceps*: *Persoon. Ench. Bot.* i. p. 50. *Pursh.* i. p. 31. (W.)
11. *Eleocharis palustris*: *Roem. et Sch. Syst.* ii. p. 151. *Scirpus palustris*: *Willd.* i. p. 291. *Pursh.* i. p. 54. (W.)

12. *Scirpus cespitosus*: Willd. i. p. 292. (B.)  
 13. *S. lacustris*: Willd. i. p. 296. Pursh. i. p. 56. (W.)  
 14. *S. maritimus*: Willd. i. p. 306.  
*Hab.* Salt River Athabasca.  
 15. *S. sylvaticus*: Willd. i. p. 307. Pursh. i. p. 56. (W.)  
 16. *Eriophorum vaginatum*: Willd. i. p. 312. (W. B.)  
 17. *E. angustifolium*: Willd. i. p. 313. Pursh. i. p. 56. (W. B.)  
 18. *E. strictum*: spicis pedunculatis involucre brevioribus, squamis acutiusculis tenuissimè ciliatis, foliis strictis planis apice triquetro, culmo teretiusculo. Brown, M. S.  
 Dubia species *E. tenello* (Nutt.) proxima. Brown (W.)  
 19. *Alopecurus alpinus*: Smith. Fl. Brit. iii. p. 1386. (B.)  
 20. *A. aristulatus*: Mich. Am. i. p. 43? *A. subaristatus*: Pers. Ench. i. p. 80. Pursh. i. p. 66. (W.)  
 21. *Agrostis laxiflora*: *Trichodium laxiflorum*: Mich. Am. i. p. 42. t. 8. Pursh. i. p. 61. (W.)  
 22. *Stipa Canadensis*: Poiret. Encyclop. Bot. vii. p. 452. Pursh. i. p. 72.  
*Stipa juncea*: Mich. Am. i. p. 54. (W.)  
 23. *Oryzopsis asperifolia*: Mich. Am. i. p. 51. t. 9. Pursh. i. p. 60. (C.)  
 24. *Calamagrostis Canadensis*: Nuttall. Gen. Amer. Pl. i. p. 46. *Arundo Canadensis*: Mich. i. p. 73. (W.)  
 25. *C. stricta*: *Arundo stricta*: Schrad. Germ. i. p. 215. t. 4. f. 5. Smith. Compend. Fl. Brit. p. 20. Eng. Bot. t. 2160. (W.)  
 26. *C. purpurascens*: panicula spicata, glumis glabris, perianthii valvula inferiore scabra: apice 4-dentato; dorso aristata, rudimento plumoso villis baseos duplè longiore. Brown, MS. (B.)  
 27. *Aira aquatica*: Willd. i. p. 376, (W.)  
 28. *Hierochloa fragrans*: Roem. et Sch. Syst. ii. p. 514. *Holcus fragrans*: Willd. iv. p. 936. Pursh. i. p. 78. (W.)  
 29. *H. alpina*: Roem. et Sch. Syst. ii. p. 515. *Holcus alpinus*: Wahl. Fl. Lapp. p. 31. t. 2. (B.)  
 30. *Trisetum airoides*: Roem. et Sch. Syst. ii. p. 666. *Aira subspicata*: Willd. i. p. 377. (W.)  
 31. *Avena striata*: Mich. Am. i. p. 73. Pursh. i. p. 86. (W.)  
 32. *Beckmannia erucæformis*: Roem. et Sch. Syst. ii. p. 695. *Cynosurus erucæformis*: Willd. i. p. 412. (W.)  
 33. *Poa crocata*: Pursh. i. p. 80. (W.)  
 34. *P. alpina*: Willd. i. p. 386. Pursh. i. p. 79. (W.)  
 35. *Festuca ovina*: Willd. i. p. 419. (W. B.)

APPENDIX.

36. *Bromus purgans*: *Willd.* i. p. 431. *Pursh.* i. p. 85. (W.B.)  
 37. *Hordeum jubatum*: *Pursh.* i. p. 89. (W.)  
 38. *Elymus Canadensis*: *Willd.* i. p. 408. *Pursh.* i. p. 89. (W.)  
 39. *E. mollis*: spica erecta villosa, locustis geminatis 4-5-floris brevè setigeris glumas setaceas superantibus. *Brown, MS.* (W.)

TETRANDRIA.

40. *Gaium tinctorium*: *Willd.* i. p. 586. (W.)  
 The Cree women dye their porcupine quills red with the juice of this plant, or of the *G. boreale*, indiscriminately.  
 41. *G. boreale*: *Willd.* i. p. 595. *Pursh.* i. p. 104. (W.)  
 42. *Plantago major*: *Willd.* i. p. 641. *Pursh.* i. p. 98. (W.)  
 43. *P. lanceolata*, var. ? bracteis obtusissimis, foliis latè lanceolatis glabriusculis. (W.)  
*P. lanceolata* β? *Willd.* i. p. 644. *P. montana*? *Huds. Flor. Angl.*, ed. i. p. 53. (B.)  
 44. *Cornus Canadensis*: *Willd.* i. p. 661. *Pursh.* i. p. 107. *Sassagoomena-ahtick, Cree lang.* (W.)  
 45. *C. alba*: *Willd.* i. p. 662. *Pursh.* i. p. 109. (W.)  
 The lead-coloured berries are named by the Crees, musqua-meena (bear-berry), because the bear fattens upon them.  
 46. *Elæagnus arger*. *Juttall. Am. Gen.* i. p. 97. *E. nitida. Banks' Herb.*  
*Elæagnus argentea.* *Pursh.* i. p. 114. (W.)  
 47. *Potamogeton perfoliatum*: *Mich. Flor. Am.* i. p. 101.  
*Folia cordato-lanceolata, longè acuminata, longitudine spithamea, latitudine ad basin pollicaria. Species forsan distincta.* (W.)  
 48. *P. pectinatum*: *Smith. Fl. Brit.* i. p. 197. *Eng. Bot.* t. 323. (H.)

PENTANDRIA.

49. *Batschia conspicua*: caule pilis laxis, foliis oblongis pilis adpressis vestitis, laciniis corollæ integris. (W.)  
*Radix* perennis caules plures alens. *Caulis* dodrantalis, erectus, pilosus, supernè in spicas foliosas di-vel tri-chotome divisus. *Spicæ* reclinatæ divaricatæ, juniores spiraliter revolutæ. *Folia* omnia oblonga, plerumque obtusa, pilis brevissimis, adpressis vestita, subtus pallidiora: floralia subsecunda et apicem versus spicarum sensim minorâ. *Calyx* axillaris, sessilis, hirsutus, laciniis subulatis tubo corollæ triplò brevioribus. *Corolla* aurantio-flava, extus pilosiuscula, intus glabra; *tubo* supernè paulo ampliato: *fauce* fornicato, sed non clauso: *limbo* patente, laciniis quinque rotundatis sub-undulatis integerrimisque. *Stylus* longitudine tubi. *Antheræ* medium versus tubi adnatæ.  
*Hab.* In dry woods, on the banks of the Saskatchewan, growing in large patches.  
 50. *B. longiflora*: *Nuttall. Gen. Amer.* i. p. 114. (C.)  
 51. *Myosotis Lappula*: flore albo. *Willd.* i. p. 749. *Pursh.* i. p. 34. (W.)

52. *Pulmonaria paniculata*: Willd. i. p. 760. Pursh. i. p. 131. (W.)
53. *P. maritima*: Smith. Fl. Brit. i. p. 218. (H. A.)
54. *Androsace elongata*: Willd. i. p. 797. (W.B.)
55. *A. septentrionalis*: Willd. i. p. 748. (B.)
56. *Primula Egalecensis*: Flor. Dan. t. MDXI. Lehman. Monogr. p. 64. t. vii. (B.)
- Flos rubescenti-albus, ore citrino.
57. *P. farinosa*: Smith. Fl. Brit. i. p. 224. (W.)
58. *P. Hornemanniana*: Lehman. Monogr. p. 55. t. iv.
- P. farinosa*  $\beta$  *stricta*: Wahl. Fl. Lapp. p. 60, ejus descriptio cum plantâ nostrâ optimè quadrat. *P. farinosa* quâcum habitat minor, umbellâ florenti longiori et magis divaricatâ; umbellæ fructiferæ tamen in ambabus strictæ. Involucri foliola huic et præcedenti plura adsunt quam *P. Egalecensis* sed ut in illâ baseos gibbosos habent. (W.)
59. *Dodecatheon integrifolium*: Michaux. Fl. Am. i. p. 123.
- Our specimens agree with those in the Lambertian Museum, from Eastern Siberia, collected in Billings' Expedition. (W. C.)
60. *Menyanthes trifoliata*: Willd. i. p. 811. Pursh. i. p. 139. (W.)
61. *Lysimachia thysiflora*: Mich. Fl. Amer. i. p. 127. (W.)
62. *Phlox Hoodii*: humilis multicaulis, foliis subulatis margine lanatis, floribus sessilibus solitariis, limbi laciniis obovatis. (C.)
- Tab. 28. Expl. Icon. figura plantæ magnitudine naturalis. Sequentes omnes ad lentem auctæ. a. folia duo. b. flos. c. calyx longitudinaliter fissus et explanatus. d. corolla aperta ad venas ejus stamina et pistillum ostendendas. e. stamen.
- This beautiful species is a striking ornament to the plains in the neighbourhood of Carlton-House, forming large patches, which are conspicuous from a distance. The specific name is a small tribute to the memory of my lamented friend and companion, whose genius, had his life been spared, would have raised him to a conspicuous station in his profession, and rendered him an ornament to any science to which he might have chosen to direct his attention.
63. *Eutoca Franklinii*: foliis pinnatifidis bipinnatifidive, ovulis placentæ singulæ viginti pluribus. Brown ad finem hujus catalogi. (W.)
64. *Campanula rotundifolia*: Willd. i. p. 892. Pursh. i. p. 159 (W.)
- var. *linifolia*: Flor. Dan. t. 189. Linn. Fl. Lapp. No. 84. (W.)
65. *C. uniflora*: Willd. i. p. 890. Wahl. Fl. Lapp. p. 63. (B.)
66. *Azalea procumbens*: Willd. i. p. 832. Pursh. i. p. 154. (B.)
67. *Caprifolium parviflorum*: Pursh. i. p. 161. (W.)
68. *Xylosteum cæruleum*: *Lonicera cærulea*. Willd. ii. p. 988. (W.)
69. *X. villosum*: Michaux. Fl. Am. i. p. 106. (W.)
70. *X. involucratum*: pedunculis bifloris, baccis distinctis, involucro tetraphyllo: foliolis sub-rotundis interioribus bilobis, foliis ovato ellipticis. *Lonicera involucrata*: M.S. Herbario Banksiano. (W.)
71. *Symphoria occidentalis*: R. Brown. M.S. (W.)
- S. racemosæ proxima.

72. *Rhamnus alpinus* : Willd. i. p. 1097. (W.)  
 73. *Ribes rubrum* : Willd. i. p. 1153. (W.)  
 74. *R. glandulosum* : Willd. i. p. 1154. *R. prostratum* : Pursh. i. p. 168. (W.)  
 75. *R. nigrum* : Willd. i. p. 1156. (W.)  
 76. *R. floridum* : Willd. i. p. 1156. Pursh. i. p. 164. (W.)  
 77. *R. oxycanthoides* : Willd. i. p. 1159. Pursh. i. p. 165. (W.)  
 78. *Viola pinnata* : Willd. i. p. 1160. (C.)  
 79. *V. blanda* : Pursh. i. p. 72. (W.)  
 80. *V. debilis* : Nuttall. Gen. Amer. i. p. 150. (W.)  
 81. *V. canina* : var. ? Willd. i. p. 1164. (W.)  
 82. *V. Canadensis* : Willd. i. p. 1166. Pursh. i. p. 174. (C.)  
 83. *Comandra umbellata* : Nuttall. Am. i. p. 157. *Thesium umbellatum* : Pursh. i. p. 177.  
*Comandra* a *Santalo* differt calyce persistente monentè doctiss. Brown, qui primus genus distinctum esse. Prodr. pl. Novæ Hollandiæ, i. p. 353. indicavit. (W.)  
 84. *C.* : livida sarmentosa, foliis ellipticis flaccidis, umbellâ axillari solitariâ pedunculatâ sub-triflorâ. (W.)  
*Sarmentum* inter muscos repens radicem refert et caules alternatim edit. *Caules* spithamei simplices suffruticosi, erecti, inferne teretes, superne obsolete triquetri. *Folia* elliptica, venosa, obtusa, nervo excurrenti apiculata, flavo-viridescens, concolora, subsessilia. Umbellâ in medio caulis axillaris, bi-vel triflora, pedicellis brevissimis. *Pedicelli* rarissime foliolo involucrati sunt. Flores parvi, inconspicui. *Calyx* campanulatus, laciniis quinque acutis, viridibus, intus apicem versus fuscis. *Squamæ* virido-fusæ. *Stylus* crassus. *Germen* nux globosa, calyce coronata.  
 Variat foliis rugosis flavo maculatis reticulatisq.  
*Hab.* In shady mossy woods. Not seen to the northward of Great Slave Lake.  
 85. *Apocynum androsæmifolium* : Willd. i. p. 1259. Pursh. i. p. 79. (W.)  
 86. *Gentiana amarella* : Willd. i. p. 1347. (W.)  
 87. *G. crinita* : Willd. i. p. 1352. Pursh. i. p. 165. (W.)  
 88. *G. propinqua* : corollâ 5-fida tubuloso-campanulata ; apicibus limbi subserratis ; fauce nuda, foliis radicalibus lineari-obovatis ; caulinis lanceolatis. (H.)  
 Facies omnino *G. pratensis* sed fauce nuda.  
 89. *G. rotata* : Gmel. Flor. Sib. iv. p. 112. No. 73, t. 53, f. 1. (H.)  
 Cum figurâ Gmelini planta nostra quadrat, forsitan tamen a *Swertiâ rotatâ*, L., species distincta propter laciniâ calycis angustas corollâ longiores.  
 90. *Heuchera Richardsonii* : calycis limbo inæquali obliquo. Brown, ad finem catalogi. (W.)  
 91. *Cicuta virosa* : Willd. i. p. 1445. (W.)  
 92. *C. maculata* : Willd. i. p. 1446. Pursh. i. p. 195. (W.)  
 93. *Smyrniurn trifoliatum* : Nuttall. Am. i. p. 195. (S.)  
 94. *Viburnum Oxycoccus* : Pursh. i. p. 203. (W.)  
 Named, by the Crees, *Mongsoa-Meena*, or *Moose Berry*.

95. *V. edule*: *Pursh. i. p. 203. (W.)*  
 Its red berries, termed by the Crees, Peepoom-meena (Winter Berry), form a great ornament to the woods.
96. *Parnassia palustris*: *Willd. i. p. 1516. Pursh. i. p. 208. (H. W. B.)*
97. *Azalea nudicaulis*: *Willd. i. p. 1521. Pursh. i. p. 209. (W.)*  
 The Crees use the root of this plant as a remedy against the venereal disease, under the name of Waw-poom-ootchepeh (Rabbit-root), and also apply the bruised bark of its root to recent wounds.
98. *Statice armeria*: *Willd. i. p. 1522. Pursh. i. p. 212. (B.)*  
 $\beta$ . *Foliis angustioribus acutis ciliatis. (B.)*
99. *Linum perenne*: *Willd. i. p. 1534. Nuttall. Am. i. p. 206. (C.)*

## HEXANDRIA.

100. *Allium angulosum*? *Willd. ii. p. 76. Pursh. i. p. 223. (C.)*
101. *A. schœnoprasum*: *Willd. ii. p. 81. Weechœ'gun (Stinking-Grass), Cree Lang. (W.)*
102. *Lilium Philadelphicum*: *Willd. ii. p. 90. Pursh. i. p. 229. (W.)*  
 Termed, by the Crees, Apperooseesh-ootchepeh (Mouse-root), because the common mouse of the country, a species of *Campagnol*, feeds upon its scaly bulbs.
103. *Uvularia puberula*: *Mich. Fl. Am. i. p. 199. (W.)*
104. *Smilacina bifolia*: *Convallaria bifolia. Willd. ii. p. 164. Mich. Fl. Am. i. p. 201. (W.)*  
*Caule foliisque ciliatis.*
105. *S. trifolia*: *Convallaria trifolia. Willd. ii. p. 163. Mich. i. p. 202. Gmel. Flor. Sib. i. t. 6. (W.)*  
*Herba tota glaberrima, caule stricto et non ad insertiones foliorum geniculato ut in priori.*
106. *S. stellata*: *Pursh. i. p. 232. Convallaria stellata: Willd. ii. p. 163? (W.)*
107. *Luzula campestris*: *Decand. Flor. Franc. iii. p. 161. Juncus campestris: Pursh. i. p. 238. (B.)*
108. *L. melanocarpa*: *Desvoux. Journ. de Botan. i. p. 142. t. 5. f. 2. Juncus melanocarpus: Pursh. i. p. 238. (W.)*
109. *Juncus triglumis*: *Willd. ii. p. 216. (B.)*
110. *J. castaneus*: *Smith. Fl. Brit. i. p. 383. Engl. Bot. t. 900. (H. B.)*
111. *J. echinatus*: *Muhl. Gram. Am. p. 207? (W.)*
112. *J. affinis*: *foliis subulatis nodoso-articulatis, capitulis subpaniculatis paucifloris (3-5 floris), capsulis ovalibus calyce obtuso hexandro longioribus. Brown. MS. (W.)*
113. *J. filiformis*: *Pursh. i. p. 236. (W.)*
114. *J. tenuis*: *Willd. ii. p. 214. J. bicornis: Mich. Am. i. p. 191. (W.)*
115. *J. glaucus*: *Willd. ii. p. 206. (W. B.)*
116. *Oxyria reniformis*: *Brown. List of Plants. Ross. Voy. Ed. 2da. p. 4. Rummex digynus: Pursh. i. p. 248. (B.)*
117. *R. sanguineus*: *Willd. ii. p. 250. Pursh. i. p. 247. (B.)*
118. *R. acutus*: *Willd. ii. p. 253. (W.)*

119. *R. verticillatus*: Willd. ii. p. 250. Pursh. i. p. 248. (W.)

120. *Triglochin maritimum*: Willd. ii. p. 265. Pursh. i. p. 247. (H. A.)

121. *T. palustre*: Willd. ii. p. 264. Pursh. i. p. 247. (W. B.)

122. *Tofieldia borealis*: Wahlenberg. Fl. Lapp. p. 89. (W. B.)

*Scapus nudus, involucris (calyculis, Wahl.) altis dimidiatis trifidis pedicellum fulcrantibus ut rectè monet clariss. Wahlenberg. Herba elegans.*

123. *T. coccinea*: spica capitata bracteata, involucre trifido regulari. (A.)

*Herba elegantia T. borealis tota carens. Folia basi spathacea, equitantia, compressa, linearia superne lanceolata acuminata plana. Caulis palmaris erubescens firmus duriusculus plerumque flexuosus, folio uno alterove radicalibus simili instructus. Spathe folior. caulinar. ventricose, rubescentes. Flores ferè sessiles in capitulo terminali congesti, interdum proliferi. Calyx trifidus, corollæ approximatus, nec dimidiatus, laciniis rubescentibus, brevibus, ovatis, acutis. Petala sex viridia, dorso coccineo rubro, interdum tota sordidè coccinea, lineari obovata, calyce triplo longiora. Capsulæ tres ovate, basi connate, petalis altiores polysperme. Floret Augusto ad oras maris hyperborei.*

Our specimens of this plant were lost in crossing the Barren Grounds; but the above description, which was taken from the live plant, agrees with specimens in the Banksian Herbarium, brought from Unalaska, by Mr. Nelson.

124. *Zigadenus chloranthus*: scapo sub-nudo, petalis obovatis obtusis. (W.)

*Herba glauca glaberrima. Radix bulbosa tunicata. Folia radicalia, scapo dimidio breviora, erecto-patentia, linearia, acuta, canaliculata, basi vaginantia, nervis parallelis. Scapus cubitalis hevis infernè obsoletè triquetè, superne teretiusculus vix flexuosus, foliis duobus bracteiformibus plerumque instructis. Racemus terminalis multiflorus sæpius basi ramosus; pedicellis pollicaribus, apicibus incrassatis; bracteis membranaceis lanceolatis concavis acutis pedicellis dimidio brevioribus. Flores viridescenti-albi, masculini hermaphroditis immixti. Corolla laciniis sex patentibus, obovatis basi attenuatis infra medium glandulâ viridi oborlatâ profundè emarginatâ munitis. Filamenta corollam subsequantia. Capsula membranacea tricocca, trilocularis ovata, acuminata, corollâ emarcidâ obtecta. Semina plurima angulata in loculamentis duplici ordini infarcta.*

#### HEPTANDRIA.

125. *Trientalis Europæa*  $\beta$  *Americana*: Nuttall. Am. i. p. 226. (W.)

#### OCTANDRIA.

126. *Epilobium angustifolium*: Willd. ii. p. 313. Pursh. ii. p. 259. (W. B.)

The young leaves, under the name of L'Herbe Fret, are used, by the Canadian voyagers, as a pot-herb.

127. *E. latifolium*: Willd. ii. p. 314. Pursh. i. p. 259. (A.)

128. *E. palustre*: Willd. ii. p. 317. Pursh. ii. p. 260. (W. B.)

129. *E. tetragonum*: Willd. ii. p. 317. Pursh. i. p. 259. (W.)

130. *Vaccinium Canadense*: foliis lanceolatis utrinque pubescentibus integerrimis, corollis fasciculato-racemosis ovatis: stylo incluso. (W.)

