XIX. *A Monograph of the Genus Saxifraga. By Mr. David Don.*
Communicated by A. B. Lambert, Esq. V.P.L.S.

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IN the following monograph of a very interesting and difficult genus of plants, my principal object is to endeavour to determine the limits of species on more satisfactory grounds than I conceive has hitherto been done. As for six or seven years, during which my attention has been directed to this subject, I have had opportunities of cultivating many species of *Saxifraga*, both foreign and British, and of observing the greater part of the latter in their native habitats, I hope, in some cases at least, to have been enabled to fix on those distinguishing marks which are most constant in determining the species.

It has been proposed by some botanists to divide *Saxifraga* into several genera: these subdivisions appear to me, however, to rest on very insufficient grounds; and that the genus as it now stands, consisting of sections which gradually pass into each other, is truly natural.

The species of *Saxifraga*, although most abundant in the higher latitudes, are still very widely extended over the surface of the globe. In the polar regions, many of them are found even near the level of the sea; and within the tropics, on the summits of the loftiest mountains; but the cold and elevated regions of the north of Asia, Europe and America are the favourite habitats of the genus.

I have been particularly careful in the selection of synonyms ; these I have considerably augmented and corrected, as will hereafter appear ; doubtful ones I have in most instances excluded, as they would unnecessarily increase the bulk of the paper, without adding to its utility. For many of the new species contained in this paper I am indebted to the splendid Herbarium of the late much-lamented President of the Royal Society, the Right Honourable Sir Joseph Banks, Bart., whose death will be long felt throughout the scientific world ; and whose name, whose talents and liberality are too well known to require any additional eulogium from my feeble pen. To Aylmer Bourke Lambert, Esq. I am also infinitely indebted for liberally permitting me to examine the species contained in his vast collection ; and especially in that portion comprising the Herbarium of the celebrated Pallas.

I have divided the genus into sections and subdivisions, to both of which characters are given ; those of the sections being derived from the parts of fructification, and those of the subdivisions from the form of leaves and other differences in habit. Without any further remark, I shall now beg leave to lay before the Society a Synopsis of the genus.

Conspectus

Conspectus et Separatio SAXIFRAGÆ Generis.

SAXIFRAGA. *Linn., Juss.*

Syst. Linn. DECANDRIA DIGYNIA.

Ord. Nat. SAXIFRAGÆÆ. *Juss.*

CHAR. ESSENTIALIS. *Calyx* 5-fidus. *Petala* 5, integra. *Stamina* 10. *Styli* 2, persistentes. *Capsula* 2-locularis, 2-valvis è stylis persistentibus birostris: intra rostra foramine orbiculari aperiens, polysperma. *Semina* minuta, lævia.

Sectio 1. BERGENIA, *Mærch.*

Calyx campanulatus, 5-fidus, extus rugosus: *segmentis* conniventibus. *Petala* unguiculata, calyce inserta. *Stamina* fauce calycis inserta; *filamenta* subulata; *antheræ* subrotundæ. *Styli* intus cavi seminibus pleni! basi coaliti, demùm turgidi et in capsulam profundè bipartitam transientes. *Stigmata* semiglobosa, glabra. *Semina* cylindræa.

Herbæ perennes. Radix crassa, lignosa. Folia ampla carnosæ. Petioli stipulis integris membranaceis secus bases utrinque adnatis instructi! Scapi crassi, denudati. Flores thyrsoidæo-paniculati, rubri.

Species.

1. crassifolia
2. cordifolia
3. ligulata.

Sectio 2. GYMNOPEA.

Calyx 5-phyllus, reflexus. *Petala* hypogyna, sessilia. *Stamina* hypogyna; *filamenta* clavata; *antheræ* reniformes. *Styli* conniventes. *Stigmata* simplicia, imberbia. *Capsula* subrotunda, nuda. *Semina* sphærica.

Herbæ caespitosæ, perennes, brevè surculosæ. Folia carnosæ, indivisa, plerumque cartilagineo-serrata. Scapi erecti, ramosi. Flores parvi, paniculati, rosei aut albi, punctati.

Species.

4. Geum	7. arguta
5. hirsuta	8. stellaris
6. umbrosa	9. leucanthemifolia
7. cuneifolia	10. sarmentosa
5. spicata	11. erosa.
6. Nelsoniana	

Sectio 3. LEOGYNE.