*Frutex pedalis ramosissimus. Ramuli teretes, flavescenti-virides, verruculosi et pubè brevi densè, canescenti vestiti. Folia pollicaria, latè lanceolata utrinque acuta, integerrima, ubique præcipuè ad nervos villosiuscula: stipulis minutis setaceis trifidis. Racemus plerumque terminalis, bracteis obtusis. Calyx aranthino-viridis, nutans, laciniis ovatis. Corolla pallidè viridescens, globosa infernè obsoletè pentagona, ore patulo, laciniis ovatis reflexis. Stamina inclusa, filamentis planis villosis, cornubus binis deorsum spectantibus. Fructus maturus mihi non visus. Ramuli floriferi foliosi. Interdum planta tota fuscescit.*

Folia masticata saporem acidam gratam edunt. Specimen hujus plantæ Kalmio lectum et sub hoc nomine in herbario Banks. conservatum extat. *Hab.* in pinetis.

131. *V. Vitis Idæa*: *Willd.* ii. p. 354. *Pursh.* i. p. 289. Weesawgum-meena (Sour-Berry). *Cree Lang.* (W. B.)

132. *Oxycoccus palustris*, a: *Pers. Ench.* i. p. 419. Maskægo-meena (Swampy-Berry). *Cree Lang.* (W. B.)

133. *Polygonum erectum*: *Willd.* ii. p. 450. (H.)

134. *P. viviparum*: *Willd.* ii. p. 441. (W. B.)

135. *P. cilinode*: *Mich. Fl. Am.* i. p. 241. (W.)

136. *Adoxa moschatellina*: *Willd.* ii. p. 472. (W.)

## DECANDRIA.

137. *Thermopsis rhombifolia*: *Nuttall. Am.* i. p. 282. (C.)

138. *Ledum palustre*: *Willd.* ii. p. 602. *Pursh.* i. p. 300.—Wisha-capucca: *Hearne's Journey*, p. 456. (W. B.)

This plant is a better substitute for tea than the following one.

139. *L. latifolium*: *Willd.* ii. p. 602. *Pursh.* i. p. 300. (W.)

Termed by the Crees, Kawkee-kee pucquaw, (always leaves, evergreen,) and sometimes Maskeg, (medicine,) because they suppose that the white residents drink the infusion of it as a medicine.

140. *Kalmia glauca*: *Willd.* ii. p. 601. *Pursh.* i. p. 296. (W. B.)

141. *Rhododendron lapponicum*: *Wahl. fl. Lapp.* p. 104. (B.)

142. *Andromeda tetragona*: *Willd.* ii. p. 607. *Pursh.* i. p. 290. *Brown, Ross's Voy.* (B.)

143. *A. polifolia*: *Willd.* ii. p. 610. *Pursh.* i. p. 291. (W. B.)

144. *A. calyculata*: *Willd.* ii. p. 614. *Pursh.* i. p. 291. (W. B.)

145. *Arbutus alpina*: *Willd.* ii. p. 618. *Pursh.* i. p. 283. (W.)

146. *A. Uva ursi*: *Willd.* ii. p. 618. *Pursh.* i. p. 283. Jackashey-puck, *Hearne's Journey*. Kleh, *Chipewyan lang.* Attoongaweeat, *Esquimaux.*

It has received the name of *Sac à Commis*, from the trading clerks carrying it in their smoking-bags.

147. *Pyrola rotundifolia*: *Willd.* ii. p. 621. *Pursh.* i. p. 299. (W.)

148. *P. chlorantha*: *Schwartz. Act. Holm.* 1810, p. 190, t. 5. *P. asarifolia*: *Mich. Am.* p. 251. (W.)

149. *P. minor*: *Willd.* ii. p. 621. *Pursh.* i. p. 299. (B.)

150. *P. secunda*: *Willd.* ii. p. 621. *Pursh.* i. p. 299. (W. B.)

151. *P. uniflora*: *Willd.* ii. p. 622. *Pursh.* i. p. 299. (W.)

152. *Chrysosplenium alternifolium*: *Willd.* ii. p. 637. (W. B.)

153. *Saxifraga nivalis*: *Willd.* ii. p. 645. *Pursh.* i. p. 310. (B.)

154. *S. Hirculus*: *Willd.* ii. p. 649. (H. A.)

155. *S. Aizoides*: *Willd.* ii. p. 650. *Pursh.* ii. p. 312. (B.)

156. *S. oppositifolia*: *Willd.* ii. p. 648. *Pursh.* i. p. 311. (B.)

157. *S. cernua*: *Willd.* ii. p. 652. (B.)

158. *S. tricuspidata*: *Willd.* ii. p. 657. *Pursh.* i. p. 313. (W. B.)



159. *S. grœnlandica*: *Pursh. i. p. 312.*—*S. cœspitosa*,  $\beta$ : *Willd. ii. p. 657.* (A.)
160. *Mitella nuda*: *Gmel. Sibir. iv. t. 68. fig. 1.* *Willd. ii. p. 660.* *M. reniformis*: *Pursh. i. p. 314.*—*M. prostrata*: *Mich. Am. p. 270.* (W.)
161. *Silene acaulis*: *Willd. ii. p. 709.* *Pursh. i. p. 316.* (B.)
162. *Stellaria læta*: glauca, foliis lineari-lanceolatis carinatis lævibus, pedunculis sub-geminis terminalibus, petalis longitudine calycis villosiusculi, capsula calycem paulo superanti. (B.)  
*Caulis* decumbens, marcescens ramosissimus; rami erecti palmares debiles uni-vel bi-flori. *Folia* unguicularia, inferiora breviora lanceolata utrinque acuta, superiora magis linearia sensim acuminata, omnia cum caule et pedunculis glaberrima. *Calyx* petalis vix brevior acuminatus obsoletè trinervis, villosus, margine albo. *Petala* bipartita, laciniis linearibus obtusis.
163. *St. Edwardsii*: *Brown Append. inœd. Parry's Voyage.* (B.) *St. nitida*: *Hooker in Scoresby's voy. p. 411?*  
 A priori differt petalis et capsulâ calyce duplò longioribus, follisque crassioribus aveniis, costâ mediâ vix transparenti. Colore quoque obscuriori nec læto, primo conspectu, distinguitur.
164. *St. palustris*: *Retz. Fl. Scand. ed. 2da, p. 106.* *St. glauca*; *Smith, Fl. Brit. p. 475.* (W.)  
 $\beta$  Iisdem locis crescens differt tantum habitu strictiori, caule villosa et foliis non glaucis. (W.)
165. *St. graminea*: *Willd. ii. p. 711.* (W.)  
 A plantâ Britannicâ differt caulis angulis retrorsum scabris.
166. *St. gracilis*: glaberrima, caule debili, ramis sterilibus gemmâ foliorum terminatis, foliis lanceolatis, flore solitario sub-terminali, calyce trinervi petalis paulo breviora. (H.)  
*Caulis* dodrantalis filiformis acute tetragonus superne ramosus. *Folia* lanceolata acuta integerrima enervia; *caulina* longitudine trilinearis internodiis duplo brevioribus; *ramca* caulinis multo minoribus. *Lacinie calycine* ovate acutæ glabræ trinerves, margine hyalino. *Petala* bipartita calyce vix longiora, laciniis lanceolatis obtusis, inferne attenuatis.
167. *Arenaria peploides*: *Willd. ii. p. 716.* *Pursh. i. p. 317.* (H. A.)
168. *A. lateriflora*: *Willd. ii. p. 718.* *Pursh. i. p. 317.* (W.)
169. *A. propinqua*: cœspitosa glanduloso-pilosa, foliis lineari-subulatis acutis trinerviis, calyce acuto trinervi petalis vix longiori capsula breviori. (B.)  
 Habitus *A. verne*. Folia, caules, peduncul et calyces pilis crebris brevissimis patentissimis glanduliferis vestiti. Lacinie calycine lanceolatae acutæ trinerves, nervis validis æqualibus sub-approximatis, margine lato membranaceo, albo. *Petala* alba ovata vel ovalia obtusa, minorâ quam in *Arenaria verne*.
170. *A. Rossii*: *Brown Append. inœd. Parry's Voyage.* (B.)  
 Fastigiato-ramosissima denseque foliosa, glabra, Folia enervosa. Pedunculi solitarii terminales, elongati, uniflori. Calyx margine purpurascens. *Petala* ligulata calyce paulo longiora.
171. *Lychnis apetala*: *Willd. ii. p. 810.* (B.)
172. *Cerastium viscosum*: *Willd. ii. p. 812.* *Pursh. i. p. 320.* (W. B.)
173. *C. arvense*: *Willd. ii. p. 813.* *Pursh. i. p. 321.* (W.)
174. *Spergula nodosa*: *Willd. ii. p. 818.* (W.)

## DODECANDRIA.

175. *Hudsonia ericoides*: *Willd.* ii. p. 858. *Pursh.* ii. p. 364. (W.)

## ICOSANDRIA.

176. *Prunus Virginiana*: *Willd.* ii. p. 985: *Pursh.* i. p. 329. (W.)

The *tawquoy-meen-ahitck* of the Crees is a handsome small tree, rising on the sandy plains of the Saskatchewan to the height of twenty feet, but extending as far north as Great Slave Lake, where it attains the height of five feet only. Its fruit, termed *Tawquoymeena*, or *Choke-cherry*, is not very edible in a recent state, but when dried and bruised, forms an esteemed addition to pemmican.

177. *P. Pensylvanica*: *Willd.* ii. p. 992. *Pursh.* i. p. 331. *Passeewey-meenan*, *Cree Lang.* (W.)

178. *Sorbus Americana*: *Pursh.* i. p. 341. (W.)

179. *Aronia ovalis*: *Pers. Ench.* ii. p. 40. *Pyrus ovalis*, *Pursh.* i. p. 340. (W.)

This shrub is common as far north as lat. 62°. It abounds on the sandy plains of the Saskatchewan. Its wood, named by the Crees *meesassquat-ahitck*, is prized for making arrows and pipe stems, and is thence termed by the Canadian voyagers *bois de fleche*. Its berries, about the size of a pea, are the finest fruit in the country, and are used by the Crees under the name of *Meesasscootoom-meena*, both in a fresh and dried state. They form a pleasant addition to pemmican, and make excellent puddings, very little inferior to plum-puddings.

180. *Spiræa salicifolia*: *Willd.* ii. p. 1055. *Pursh.* i. p. 341. (W.)

181. *Rosa blanda*: *Willd.* ii. p. 1065. *Pursh.* i. p. 344. *Ogganee-ahitck*, *Cree Lang.* (W.)

182. *Rubus idæus* β. *Canadensis*: *Willd.* ii. p. 1081. *Pursh.* i. p. 346. (W.)

183. *R. saxatilis* β. *Canadensis*: *Mich. Am.* i. p. 298. (W.)

The fruit of this and the preceding species is termed by the Crees, *Athouscan*.

184. *R. pistillatus*: *Smith, Exot. Bot.* ii. p. 53, t. 86. *Pursh.* i. p. 349. (W.)

185. *R. Chamæmorus*: *Willd.* ii. p. 1090. *Pursh.* i. p. 349. (W. B.)

186. *Fragaria Canadensis*: *Mich. Am.* i. p. 299. *Otei-meena* (*Heartberry*), *Cree Lang.* (W.)

187. *Potentilla fruticosa*: *Willd.* ii. p. 1094. *Pursh.* i. p. 355. (W. B.)

188. *P. Pensylvanica*: *Willd.* ii. p. 1099. *Pursh.* i. p. 356. (W.)

189. *P. arguta*: *Pursh.* ii. p. 736. *Lehm. Monogr.* p. 62. (W.)

*Viscido-villosa, flore albo, unguibus citrinis. Planta olim in horto Kewensi culta et ut videtur teste Herb. Banks. cum P. Pensylvanica confusa.*

190. *P. Norwegica*: *Willd.* ii. p. 1109. *Pursh.* i. p. 354. (W.)

191. *P. anserina*: *Willd.* ii. p. 1095. *Pursh.* i. p. 356. (W.)

192. *P. concinna*: *foliis septenatis quinatisque; foliolis ovali-obovatis subtus niveo-tomentosis: apicibus serratis, caule abbreviato.* (C.)

*Caules* plures bi-pollicares diffusi, uti et petioli et pedunculi sericeo-argentei. *Folia* radicalia 7-vel quinata, petiolis sericeis ex basibus brunneis membranaceis 5-nervis orientibus: stipulae adnatæ, membranaceæ lanceolatae acuminatæ integerrimæ, dorso et apice pilosis. *Foliola* sessilia ovali-obovata

interdum fere truncata, ad apicem inequaliter serrata; supra flavescenti-viridia, pilis adpressis subsericeis dense obiecta, subtus pulchrè niveo-tomentosa, ad margines pilis mollibus exsertis hirsuta: exteriora minora. Folium unicum prope basin caulis saepius ternatum. Adsunt quoque ad originem pedunculorum foliola duo opposita simplicissima sericea stipulis insidentia. *Pedunculi* 2-3, unguiculares, ascendentes dum terni laterales medio bibracteati, tertius nudus. *Calyces* villosi, laciniis exterioribus brevioribus linearibus acutis; interioribus triplo latioribus semi-ovatis acuminatis corollam vix æquantibus. *Petala* flavissima latè obcordata. *Germina* lævia, receptaculo hirsuto. Species pulchra. *P. humifusam Nuttallii* non vidi, sed à plantâ nostrâ diversa videtur propter caules flagellatos et non foliosos.

193. *P. nivea*: Willd. ii. p. 1109. Pursh. i. p. 353. (B.)

194. *P. hirsuta*: Nestl. Monogr. p. 67. t. 9. *P. Monspeliensis*. Willd. ii. p. 1109. (S.)

195. *P. tridentata*: Willd. ii. p. 1110. Pursh. i. p. 353. (W.)

196. *P. biflora*: Lehman. Monogr. p. 192. No. 88. t. 20. (B.)

Dense cæspitosa. *Folia* gramineo-viridia subtus glauca, marginibus revolutis, apicibus fuscis. *Flos* erectus plerumque solitarius sæpe tamen flores duo terminales, pedicellis brevibus villosis ebracteatis ex axillis foliorum caulinorum. *Calyx*, laciniis exterioribus linearibus, marginibus revolutis, utrinque rotundatis subtusque glaucis; interioribus longitudine æqualibus, duplo latioribus ovatis, acuminatis planiusculis. *Petala* calyce duplo grandiora, obcordata citrino-flava ad unguem maculâ aurantio-flavâ ornata. *Styli* flavi subulati, curvi, staminibus breviores. *Receptaculum* dense villosum, germinibus rugulosis.

197. *Geum triflorum*: Pursh. ii. p. 736. Nuttall. i. p. 309. (C.)

198. *G. strictum*: Willd. ii. p. 1113. Pursh. i. p. 351. (W.)

199. *Dryas chamædrifolia*: Pers. Ench. ii. p. 57. Pursh. i. p. 350. (W.)

200. *D. integrifolium*: Pers. Ench. ii. p. 57. (B.)

201. *Comarum palustre*: Willd. ii. p. 1119. Pursh. i. p. 357. (W.)

#### POLYANDRIA.

202. *Actæa brachypetala*: Decand. Syst. i. p. 385. *A. Americana*: Pursh. ii. p. 366. (W.)

203. *Papaver nudicaule*: Willd. ii. p. 1145. Pursh. ii. p. 365. (B.)

204. *Sarracenia purpurea*: Willd. ii. p. 1150. Pursh. ii. p. 367. (W.)

205. *Nuphar lutea*: Pursh. i. p. 369. (W.)

206. *Aquilegia vulgaris*: Willd. ii. p. 1245? (W.)

207. *Thalictrum corynellum*: Decand. Syst. i. p. 1172? *Th. Cornuti*: Pursh. ii. p. 388? (W.)

208. *Anemone Nuttalliana*: Decand. Syst. i. p. 193. *A. Ludoviciana*: Nutt. Am. ii. p. 20. (W. C.)

209. *A. parviflora*: Decand. Syst. i. p. 200. Mich. Am. i. p. 319. (W. B.)

210. *A. ranunculoides?* var: Decand. Syst. i. p. 206? (H. B.)

Involucri foliola latè obovata vix in petiolos attenuata.

211. *An. borealis*: foliis ternatis: segmentis rotundatis dentatis crenatisve; involucralibus amplexicaulibus trifidis, petalis 6 obovatis. (B.)

*Radix* fibroso-fasciculata, fuscescens.—*Folia radicalia*, petiolata, ternata, glaberrima, *foliis* sessilibus, euneiformi-rotundatis, inaequaliter crenatis aut etiam inciso-dentatis. *Petiolus* tener debilisque pollicaris, interdum prope laminam folii pilis paucis mollibus indutus. *Scapus* palmaris, uniflorus, infra involucrem, laxè, supra densè villosus. *Involucrum* foliaceum amplexicaule, subtus pilosum et ad basin villosum, profundè 3-vel 4-partitum, segmentis trifidis, laciniis lineari-obovatis, integerrimis aut cuneiformibus et apice obtusissime, 3-dentatis. *Flos* albidus, extus in junioribus præcipue ad basin cærulescens. *Petala* 6 unguicularia, obovata, obtusissima, plerumque emarginata, juniora extus pube brevi, lanatâ, induta: in maturioribus pili adpressi tantum adsunt. *Stamina* permulta, petalis triplo breviora. *Germina* pilosa.

212. *A. Hudsoniana*: foliis radicalibus multipartitis, segmentis bis palmatim sectis, laciniis linearibus: involucri ternatim decompositis breviter petiolatis, pedunculis binis, petalis 5-8 ovatis, acutiusculis. (W.)

*A. multifida* β. *Hudsoniana*. *Decand. Syst. Vegetab. i. p. 209.*

*Herba* fere cubitalis, erecta, pilis albis mollibus longiusculis undique munita. *Folia radicalia* petiolata, caule duplo breviora, tripartita: *segmenta* basi attenuata, lateralia bipartita, omnia bis palmatim secta: *laciniis ultimis* lineari-lanceolatis. *Involucrum* trifolium, foliis modo radicalium ternatim decompositis et in petiolas latos breves attenuatis. *Pedunculi* spithamæi, pube brevi densius tecti, plerumque bini, quorum unus præcocior nudus, alter involucrellum bifolium trifidum medio gerens. *Flores* parvi, intus melleo-flavi, extus ad basin paulo fuscescentes. *Petala* 5-9 ovata, acutiuscula, extus villosa. *Stamina* petalis plus duplo breviora. *Germina* hirsuta, stylo persistente, recto, glabro mucronata, in capitulum ovatum densè aggregata: matura lanâ involuta quâ dispersa sunt.

β. *Sanguinea*: *An. sanguinea*: *Pursh. inedit. in Herbario Lambert.*

*A* precedenti differt statura graciliori, floribusque minoribus saturatè sanguineis. (W.)

213. *A. Pensylvanica*: *Decand. Syst. Veg. i. p. 209.* *A. aconitifolia. Mich. Fl. Am. i. p. 320.* (S.)

214. *Ranunculus flammula* var. ? *Decand. Syst. Veg. i. p. 247.* (W.)

215. *R. cymbalaria*: *Pursh. i. p. 392.* var. β. *Decand. Syst. Veg. i. p. 252.* (W.)

β. *minima*; foliis plerumque 3-dentatis, flagellis paucis vel nullis. (W.)

216. *R. rhomboideus*: *Edin. Phil. Journ. vi. p. 329. t. xi. f. 1.* *R. ovalifolius. Pursh. inedit. in Herbario Lambert.* (C.)

217. *R. arcticus*: foliis radicalibus petiolatis hastatis tripartitis lobis divisis: caulinis in lobos lineares integerrimos partitis, caule trifolio unifloro, calyce villosa petalis breviora. (B.)

*Folia* glaberrima; *radicalia* longè petiolata, hastata, tripartita; *lobo intermedio* unguiculari trifido, laciniis lateralibus minoribus, patentibus; *lobis lateralibus* 4-partitis segmentis divaricatis, exterioribus sensim minoribus: laciniis omnibus obtusis, lanceolatis vel linearibus; *caulina* in lobos lineares integerrimos, obtusiusculos partita, ad bases membranacea, amplexicaulia et pilis albis mollibus ciliata: innum sub-petiolatum lobis sex, summum lobis tribus. *Caulis* simplicissimus pedalis erectus uniflorus, foliis tribus remotis munitis et supra folium summum pilis albis villosiusculus. *Calyx* flavescenti-erubescens, villosus, reflexus, petalis dimidio brevior. *Petala* lutea patentissima, obovata, obtusissima, receptaculo breviora. *Stamina* filamentis brevissimis, antheris oblongis. *Germina* glabra stylo recurvato mucronata, receptaculo cylindraceo.

218. *R. Pensylvanicus*: *Decand. Syst. Veg. i. p. 290.* *Pursh. ii. p. 393.* (W.)

219. *R. Purshii*: glaberrimus, foliis petiolatis: depressis ternatim decompositis; elevatis bis terve palmatim trifidis, caule repente, petalis calyce glaberrimo triplo longioribus. *R. Fistulosus*: *Pursh. inedit. in Herb. Lambert.* (W. B.)

Caulis teretes filiformes teneri super arenas irrigatas implexè repentes, scedentes. *Folia* nonnulla *depressa* ternatim decomposita, laciniis divaricatis, linearibus acutis; alia *elevata* sub-reniformia, laciniis divaricatis, cuneatis apice dentatis incisive, lateralibus sæpe trifidis; segmentis omnibus glaberrimis utrinque concoloribus marginibusque erubescensibus. *Petiolis* basi amplexicaules, trinerves et membrana teneri, rotundata, integra, ciliata acti. *Pedunculus* unus præcocior nudus, non sulcatus caulcm quasi terminans et internodium proximum longitudine et crassitudine fere æquans, folioque oppositus: alter axillaris, brevis uniflorus vel sæpe biflorus foliosus et mox elongaturus. *Calyx* glaberrimus reflexus foliolis tribus quaternisve sub-membranaceis, nervis tribus quatuorve ramosis, concavis fere saccatis, deciduis. *Petala* 5-6 saturatè flava, latè elliptica, obovate obtusissima, 5-nervosa, nitentia, subtus opaca, calyce triplo longiora, unguibus brevibus, porisque nectariferis patelliformibus margine elevato circumcinctis. *Semina* sublenticularia, glabra, stylo brevi compresso terminata.