Calyx profundè 5-fidus. *Petala* in plurimis sessilia. *Stamina* fauce calycis inserta; filamenta subulata. *Styli* recti. *Stigmata* orbiculata, planiuscula, imberbia. *Capsula* à calyce libera. *Semina* subrotunda.

Herbæ rarò suffrutices, humiles. Radix fibrosa in pluribus granulosa. Caules flexuosi, sæpiùs multiflori, polyphylli. Folia in aliis reniformia, lobata, in aliis linearia, indivisa. Flores albi aut lutei.

§. *Foliis lobatis.*

Species.

12. rotundifolia	19. bracteata
13. hybrida	20. rivularis
14. granulata	21. nutans
15. bulbifera	22. orientalis
16. cernua	23. cymbalaria
17. sibirica	24. hederacea.
18. nudicaulis	

§. *Foliis*

§. *Foliis indivisis.*

Species.

25. <i>Hirculus</i>	31. <i>brachypoda</i>
26. <i>flagellaris</i>	32. <i>juniperina</i>
27. <i>myosotifolia</i>	33. <i>aspera</i>
28. <i>aizoides</i>	34. <i>hispidula</i>
29. <i>bronchialis</i>	35. <i>bryoides</i>
30. <i>tenella</i>	36. <i>cherlerioides</i> .

Sectio 4. MICRANTHES.

Calyx 5-partitus, patens. *Petala* parva, sessilia, patentia, calyce inserta. *Stamina* calyce inserta; *filamenta* brevissima, subulata. *Styli* brevissimi, crassi. *Stigmata* capitata, glabra. *Capsula* depressa à calyce libera.

Herbæ perennes. *Radix fibrosa*. *Scapi multiflori*. *Folia indivisa, patentia, lanceolata v. ovata, serrata v. crenata*. *Flores corymbosi, parvi, albi v. flavescentes, in paniculam terminalem dispositi*.

Species.

37. <i>hieracifolia</i>	41. <i>nivalis</i>
38. <i>pensylvanica</i>	42. <i>longiscapa</i>
39. <i>semipubescens</i>	43. <i>davurica</i>
40. <i>virginiensis</i>	44. <i>pyrolifolia</i> .

Sectio 5. SAXIFRAGÆ VERÆ.

Calyx 5-fidus. *Petala* sessilia, perigyna. *Stamina* perigyna; *filamenta* plana, sensim attenuata. *Stigmata* patentia, plana, spathulata, pube brevi barbata. *Capsula* calyce obvoluta et arctè connata. *Semina* obovata.

Herbæ perennes v. rarissimè annuæ, humiles, densè cæspitosæ plerumque surculosæ. *Folia indivisa v. variè partita in pluribus rosulata*.

rosulata. Caules *polyphylli* rarò *nudi*, *multi* v. *pauciflori*.
Flores *albi* v. *lutei* aut *rarissimè rosei*.

§. *Foliis indivisis plerumque rosulatis impetiolatis.*

Species.

45. <i>Cotyledon</i>	55. <i>oppositifolia</i>
46. <i>lingulata</i>	56. <i>cæsia</i>
47. <i>Aizoon</i>	57. <i>diapensioides</i>
48. <i>intacta</i>	58. <i>fimbriata</i>
49. <i>mutata</i>	59. <i>serpyllifolia</i>
50. <i>media</i>	60. <i>parnassifolia</i>
51. <i>Lapeyrousii</i>	61. <i>androsacea</i>
52. <i>aretioides</i>	62. <i>spathulata</i>
53. <i>burseriana</i>	63. <i>sedioides</i>
54. <i>retusa</i>	64. <i>tenera</i> .

§. *Foliis 5—3-partitis petiolatis.*

Species.

65. <i>geranioides</i>	78. <i>incurvifolia</i>
66. <i>irrigua</i>	79. <i>denudata</i>
67. <i>maderensis</i>	80. <i>Sternbergii</i>
68. <i>pedatifida</i>	81. <i>pulchella</i>
69. <i>ceratophylla</i>	82. <i>tridentata</i>
70. <i>obtusifida</i>	83. <i>andicola</i>
71. <i>ajugifolia</i>	84. <i>cæspitosa</i>
72. <i>affinis</i>	85. <i>stellata</i>
73. <i>pentadactyla</i>	86. <i>Bonplandii</i>
74. <i>latifida</i>	87. <i>magellanica</i>
75. <i>decipiens</i>	88. <i>exarata</i>
76. <i>hirta</i>	89. <i>Pavonii</i>
77. <i>platipetala</i>	90. <i>pedemontana</i>
	91. <i>moschata</i>

91. moschata	98. cuneata
92. muscoides	99. globulifera
93. pygmæa	100. hypnoides
94. tricuspidata	101. condensata
95. tridactylites	102. elongella
96. petræa	103. leptophylla
97. adscendens	104. lætè-virens.

DESCRIPTIONES SPECIERUM.

Sectio 1.

1. *S. crassifolia*, foliis ovalibus obtusissimis glabris serrulatis, petalis elliptico-oblongis.

S. crassifolia. Linn. *Dec.* ii. p. 27. t. 14. Willd. *Sp. Pl.* ii. p. 644. Bot. *Mag.* t. 196. Persoon *Synop.* i. p. 488. Hort. *Kew.* iii. p. 67.

S. foliis ovalibus crenulatis, caulibus nudis. Gmel. *Sib.* iv. p. 166. t. 66.

Habitat in Siberiæ alpibus. 4. (v. v. c.)

Radix crassa, lignosa, rudimentis foliorum emarcidorum crebrè tecta. *Folia* petiolata, ovalia, obtusissima, carnosa, glaberrima, lucida, serrulata. *Petioles* teretes. *Stipulæ* latissimè dilatatæ, glabræ secùs bases petiolorum decurrentes. *Scapi* pedales, denudati, nitidi, purpurei, angulati, crassitie ferè digiti. *Panicula* coarctata. *Pedunculi* alterni, racemosi, nutantes. *Pedicelli* unilaterales, numerosi. *Flores* campanulati, magni, rubri. *Lacinie calycinae* conniventes, oblongæ, obtusæ. *Petala* elliptico-oblonga, multinervosa.

2. *S. cor-*

2. *S. cordifolia*, foliis orbiculato-cordatis serratis glabris, petalis subrotundis.

S. cordifolia. *Haworth Misc. Nat.* 157. *Hort. Kew. ed. 2.* 3. p. 67.

Geum saxatile rotundifolium majus, flore purpureo. *Amm. Ruth. n.* 90.

Habitat in Siberiæ alpibus. 4. (v. v. g.)

Præcedenti simillima, at major et robustior. *Folia* orbiculato-cordata, carnosa, ampla, serrata, glabra, lucida. *Petioles* longiores. *Scapus* brevior, crassior, angulatus, glaber, lucidus. *Panícula* thyrsoides. *Pedunculi* alterni breviores, racemosi, nutantes. *Pedicelli* numerosi, unilaterales. *Flores* campanulati, majores, rubri. *Lacinie calycinae* conniventes, breviores et latiores. *Petala* subrotunda, multinervia.

This plant, although it has been long considered as only a variety of the preceding species, nevertheless affords sufficient marks to keep it distinct; and these characters are always constant when raised from seed. It is not, as some have supposed, a garden hybrid or variety. It was found wild in Siberia both by Dr. Amman and the celebrated Pallas, in whose Herbarium, now in the possession of A. B. Lambert, Esq., there are several native specimens.

3. *S. ligulata*, foliis orbiculato-cordatis, denticulatis, ciliatis, utrinque hirsutis, scapo filiformi dichotomo, petalis latè orbiculatis.

S. ligulata. *Wallich in Act. Soc. Asiat.* xiii. p. 398. *cum figurâ.*

S. Pacumbis. *Buchanan Mss.*

Habitat in Nepaliæ, et Bengalæ orientalis, alpibus. *Buchanan, Wallich.* 4. (v. s. in Herb. Lamb.)

Radix

Radix horizontalis, lignosa, crassitie digiti, rudimentis foliorum emarcidorum imbricatim tecta. *Folia* ampla, orbiculato-cordata v. rarius ferè obovata, utrinque scabra, hirsutissima, margine tenuitè denticulata et pilis crebris ciliata; suprà venis prominentibus reticulata. *Petioles* brevissimi, teretes, quàm in præcedentibus, breviores. *Stipulæ* latissimè membranaceo-dilatatae, secus bases petiolorum decurrentes, ad margines ciliis paleaceis longis cuspidatis instructæ. *Scapus* erectus, gracilis, filiformis, nudus, læviusculus; apice bifurcus. *Flores* rubri, præcedentibus majores, campanulati, in racemis cernuis unilateralitè dispositi. *Pedicelli* calycesque scabriusculi. *Calycis* *Laciniae* brevissimæ, rotundatae. *Petala* latè orbiculata, multinervia.