2. Margines rivulorum arenosas sicciore habitans, differt foliis omnibus reniformi-rotundatis, palmato-trifidis, laciniis divaricatis, cuneatis, apice dentatis, incisive segmentis obtusis. R. hyperboreo affinis, sed flore differt. (B.)

220. R. Lapponicus: *Decand. Syst. Veg.* i. p. 211. (W.)

221. R. pygmæus: *Decand. Syst. Veg.* i. p. 273. *Pursh.* i. p. 393. (A.)

222. R. sulphureus. *Phipps, Voyage.* p. 202. *Decand. Syst. Veg.* i. p. 274. (B.)

223. R. sceleratus: *Decand. Syst. Veg.* i. p. 268. *Pursh.* i. p. 293. (W.)

224. *Caltha palustris*: *Willd.* ii. p. 1339. *Pursh.* i. p. 390. (W.)

225. *C. natans*: *Gmel. Fl. Sibir.* iv. t. 82. *Willd.* ii. p. 1339. (W.)

#### DIDYNAMIA.

226. *Mentha Canadensis*: *Pursh.* ii. p. 405. *Amiscticuscoa* (beaver-grass.) *Cree Lang.* (W.)

227. *Stachys ambigua*: *Smith. Comp. Fl. Brit.* p. 91. *Eng. Bot.* t. 2089. (W.)

228. *Dracocephalum* ? *parviflorum*: *Nuttall. Am.* ii. p. 35. (W. C.)

229. *Scutellaria galericulata*: *Willd.* iii. p. 173. *Pursh.* ii. p. 412. (W.)

230. *Euphrasia officinalis*: *Willd.* iii. p. 193. *Pursh.* ii. p. 430. (H.)

231. *Bartsia pallida*: *Willd.* iii. p. 186. *Pursh.* ii. p. 429. (W. B.)

232. *Rhinanthus crista-galli*: *Willd.* iii. p. 188. *Pursh.* ii. p. 429. (H.)

233. *Pedicularis macrodontis*: caule sub-simplici, foliis pinnatifidis: pinnis linearibus obtusis, calycibus bilobis cristatis, galeâ obtusissimâ ad faucem dentata. (H.)

*Herba* glabra. *Caulis* pedalis et ultra, erectus gracilis plerumque simplex interdum tamen ramulos superne ex axillis foliorum prodiens. *Folia* remotiuscula, fere sesquipollicaria, acuminata profunde pinnatifida; pinnis patentissimis linearibus obtusis, sinuato-dentatis crenatisve. *Flores* axillares sessiles foliis floralibus interdum plus duplo breviores. *Flos* fere P. palustris. *Calyx* ovatus inflatus, corolla duplo brevior. *Galea* obtusissima nec emarginata et dentibus sub apice carens, ad faucem tamen dente majusculo angulo recto stante utrinque munita. *Labium* inferius galea sub-brevius, 3-lobum, lobis sub æqualibus integerrimis.

234. *P. euphrasioides*,  $\beta$ . *Labradorica*: *Willd.* iii. p. 204. *Pursh.* ii. p. 424. (W. B.)

235. *P. flammea*: *Willd.* iii. p. 215. *Pursh.* ii. p. 248. (B.)

236. *P. Lapponica*: *Willd.* iii. p. 207. *Pursh.* ii. p. 245. (B.)

237. *P. sudetica*: *Willd.* iii. p. 209. (B.)

238. *P. hirsuta*: Willd. iii. p. 216. *Brown, Ross's Voyage.* (B.)  
 239. *P. Nelsonii*: *Brown. MS. in Herb. Banks.* *P. verticillata.* Pursh. ii. p. 426. (B.)  
 240. *Linnaea borealis*: Willd. iii. p. 340. Pursh. ii. p. 415. (W.)

## TETRADYNAMIA.

*Pleurorhizæ.* Decand.

241. *Nasturtium palustre*: Decand. Syst. ii. p. 191. *Sisymbrium palustre*: Pursh. ii. p. 240. (W.)  
 242. *Barbarea præcox*: Decand. Syst. ii. p. 207. (W.)  
 243. *Braya* ? *glabella*: foliis linearibus plerumque remote dentatis, racemo fructifero laxo elongato. (B.)  
*Radix* fusiformis ad collum in caudices paucos breves reliquis foliorum obtectos divisa. *Folia* subradicalia fere bipollicaria erecta, è basi tenui lineare sursum lanceolatum dilatata, acuta, medium versus dentibus 2 vel 3 acutis sæpe instructa, utrinque concolora, glabriuscula, costa obsoletiori percursa sed venis nullis transparentibus. *Caulis* palmares erecti costati pube bifida rarissima muniti: alii scapiformes ex ipsa radice, alii e summo sureulorum brevium foliosorum exsurgentes, rarius folio uno alterove radicalibus simili, instructi. *Racemus* elongatus, pedunculis erectiusculis calyces æquantibus. *Flores* parvi. *Lacinia calycina* erectæ, lineares, obtusæ, glabræ. *Petala* (exsiccata) pallidè purpurascens, limbis obtusis integerimis calycem duplo altioribus. *Stylus* filiformis brevis stigmate sub-capitato emarginato. *Siliquæ* immatura sub-erectæ calyce persistente triplo longiores, torulosæ, stylo coronatæ.  
*Hab.* On the Copper Mountains.  
 244. *Turritis glabra*: Decand. Syst. ii. p. 211. (W.)  
 245. *Arabis sagittata*: Decand. Syst. ii. p. 221. *Turritis ovata*: Pursh. ii. p. 438. (W.)  
 246. *A. hispida*: *Brown. Hort. Kew.* iv. p. 106. *A. petræa*,  $\beta$ . Decand. Syst. ii. p. 230. (B.)  
 247. *A. lyrata*: Decand. Syst. ii. p. 231. Pursh. ii. p. 437. (W.)  
 248. *Cardamine pratensis*: Decand. Syst. ii. p. 256. Pursh. ii. p. 440. (H. A. W.)  
 249. *C. hirsuta*: Decand. Syst. ii. p. 259. (W.)  
 250. *C. digitata*: foliis digitatim pinnatis: pinnis sessilibus linearibus integerimis, stylo brevi vix siliqua tenuiori: stigmate capitato. (B.)  
*Herba* glaberrima. *Folia* digitatim pinnata; inferiora petiolo longo gracili, pinnisque 7 approximatis: superiora brevius petiolata pinnis paulo remotioribus: summum subsessile, pinnis 3 aut 5; pinnis omnibus sessilibus conformibus. *Caulis* dodrantalis, simplex, basi repens ascendens, superne erectus sub-flexuosus. *Racemi* erecti, multiflori. *Pedicelli* siliquis longiores, patentes. *Flores* ferè magnitudine *Card. pratensis*. *Calyx* flavescens. *Petala* obovata, calyce duplo longiora, alba vel purpureo tincta. *Stylus* crassiusculus lineam longus, stigmate capitato. *Siliquæ* juniores breviusculæ; maturas non vidi.  
 251. *Vesicaria arctica*: *Alyssum* ? *arcticum*: Decand. Syst. ii. p. 324. (B.)  
 252. *V. arenosa*: foliis inferioribus sub-rhombeis obsolete sinuato-dentatis pube stellatâ canescentibus, caulibus teretibus basi suffruticosis, siliculâ pubescente.  
*Radix* fusiformis. *Folia* radicalia plurima erecta elliptica parciter obsoleteque sinuato-dentata vel non

raro rhomboidea, acuta, in petiolum ipsâ leminâ sesquolongiorem attenuata, utrinque pube stellata adpressa dense tecta, supra flavescenti-viridia subtus canescentia. *Caules* patentes aut ascendentes, firmi, palmares simplices, erubescens, teretes, pilis stellatis vestiti foliisque paucis magis aut minus linearibus, nunc sessilibus nunc in petiolum attenuatis instructi. *Racemi* terminales. *Pedicelli* flores longitudine æquantes. *Pubescentia* calycis pedicellorumque ut in foliis. *Petala* flava obovata in unguem attenuata, calyce sesquolongiora. *Stamina* edentula. *Stylus* filiformis, stigmatè capitato. *Germen* pilosum. *Siliculam* maturam non vidi. Floret Maio.

*Hab.* On the sandy plains of the Saskatchewan.

253. *Draba alpina*: *Decand. Syst.* ii. p. 338. *Wahl. Fl. Lapp.* p. 173. t. xi. f. 4. (B.)

254. *D. muricella*: *Decand. Syst.* ii. p. 340. *Brown. App. Ross's Voyage.* (B.)

255. *D. hirta*  $\alpha$  inferalpina: *Wahl. Fl. Lapp.* p. 175. t. xi. f. 3. *Decand.* ii. p. 340. (B.)

256. *D. glabella*: *Pursh.* ii. p. 434. (B.)

257. *D. lutea*  $\beta$ . *longipes*? *Decand. Syst.* ii. p. 351. (W.)

258. *Capsella bursa pastoris*: *Decand. Syst.* ii. p. 383. (W.)

#### *Notorhizæ.* Decand.

259. *Sisymbrium canescens*? *Decand. Syst.* p. 475? *Nuttall. Gen. Am.* ii. p. 68. ? (W.)

260.  $\S$  *brachycarpon*: foliis bipinnatisectis: lobis obtusis integris vel parciter incisis, p. talis calyce majoribus, siliquis linearibus sub-tetragonis pedicello brevioribus. (W.)

*Facies* S. *Sophia*, at facile distinguitur siliquis duplo brevioribus. *Caulis* bipedalis, simplex aut superne corymboso-ramosus, glandulis parvis pedicellatis munitus. *Folia* pinnata, pinnis pinnatifidis, lobis oblongis lanceolatisve, extimis majoribus, glabra aut pube glandulosa munita. *Petala* obovata, pallidè flava, calycem saturatus flavum paulò superantia. *Siliqua* erectiuscula, pedicello patenti brevior vel interdum fere æqualis, teretiusculâ sed propter lineam elevatam in axi valvularum subtetragona, stigmatè orbiculato terminata, 4 lineas longa, lineam lata.

261. *S. Sophia*? *Var.* *Decand. Syst.* ii. p. 474? (B.)

Lobis foliorum latioribus obtusis et notis aliis forsan species diversa?

262. *Erysimum cheiranthoides*: *Decand. Syst.* i. p. 498. *Pursh.* ii. p. 436. (C.)

263. *Lepidium ruderales*: *Decand. Syst.* ii. p. 540. (H.)

#### MONADELPHIA.

264. *Geranium Carolinianum*? *Willd.* iii. p. 711. *Pursh.* ii. p. 449. (W.)

#### DIADELPHIA.

265. *Corydalis glauca*: *Pursh.* ii. p. 463. (W.)

266. *C. aurea*: *Pursh.* ii. p. 463. (W.)

267. *Polygala paucifolia*: *Willd.* iii. p. 880. *Pursh.* ii. p. 464. (S.)

268. *P. Senega*: *Willd.* iii. p. 894. *Pursh.* iii. p. 464. (H. W. B.)

269. *Lupinus perennis*? Var. foliis magis acutis et cum caule pilosioribus: *Willd.* iii. p. 1022? *Pursh.* ii. p. 467? (B.)

270. *Lathyrus pisiformis*? Varietas? stipulis folia tantum æquantibus semi-sagittato-cordatis: basi angulato-dentato, cæteris similis. *Willd.* iii. p. 1092? (S.)

271. *Pisum maritimum*: *Willd.* iii. p. 1071. *Pursh.* ii. p. 470. (A.)

272. *Vicia americana*: *Willd.* iii. p. 1096. *Pursh.* ii. p. 471. (W.)

273. *Hedysarum alpinum*: *Willd.* iii. p. 1207, a H. alpino *Mich.* diversum.

274. *Hedysarum Mackenzii*: caulescens decumbens, foliis pinnatis foliolis oblongis utrinque canescenti-pilosis, stipulis vaginantibus, articulis lomenti transversim rugosis pilosis. (B.)

*Caulis* ulnaris decumbens parciter ramosus, angulatus superne pilis mollibus brevissimis adpressus tectus. *Folia* pinnata cum impari palmaria fere sessilia rachide trilaterali adpresso-pilosa: foliolis 5-7-jugis, petiolatis sub-oppositis æqualibus sesquipollicaribus oblongis aut ovato-lanceolatis obtusis, utrinque pilis brevibus incanis, venis paucis curvis ramosis obscure transparentibus. *Stipulae* coalitæ vaginantes parvæ membranaceæ acuminatæ pilosæ. *Pedunculi* axillares foliis duplo longiores caulem crassitudine æquantes superne villosi. *Racemus* 7-10 florus, pedicellis sericeis calycem quantibus bracteisque suis membranaceis subulatis brevioribus. *Calyx* membranaceus pilosus mox erubescens bractea setacea adpressa utrinque fulcratus 5-fidus: laciniis subulatis, superioribus sinu obtusiori separatis. *Corolla* magna speciosa carmesino-rubra purpurascensve. *Vexillum* obcordatum carinam obtusissimam æquans calyceque quintuplo longius. *Alæ* calyce triplo longiores. *Legumen* 5-7 articulis compressis transversim rugosis et pilis brevissimis adpressis vestitis. *Semina* reniformia.

This is the Liquorice-plant mentioned by Sir Alexander M'Kenzie in his *Voyage to the Arctic Sea*.

275. *H. boreale*? caulescens erectus, foliis pinnatis foliolis ellipticis obtusis supraglabris subtus canescenti-pilosis, stipulis vaginantibus articulis lomenti glabris. *Nuttall, Am.* ii. p. 110?

A *H. Mackenzii* cui valde similis diversum foliolis supra glabris minoribus omnino aveniis et proportionibus petalorum relativis. *Caulis* erectus flexuosus glaber brachialis et ultra. *Foliola* pollicaria plerumque elliptica interdum ovato-lanceolata obtusa. *Flores* magnitudine et colore præcedentis. *Carina* vexillo longior, calyce triplo longior. *Alæ* lineari-oblongæ obtusæ vexillo breviores, calyce plus duplo longiores. *Ovarium* glabrum seminulis sex. *Fructum* maturum non vidi.

276. *Phaca frigida*: *Willd.* iii. p. 1253. *Wahl. Lapp.* p. 188. *Fl. Dan.* t. 856. (W.)

277. *Ph. astragalina*: *Decand. Astr.* p. 52. *Astr. alpinus*, *Pursh.* ii. p. 472. (H. W. B.)

278. *Oxytropis oxyphylla*: *Pall. Astr.* t. 74? *Pall. Itin.* iii. t. x. f. 2? (W.)

279. *O. deflexa*: *Decand. Astr.* p. 96. *Astragalus parviflorus*: *Willd.* iii. p. 1270. (W.)

280. *O. campestris*: *Decand. Astr.* p. 74. *Astr. campestris*, *Willd.* iii. p. 1317. (B.)

281. *O. argentata*: *Pursh.* ii. p. 473. *Astr. argentata*: *Pall. Astr.* n. 69, t. 48. (C.)



282. *O. uralensis*: *Decand. Astr.* p. 69. *Astr. uralensis*, *Hort. Kew.* iv. p. 370.  
*Phaca sordida*: *Wahl. Fl. Lapp.* p. 190. (A.)

283. *Astragalus melanocarpus*: *Frazer's Catalogue.* A. *Missouriensis*: *Nuttall,* ii. p. 99 ? *exclus. syn. Purshii.* A. *Setosus*: *Pursh inæd. Herb. Lamb.* (C.)

284. *A. vaginatus*: *Pall. Astr.* p. 76, t. 36. (B.)

285. *A. aboriginorum*: suffruticosus erectus canescens, foliis sessilibus, foliolis 6-jugis lanceolato-linearibus, racemis axillaribus laxis foliis longioribus. (C.)

Præcedenti similis. Radix teres longa flavescens Glycirrhizæ similis è quo surgunt caules plures pedales suffruticosi erecti graciles simpliciusculi pilis mollibus canescentes. *Folia* sessilia pinnata, pube canescenti ut in caule sed longiori et densiori: rachide bipollicari filiformi; foliolis plerumque 11, pollicaribus, sessilibus, linearibus lanceolatisve obtusiusculis basi attenuatis utrinque concoloribus nunc alternis nunc oppositis rariusve verticillatis; stipulis caulinis: inferioribus connatis ovatis acutis; superioribus magis distinctis acuminatis. *Pedunculi* axillares foliis duplo longiores pilosi. *Racemus* erectus laxis 15-20 florus, pedicellis erectis calyce et bractea subulata pilosa brevioribus. *Calyx* nigrescenti-pilosus, laciniis quinque subulatis æqualibus: superioribus sinu obtuso separatis. *Corolla* albida cærulescensve carinâ eminente cæruleâ. *Vexillum* ungue lato horizontali calyce breviori, limbo obcordato erecto. *Ala* vexillo breviores carinâ paulo longiores, ungue tenui lineari, limbo oblongo emarginato ad basin lobo lineari obovato aucto. *Carina* obtusa calyce tertia parte longior. *Legumen* immaturum oblongum, pilis canis adpressis tectum, pedicello longitudine calycis sustentatum, stylo brevi incurvo capitato terminatum. *Semina* 14.

The Crees and Stone Indians gather its roots in the spring, as an article of food.

286. *A. hypoglottis*: *Willd.* iii. p. 1285. *Nutt. Am.* ii. p. 99. (S.)

287. *A. succulentus*: caulescens decumbens glabriusculus, foliolis ovalibus obtusis, stipulis glabris triangularibus, spicis pedunculatis folio brevioribus. (C.)

Herbaceus spithameus glabriusculus vel pilis adpressis vix conspicuis deciduis munitus. *Caulis* decumbens sub-angulatus superne crassior. *Folia* sessilia rachide bi-pollicari sub-trilaterali superne attenuatâ, foliolis 21 trilinearibus, ovalibus obtusissimis aveniis brevissime ciliatis supra glabra subtus pilis sparsis inconspicuis munitis; foliolis exterioribus paulo minoribus; stipulis caulinis triangularibus integerrimis glabris viridibus, basibus infra petiolum connatis ibique costis tribus decurrentibus munitis. *Folia* basin versus caulis breviora foliolisque minora. *Pedunculi* foliis breviores, axillares, crassi. *Spica* sub-decensiflora conferta. *Flores* magni ochroleuci, carinæ apice purpurascenti, bracteis membranaceis suffulti. *Calyx* subsessilis cylindricus membranaceus pallescens, inferne glaber, superne pilis sparsis munitus, dentibus subulatis sinibus obtusis separatis. *Vexillum* alis quartâ parte longius, oblongum, acute emarginatum, lateribus replicatis. *Ala* carinâ tertia parte, calyce duplò longiores, ungue tenui, limbo lineari-oblongo integerrimo obtuso infernâ lobo brevi obtuso aucto. *Germina* glabra polysperina, stylo longo ad apicem incurvo acuminata. Fructum maturum non vidi.

#### SYNGENESIA.

288. *Leontodon palustre*: *Smith. Fl. Brit.* ii. p. 923. *Eng. Bot.* t. 553. (W. B.)

289. *Troximon glaucum*: *Pursh.* ii. p. 505. (S.)

290. *Hieracium prenanthoides*: *Willd.* iii. p. 1590. *Nuttall. Gen. Am. Pl.* ii. p. 125. *exclud. syn. Purshii.* (B.)

291. *Crepis* ? *nana*: glaberrima, foliis ovatis integerrimis, pappo sessili. (B.)

*Herba* glauca sesquipedalis multiflorus. *Radix* fusiformis simplex caules plures brevissimos decumbentes alens. *Folia* radicalia confertissima ovata integerrima trinervia glaberrima supra olivaceo-viridia, subtus rubescenti-viridia, petiolis caules pedunculosque superantibus. *Caules* reliquis foliorum obiecti in pedunculis vel ramis corymbosos unifloros foliis paucis linearibus munitos divisi. *Calyx* gracilis cylindricus calyculatus pedunculo vel ramo suo longior; squamis exterioribus brevibus linearibus adpressis diversae altitudinis: interioribus aequalibus carinatis glaberrimis. *Flosculi* saturate flavi calyce altiores lineares 5-dentati. *Semina* linearia supernè paulo attenuata pappo sessili simpliciter scabriusculo coronata.

*Hab.* On the Copper-Mine River.

292. *Saussuria multiflora*? *Decand. An. du Mus.* tom. xvi. p. 199? exclud. synonym. Lin. (B.)

293. *Sonchus sibiricus*: *Willd.* iii. p. 1522. (W.)

294. *Tanacetum pauciflorum*: foliis bi-pinnatis villosis sessilibus, caule simplici foliis longiore subunifloro, flosculis omnibus hermaphroditis. *MS. in Herb. Banks.* (S.)  
Umaris. Folia bi-pinnate et tripinnatifida, laciniis angustis obtusiusculis. Flos plerumque unicus terminalis interdum alter è suprema axilla.

295. *Artemisia virgata*: frutescens sericeo-incana, ramis erectis gracilibus, foliis capillaceis bi-pinnatifidis: floralibus simplicibus calyce hemispherico villosa longioribus. (W.)

Odor Art. Abrotani cui habitu similis sed foliis duplo minoribus.

296. *A. campestris*: *Willd.* iii. p. 1827. *Pursh.* ii. p. 521. (W.)

297. *A. borealis*: *Willd.* iii. p. 1839. *Pall. Itin.* iii. p. 755. t. H. h. f. 2.

*A. spithamea*? *Pursh.* ii. p. 522? (B.)

298. *A. vulgaris*: *Willd.* iii. p. 1845. *Pursh.* ii. p. 522. (B.)

299. *A. integrifolia*: *Willd.* iii. p. 1846. *Gmel. Sibir.* t. 48. f. 1. *Pursh.* ii. p. 521. (W.)

300. *Gnaphalium plantagineum*: *Pursh.* ii. p. 525. *G. plantaginifolium* *Willd.* iii. p. 1882. (W.)

301. *G. dioicum*: *Willd.* iii. p. 1882. (W.)

302. *G. alpinum*: *Willd.* iii. p. 1883. *Pursh.* ii. p. 524. (B.)

303. *Erigeron pulchellum*: *Mich. Am.* ii. p. 224. *E. bellidifolium*: *Pursh.* ii. p. 532. *E. serpentaria*: *Herb. Banks. MSS.* (S.)

304. *E. purpureum*: *Willd.* iii. p. 1958. *Pursh.* ii. p. 533. (S.)

305. *E. philadelphicum*: *Willd.* iii. p. 1957. *Pursh.* ii. p. 533. (W.)

306. *E. glabellum*: *Nuttall. Am.* ii. p. 147. (W.)

307. *E. uniflorum*: *Willd.* iii. p. 1960. *Eng. Bot.* t. 2416. (A.)

308. *Senecio pauciflorus*: *Pursh.* ii. p. 529. (S.)

309. *S. gracilis*: *Pursh.* ii. p. 529. (W.)

310. *S. balsamitæ*: *Willd.* iii. p. 1998. *Pursh.* ii. p. 530. (W.)

311. *S. aureus*: *Willd.* iii. p. 1999. *Pursh.* ii. p. 530. (W.)

312. *S. lugens*: tomentosus, foliis integris glanduloso-dentatis: radicalibus sub-spatulatis: caulinis linearibus acutis, caule simplici, corymbo denso. (B.)

*Herba* pedalis, ubique pariter lanosa. *Caudes* plures ex eodem radice, simplices costati, erubescentes. *Folia* ideo crassa ut venæ nullæ transparent plana nec ullo modo ensiformia nihilominus costâ erubescenti validâ sub apice evanidâ munita: *radicalia* primordially palmaria spatulata et obtusissima; mox exurgunt alla versus apicem elliptica vel lanceolata et acuta, basibus tamen semper angustis et nil nisi costas ulatas exhibentibus: *caulina* minora, remota, sessilia, semi-amplexicaulia lanceolato-linearia, acuminata, acuta, summa in bracteis sensim dimiuta: *omnia* dentata, dentibus nunc raris et ex glandulis parvis acutis omninò formatis, nunc frequentioribus et ex substantia folii constructis sed tunc etiam glandulis apiculatis. *Folia* juniora interdum revoluta sunt. *Corymbus* terminalis circiter 10-florus, pedunculis calyce vix duplo longioribus, tomentosis, bracteis linearibus acuminatis suffultis. *Calyx* cylindricus squamis paucis laxis minoribus calyculatus. Squamarum apices nigerrimæ. *Floruli* disci calyce longiores, antheris stigma superantibus. *Flosculi* radii patentes calyce duplo longiores, limbis lanceolatis integerrimis vel emarginatis. *Pappus* simplex sessilis. *Receptaculum* nudum.

*Hab.* At Bloody Fall, where the Esquimaux were destroyed by the Northern Indians that accompanied Hearne, whence the specific name.

313. *Cineraria integrifolia*: Willd. iii. p. 2082. Pursh. ii. p. 528. (H.)

314. *C. palustris*: Willd. iii. p. 2080. (H. W. A.)

315. *C. frigida*: deciduo-tomentosa, foliis ovatis obsolete dentatis: radicalibus petiolatis, caule ascendente unifloro. (B.)

*Radix* repens. *Caulis* palmaris et ultra, simplex striatus, uniflorus tomento laxo deciduo vestitus. *Folia* plerumque ovata obtusa remote obsoleteque dentata 3-vel 5-nervosa, marginibus sub revolutis; *sub-radicalia* minora, glabra, in petiolum longum attenuata; *caulina media* majora tomento ut in caule vestita; *caulina suprema* minora, linearia. *Flos* luteus. *Calyx* simplex pilis glanduliferis villosus, laciniis linearibus acutis longitudine disci. *Flosculi* radii calyce duplo longiores 3-dentati.

316. *C. Lewisii*: *Erigeron compositum*: Pursh. ii. p. 535. (B.)

317. *Aster?* exscapus: foliis radicalibus lineari-lanceolatis adpresso pilosis flore sessili altioribus. (C.)

*Radix* fusiformis superne in caudices breves crassos reliquis foliorum obtectus divisa. *Folia* radicalia aequipollicaria angusta acuta, inferne sensim attenuata, integerrima, utrinque pilis adpressis vestita. *Flos* magnus albidus in summo caudicis sessilis folisque paulo brevior. *Calyx* adpresso-imbricatus, laciniis angustis lineari-subulatis acutis marginibus membranaceis ciliatis. *Flosculi* disci calyce paulo longiores pappo breviores. *Fl. radii* calyce plus duplo longiores angusti, lineares apice dentibus 3 conniventibus.

*Hab.* at Carlton House.

318. *A. salicifolius*: Willd. iii. p. 2030. Pursh. ii. p. 549. (W.)

319. *A. graminifolius*: Pursh. ii. p. 545. (H.)

320. *A. paludosus*: Willd. iii. p. 2033. Pursh. ii. p. 551. (H.)

321. *A. paniculatus*: Willd. iii. p. 2035. Pursh. ii. p. 551. (W.)

322. *A. cordifolius*: Willd. iii. p. 2036. Pursh. ii. p. 552. (W.)

323. *A. salsuginosus*: caule unifloro, foliis lineari-obovatis acutis sub-integerrimis venosis, calycibus laxè imbricatis linearibus acutis disco vix duplo radio plus triplo brevioribus. (W.)

*Herbaceus*. *Caudes* plures ex eadem radice, dodrantaes erecti aut ascendentes firmi simplices purpurei sed pilis brevissimis sub-incanis. *Folia* sessilia lineari-obovata lanceolatae plerumque acuta, integerrima

vel ad apicem dentibus raris munita, venosa, utrinque concolora, supra glabra, subtus pilis brevibus patentissimis vestita. *Flos* magnus terminalis infra quem caulis paulo incrassatus est et villosus. *Calyx* laxiusculus pilis brevibus canis obtectus, laciniis linearibus acutis, marginibus purpurascensibus. *Flosculi disci* calyce fere duplo longiores; *radii* triginti sesqui-ungulares disco duplo longiores, lineares sub-emarginati. *Germina* hirta pappo simplici dentato fusciscente disco equante coronata.

*Hab.* On the Salt Plains in the Athabasca.

324. *A. montanus*: radice repente, caule ramoso sub-bifloro ad apicem densè tomentoso, foliis latè oblongis remotè dentatis subtus breviter pilosis, calycibus squarrosis, flosculis radii numerosis angustis. (B.)

*Radix* repens. *Caules* plures spithamei ascendentes simplices aut ramosi firmi sulcati villosa-canescens rami plerumque sterilibus. *Folia* sesquipollaria apicem versus remotè dentata, subtusque pilosa, variè modo latè lanceolata acuta, modo lineari-oblonga obtusa sed costa excurrente apiculata. *Flos* magnitudine *Erigerontis alpini*, terminalis propè quem caulis incrassatus est et tomento leano densissimè obtectus. *Calyx* villosus laciniis lineari-lanceolatis acutis imbricatis squarrosis, interioribus purpurascensibus radii sub-æquantibus. *Flosculi disci* calyce breviores; *radii* subtriginti angustè lineares sub-emarginati calyce paulo longiores. *Germina* pilosa, pappo simplici dentato fusciscente disco longiori. Specimen hujus plantæ è Sibiria in herbario Pallasii nunc Lambertiano sub nomine falso *Erigerontis alpini* conservatum est. Asteris species propter calycem potius quam *Erigerontis*.

325. *Solidago tenuifolia*: Pursh. ii. p. 540. (H.)

326. *S. virga-aurea*: Willd. iii. p. 2065. Pursh. ii. p. 542. (W.)

327. *S. stricta*: Willd. iii. p. 2062. Pursh. ii. p. 540. (W.)

328. *S. juncea*: Willd. iii. p. 2060. Pursh. ii. p. 538. (W.)

329. *S. procera*: Willd. iii. p. 2055. Pursh. ii. p. 535. (H.)

330. *S. lanceolata*: Willd. iii. p. 2062. Pursh. ii. p. 540. (H.)

331. *S. humilis*: Pursh. ii. p. 543. (W.)

332. *Arnica montana*: Willd. iii. p. 2106. Nuttall. Gen. Am. ii. p. 164. (W.B.)

333. *Grindelia squarrosa*: Brown, Lin. Trans. v. xii. p. 102. *Donia squarrosa*: Pursh. ii. p. 559.

*Hab.* On the Salt Plains in the Athabasca.

334. *Tussilago palmata*: Willd. iii. p. 1972. Pursh. ii. p. 531. (W.)

335. *T. frigida*: Willd. iii. p. 1969. Pursh. ii. p. 531. (A.)

336. *T. sagittata*: Pursh. ii. p. 531. (W.)

337. *Chrysanthemum integrifolium*: pilosum, foliis linearibus integerrimis, caule sub-aphyllo unifloro.

*Radix* gracilis perennis. *Folia* radicalia conferta, ferè pollicaria, linearia, obtusiuscula integerrima pilosa. *Caulis* simplicissimus, digitalis, superne incrassatus, pilis mollibus patentissimis densè tectus et interdum folio uno alterove fere setaceo instructus. *Flos* pro ratione plantæ magnus. *Calyx* hemisphericus imbricatus, squamis elliptico-obovatis, appressis, viridibus, marginibus membranaceis laceris umbrino-fuscis. *Flosculi radii* albi, magni, latè elliptici 3-dentati; *disci* lutei. *Receptaculum* pilosiusculum. *C.* graninifolio Lam. III. t. 678. f. affinis. *Hab.* On the Copper Mountains.

338. *Achillea ptarmica*: Willd. iii. p. 2191. Pursh. ii. p. 562. (W.B.)

339. *A. millefolium*: Willd. iii. p. 2208. Pursh. ii. p. 563. (W.B.)

## GYNANDRIA.

340. *Habenaria obtusata* : *Orchis obtusata* : *Pursh*. ii. p. 588. (H.)  
 341. *H. hyperborea* : *Brown. Hort. Kew.* v. p. 193. *Orchis hyperborea* : *Pursh*. ii. p. 588. (W.)  
 342. *H. rotundifolia* : *Orchis rotundifolia* : *Pursh*. ii. p. 588. (W.)  
 343. *Neottia cernua* : *Willd.* iv. p. 75. *Pursh*. ii. p. 589. (B.)  
 344. *Corallorhiza innata* : *Brown. Hort. Kew.* v. p. 209. *Nuttall. Gen. Am.* ii. p. 197. (W.)  
 345. *Cypripedium parviflorum* : *Willd.* iv. p. 143. *Pursh*. ii. p. 594. (W.)  
 346. *C. pubescens* : *Willd.* iv. p. 143. *Pursh*. ii. p. 594. (W.)  
 347. *C. humile* : *Willd.* iv. p. 144. *Pursh*. ii. p. 595. (W.)

## MONECIA.

348. *Chara translucens* : *Eng. Bot.* t. 1855. (B.)  
 349. *Typha latifolia* ? *Pursh*. i. p. 34 ? (W.)  
 350. *Kobresia scirpina* : *Willd.* iv. p. 205. (B.)  
     *Carex*. 1. *Spicis dioicis*.  
 351. *C. dioica* : *Willd.* iv. p. 207. (W.)  
 352. *C. scirpoidea* : *Mich. Am.* ii. p. 171. *Pursh*. i. p. 34. *C. Wormskioldiana* : *Hornemann. Fl. Dan.* t. 1528. (W.)  
     2. *Spica androgyna simplici, arista stricta (vel exserta vel inclusa.)*  
 353. *C. filifolia* : *Nutt. Am.* ii. p. 204. (C.)  
     3. *Spica androgyna simplici mutica*.  
 354. *C. affinis* : *spica androgyna simplici superne mascula, stigmatibus tribus, squamis lanceolatis acutis muticis ; infima aristata. Brown, MS.* (W.)  
     *Obs.* Proxima *C. polytrichoidi. Br.*  
 355. *C. attenuata* : *spica androgyna simplici : superne mascula densa : femineis paucioribus alternis, squamis omnibus obtusis. Brown, MS.* (B.)  
     4. *Spicis androgynis pedunculatis*.  
 356. *C. media* : *spicis androgynis ternis brevissimè pedunculatis sessilibusve approximatis basi masculis, stigmatibus tribus, capsulis ovatis rostellatis glaberrimis squama ovata obtusiuscula longioribus. Brown, MS.* (W.)  
     Prope *C. bicolorum. Br.*  
 357. *C. fuliginosa* : *Sternb. et Hoppe. in Act. Soc. Bot. Ratisb.* i. p. 159, t. 3. (B.)  
     5. *Spicis androgynis sessilibus alternis*.  
 358. *C. scoparia* : *Willd.* iv. p. 230. *Pursh*. i. p. 37. (W.)  
 359. *C. loliacea* : *Willd.* iv. p. 237. (W.)  
 360. *C. remota* : *Willd.* iv. p. 239. *Pursh*. i. p. 37. (W.)

6. *Spicis sexu distinctis, mascula solitaria, femineis subsessilibus scapo nudo bracteisque membranaceis vaginatis.*

361. *C. Richardsonii*: spica mascula pedunculata, femineis binis alternis subsessilibus exsertis multifloris, stigmatibus tribus, fructibus obtusis pubescentibus. *Brown, MS. (W.)*

7. *Spicis sexu distinctis, mascula solitaria, femineis sessilibus s. incluse pedunculatis.*

362. *C. concinna*: spica mascula sessili cylindracea, femineis ternis subsessilibus approximatis, bracteis semimembranaceis, stigmatibus 3, capsulis trigono-obovatis brevissimè rostellatis pubescentibus duplo ferè longioribus squamis obovatis, foliis caulinis superioribus abbreviatis. *Brown, MS. (W. B)*

Affinis *C. marginata*, quæ diversa spica mascula majori, femineis binis brevioribus, squamis obtusiusculis capsulam subæquantibus. *Br.*

363. *C. varia*: *Willd. iv. p. 259. Pursh. i. p. 40. (C.)*

364. *C. compacta*: *Brown, App. Ross's Voyage. (B.)*

*Obs. Prope C. saxatilem. Br.*

365. *C. lupulina*: *Willd. iv. p. 263. Pursh. i. p. 41. (W.)*

8. *Spicis sexu distinctis, mascula solitaria, femineis superioribus sessilibus vel inclusè pedunculatis inferioribus pedunculatis.*

366. *C. mutica*: spica mascula squamis obtusis, femineis tribus distantibus subexserte pedunculatis erectis raris, stigmatibus binis, capsulis ovalibus muticis lævibus squama ovata mucronata longioribus, foliis bracteisque planis. *Brown, MS. (W.)*

367. *C. oligocarpa*: *Willd. iv. p. 279. Pursh. i. p. 41. (W. B. C.)*

9. *Spicis sexu distinctis, mascula solitaria, femineis omnibus pedunculatis.*

368. *C. capillaris*: *Willd. i. p. 290. (W.)*

369. *C. limosa*: *Willd. iv. p. 293. (W.)*

370. *C. podocarpa*: spica mascula solitaria, femineis binis pendulis oblongis, stigmatibus tribus, fructibus ellipticis brevissimè rostellatis integris lævibus acheniisque pedicellatis, foliis caulinis inferioribus brevioribus lanceolatis. *Brown, MS. (B.)*

10. *Spicis sexu distinctis masculis pluribus.*

371. *C. pellita*: *Willd. iv. p. 302. Pursh. i. p. 44. (W.)*

372. *C. ampullacea*: *Willd. iv. p. 308. (W.)*

373. *C. aristata*: spicis femineis ternis quaternisve cylindraceis distantibus brevè pedunculatis, stigmatibus 3, capsulis glaberrimis nervosis rostro longissimo altibifido lævi: laciniis patentibus, squamis omnibus aristatis, foliis subtus vaginisque villosis. *Brown, MS.*

*Inter C. bullatam et lacustrem. Br.*

374. *Alnus glutinosa*: *Willd. iv. p. 434. Pursh. ii. p. 622. (A. W. H.)*

375. *Urtica gracilis*: *Willd. iv. p. 356. (W.)*

376. *Myriophyllum spicatum*: *Willd. iv. p. 406. Pursh. i. p. 274. (W.)*

377. *Corylus americana*? Willd. iv. p. 471? Pursh. ii. p. 634? (S.)  
 378. *Betula papyracea*: Willd. iv. p. 464. Pursh. ii. p. 621. (W.)  
 379. *B. glandulosa*: Willd. iv. p. 466. Pursh. ii. p. 622. (H. W. B. A.)  
 380. *Calla palustris*: Willd. ii. p. 290. Pursh. i. p. 399. (W.)  
 381. *Pinus balsamea*: Willd. iv. p. 504. Pursh. ii. p. 639. (W.)  
 382. *P. nigra*: Lambert. Monogr. p. 41. t. 27. Pursh. ii. p. 640. (W.)

It is found in swampy situations, as far north as lat. 65°, where it terminates together with the *Betula papyracea*.

383. *P. alba*: Lambert. Monogr. p. 39. t. 26. Pursh. ii. p. 641.

The *Aechmie* of the Crees is the most northerly tree that came under our observation. On the Copper-Mine River, within twenty miles of the Arctic Sea, it attains the height of twenty feet or more. Its timber is in common use throughout the country, and its slender roots, denominated *Watapeh*, are indispensable to canoe-makers for sewing the slips of birch-bark together. The resin which it exudes is used for paying over the seams of the canoes, and canoes for temporary purposes are frequently formed of its own bark. It is the only tree that the Esquimaux of the Arctic Sea have access to while growing, and they contrive to make pretty strong bows by joining pieces of its wood together.

384. *P. Banksiana*: Lambert. Monogr. p. 7. t. 3. Pursh. ii. p. 642.

This tree occupies dry sandy soils to the exclusion of all others. It is a handsome tree with long spreading flexible branches, generally furnished with whorled curved cones of many years' growth. It attains the height of forty feet and upwards in favourable situations, but the diameter of its trunk is greater in proportion to its height than in the other pines of the country. In its native situation it exudes much less resin than the *pinus alba*. The Canada porcupine feeds on its bark; and its wood, from its lightness and the straightness and toughness of its fibres is much prized for canoe timbers. The Canadian voyagers term it *Cypres*, the Crees *Ooskartawuc-ahitic*. It occurred on our route as far to the northward as lat. 64°, but it is said to attain higher latitudes on the sandy banks of Mackenzie's River.

385. *P. microcarpa*: Lambert. Monogr. p. 56. t. 37. Pursh. ii. p. 645.

*Hab.* In swampy situations, from York Factory to Point Lake, in lat. 65°. In the latter place it is very dwarfish, seldom exceeding six or eight feet in height. It is named by the voyagers *L'Epinette Rouge*, and by the Hudson's Bay men, *Juniper*. Its Cree name is *Wagginawgan* (the tree that bends.)

386. *Thuja occidentalis*: Willd. iv. p. 508. Pursh. ii. p. 646. (S.)

#### DICECIA.

387. *Salix purpurea*: Smith. Fl. Brit. iii. p. 1039. (W.)  
 388. *S. rubra*: Smith. Fl. Brit. iii. p. 1042. (W.)  
 389. *S. decipiens*: Eng. Bot. t. 1937. Pursh. ii. p. 617. (W.)  
 390. *S. fragilis*: Smith. Fl. Brit. iii. p. 1051. Eng. Bot. t. 1807. (W.)  
 391. *S. cordata*: Pursh. ii. p. 615. (W.)  
 392. *S. myrsinites*: Wahl. Fl. Lapp. p. 262. Pursh. ii. p. 617. (B.)  
 393. *S. myrtilloides*: Wahl. Fl. Lapp. p. 266. (W.)  
 394. *S. Ammaniana*: Willd. iv. p. 663? (W.)  
 395. *S. reticulata*: Willd. iv. p. 685. Pursh. ii. p. 610. (B.)  
 396. *S. arctica*: Brown's List of Plants, Ross's Voyage. (B.)

Diffusa. *Folia* elliptico-obovata integerrima pilis sericeis vestita mox glabra subtusque glauca venosa. *Anthera* purpureæ: *Germina* sessilia elongata sensim acuminata griseo-tomentosa: *stilo* gracili. *Squamæ* germinibus 5-tuplo breviores obovate rotundatæve nigrescentes pilis sericeis vestitæ.

307. *S. desertorum*: foliis ovalibus integerrimis: subtus glaucis deciduo?-villosis venosis, germinibus sessilibus longitudine squamorum tomentosiss, stigmatibus sessilibus bitidis. (B.)

*Fruticæ* erectus sesquipedalis, cortice flavescenti-bruno, nitido. *Folia* exstipulata exacte elliptica obtusa supra opaca glabra, subtus pube laxâ molli deciduâ? vestita. *Amenta* serotina: masculina diandra pollicaria cylindrica: feminea pedicellata foliisque fulcrata; squamis fuscis ellipticis obtusis; germinibus sesquilineis ovatis acuminatis squamis vix altioribus, stigmatibus bifidis, segmentis filiformibus divaricatis; nectario interno filiformi.

398. *S. vestita*: *Pursh.* ii. p. 610. (H. W.)

399. *S. glauca*,  $\alpha$ : *Wahl. Fl. Lapp.* p. 264. t. xvi. f. 3? (B.)

400. *S. arenaria*, macrostachys: *Schleicher.* *S. limosa*: *Wahl. Lapp.* p. 265? (B.)

401. *S. candida*: *Pursh.* ii. p. 608. (W.)

$\beta$ ? rugosa foliis nudiusculis exstipulatis reticulato-rugosis subtus glaucis, amentis omnino varietatis  $\alpha$ . (W.)

402. *S. rostrata*: foliis ellipticis acutis integerrimis pubescentibus subtus glaucescentibus, germinibus longè pedicellatis ovato-subulatis tomentosiss, stigmate sessili quadrifido. *S. phylicifolia*? *Smith. Comp. Fl. Br.* p. 146? *Eng. Bot.* t. 1958?