This remarkable and truly distinct species was first discovered on the mountains of Nepal by a distinguished naturalist, Dr. Francis Hamilton (formerly Buchanan), from whom there are very excellent specimens of it in the Lambertian Herbarium. Others have been more recently received from Dr. Wallich, by whose collectors they have been gathered both in the mountains of Nepal and the eastern parts of Bengal. This plant is one of many instances which manifests that striking similarity which exists between the vegetation of Nepal and that of the northern regions of Tartary.

Sectio 2.

4. *S. Geum*, foliis reniformibus crenatis, utrinque pilosis; adultis confertis patentibus, petiolis longissimis teretiusculis villosis, laciniis calycinis ovatis obtusis.

S. Geum. *Linn. Sp. Pl.* 574. *Scop. Carn. ed. 2. n.* 491. *Willd. Sp. Pl. ii. p.* 448. *Lam. Encycl. vi. p.* 682. *Lapeyr. Saxif. Pyren. p.* 46. *t.* 24. (bona.) *Lam. et Decand.*

Flor. Franc. iv. p. 379. *Persoon Synop.* i. p. 488. *Hort. Kew. ed.* 2. 3. p. 68. *Engl. Bot. t.* 1561. (*optima.*) *Sternberg. Saxif.* p. 15.

S. punctata. *Sternb. loc. cit.* p. 18.

S. foliis reniformibus obtusè crenatis, caule simplici nudo.
Gmel. Sib. iii. p. 161. t. 65. f. 1.

Geum folio subrotundo minori, pistillo floris rubro. *Magn. Hort.* p. 88. t. 88.

Sanicula montana rotundifolia minor. *Bauh. Pin.* 243.

Sedum montanum rotundifolium minus album non guttatum.
Moris. Hist. iii. p. 478. sect. 12. t. 9. f. 12. (*malu.*)

β . foliorum paginâ utrinque glabrâ.

S. elegans. *Mackay in literis.*

γ . triplò major; foliorum paginâ utrinque glabrâ, paniculâ magis diffusâ, petalis majoribus pulchrè punctatis.

Habitat in Sibiriâ; nec non in Pyrenæor. Helvetiæ et Hiberniæ alpibus copiosè, β et γ in Hiberniæ montibus.
J. T. Mackay. 4. (v. v. c.)

Planta cæspitosa. *Radix* fibrosa. *Folia* anni præcedentis persistentia, conferta, rigida, humi patentia; juniora erecta, longè petiolata, reniformia, coriacea, crenata: crenaturis imbricatis obtusissimis vix cartilagineis; suprâ saturatè viridia; subtùs rubescentia; utrinque avenia, pilis rigidis instructa. *Petioles* longissimi, subteretes, villosi, nunquam dilatati. *Scapus* erectus 4—6-pollicaris, pilis viscidis densè tectus. *Panicula* ramosissima, multiflora: *ramuli* multiflori, variè furcati. *Bracteæ* parvæ, carnosæ, lineares, obtusæ. *Pedicelli* breves calycesque pilis glanduliferis crebrè tecti. *Lacinie calycis* ovatæ, obtusæ, obscurè 3-nerves. *Petala* ovalia, punctis flavis et puniceis ad basin instructa. *Antheræ* flavæ. *Pistilla* staminibus breviora.

5. *S. hir-*

5. *S. hirsuta*, foliis ovalibus acutè serratis basi rotundatis cordatisve utrinque pilosis; adultis erectis, petiolis longissimis teretiusculis villosis, pedicellis elongatis unifloris.

S. hirsuta. Linn. *Sp. Pl.* 574. Mill. *Dict. n.* 6. Willd. *Sp. Pl.* ii. p. 647. Lapeyr. *Fl. Pyren. Saxif.* p. 45. t. 23. (*optima.*) Lam. *Encycl.* vi. p. 681. Engl. *Bot.* t. 2322. (*bona.*) Hort. Kew. ed. 2. 3. p. 68. Lam. et Decand. *Flor. Franc.* iv. p. 378. Sternb. *Saxif.* p. 14.