*Folia* sesquipollicaria, exstipulata, pube sericea caduca? vestita, subtus grisea sub-glauca. *Amenta* feminea sæpe ferè palmaria pedunculata foliis tribus quatuorve fulcrata. *Squamæ* elliptice pallide brunneæ pilosæ. *Pedicelli* primo squamas vix superantes mox ad longitudinem unguicularum elongati et squamis triplo quadruplove longiores. *Germina*  $\alpha$  basi ovata in rostrum ferè cylindricum producta, semper pedicellis longiora.

403. *Empetrum nigrum*: *Willd.* iv. p. 713. *Pursh.* i. p. 93. (W. B.)

In high northern latitudes its berries, after the first frosts, are very juicy and pleasant. They are hoarded up by the different species of marmots, and form the autumnal food of the *Anas hyperborea*.

404. *Myrica gale*: *Willd.* iv. p. 745. *Pursh.* ii. p. 618. (W.)

The Indian women use the buds of this plant to dye their porcupine quills with.

405. *Populus trepida*: *Willd.* iv. p. 803. *Pursh.* ii. p. 618. (W.)

*Hab.* From Hudson's Bay to the northward of Great Slave Lake, as far as lat. 64°. It is denominated by the Crees, metoos, and is esteemed to burn better in a green state than any other tree in the country.

406. *P. balsamifera*: *Willd.* iv. p. 805. *Pursh.* ii. p. 618.

The trunk of this tree attains a greater circumference than that of any other in the northern parts of America. It burns badly, and gives little heat when green, but its ashes yield a large quantity of potash. We traced it as far to the north as Great Slave Lake, and the south branch of Mackenzie's River has been named Rivière aux Liards, from its abundance in that quarter. It constituted the greatest part of the drift timber that we observed on the shores of the Arctic Sea. Its Cree name is Mathel-metoos, (ugly poplar.)

407. *Juniperus communis*: *Willd.* iv. p. 853. *Pursh.* ii. p. 647. (W.)

Its fruit is termed Caw-caw-quew-meena, (crow-berry), by the Crees.

408. *J. prostata*: *Pers. enchir.* ii. p. 632. (W.)

It is nearly as common as the other species, grows close to the ground, and sends out flagelliform branches two yards long.



409. *Hippophæ canadensis*: Willd. iv. p. 744. Pursh. i. p. 115. (H. W. B. A.)  
 410. *Acer saccharinum*: Willd. iv. p. 985? Pursh. i. p. 266? (S.)

## CRYPTOGAMIA. FILICES.

411. *Equisetum arvense*: Willd. v. p. 1. Pursh. ii. p. 651. (W.)  
 412. *E. sylvaticum*: Willd. v. p. 3. Pursh. ii. p. 651. (W.)  
 413. *E. umbrosum*: Willd. v. p. 4? (C.)  
 Characteri specifico quadrat. Vaginæ glaucæ dentibus circiter 14 nigro-fuscis, marginibus hyalinis.  
 414. *E. palustre*: Willd. v. p. 5. Pursh. ii. p. 651. (B.)  
 415. *E. variegatum*: Smith. Comp. Fl. Brit. p. 154. Eng. Bot. t. 1987. (B.)  
 416. *E. scirpoides*: Willd. v. p. 7. Pursh. ii. p. 652. (W.)  
 417. *Lycopodium complanatum*: Willd. v. p. 19. Pursh. ii. p. 652. (W. B.)  
 418. *L. selago*: Willd. v. p. 49. Eng. Bot. t. 233. (W. B.)  
 419. *L. dendroideum*: Willd. v. p. 21. Pursh. ii. p. 653. (W.)  
 420. *L. annotinum*: Willd. v. p. 23. Pursh. ii. p. 653. (W. B.)  
 421. *L. alpinum*: Willd. v. p. 20. Eng. Bot. t. 234. (B.)  
 422. *Polypodium vulgare*: Willd. v. p. 172. Pursh. ii. p. 658. (W.)  
 423. *P. dryopteris*: Willd. v. p. 209. Eng. Bot. t. 616. (W.)  
 424. *Woodsia ilvensis*: Pursh. ii. p. 660. *Nephrodium rufidulum*: Mich. Am. ii. p. 269. fide exempl. à D. Reichard.  
 425. *W. glabella*: frondibus (lanceolato-linearibus) pinnatis glaberrimis, pinnis triangularibus pinnatifidis: imis dilatatis; laciniis cuneiformibus, rachi nuda, stipite squamato. Brown. MS. (W.)  
 426. *Athyrium fragile*: *Aspidium fragile*: Willd. v. p. 280. (W.)  
 427. *Nephrodium fragrans*: *Aspidium fragrans*: Willd. v. p. 253. (C. W. B.)  
 428. *Pteris gracilis*? Willd. v. p. 376?? Pursh. ii. p. 668?? (W.)  
 Var? nana, fronde unguiculari, pinnis omnibus indivisis.  
 429. *Cryptogramma acrostichoides*: frondibus bipinnatifidis, sterilium pinnulis ovalibus crenatis; fertiliem demum explanatis, soris linearibus discum totum occupantibus. Brown, ad finem Catalogi. (W.)

## MUSCI.

430. *Sphagnum squarrosum*: Schwægr. Muscor. Frond. Suppl. i. par. i. p. 49. Hook & Taylor, Muscol. Brit. p. 4. (W. B.)  
 431. *S. acutifolium*: Schwægr. Sup. I. i. p. 15. Musc. Brit. p. 4. (W. B.)  
 β rufescens. (W. B.)  
 γ tenera. (W. B.)  
 432. *Anœctangium ciliatum*: Schwægr. Sup. I. i. p. 38. Musc. Brit. p. 14. (W. B.)  
 433. *Tetraphis pellucida*: Schwægr. Sup. I. i. p. 39. Mich. Fl. Am. p. 287. Musc. Brit. p. 16. (W.)  
 434. *Andræa alpina*: Schwægr. Sup. I. i. p. 42. Mus. Brit. p. 1. (B.)

435. *Splachnum mnioides* : *Schwagr. Sup. I. i. p. 48.* (B.)  
*Hab.* Very common on the Barren Grounds, forming tufts, whose roots always include the bones of some small animal.
436. *S. angustatum* : *Schwagr. Sup. I. i. p. 48. Mus. Brit. p. 20.* (W.)
437. *S. Brewerianum* : *Schwagr. Sup. I. i. p. 49. S. mnioides. Eng. Bot. t. 786.*(B.)  
*β. minus.* (B.)
438. *S. urceolatum* : *Schwagr. Sup. I. i. p. 49.* (B.)
439. *S. vasculosum*, var., *minima* : *Schwagr. Sup. I. i. p. 51. Mus. Brit. p. 21.* (B.)
440. *S. luteum* : *Schwagr. Sup. I. i. p. 55. Wahl. Flor. Lap. p. 308.* (B.)
441. *Encalypta pilifera* : *Schwagr. Sup. II. t. 26. Funx. in Sturmii Flor. Germ. Crypt. 15.* (W.B.)
442. *Weissia cirrata* : *Schwagr. Sup. I. i. p. 75. Mus. Brit. p. 46.* (W.)
443. *Grimmia ovata* : *Schwagr. Sup. I. p. 85. t. 24. Mus. Brit. p. 39.* (B.)
444. *G. sudetica* : *Schwagr. Sup. I. i. p. 87.* (B.)
445. *G. apocarpa* : *Schwagr. Sup. I. i. p. 95.* (W.B.)
446. *Barbula unguiculata* : *Schwagr. Sup. I. i. p. 123. Tortula unguiculata : Musc. Brit. p. 33.* (W.)
447. *Tortula ruralis* : *Schwagr. Sup. I. i. 137. Musc. Brit. p. 31.* (W.B.)
448. *Trichostomum lanuginosum* : *Schwagr. Sup. I. i. p. 149. Musc. Brit. p. 60.* (W.B.)
449. *Dicranum scoparium* : *Schwagr. Sup. I. i. p. 162. t. 42. Mich. Fl. Amer. p. 297.* (W.)
450. *D. polysetum* : *Schwagr. Sup. I. i. 165. Mich. Fl. Am. p. 297. D. undulatum : Musc. Brit. p. 57.* (W.)
451. *D. Schraderi* : var. *major* : *Schwagr. Sup. I. i. p. 166.* (B.)
452. *D. fuscescens* : *Turner, Musc. Hiber. p. 60. t. 5. fig. 1.* (B.)
453. *D. elongatum* : *Schwagr. Sup. I. i. p. 171.*  
*Hab.* On the Barren Grounds. This, and the other species of *Dicrana*, form dense tufts on the Barren Grounds, that are very troublesome to pedestrians, and obtain from the Indians the name of women's heads, because, say they, when you kick them they do not get out of the way.
454. *D. polycarpum* : *Schwagr. Sup. I. i. p. 179. Musc. Brit. p. 57.* (B.)
455. *D. purpureum* : *Schwagr. Sup. I. i. p. 183. Mich. Fl. Am. p. 298.* (W.B.)
456. *D. strictum* : *Schwagr. Sup. I. i. p. 188.* (B.)
457. *D. virens* : *Schwagr. Sup. I. i. p. 194. Musc. Brit. p. 34.* (B.)
458. *D. strumiferum* : *Schwagr. Sup. I. i. p. 194. Musc. Brit. p. 34.* (B.)  
*β. praelongum.* (B.)
459. *Fissidens taxifolus* : *Schwagr. Sup. I. ii. p. 10. Musc. Brit. p. 54.* (B.W.)
460. *Didymodon capillaceum* : *Musc. Brit. p. 67.* (B.)
461. *Orthotrichum obtusifolium* : *Schwagr. Sup. I. ii. p. 14. t. L.* (B.)
462. *O. rupestre* : *Schwagr. Sup. I. ii. p. 27. t. liii.* (B.)
463. *O. cupulatum* : *Schwagr. Sup. I. ii. p. 35. t. L. Musc. Brit. p. 72.* (W.B.)

464. *O. anomalum* : *Schwagr. Sup. I. ii. p. 37. Musc. Brit. p. 72. (B.W.)*  
 465. *O. Hutchinsiae* : *Musc. Brit. p. 73. t. xxi. (W.)*  
 466. *O. speciosum* : *Flor. German. Sturmii. (W.)*  
 467. *O. elegans* : *Schwagr. ined. (W.)*  
 468. *Bartramia ithyphylla* : *Schwagr. Sup. I. ii. p. 51. Musc. Brit. p. 86. (B.)*  
 469. *Webera pyriformis* : *Schwagr. Sup. I. ii. 66. Mich. Fl. Am. p. 302. (W.)*  
 470. *W. nutans* : *Schwagr. Sup. I. ii. p. 67. Bryum nutans : Musc. Brit. p. 123. (B.)*  
 471. *W. alpina* : *Schwagr. (B.)*  
 472. *Funaria hygrometrica* : *Schwagr. Sup. I. ii. p. 75. Musc. Brit. p. 69. (W.)*  
 473. *Meesia uliginosa* : *Schwagr. I. ii. p. 82. Bryum trichodes : Musc. Brit. p. 116. (B.)*  
 474. *Timmia megapolitana* : *Schwagr. Sup. I. p. 84. T. cucullata : Mich. Fl. Am. p. 304. (B.)*  
 475. *Bryum carneum, β* : *Schwagr. Sup. I. p. 91. (B.)*  
 476. *B. pulchellum, atro-purpureum* : *Wahl. Fl. Lapp. p. 360. (B.)*  
 477. *B. caespiticium* : *Schwagr. Sup. I. ii. p. 109. Musc. Brit. p. 121. (W.B.)*  
 478. *B. ventricosum* : *Musc. Brit. p. 124. (W.B.)*  
 479. *B. pallens* : *Schwagr. Sup. I. ii. p. 111. (W.)*  
 480. *Mnium palustre* : *Schwagr. Sup. I. ii. p. 122. Mich. Fl. Am. p. 305. (W.)*  
 481. *Mn. turgidum* : *Schwagr. Sup. I. ii. p. 123. Wahl. Fl. Lap. p. 351. (W.)*  
 482. *Mn. crudum* : *Schwagr. Sup. I. ii. p. 127. Bryum crudum : Musc. Brit. p. 119. (W.)*  
 483. *Mn. cuspidatum* : *Schwagr. Sup. I. ii. p. 132. Bryum cuspidatum : Musc. Brit. p. 127. (W.)*  
 484. *Mn. rostratum* : *Schwagr. Sup. I. ii. p. 136. Bryum rostratum : Musc. Brit. p. 126. (W.)*  
 485. *Climacium dendroides* : *Schwagr. Sup. I. ii. p. 141. Leskea dendroides : Mich. Fl. Am. p. 309. (W.)*  
 486. *Neckera pennata* : *Schwagr. Sup. I. ii. p. 144. Mich. Fl. Am. p. 307. (W.)*  
 487. *Leskea polyantha* : *Schwagr. Sup. I. ii. p. 173. (W.)*  
 488. *Hypnum denticulatum* : *Schwagr. Sup. I. ii. p. 187. Var. α Musc. Brit. p. 92. (W.B.)*  
 489. *H. stramineum* : *Schwagr. Sup. I. ii. p. 213. Musc. Brit. p. 97. (W.)*  
 490. *H. Schreberi* : *Schwagr. Sup. I. ii. p. 227. Musc. Brit. p. 96. (W.)*  
 491. *H. nitens* : *Schwagr. Sup. I. ii. p. 228. Musc. Brit. p. 100. (W.)*  
 492. *H. abietinum* : *Schwagr. Sup. I. ii. p. 232. Mich. Fl. Am. p. 316. (B.)*  
 493. *H. splendens* : *Schwagr. Sup. I. ii. p. 237. Mich. Fl. Am. p. 317. (W.B.)*  
 494. *H. lutescens* : *Schwagr. Sup. I. ii. p. 237. Musc. Brit. p. 100. (W.)*  
 495. *H. striat.* : *Schwagr. Sup. I. ii. p. 238. Musc. Brit. p. 106. (W.)*  
 496. *H. plumosum* : *Schwagr. Sup. I. ii. p. 244. (W.)*  
 497. *H. serpens* : *Schwagr. Sup. I. ii. p. 260. Musc. Brit. p. 94. (W.)*

498. *H. crista castrensis*: *Schwægr. Sup. I. ii. p. 293. Mich. Fl. Am. p. 314. (W.)*  
 499. *H. scorpioides*: *Schwægr. Sup. I. ii. p. 293. Musc. Brit. p. 112. (W.)*  
 500. *H. rugosum*: *Schwægr. Sup. I. ii. p. 301. H. rugulosum*; *Musc. Brit. p. 212. (W.)*  
 501. *H. uncinatum*: *Schwægr. Sup. I. ii. p. 304. Musc. Brit. p. 111. (W.)*  
 502. *H. fluitans*: *Schwægr. Sup. I. ii. p. 304. Musc. Brit. p. 98. (W.)*

## HEPATICÆ.

503. *Jungermannia tamariscifolia*: *Schwægr. Prodr. p. 14. Hook. Jung. t. vi. (B.)*  
 504. *J. bidentata*: *Schwægr. Prodr. p. 18. Hook. Jung. t. xxv. (B.)*  
 505. *J. pulcherrima*: *Schwægr. Prodr. p. 21. J. ciliaris*: *Hook. Jung. t. lxxv. (W.)*  
 506. *J. setiformis*: *Schwægr. Prodr. p. 21. Hook. Jung. t. xx. (B.)*  
 507. *J. complanata*: *Schwægr. Prodr. p. 22. Hook. Jung. t. lxxxii. (W.)*  
 508. *J. nemorosa*: *Schwægr. Prodr. p. 23. Hook. Jung. t. xxi. (W.)*  
 509. *J. sphagni*: *Schwægr. Prodr. p. 24. Hook. Jung. t. xxxiii. et Sup. t. ii. (B.)*  
 510. *J. emarginata*: *Schwægr. Prodr. p. 27. Hook. Jung. t. xxvii. (B.)*  
 511. *J. saxicola*: *Schrader. Schwægr. Prodr. p. 27. (B.)*  
 512. *J. bicornis*: *Schwægr. Prodr. p. 27.*  
 513. *J. bicuspidata*: *Schwægr. Prodr. p. 28. Hook. Jung. t. xi. (B.)*  
 514. *J. exsecta*: *Schwægr. Prodr. p. 29. Hook. Jung. t. xix. (B.)*  
 515. *J. quinquedentata*: *Schwægr. Prodr. p. 29. J. barbata*: *Hook. Jung. t. lxx. (B.)*  
 516. *Marchantia polymorpha*: *Schwægr. Prodr. p. 23. Mich. Fl. Am. p. 227. (W. B.)*  
 517. *M. conica*: *Schwægr. Prodr. p. 34. Eng. Bot. t. 504. (W.)*  
 518. *Riccia natans*: *Schwægr. Prodr. p. 38. Eng. Bot. t. . (W.)*

## LICHENES.

519. *Arthonia astroidea, β radiata*: *Ach. Syn. p. 6. (W.)*  
 520. *Spiloma versicolor*: *Ach. Syn. p. 2. Eng. Bot. t. 2076. (W.)*  
 521. *Solorina crocea*: *Ach. Syn. p. 8. Lichen croceus*: *Eng. Bot. t. 498. (B.)*  
 522. *Gyalecta bryophila*: *Ach. Syn. p. 10 & 337. Flor. Dan. t. 1351. f. 2. (B.)*  
 523. *Lecidea atro-alba*: *Ach. Syn. p. 11 ? (B. W.)*  
 524. *L. fumosa*: *Ach. Syn. p. 12. Lichen arthrocarpus*: *Eng. Bot. t. 1829. (W.)*  
 525. *L. lapicida*: *Ach. Syn. p. 13. Muhl. Cat. p. 105. (W.)*  
 526. *L. confluens*: *Ach. Syn. p. 16. Eng. Bot. t. 1964. (W. B.)*  
 527. *L. parasema*: *Ach. Syn. p. 17. Eng. Bot. t. 1450. Muhl. Catalog. p. 105. (W.)*  
 528. *L. sabuletorum*: *Ach. Syn. p. 20. (W)*

529. *L. atro-virens*: *Ach. Syn.* p. 21. (W. B.)  
*β* *geographica*: *Ach. Syn.* p. 21. *Lichen geographicus*: *Eng. Bot.* t. 248. (B.)
530. *L. Oederi*: *Ach. Syn.* p. 22. *Lichen Oederi*: *Eng. Bot.* t. 117. (B.)
531. *L. uliginosa*: *Ach. Syn.* p. 25? *Eng. Bot.* t. 1466? (B.)
532. *L. rivulosa*: *Ach. Syn.* p. 28. *Eng. Bot.* t. 1787. (B.)
533. *L. abietina*: *Ach. Syn.* p. 30. (W.)
534. *L. vernalis*: *Ach. Syn.* p. 36. (W.)
535. *L. decolorans β, granulosa*: *Ach. Syn.* p. 38. *Eng. Bot.* t. 1125. (W.)
536. *L. luteola*: *Ach. Syn.* p. 41. *Lichen vernalis*: *Eng. Bot.* t. 845. (W.)
537. *L. fusco-lutea*: *Lichen fusco-luteus*: *Eng. Bot.* t. 1007. *Lecidea fusco-lutea*: *Ach. Syn.* p. 42? (B.)
538. *L. anthracina*: *Ach. Syn.* p. 43? (W.)
539. *L. icmadophila*: *Ach. Syn.* p. 45. *Muhl. Cat.* p. 105. (B. W.)
540. *L. Ehrhartiana, β polytropa*: *Ach. Syn.* p. 47. *Lichen polytropus*: *Eng. Bot.* t. 1264. (B.)
541. *L. lucida*: *Ach. Syn.* p. 48. *Lichen lucidus*; *Eng. Bot.* t. 1550. (B.)  
*β theyotea*: *Ach. Syn.* p. 48. On dead wood. (B.)
542. *L. luteo-alba*: *Ach. Syn.* p. 49. *Lichen luteo-albus*: *Eng. Bot.* t. 1426. (W.)
543. *L. Wahlenbergii*: *Ach. Syn.* p. 50. *Method. Lich.* t. 2. f. 2. (B.)
544. *L. candida*: *Ach. Syn.* p. 50. *Lichen candidus*: *Eng. Bot.* t. 1138. (B.)
545. *L. vesicularis*: *Ach. Syn.* p. 51. *Lichen cœruleo-nigricans*: *Eng. Bot.* t. 1139. (B.)
546. *L. decipiens*: *Ach. Syn.* p. 52. *Lichen decipiens*: *Eng. Bot.* t. 1501. (B.)
547. *Calicium tigillare*: *Ach. Syn.* p. 55. *Lecidea tigillaris*: *Wahl. Fl. Lapp.* p. 468. *Eng. Bot.* t. 1330. (W. B.)
548. *C. chlorellum, β trabinellum*: *Ach. Syn.* p. 60. *Lichen trabinellus*: *Eng. Bot.* t. 1540. (W. B.)
549. *C. debile*: *Eng. Bot.* t. 2462. (W.)
550. *C. clavulare*: *Ach. Syn.* p. 57. (W.)
551. *Gyrophora proboscidea, β arctica*: *Ach. Syn.* p. 65. Tab. xxx. fig. 4.  
*Thallus* monophyllus, umbilicatus, orbicularis, tennis, in ambitu plerumque lacerus; supra rugis umbilicium versus majoribus reticulatus, concavus vel convexus et nisi ex rupto margine planus, semper medio umbonem vel umbilicium ostendens; subtus pedicello brevissimo centrali saxo affixus, glaber, ambitum versus levissimè lacunosus, quandoque punctis depressis notatus et rarissimè fibrillis quibusdam instructus. *Thalli* color brunnescenti-niger et aliquando quasi pulvisculo suffuso fere cinereus; subtus sordidè flavescenti-brunneus interdum cinerascens: utrinque opacus. In aquâ totus pallet. *Apothecia* sessilia, orbicularia, rarius angulata, disco plano vel convexiusculo, plicis concentricis pulcherrimè notato et margine proprio elevato cincto.  
Expl. Iconis. a. Superf. supina. b. Superf. prona. mag. nat. c. Apothecium et portio thalli sub lente visi.  
*Hab.* On rocks on the Barren Grounds; more abundant towards the Arctic Sea than the following species.
552. *G. hyperborea*: *Ach. Nov. Act. Stockh.* xv. t. 2. f. 2. *Ach. Syn.* p. 66. Tab. xxx. fig. 3.