Sedum serratum, folio pallido, flore elegantè punctato. Moris. *Hist.* 3. 12. t. 9. f. 17.

β. foliis subrotundo-cordatis utrinque glabris.

Habitat in rupibus humidis alpium Pyrenaicarum et Hibernicarum, β cum α in Hiberniâ. J. T. Mackay. 4. (v. v. c.)

Planta cæspitosa. *Radix* fibrosa. *Folia* omnia longè petiolata, erecta, ovalia, coriacea, utrinque pallidè viridia, pilis rigidiusculis adspersa; basi vel rotundata v. cordata; margine serrata: serraturis subdistantibus, triangularibus, acutis. *Petioli* longissimi, erecti, teretiusculi, densè villosi; suprâ canaliculati. *Scapi* erecti, palmares aut pedales, flexuosi, villis viscidis tecti. *Panicula* divaricatim ramosissima. *Pedicelli* elongati, uniflori, calycesque pilis glanduliferis obsiti. *Laciniae calycinae* ovatae, obtusae, obscure 3-nerves. *Petala* ovali-oblonga, alba punctis numerosis fulgidis rubris et flavis instructa oculo armato 5-nervia. *Filamenta* alba, pistillis longiora. *Antherae* rubrae.

This species appears intermediate between *S. Geum* and *umbrosa*; with *Geum* it agrees in the form of its petioles, and in its leaves being cordate at the base; and with *S. umbrosa* in its more oval, smooth, and paler green leaves and larger flowers with bright-coloured spots. From both, however, it appears sufficiently distinct to rank as a species. Moris. *Hist.* 3. 12. t. 9. f. 17.

given as a synonym of *punctata*, certainly belongs to this plant. *Magnol. Hort. Monsp. t. 87.* ought with more propriety to be referred to *S. Geum*.

6. *S. umbrosa*, foliis obovatis retusis cartilagineo-crenatis glaberrimis; adultis confertis patentibus, petiolis brevibus compresso-dilatatis, pedicellis paucifloris.

S. umbrosa. Sp. Pl. 574. Mill. Icon. 141. f. 2. Willd. Sp. Pl. ii. p. 647. With. Brit. 403. Lapeyr. Pyren. Saxif. p. 44. t. 22. (bona.) Lam. Encycl. vi. p. 680. Smith Brit. ii. p. 450. Engl. Bot. 633. Hull. Brit. 92. Persoon Synop. i. p. 488. Lam. et Decand. Fl. Franc. iv. p. 378. Hort. Kew. iii. p. 67. Sternb. Saxif. p. 14.

Geum folio subrotundo minori, pistillo floris rubro. Tournef. Inst. 251.

- β . *punctata*, foliis subrotundis argutè dentato-serratis; adultis erectis, petiolis longioribus.

S. punctata. Linn. Sp. Pl. 574. (exclus. syn. Moris. Hist.) Willd. Sp. Pl. 2. p. 646. (exclus. syn. Moris. Hist.)

- γ . *serratifolia*, foliis oblongo-ovatis inciso-serratis; adultis erectis, petiolis longioribus.

S. serratifolia. Mackay in literis.

Habitat α in alpinis Pyrenaicis et Hibernicis, β et γ in Hiberniæ montibus. *D. Mackay. 4. (v. v. c.)*

Planta cæspitosa. *Radix* fibrosa. *Folia* anni præcedentis persistentia, densè conferta, humi patentia; juniora erecta, brevè petiolata, obovata, retusa, cartilagineo-crenata: crenaturis subimbricatis, utrinque viridia glaberrima. *Petioluli* compresso-dilatati, suprà plani, ad marginem villis mollibus tenuitè ciliati paginâ foliorum vix longiores. *Scapus* erectus, flexuosus, villis viscidis tectus. *Panicula* divaricatim ramosa. *Pedicelli* breves, pauciflori, calycesque

que pilis brevibus glanduliferis confertè instructi. *Laciniae calycis* ovatae, obtusae, obscure trinerves. *Petala* ovalia, conspicuè trinervia: nervis ramosis, roseo-alba punctis numerosis coccineis et flavis pulcherrima.

Saxifraga umbrosa is readily distinguished from the two preceding species by its flat, dilatated, and much shorter petioles; by the leaves never being cordate at the base; and lastly, by the serratures being more distinctly cartilaginous at their margins. The variety β . I believe to be Linnæus's *S. punctata*: it differs from α . by the greater length of its petioles, and by the older leaves being loose, and always erect, never confert and spreading on the ground as in var. α ; the var. γ . is very near akin to β , only differing in its leaves being oblong-ovate. They both likewise differ from α . by the large and sharp serratures of their leaves. The synonyms of Morison and Miller, quoted by Linnæus, evidently belong to *hirsuta*. The Count de Sternberg, in his excellent monograph of the genus, has described for *S. punctata* the Siberian *S. Geum*, which differs in no respect from the European one, as I have examined excellent specimens of it in the Pallasian Herbarium in the possession of A. B. Lambert, Esq. These specimens agree exactly with Gmelin's figure quoted by him.

7. *S. cuneifolia*, foliis cuneiformibus repando-crenatis glabris; adultis confertis patentibus: petiolis linearibus angustissimis nudis, laciniis calycinis oblongis acutis, petalis spatulatis.

S. cuneifolia. Linn. *Sp. Pl.* 574. Scop. *Carn.* 490. t. 13. Schmied. *Fasc.* t. 12. n. 37. Willd. *Sp. Pl.* ii. p. 647. Lapeyr. *Pyren. Saxif.* p. 45. Waldst. et Kitaib. *Hung.* i. p. 43. t. 44. (media.) Lam. *Encycl.* vi. p. 681. Lam. et Decand. *Fl. Franc.* iv. p. 377. Hort. Kew. ed. 2. 3. p. 68. Sternb. *Saxif.* p. 14.

Saxifraga

Saxifraga punctata. Gunn. Norv. n. 1076. Act. Haf. x. p. 445. t. 3. f. 10.

S. foliis petiolatis obtusis, caule fragili nudo ramoso. Hall. Helv. n. 974.

Cotyledon altera olim Matthioli. Bauh. Hist. iii. p. 684.

Cotyledon aut Sedi species quædam. Gesn. Fasc. xix. t. 12. f. 37. (bene.)

β . *davurica*, foliis opacis dentatis, floribus majoribus.

S. davurica. Hort. nec Willd.

Habitat α in alpihus Pyrenæor. Helvetiæ, Styriæ, Hungariæ et Norvegiæ; β in Sibiriâ? 4. (v. v. c.)

Planta cæspitosa, duplò minor. *Radix* fibrosa. *Folia* anni præcedentis persistentia, conferta, humi patentia; juniora erecta, cuneiformia, petiolata, utrinque glaberrima, repando-crenata, rigidè coriacea, basi attenuata. *Petioli* lineares, angustissimi, rigidi, fragiles, nudi, margine cartilaginei. *Scapus* erectus, flexuosus, rigidus, fragilis, villis viscidis rarè adpersus. *Panicula* divaricatim ramosa: *rami* dichotomi. *Pedicelli* calycesque pilis glandulosis instructi. *Lacinie calycinae* oblongæ, acutæ, obscurè uninerves. *Petala* spathulata, basi angustata, puncto luteo, subsolitario instructa, sub microscopio trinervia: nervis ramosiusculis. *Stamina* pistillis ferè duplò longiora; *filamenta* alba; *antheræ* fulvæ.

8. *S. spicata*, foliis longè petiolatis orbiculato-cordatis argutè serratis venosis pilosis, petiolis basi dilatatis, racemo elongato spiciformi, laciniis calycinis brevissimis obtusis.

S. Geum. Pursh Fl. Amer. Septent. i. p. 311.

Habitat in Insulâ Sledge dictâ ad oras occidentales Americæ septentrionalis. D. Nelson. 4. (v. s. in Herb. Banks.)

Planta

Planta cæspitosa. *Radix* fibrosa. *Folia* omnia erecta longè petiolata, orbiculato-cordata, conspicuè venosa, grossè et acutè serrata, utrinque pilosa; *petioli* longissimi; basi dilatati, subtùs striato-nervosi, margine villis mollibus ciliati. *Scapus* pedalis, teres, erectus, villis viscidis tectus. *Racemus* elongatus, apice attenuatus, variè dichotomus, multiflorus. *Pedicelli* brevissimi, numerosi, pube brevi glutinosâ, ut et *calyces*, tecti. *Laciniae calycinae* brevissimæ, obtusæ. *Petala* elliptico-oblonga, punctata? 3-nervia: nervis ramosis flexuosis. *Genitalia* petalis triplò longiora; *filamenta* longissima, gracilia; *pistilla* elongata, recta.