*Thallus* lacero-laciniatus, supra densissimè purpureo-rugosus, subtus magis aut minus reticulato-lacunosus, glaber. *Apothecia* difformia, angulata, convexa, plicis ut plurimum circinatis notata. Præcedenti affinis et fortassè varietas scailis. (B.)

Expl. Iconis eadem ut in præcedenti.

553. *G. pensylvanica*: *Ach. Syn.* p. 67. *Muhl. Cat.* p. 105. Tab. 30. Fig. 2.

*Thallus* tenuis umbilicatus, irregulariter expansus flexuosus, passim erosus, in ambitu lacero-laciniatus, supra umbrino-brunneus, plerumque prope umbilicum materiâ quâdam crustaceâ canescens, papulis elevatis, oblongis vel conoideis, obtusis, sparsis, discretis, saccis pagine adversæ respondentibus munitus; subtus lacunosus, punctis crebris elevatis scaber; brunnescenti-niger ambitum versus pallidior; utrinque opacus. Madefactus aliquantulum pallet et supra olivaceus vel æneo-fuscus evadit.

*Apothecia* simplicia adpressa, orbiculata vel flexuosa angulataque, disco opaco, plano vel concaviusculo, æquabili interdum ostiolo centrali impresso et margine proprio elevato nitidiusculo cincto. *Apothecia* aliquando in discis suis alia minora ferunt vel cum aliis confluent quibus modis formatur apothecium satis magnum disco planiusculo irregulariter plicato margine communi flexuoso, et angulato cincto. Sunt quoque in thallis quibusdam fortassin vetustioribus apothecia dissimilia parva, discreta, aut conferta, discis depressis et marginibus granulato-crenulatis, rugosis, inflexisque. *Apothecia* vetustiora utriusque generis in ambitu à thallo elevata sunt.

*Thallus* interdum locos humidos opacos habitans flavescenti-cinereus fit. (B.)

Expl. Icon: *a.* superficies thalli supina, *b.* superf. prona mag. nat. *c.* apothecium et portio thalli exsecti sub lente visi.

554. *G. Muhlenbergii*: *Ach. Syn.* p. 67. *Muhl. Cat.* p. 105.

*Thallus* hujus quam trium præcedentium paulo crassius, plerumque polyphyllus, hepatico-brunneus, extrorsum fere nigricans, oblique umbilicatus, flexuosus, prope umbilicum capillaceo-brunneus corrugato-plicatus, plerumque irregulariter expansus, margineque lacero, hic illic pertusus erosusque; supra glaber, nitidiusculus, foveolis ab apothecis impletis ambitum versus præcipue impressis; subtus sordidè flavescenti-brunneus, minute verrucosus, at fixuris cribriformibus nigrescentibus fere obtectus. *Apothecia* majuscula vix unquam orbiculata, fere semper angulata, et non raro pulchrè stellata, convexa, densissimè plicata non semper in sacculis immersa sed etiam in planâ superficie thalli sessilia. Dantur quoque in eodem thallo apothecia alia parva fere orbicularia, disco depresso et margine granulato rugosoque inflexo.

Expl. Icon. *a.* superficies thalli supina, *b.* superficies partis thalli prona mag. nat. *c.* pars thalli cum apothecio exsecta, et sub lente visi.

*Hab.* This and the three preceding species were found in greater or less abundance in all rocky places throughout our journey. We used them all four as articles of food, but not having the means of extracting the bitter principle from them, they proved noxious to several of the party producing severe bowel complaints. The Indians use the *G. Muhlenbergii*, rejecting the others, and when boiled along with fish-roe or other animal matter, it is agreeable and nutritious. On the Barren Grounds this lichen is scarce, and we were obliged to resort to the other three, which served the purpose of allaying the appetite, but were very inefficient in recruiting our strength.

555. *G. vellea*, *Ach. Syn.* p. 68. *Umbilicaria vellea*. *Mich. Fl. Am.* ii. p. 323.

*Thallus* crassiusculus, molliusculus, sæpe latitudine sesquipedalis, sordide flavescenti-griseus (sub lente verrucosus) pertusus erosusque, in ambitu sub rotundato-lobatus, lacerusque; subtus fibrillis densis brevibus, furcatis, nigris, hirsutus. *Apothecia* nunquam inveni.

*Hab.* on shady and moist rocks, most luxuriant in woods. This is more agreeable to eat than any of the preceding species, but we met with it very sparingly on the Barren Grounds.

556. *Opegrapha macularis*: *Ach. Syn.* p. 72. *Muhl. Cat.* p. 105. (W.)

557. *O. epipasta*,  $\beta$ . *microscopica*: *Ach. Syn.* p. 75. *O. microscopica*. *Eng. Bot. t.* 1911. (W.)
558. *Verrucaria epidermidis*: *Ach. Syn.* p. 89. (W.)
559. *V. stigmatella*: *Ach. Syn.* p. 89. *Eng. Bot. t.* 1891. *Muhl. Cat.* p. 105. (W.)
560. *Endocarpon complicatum*: *Ach. Syn.* p. 102. *Eng. Bot. t.* 593. (B.)
561. *E. viride* (absque scutellis): *Ach. Lich. Univers.* p. 300. (B.)
562. *Thelotrema lepadinum*: *Ach. Syn.* p. 115. *Lichen inclusus*. *Eng. Bot. t.* 678 (B.)
563. *Variolaria communis*, *g. aspergilla*: *Ach. Syn.* p. 131. *Eng. Bot. t.* 2041. *Muhl. Cat.* p. 105. (B.)
564. *Urceolaria cinerea*: *Ach. Syn.* p. 140. *Hoff. Pl. Lich. t.* 20. f. 2. (B.)
565. *Lecanora atra*: *Ach. Syn.* p. 146. *Lichen ater*. *Eng. Bot. t.* 949. *Muhl. Cat.* p. 105. (B.)
566. *L. oculata*: *Ach. Syn.* p. 148. *Lichen oculatus*. *Eng. Bot. t.* 1833. (B.)
567. *L. periclea*: *Ach. Syn.* p. 150. (W. B.)
568. *L. badia*: *Ach. Syn.* p. 154. *Lichen piceus*. *Dicks. Crypt. Fasc. 4: t.* 12. f. 1. (B.)
569. *L. epibryon*: *Ach. Syn.* p. 155. (B.)
570. *L. sub-fusca*: *Ach. Syn.* p. 157. *Eng. Bot. t.* 2109. *Muhl. Cat.* (W. B.)
571. *L. ventosa*: *Ach. Syn.* p. 159. *Eng. Bot. t.* 906. (B.)
572. *L. glaucoma*: *Ach. Syn.* p. 165. *Eng. Bot. t.* 2156. (B.)
573. *L. parella*,  $\gamma$  *upsaliensis*: *Ach. Syn.* p. 169. *Lichen upsaliensis*. *Eng. Bot. t.* 1634. (B.)
574. *L. tartarea*: *Ach. Syn.* p. 172? *Lichen tartareus*. *Eng. Bot. t.* 156? (B.)
575. *L. cerina*: *Ach. Syn.* p. 173. *Lichen cerinus*: *Eng. Bot. t.* 627. *Muhl. Cat.* p. 105.
576. *L. erythrella*: *Ach. Syn.* p. 175.
577. *L. citrina*: *Ach. Syn.* p. 176. *Eng. Bot. t.* 1793. (W.)
578. *L. straminea*: *Ach. Syn.* p. 180. *Wahl. Fl. Lupp. t.* 28. f. 1. (B.)
579. *L. miniata*: *Ach. Syn.* p. 182. *Muhl. Cat.* p. 105. (B. W.)
580. *L. elegans*: *Ach. Syn.* p. 182. *Lichen elegans*. *Eng. Bot. t.* 2181. (B.)
581. *L. cervina*: *Ach. Syn.* p. 188. *Lichen squamulosus*. *Eng. Bot. t.* 2011. (bad.) (B.)
582. *L. liparia*: *Ach. Syn.* p. 190. (B.)
- $\beta$ . *rubina*: *Ach. Syn.* p. 190. (B.)
583. *L. virella*: *Ach. Syn.* p. 191. *Eng. Bot. t.* 1696. (B.)
584. *L. candelaria*: *Ach. Syn.* p. 192. *Lichen candelarius*. *Eng. Bot. t.* 1794. (W.)
- $\beta$ . *polycarpa*: *Ach. Syn.* p. 192. *Lichen polycarpus*. *Eng. Bot. t.* 1795. (B.)
585. *L. hypnorum*: *Ach. Syn.* p. 193. *Lichen hypnorum*. *Eng. Bot. t.* 740. (B.)
586. *L. brunnea*: *Ach. Syn.* p. 193. *Lichen brunneus*. *Eng. Bot. t.* 1246. (B.)

587. *Parmelia caperata*, b. *cylisphora*: *Ach. Syn.* p. 196. *Muhl. Cat.* (W.)
588. *P. herbacea*: *Ach. Syn.* p. 198. *Lichen lætè virens*: *Eng. Bot.* t. 294. (W.)
589. *P. olivacea*: *Ach. Syn.* p. 200. *L. olivaceus*. *Eng. Bot.* t. 2180. *Muhl. Cat.* (W. B.)
590. *P. saxatilis*: *Ach. Syn.* p. 203. *Eng. Bot.* t. 603. *Muhl. Cat.* p. 105. (W. B.)
591. *P. fahlunensis*: *Ach. Syn.* p. 204. *Eng. Bot.* t. 653. (B.)
592. *P. stygia*: *Ach. Syn.* p. 205. *Lichen styglus*. *Eng. Bot.* t. 2048. (B.)
593. *P. ambigua*: *Ach. Syn.* p. 208. (B.)
594. *P. conspersa*: *Ach. Syn.* p. 209. *Muhl. Cat.* *Eng. Bot.* t. 2097. (W. B.)
595. *P. muscigena*,  $\beta$ . *lenta*: *Ach. Syn.* p. 213. (B.)
596. *P. pulverulenta*: *Ach. Syn.* p. 214. *Eng. Bot.* t. 2063. *Muhl. Cat.* (W.)
597. *P. aipolia*: *Ach. Syn.* p. 215. *Muhl. Cat.* (W.)
598. *P. stellaris*; *Ach. Syn.* p. 216. *Muhl. Cat.* (W.)
599. *P. cyclozelis*: *Ach. Syn.* p. 216. (W. B.)
600. *P. physodes*: *Ach. Syn.* p. 218. *Muhl. Cat.* (W. B.)
- $\gamma$ . *platyphylla*: *Ach. Syn.* p. 218. *absque scutellis*. (B.)
601. *Borreria ciliaris*: *Ach. Syn.* p. 221. *Muhl. Cat.* (W. B.)
602. *B. tenella*: *Ach. Syn.* p. 221. (W.)
603. *Cetraria juniperina*: *Ach. Syn.* p. 226. *Muhl. Cat.* p. 106. (B.)
- $\beta$ . *Pinastri*: *Ach. Syn.* p. 226. (B. W.)
604. *C. sepincola*: *Ach. Syn.* p. 226. (W. B.)
605. *C. nivalis*: *Ach. Syn.* p. 228. (B.)
606. *C. cucullata*: *Ach. Syn.* p. 228. (B.)
607. *C. islandica*: *Ach. Syn.* p. 229. *Muhl. Cat.* p. 106. (B.)
608. *C. Richardsonii*: (*Hooker, MS.*) thallo brunneo omnino libero: laciniis dichotomis linearibus, apotheciis marginalibus flavescenti-brunneis. (B.)
- Thallus* coriaceo prostratus, angustifolius, divaricato-bi-pinnatifidus aut dichotomè sinuato-bipartitus, supra convexus, rubescenti-brunneus nitidus, subtus canaliculatus opacus pallidior fere canescens, sed maculis magnis irregularibus ejusdem substantiæ colorisque ac pagina superior interspersus. *Laciniæ* omnes præter ultimas ejusdem latitudinis sunt et stellatim extrorsum expansæ: ultimæ angustiores plerumque divaricofurcate sunt aut tantum emarginatæ. Margines thalli integerrimi aut parsiter granulato-dentati etiam in sicco revoluti, in humido ita connivent ut lacinias tubulosas reddunt; Exsiccatione iterum evolouuntur. *Apothecia* in margine thalli sparsa, in initio concava margine inflexo mox ampla sub-pedicellata flexuosa margineque irregulariter reflexo; supra laminâ proligerâ flavescenti-brunnea, nitida, margine thalode eam non excedente sub-cincta subtus e pagina thalli superiora formata. Ambitus apotheciorum granulatus repandus aut etiam fissus semper valde irregularis et modo Cetrariarum sub-liberis. Thallus in sicco fragilis vix tamen rigidus, madefactus pallet totus et ejus apices interdum olivaceo-virides fiunt. Sunt quoque specimina quorum apices colorem viridem etiam in sicco conservent. In nuda terra latè pulvinatum expansus est sed nulla radice humo affixus. Rarius fructificat.
- Hab.* On the Barren Grounds generally in Rein-deer tracks. It was not found to the southward of Great Slave Lake.
609. *Peltidea scutata*: *Ach. Syn.* p. 237. *Eng. Bot.* t. 1834. *Muhl. Cat.* (W.)
610. *P. apthosa*: *Ach. Syn.* p. 238. *Muhl. Cat.* (W. B.)



611. *Nephroma polaris*: *Ach. Syn.* p. 241. (W. B.)  
 612. *N. resupinata*: *Ach. Syn.* p. 241. (W.)  
 613. *Evernia prunastri*: *Ach. Syn.* p. 245. *Eng. Bot.* t. 859. *Muhl. Cat.* (W.)  
 614. *Dufourea arctica*: thallo sulphureo-flavo nitido fistuloso, apotheciis hepatico-brunneis: *D. rugosa*. *Brown, Ross's Voyage?* (B.)
- Ex thallo vetusto fistuloso prostrato surenli subulato-ventricosi exsurgunt; saepe caespitosim, sese inter muscos erigentes; thallo primordiali destructo hi surculi thallos erectos fere palmares sulphureo-flavos, ad basin flavescenti brunneos seplissime simpliciusculos efficiunt, nunc tamen ramum unum vel alterum edunt aut furcati extant, interdum nec non apicibus casu excisis, ramuli excresecunt podetias *Cenomyceum* quarundam simulantes. Thallus membranaceus extus nitidiusculus, obsolete lacinosus saepe punctis obscure brunnescenti rubris maculatus, intus leviusculus niveo-albus opacus, absque septis; nunc integerrimus, nunc uno vel altero foramine perforatus. *Apothecium* ex lamina prolifera plana, nitida castaneo-vel hepatico brunnea in apicem rami posita, margineque obsoleteiori sub-crenulato ex thallo corrugato facto, formatum. Humiditate lamina prolifera melleo-flava fit.
615. *Cenomyce cervicornis*: *Ach. Syn.* p. 251. *Eng. Bot.* t. 2574. (B.)  
 616. *C. pyxidata*: *Ach. Syn.* p. 252. *Muhl. Cat.* (W. B.)  
 617. *C. limbriata*: *Ach. Syn.* p. 254. *Eng. Bot.* t. 2438. (B. W.)  
   *f. proliifera*: *Ach. Syn.* p. 256. (W. B.)  
 618. *C. gonorega*, h. *polypæa*: *Ach. Syn.* p. 260. *Muhl. Cat.* (W. B.)  
 619. *C. ecmocyna*, a. *gracilis*: *Ach. Syn.* p. 261. (B.)  
 620. *C. oxyceras*. *Ach. Syn.* p. 264. (B.)  
   *β. cladonioides*: *Ach. Syn.* p. 264. (B.)  
 621. *C. deformis*: *Ach. Syn.* p. 268. *Eng. Bot.* t. 1934. *Muhl. Cat.* (W. B.)  
 622. *C. coccifera*: *Ach. Syn.* p. 269. *Eng. Bot.* t. 2051. *Muhl. Cat.* (W. B.)  
 623. *C. parecha*: *Ach. Syn.* p. 272. *Fl. Dan.* t. 1356. *f. 2.* *Muhl. Cat.* (W. B.)  
 624. *C. rangiferina*: *Ach. Syn.* p. 277. *Muhl. Cat.* p. 106. (W. B.)  
   *δ. pungens*: *Ach. Syn.* p. 278. *Lichen pungens*: *Eng. Bot.* t. 2444. (W. B.)  
 625. *C. ? vermicularis*: *Ach. Syn.* p. 278. (B.)  
 626. *Stereocaulon paschale*: *Ach. Syn.* p. 284. *Muhl. Cat.* (W. B.)  
 627. *Sphaerophoron compressum*: *Ach. Syn.* p. 287. (B.)  
 628. *Alcetoria jubata*: *Ach. Syn.* p. 591. *Eng. Bot.* t. 880. *Muhl. Cat.* (W.)  
   *δ. chalybeiformis*: *Ach. Syn.* p. 593. (B.)  
 629. *Ramalina fastigiata*: *Ach. Syn.* p. 296. *Eng. Bot.* t. 1890. *Muhl. Cat.* (W. B.)  
 630. *R. farinacea*: *Ach. Syn.* p. 297. *Eng. Bot.* t. 886. (W. B.)  
 631. *Cornicularia tristis*: *Ach. Syn.* p. 299. (B.)  
 632. *C. divergens*: *Ach. Syn.* p. 300? *Lichen divergens*: *Wahl. Fl. Lapp.* p. 439? (B.)  
 633. *C. ochroleuca*: *Ach. Syn.* p. 301. *Cum scutellis.* (B.)  
 634. *C. pubescens*: *Ach. Syn.* p. 302. *Eng. Bot.* t. 2318. (B.)  
 635. *Usnea florida*: *Ach. Syn.* p. 304. *Muhl. Cat.* (W.)  
 636. *U. plicata*: *Ach. Syn.* p. 305. *Eng. Bot.* t. 257. *Muhl. Cat.* p. 106. (W.)  
   *γ. hirta*: *Ach. Syn.* p. 305. *Eng. Bot.* t. 1354. *Muhl. Cat.* (B.)

637. *Collema nigrum*: *Ach. Syn.* p. 308. *Lichen niger*, *Eng. Bot.* t. 1980. (B.)  
 638. *C. saturninum*: *Ach. Syn.* p. 320. *Eng. Bot.* t. 1980. (B.)  
 639. *Lepraria chlorina*: *Ach. Syn.* p. 320. *Eng. Bot.* t. 2038. *Muhl. Cat.* (W. B.)

## FUNGI.

640. *Sphaeria concentrica*: *Pers. Syn. Fung.* p. 8. *Muhl. Cat.* (W.)  
 641. *S. disciformis*: *Pers.* p. 24. *Muhl. Cat.* *S. depressa*: *Sowerby*, *Nemaria disciformis*. *Gray. Nat. Arr. Brit. Pl.* (W.)  
 642. *Hysterium pinastri*: *Pers. Addend.* p. xxviii. (W.)  
 643. *Lycoperdon pratense*: *Pers.* p. 142. *Muhl. Cat.* (W.)  
 644. *L. perlatum*, var: *Pers.* p. 145. (W.)  
 645. *Schizophyllum commune*: *Fries. Syst. Myc.* i. p. 330. *Agaricus alneus*: *Pers.* p. 485. *Muhl. Cat.* (W.)  
 646. *Dædalea serpens*: *Fries.* i. p. 340. (W.)  
 647. *Polyporus varius*: *Fries.* p. 352. *Boletus nummularius*: *Pers.* p. 535. (W.)  
 648. *P. betulinus*: *Fries.* i. p. 358. *Boletus betulinus*: *Pers.* p. 535. (W.)  
 649. *P. velutinus*: *Fries.* i. p. 368. *Boletus velutinus et lutescens*: *Pers.* p. 539. *Muhl. Cat.* (W.)  
 650. *P. abietinus*: *Fries.* i. p. 370. *Boletus abietinus*: *Pers.* p. 541. (W.)  
 651. *P. cinnabarinus*: *Fries.* i. p. 371. *Boletus cinnabarinus*. *Pers.* 540. (W.)  
 652. *Hydnum faginæum?* *Fries.* i. p. 473. (W.)  
 653. *Thelephora purpurea*: *Pers.* p. 571. (W.)  
 654. *Th. amorpha*: *Greville*, *Peziza amorpha*: *Pers.* p. 657. (W.)  
 655. *Tremella mesenterica*: *Pers.* p. 622. *Muhl. Cat.* (W. B.)  
 656. *Peziza sarcoides*: *Pers.* p. 633. *Muhl. Cat.* p. 108. (W.)  
 657. *P. populnea*: *Pers.* p. 672. (W.)  
 658. *Erinæum betulæ*: *Greville, Ed. Philos. Journ.* v. 6. p. 77. t. 3. f. 1. (W.)

## ALGÆ.

659. *Oscillatoria muralis*: *Agardh. Syn. Alg. Scand.* p. 108. (B.)  
 660. *Conferva glomerata*: *Agardh.* p. 89. *Muhl. Cat.* (W.)  
 661. *Ulva crispa*: *Agardh.* p. 43. *Lightfoot. Fl. Scot.* p. 972. (B.)  
 662. *U. montana*: *Eng. Bot.* t. 2193. (exclud. *Syn.* *Palmellæ alpicolæ Lyngbye*)  
*Palmella rupestris*: *Lyngbye, Hydrophytolog. Dan.* (excludend. *Tremell. sab. et Ulv. rupestris, Eng. Bot.*)  
 663. *Fucus ceranoides*: *Wahl. Fl. Lapp.* p. 490. (A.)  
 Exclusive of a *Conferva*, and the fragment of a *Floridea* (*Lam.*), this was the only alga we observed in the Arctic Sea.

## ADDENDA, BY ROBERT BROWN, F.R.S.

EUTOCA. *Brown.*

SYST. LINN. Pentandria Monogynia, post Hydrophyllum.