The above species is widely different from the *S. Geum*, with which Pursh has confounded it. It is distinguished by its nerved and dilated petioles. The leaves are all erect, broader, orbiculato-cordate, veined and serrated; their teeth large, acute. *Flowers* on dichotomous peduncles, disposed in a long tapering raceme. The laciniae of the *calyx* are much shorter and broader. The *stamens* twice the length of those of *S. Geum*, and longer than the petals. The only specimens I have seen of this very distinct plant are preserved in the Banksian Herbarium, and were collected in Sledge Island, on the north-west coast of America, by Mr. David Nelson, a very indefatigable botanist, who accompanied the celebrated Captain Cook in his third voyage, and who has made many interesting discoveries in those regions.

9. *S. Nelsoniana*, foliis orbiculato-cordatis subpeltatis inciso-serratis, petiolis longissimis filiformibus, thyrsos ovato.

Habitat ad Caput Newnham dictum, ad oras occidentales Americæ borealis. *David Nelson*. 4. (v. s. Herb. Banks.)

Planta subcæspitosa. *Radix* fibrosa. *Folia* omnia erecta,
longè

longè petiolata, orbiculato-cordata, subpeltata, coriacea, suprà glabra, subtùs hirsuta, inciso-serrata: serraturis magnis acutis. *Petioli* longissimi filiformes, æquales, undique villosi. *Scapus* palmaris, erectus, simplicissimus, teres, villis longis mollibus undique tectus. *Flores* brevè pedicellati, albi, magnitudine *S. nivalis*, in thyrso ovato terminali densè dispositi. *Laciniae calycinae* triangulari-ovatae, acutae. *Petala* ovalia, parva, alba, impunctata? *Filamenta* alba. *Pistilla* elongata, recta.

Hanc speciem pulcherrimam et omninò distinctam nomine inventoris peritissimi atque indefessi lubens condecoravi.

10. *S. arguta*, foliis reniformi-rotundatis inciso-serratis glabris, petiolis filiformibus, scapo gracili lævi, laciniis calycinis oblongis acutis.

Habitat ad oras occidentales Americæ septentrionalis. *D. Menzies.* 4. (v. s. in *Herb. Banks.*)

Radix fibrosa. *Folia* longè petiolata, reniformi-rotundata, profundè inciso-serrata, utrinque glabra. *Petioli* longissimi, filiformes, graciles. *Scapus* lævis, gracilis. *Panícula* simplicissima. *Flores* albi, magnitudine *S. stellaris*. *Laciniae calycis* oblongæ, acutæ. *Petala* ovalia, unguiculata, multinervosa, punctata? *Pistilla* brevissima.

11. *S. stellaris*, foliis aggregatis rhombeo-ovatis sessilibus acutè dentatis: basi integerrimis angustatis, petalis ovatis acutis æqualibus unguiculatis, scapo subsimplici.

S. stellaris. *Linna.* *Sp. Pl.* 572. *Flor. Dan.* t. 23. (bona.) *Jacq. Coll.* i. p. 202. t. 13. (optima.) *Scop. Carn.* i. 292. t. 13. (media.) *Huds. Angl.* 179. *Lightf. Scot.* i. p. 220. *With. Brit.* 402. *Willd. Sp. Pl.* ii. p. 644. *Engl. Bot.* t. 167.

t. 167. (*bona.*) *Lapeyr. Pyren. Saxif.* p. 490. *Lam. Encycl.* vi. p. 680. *Smith Brit.* ii. p. 448. *Persoon Synop.* i. p. 488. *Lam. et Decand. Fl. Franc.* iv. p. 379. *Hort. Kew. ed. 2. 3.* p. 68. *Sternb. Saxif.* p. 11. *Wahlenb. Lapp.* p. 114.