CHAR. GEN. *Calyx* 5-partitus, persistens. *Corolla* subcampanulata: membranæ tubi decem, per paria filamentis alternantes. *Stamina* exserta. *Stylus* bifidus. *Capsula* polysperma, unilocularis, bivalvis, valvis indivisis medio placentiferis.

ORD. NAT. Hydrophyllæ, *Brown in* (Prodr. Fl. Nov. Holl. 492.) *Bot. Regist.* 242. post Phaceliam.

CHAR. GEN. *Calyx* quinquepartitus, sinibus edentulis. *Capsula* polysperma.

*Herbæ annuæ, pubescentes, eglandulosæ. Folia alterna, sæpius pinnatifida, nunc indivisa! Racemi terminales et quandoque è summis alis, secundi, ebracteati, novelli spiruliter revoluti.*

Obs. Ad hoc genus, a coordinatis (Hydrophylo, Nemophila, Ellisia, Phacelia) diversum ovulis placentæ singulæ numerosis (unde nomen), pertinent *E. Menziesii*, (erecta, foliis linearibus integerrimis nonnullis quandoque incis, ovulis placentæ singulæ viginti pluribus,) que forsan Hydrophyllum lineare, *Pursh. Am.* i. p. 131; et *E. parviflora* (diffusa, foliis pinnatifidis trifidisve; superioribus quandoque indivisis lanceolatis, ovulis placentæ singulæ 6-8,) quæ Phacelia parviflora, *Pursh. Am.* i. p. 140. Polemonium dubium, *Lin.*

EUTOCA FRANKLINII. *Tab. 27.*

*Eutoca* erecta, foliis pinnatifidis bipinnatifidisve, ovulis placentæ singulæ viginti pluribus.

*Hab.* Abundantly amongst trees that have been destroyed by fire, on the banks of the river Mississippi.

*Herba* annua, erecta pubescens 6-10-nncialis. *Radix* descendens subramosa. *Caulis* simplicissimus teres cavus, crassitiè pennæ columbinæ, fuscus, pilis acutis tenuibus patulis pubescens. *Folia* radicalia conferta, caulina alterna; omnia petiolata exstipulata pinnatifida, (in plantis procerioribus bipinnatifida,) circumscriptione lanceolata, laciniis lanceolatis integerrimis, inferioribus quandoque dentatis incisive, plana utrinque viridia pilisque caulinis similibus pubescentia. *Petioles* foliis breviores super canaliculati basi parum dilatata semiamplexanti. *Spicæ* racemosæ breves secundæ, ebracteatæ, novellæ arcuato-recurvæ, approxim. tæ, terminales et è summis alis.

*Calyx* monophyllus æqualis quinquepartitus sinibus edentulis, foliaceus, persistens; *laciniæ* lineares acutiuscule planæ, trinerviæ nervis lateralibus margini approximatis medio venoso, hirsutæ pilis acutis strictis marginalibus crebrioribus longioribusque.

*Corollæ* monopetala, hypogyna, regularis, subcampanulata, calyce sesquolongior, glabra limbo extus pube rara consperso, cærulea immaculata, siccatione sæpius albescens, decidua. *Tubus* intus nervis 15, ternatim cum staminibus alternatibus, lateralibus ternationis singulæ infra medium auctis membranula linearî imberbi apice subtruncato medium fere tubi attingenti basi ad ortum filamenti respondentis producta et cum eodem fere confluenti, versus nervum medium conniventi. *Faux* nulla. *Limbus* tubo brevior, 5 partitus, æqualis, patens, lobis sub-recto alis integerrimis planis, venosis venis anastomosantibus, æstivatione imbricatis gemma obtusa.

*Stamina* 5, epipetala, aequalia, limbum corollae paulò superantia. *Filamenta* prope basin tubi inserta cum limbi laciniis alternantia, filiformia, basi parum dilatata, pilosiuscula pilis longiusculis sparsis in ipsa dilatata basi crebrioribus, aestivatione induplicata. *Anthera* valè-oblongæ imberbes, incumbentes, basi semibifidæ lobis approximatis, loculis parallelo-contiguis medio longitudinaliter dehiscentibus. *Pollen* sphericum simplex laeve, in cumulo albicans.

*Pistillum* altitudine staminum. *Ovarium* liberum, sessile ovatum pilosum, basi auctum disco annulari adnato, uniloculare, placentis duabus parietalibus semiseptiformibus cavitatem fere bipartientibus, polyspermis lateribus ovuliferis ventre plano nudiusculo: *ovulis* plurimis (30 pluribus) in singula placenta confertim nec utrinque seriatim affixis. *Stylus* 1, filiformis pilosiusculus, semibifidus, laciniis filiformibus aequalibus modice patentibus glabris. *Stigmata* obtusa papulosa ipsis apicibus laciniarum styli paulo crassiora.

*Capsula* calyce persistenti parum aucto cineta eoque paulò brevior, ovata modice ventricosa, pilosa, unilocularis, bivalvis, valvis indivisis medio placentiferis, placentis adnatis longitudine fere loculi, lateribus seminiferis ventre nudiusculo. *Semina* numerosa in singula placenta viginti plura maturescentia, parva, circumscriptione ovalia, trigona angulis anguste alatis, areolata fusca, nucleo ovali.

## TABULÆ 27. EXPLICATIO.

EUTOCA FRANKLINII, magnitudine naturali cum foliis duobus separatim, quorum alterum bipinnatifidum ad procerius alterum ad nanum exemplar pertinet.

Sequentes omnes ad lentem aucte.

- a. ejusdem. Calyx apertus cum Pistillo.
- b. ——— Corolla aperta exhibens paria quinque membranularum tubi et Stamina cum iisdem alternantia.
- c. ——— Anthera cum portione filamentum.
- d. ——— Ovarii sectio transversalis exhibens placentas duas parietales polyspermas.
- e. ——— Capsula haud penitus matura.
- f. ——— Capsule sectio transversalis.
- g. ——— Semen.

1. EUTOCA MENZIESII, Capsula matura aperta. 2. Ejusdem Capsule valvula altera exhibens placentam seminibus denudatam. 3. Ejusdem Semen. 4. Idem testa remota. 5. Sectio longitudinalis Albuminis Embryonem ostendens.

## HEUCHERA, Linn.

Pentandria Digynia. Flores pentapetali, superi, capsulares cum Vahlia.

CHAR. GEN. *Caps.* unilocularis, placentis 2, parietalibus adnatis polyspermis. *Calyx* 5-fidus (nunc inæqualis), aestivatione imbricata.

ORD. NAT. Saxifragæ inter Telliman et Vahlia.

CHAR. GEN. *Calyx* 5-fidus, aestivatione imbricata. *Petala* indivisa. *Stamina* 5. *Ovarium* uniloculare, placentis duabus adnatis polyspermis. *Styli* 2. *Capsula* semi-infera. flore emarcido coronata, birostris, inter rostra dehiscentis.

Herbæ perennes, sæpius acules. Folia radicalia conferta, elongato-petiolata, cordata, sublobata lobis serrato-incisis; stipulis lateralibus infra adnatis apicibus distinctis: caulina, dum adsunt, alterna, minora, brevius petiolata. Scapi paniculati, pedunculis trifidis basi unibracteatis, divisuris bibracteatis.

Obs. 1. In ordine Saxifragarum locus Heucherae est inter Mitellam grandifloram Pursh. (Telliman) convenientem capsulae unilocularis birostris dimidio supero flore persistente tecto, diversam staminibus

decem, petalis laciniatis; et *Vahlia Thunb.* (cujus certè species genuina est *Oldenlandia pentandra Retz.* quæ *Oldenlandia Smith in Rees. Cyclop.*) similem floribus pentandris, petalis indivisis, et capsule unilocularis dehiscencia, distinguendam placentis ab apice cavitatis pendulis solutis, æstivatione valvata calycis et habitu diversissimo.

*Obs. II.* A *Saxifrageis* transitus haud difficilis ad *Ribes* structura floris et ovarii admodum simile *Heuchera*, diversum stylo semilifido, fructu baccato, albumine densiore, funiculis umbilicalibus longis ad chalazam usque liberis et habitu. Attamen vel in eadem prorsus familia cum *Ribe* includenda, vel in proximo ordine (*Escalloneæ*) disponenda *Escallonia Mutis. (Stereoxylon Ruiz et Pavon.)* et nonnulla genera inedita Novæ Hollandiæ, nec non *Anopterus Labill. (et Prodr. Fl. Nov. Holl. 457.)* cujus petala distincta, calyci inserta et ovarii capsulaeque basis adherens. Sed *Anopteri* cum *Saxifrageis* affinitas mediante *Heuchera* in fructificatione saltem obvia, obstante quidem habitu omnino cum *Escalloneis* et nec *Cunoniaceis* nec *Saxifrageis* conveniente.

### HEUCHERA RICHARDSONII. Tab. 29.

*Heuchera* calycis limbo inæquali obliquo.

*Hab.* On the rocky banks of rivers from lat. 54° to 64° north.

*Desc.* *Herba* acaulis, perennis. *Folia* radicalia conferta, elongato-petiolata, cordata, diametro sesquipollicari, seniseptemloba, lobo medio majore, omnibus inæqualiter serrato-incisis, super scabra subter lævia, secundum nervos venasque primarias pubescentia pilis brevissimis acutis, eglandulosa. *Petiolus* folio longior, triangularis, pilosiusculus, scaber, antice canaliculatus. *Stipulae* laterales infra adnatae, apicibus lingulatis scariosis subciliatis. *Scapus* simplex, erectus, pedalis—sesquipedalis, gracilis, teres, striatus, pilosiusculus, dimidio inferiore pilis acutis divaricatis glandulisque intermixtis paucissimis, superiore pube brevissima glanduloso-capitata copiosa pilisque acutis rarioribus. *Panicula* laxè thyrsoidæa, angusta, ramis alternis bractea lineari apice bi-trifido subtensis, trifidis pedicellis lateralibus 1-2-floris medio unifloro præcociore, divisis singulis bibracteatis, bracteis lineari subulatis glanduloso-pubescentibus.

*Calyx* monophyllus, campanulatus, irregularis, persistens, extus glandul. subsessilibus parvis copiosis tectus: *limbus* obliquus 5-fidus, laciniis obtusis obovatis magnitudine subæqualibus sed ob faucis obliquitatem altitudine inæqualibus, duabus altioribus paribus impari demissiori, omnibus quinque nervis nervis venosis, æstivatione imbricatis, duabus altioribus reliquis equitantibus.

*Petala* 5, ipsis sinibus calycis inserta, unguiculata, indivisa, brevè ciliata, vix calycis laciniis superantia, persistentia, altiora lamina cuneato-obovata, demissiora sublanceolata, omnia trinervia nervis extus venosis, unguibus angustis linearibus.

*Stamina* 5, summo tubo calycis inserta, ejusdem laciniis opposita, petala vix superantia, persistentia. *Filamenta* subulata, glabra, laciniis calycis altitudine proportionata. *Antheræ* incumbentes, brevè ovales, obtusè, loculis parallelo-contiguis, longitudinaliter dehiscuntibus. *Pollen* lateritium.

*Pistillum*: *Ovarium* seminiferum, uniloculare, placentis duabus parietalibus longitudinaliter adnatis prominulis, cum stylis alternantibus, polyspermis: *ovulis* indefinite numerosis confertis superficiem ventralem lateraque placenta operientibus. *Styli* duo, subulati, glabri, altitudine staminum. *Stigmata* obtusa imbricè, apicibus stylorum vix crassiora.

*Capsula* semiifera, dimidio supero brevior calyce aucto persistente cum petalis vix emarcidis et filamentis sæpe antheris orbatis tecto, stylis rostrato, apice bilobo lobis intus dehiscuntibus, unilocularis, placentis proportionatim actis.

*Semina* numerosa, sessilia, ovalia, punctis elevatis acutis longitudinaliter seriatis aspera, altera extremitate obtusior. *Testa* crasso-membranacea, fusca, facile separabilis. *Membrana interna* albumini arete adhaerens absque chalaza rapheve manifesta. *Albumen* semini conforme, album, carnosum, molle, oleosum. *Embryo* minutus, subovatus albus ad albuminis extremitatem obtusioris situs. *Cotyledones* brevissimæ. *Radicula* processu capillari terminata, centrifuga.

## TABULÆ 29. EXPLICATIO.

**HEUCHERA RICHARDSONII**, magnitudine naturali. i. basis dilatata petioli cum stipulis infra adnatis.

Figure sequentes ad lentem plus minus auctæ.

a. Flos plurimum auctus. b. Idem hirs longitudinaliter apertus. c. Ovarium longitudinaliter sectum placentas parietales adnatas accurate, sed perperam stylos infra connatos, exhibens. d. idem transversè sectum. e. Capsula matura flore stylisque coronata, paulo tantum aucta. f. Eiusdem sectio transversalis. g. Semen plurimum auctum. h. Idem testa orbatum.

CRYPTOGRAMMA. *Brown.*

ORD. NAT. Filices. *Gyrate* (*Polypodiaceæ*) inter *Onocleam* et *Lomariam*.

CHAR. GEN. *Sori* lineares (v. subrotundi) venulis costæ (pinnulæ) obliquis insidentes. *Capsula* pedicellatæ, receptaculo communi elevato nullo. *Involucrum commune* (pinnulæ) marginale, continuum, disco venoso, margine scarioso libero sæpius induplicato; *partiale* nullum.

*Filiculæ glabellæ*. Frondibus *cæspitosis bi-tripinnatifidis: centralibus mutato-contractis fertilibus, exterioribus sterilibus*. *Involucris dorsum totum pinnulæ tegentibus. Capsulis brevè pedicellatis, annulo incompleto. Sporulis obtuse trigonis, levibus*.

*Obs.* Typus generis est *Cryptogramma acrostichoides*, sed character constructus pro receptione *Pteridis crispæ auctor.* que dubia equidem species, ob soros abbreviatis potius subrotundos quam lineares, venulas terminantes sinum ferè involucri occupantes et cito confluentes, tunc æmulantes sorum linearem continuum costæ parallelum *Pteridis*, cum ejus speciebus pinnulis angustatis involucro omnino tectis, habitu benè satis convenit. C. acrostichoides habitu et sororum dispositione et forma *Grammitidibus* nonnullis præsertim *G. leptophyllæ* analogæ, diversa frondibus fertilibus distinctis et præsentia involucri dorsum totum pinnulæ tegentis: His notis autem *Cryptogramma* convenit cum *Pteridi thalictroidi Swartz* (à nobis tredecim abhinc annis in *Prodr. Fl. Nov. Holl.* i. p. 154, uti genus distinctissimum indicata.) In hoc genere (*Teleozoma nob.*), *Capsulæ* sessiles, annulo completè latissimo, distincte in serie simplici insident venis costæ parallelis, ærinque vel solitariis marginalibus, vel binis altera superficialia. *Teleozoma* insuper insigne est sporis in ordine naturali forsan, in tribu quantum scio maximis obtuse trigonis pulchre striatis, puncto unico opaciore.

## CRYPTOGRAMMA ACROSTICHOIDES.

*Cryptogramma*, frondibus bipinnatifidis, sterilium pinnulis ovalibus crenatis; fertilium demum explanatis, soris linearibus discum totum occupantibus.

*Hab.* In shady rocky woods, between lat. 56° and 60° north. (First found by Mr. Menzies at Nootka Sound.)

*Desc.* *Filix* 4-8-uncialis, glabra, herè virens, frondibus cæspitosis, stipitatis, crasso membranaceis opacis venis vix adversus lucem conspicuis.

*Frondes* exteriores cæspitis steriles, circumscriptione lanceolatæ bipinnatifidæ apice pinnate pinnis distinctis alternis, brevissimè petiolatis; pinnulis confluentibus, ovalibus obtusis, crenatis, inferioribus passim dentatis, omnium venis e costa vix prominula acutangulis distinctis simplicibus bifidisve intra marginem crenature desinentibus. *Stipites* pallidi, subtus semiteretes anticè bisulci, infra medium conspersi squamulis lineari-lanceolatis acuminatis disco fusco-atro limbo pallido, supra glabri. *Rachis* epaleata, angusta, compressa, colore et

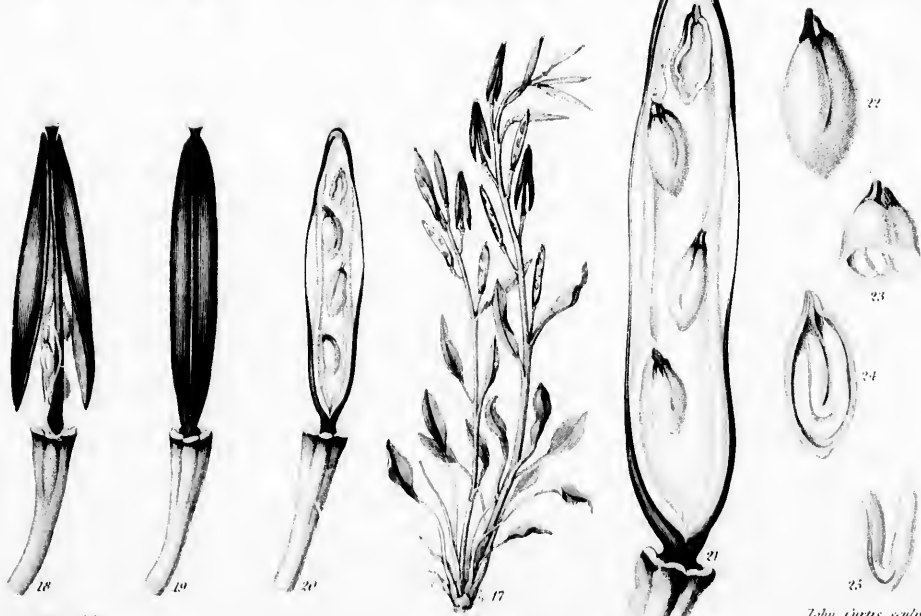
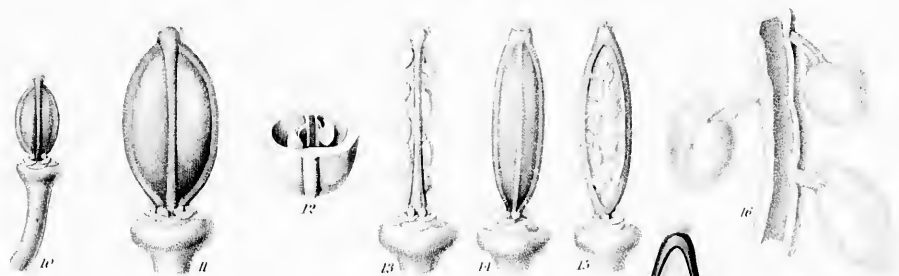
et fere substantia frondis. *Fronde* centrales *fertiles* stipite sterilium longiore alioqui simili insidentes bipinnatæ: pinnæ petiolatæ; *pinnulæ* omnes fructiferae distinctæ inferiores brevissimè petiolatæ; ante explanationem involucri lineares, limbo utrinque recurvo, efformante *involucrum* fornicatum discum totum operiens pallide viride venosum margine scarioso avenio sæpius induplicato: demum explanatæ angusto-oblongæ involuero quasi nullo: costa subtus particulis parvis flavis conspersa, venis costæ obliquis, altè bifidis fere bipartitis, distinctis.

*Sori* ramulos omnes venarum à basi fere ad apicem occupantes, lineares, distincti sed ita approximati ut discus totus pinnulæ explanatæ capsulis maturis tectus est et in hoc stadio filix species *Grammitidis* vel *Acrostichi* quasi evadit.

*Capsulæ* brevè pedicellatæ, turgide lenticulares annulo incompleto, altero lateri infra annuli terminationem transversim dehiscentes, *receptaculo* communi elevato nullo sed venæ parum incrassatæ insidentes.

*Sporulæ* triangulares, læves, absque striis manifestis vel puncto opaciori, in cumulo dilutè flavæ separatim hyalinæ.

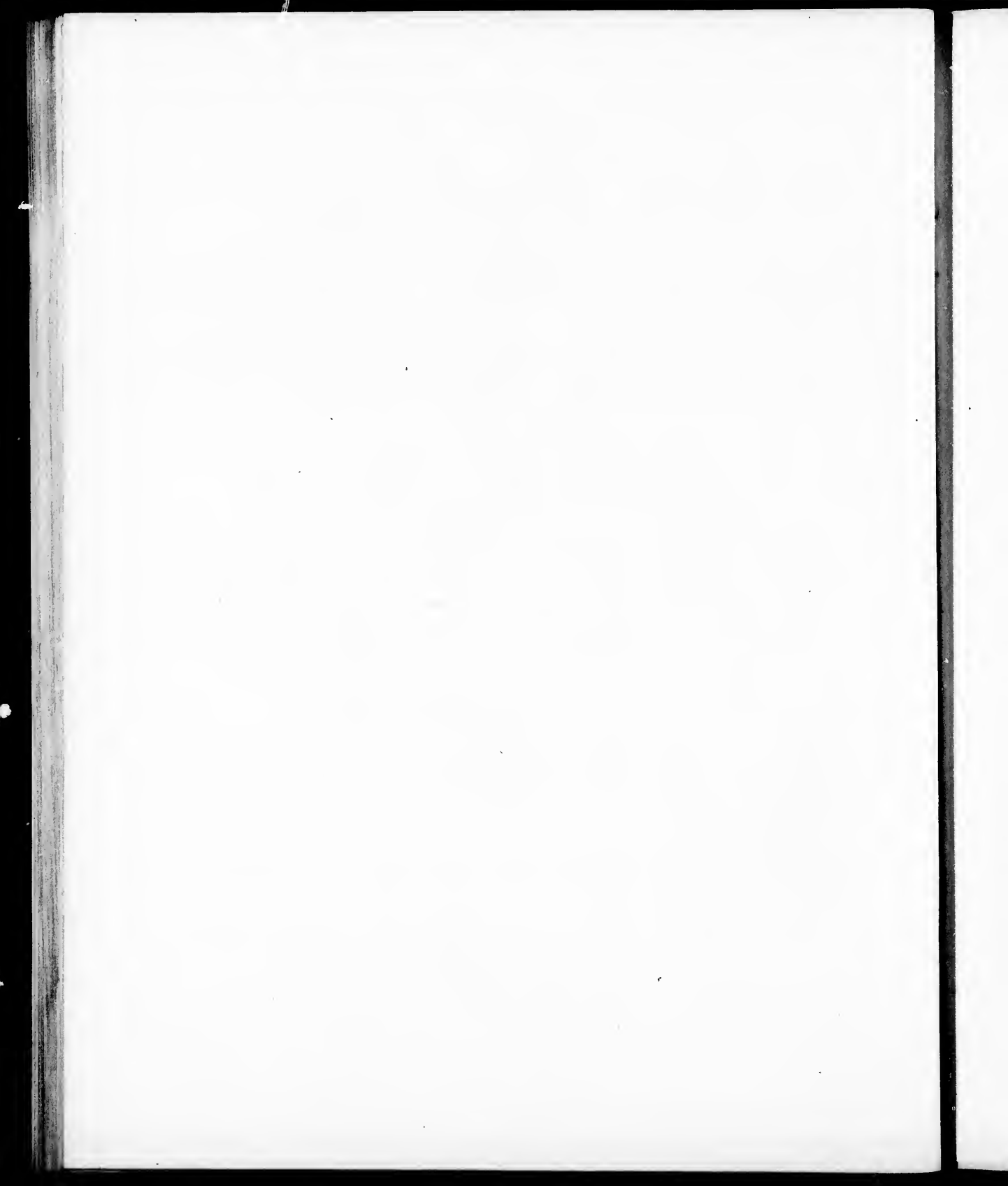
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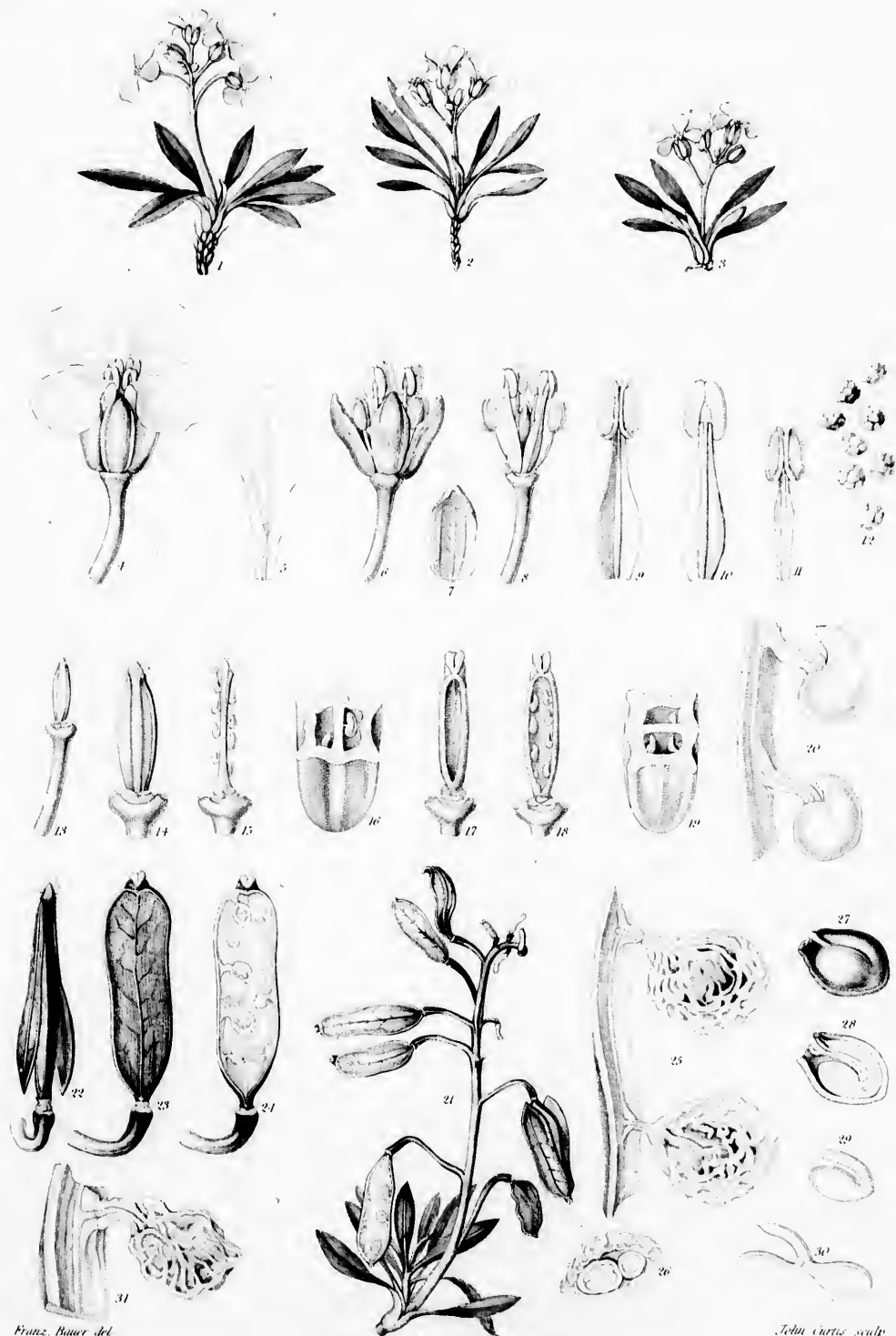


Franz Bauer del.

John Curtis sculp.



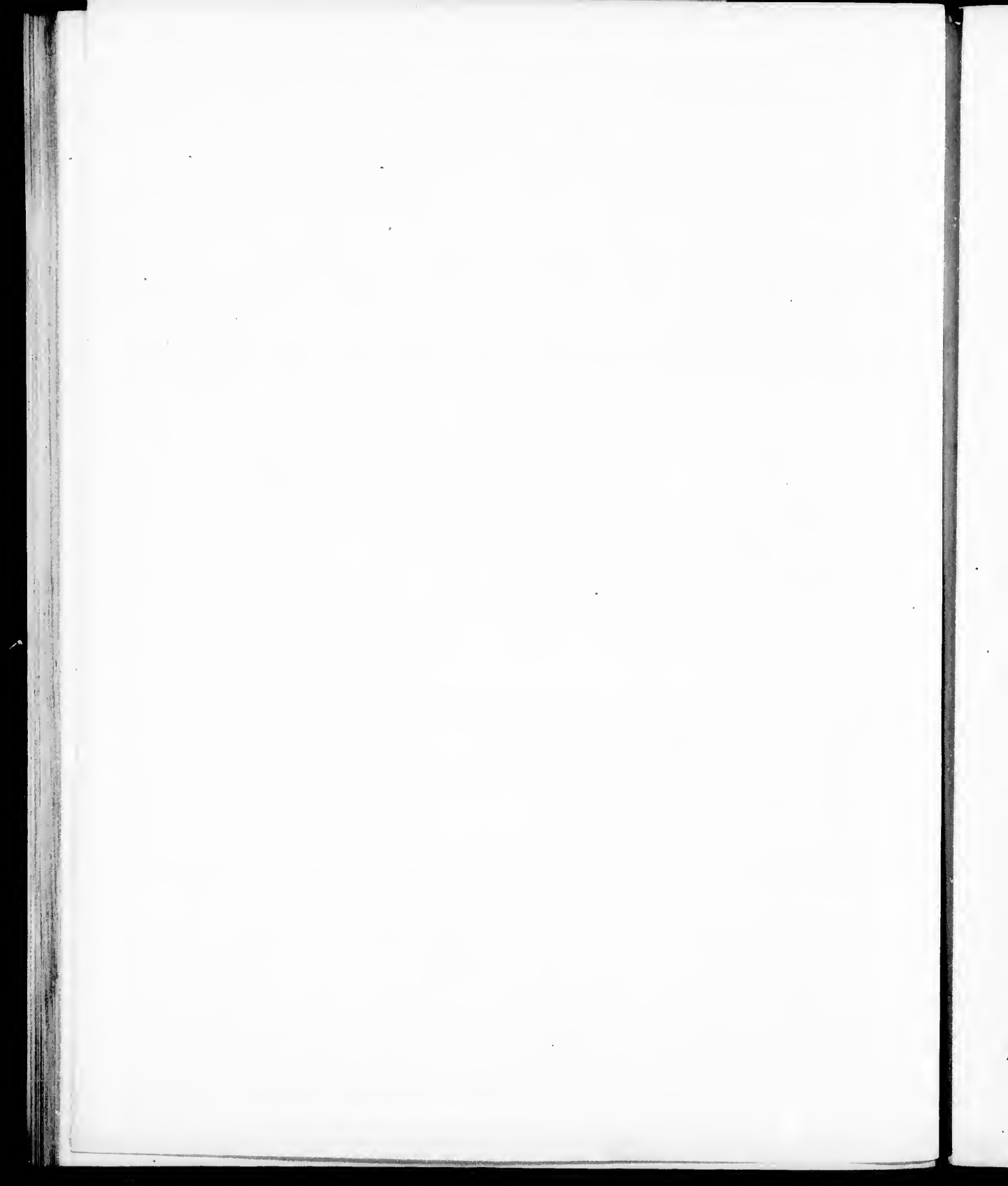


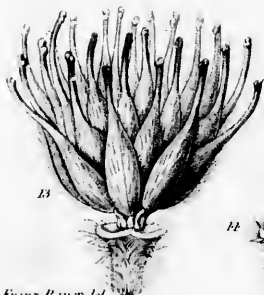
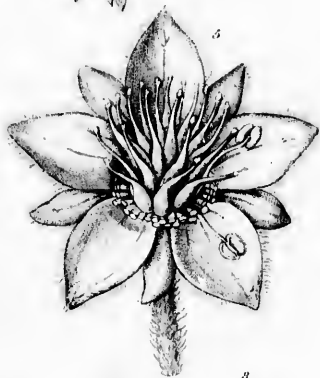
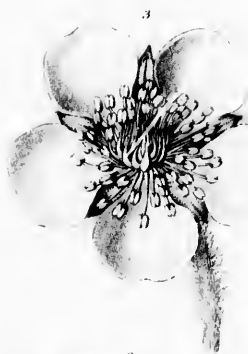


Franz. Bauer del.

Published by John Murray, London, March 6, 1821.

John Curtis sculp.





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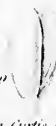
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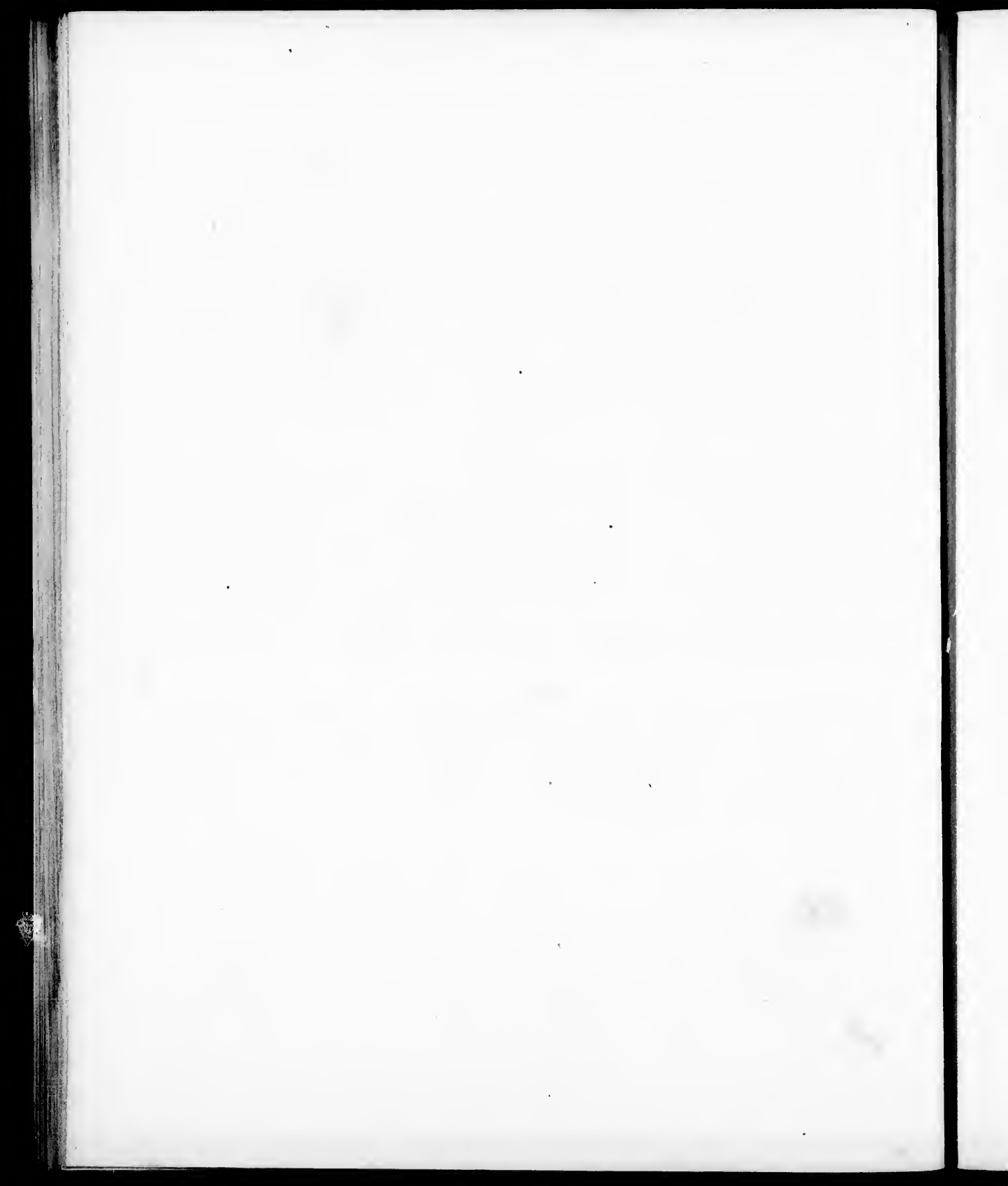
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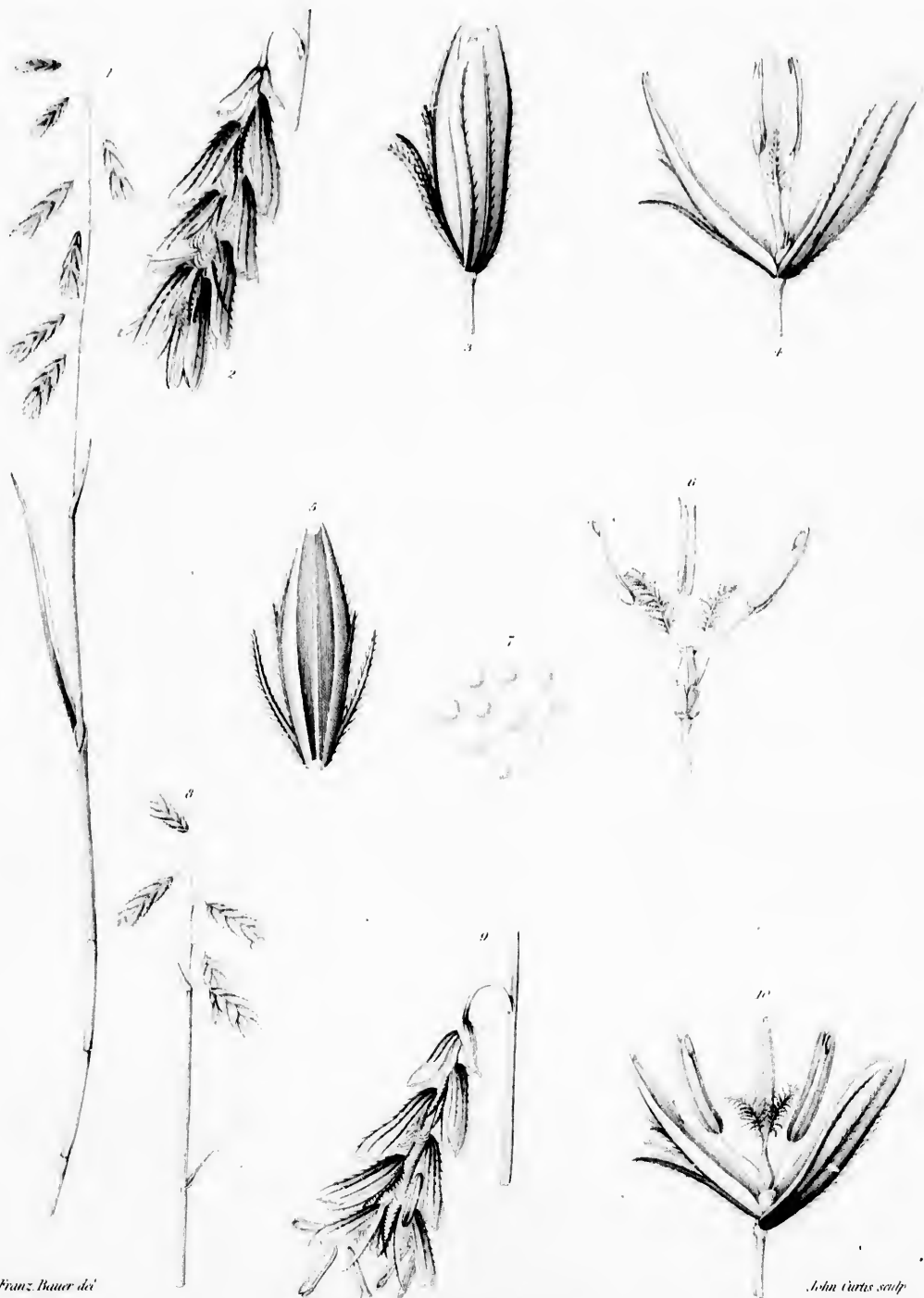


*Franz Bauer del.*

*Published by John Murray, London, March 1842*

*John Curtis sculp.*

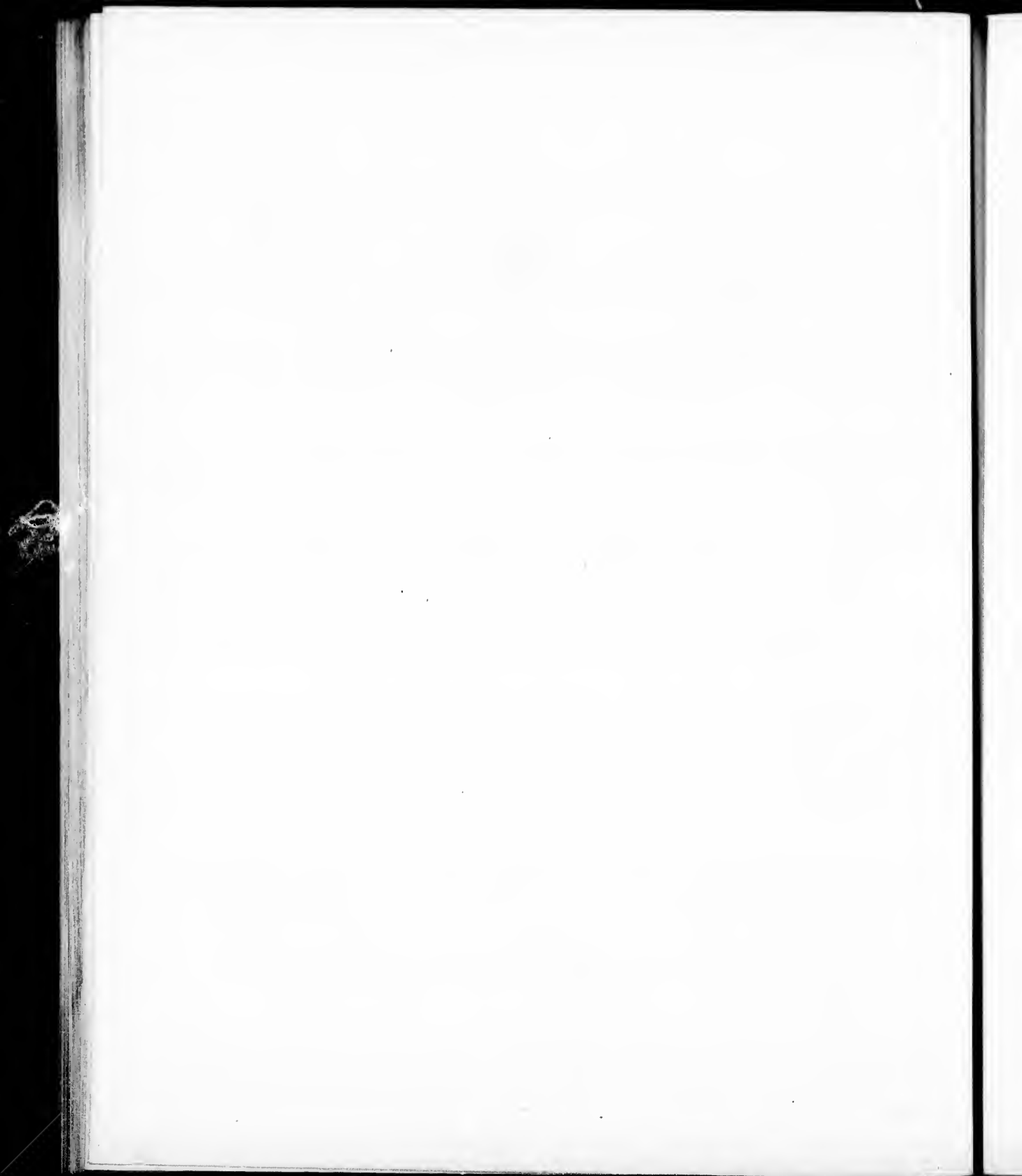




*Franz Bauer del.*

*Published by John Murray, London, March 6, 1822*

*John Curtis sculp.*

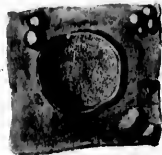




I



II



III



IV



*J. Carter del (ad. steel) et sculp.*