S. foliis rhomboideis acutè serratis, caule nudo ramoso.
Hall. Helv. n. 973.

S. foliis lanceolatis dentato-serratis, caule nudo simplici.
Linn. Suec. 335, 367.

S. caule nudo simplici, foliis lanceolatis dentatis, petalis acutis. *Linn. Lapp.* 175.

Sanicula Myosotis floribus albicantibus ferè umbellatis.
Pluk. Alm. p. 331. *ejusd. Phytog. t.* 58. *f.* 2. (*bene.*)

Sedum montanum hirsutum mucronato et dentato folio, flore albo guttato. *Moris. Hist.* iii. p. 478. s. 12. *t.* 9. *f.* 13. (*bene.*)

Sanicula alpina aliquatenus affinis. *Bauh. Hist.* iii. p. 708.
β. elata, scapi plures, pedales.

γ. angustifolia, foliis angustioribus longioribusque apice paucidentatis.

δ. Schleicheri, foliis obovatis repando-crenatis, scapo flexuoso humiliore.

S. stellaris. *Schleicher in literis.*

ε. Bellardi, acaulis; foliis subrotundis repandis, flore sessili.

S. Bellardi. *Allion. Pedem. n.* 1536. *t.* 88. *f.* 1. *Willd. Sp. Pl.* ii. p. 645. *Sternb. Saxif.* p. 2.

Habitat α Scotiæ et totius Europæ alpium petrosa humida et scaturigines; *β* et *γ* in Sibiria (*Pallas*); *δ* in alpibus Helveticis (*Schleicher*); *ε* in alpibus Pedemontanis (*Bellardi*). *υ.* (v. v. *α* sp. *δ* cult.; *β* et *γ* v. s. in Herb. Palasio, nunc Lamb.)

Planta in cæspitibus densis parvulis vegetans. *Radix* fibrosa.

Folia conferta, sessilia, rhombeo-ovata, apice acutè dentata, basi integerrima, angustata, utrinque pilis setosis adspersa; suprà nitida. *Scapus* subnudus, 2—4-pollicaris in β pedalis, villis mollibus viscidis instructus. *Panicula* simplex, pauciflora. *Pedunculi* dichotomi calycesque pilis glandulosis leviter tecti. *Bracteæ* ovatæ, acutæ, integræ. *Laciniae calycinae* ovato-acutæ, 3-nerves. *Petalata* ovata, acuta, alba, æqualia, unguiculata, elegantissimè 3-nervia (nervis simplicibus rectis); basi maculis 2 aureis instructa: dorso carinata. *Filamenta* albâ. *Antheræ* croceæ. *Pistilla* brevissima, crassa.

12. *S. leucanthemifolia*, foliis confertis lanceolato-cuneatis acutè grossèque dentatis, basi integerrimis angustatis, scapo ramosissimo diffuso, petalis ovatis acutis unguiculatis; tribus exterioribus majoribus.

S. leucanthemifolia. *Mich. Amer. Bor.* i. p. 268. *Lapeyr. Pyren. Saxif.* p. 49. t. 25. *Lam. Encycl.* vi. p. 679. *Pursh Amer. Septent.* i. p. 311. *Sternb. Saxif.* p. 10.

S. Clusii. *Gouan Illust.* p. 28. (exclus. synonym.) *Lam. et Decand. Flor. Franc.* iv. p. 380.

Habitat in alpibus Pyrenaicis, et in Americâ boreali.
 2 (v. v. c. et s. sp.)

Planta cæspitosa. *Radix* fibrosa. *Folia* conferta, erecta, lanceolato-cuneata, apice acutè grossèque dentata, basi integerrima, angustata, utrinque pilis setosis instructa. *Scapus* subnudus, 4—6-pollicaris, flexuosus, diffusè ramosissimus, villis viscidis tectus. *Rami* dichotomi. *Pedicelli* elongati, graciles, uniflori, pube brevi glutinosâ vestiti. *Laciniae calycinae* ovatæ, obtusæ. *Petala* ovata, acuta,

acuta, inæqualia, unguiculata, triplinervia: nervis ramosis, flexuosis; tria exteriora majora, basi biguttata; duo interiora multò minora, immaculata.

OBS. Præcedente triplò major, in plurimis tamen similis, at notis indicatis abundè diversa.

13. *S. sarmentosa*, stolonibus reptantibus, foliis orbiculato-cordatis latè lobato-crenatis discoloribus pilosis, petalis unguiculatis; duobus exterioribus maximis flaccidis.

S. sarmentosa. *Linn. Suppl.* p. 240. *Thunb. Japon.* p. 182. *Schreb. Monog. Dioneæ*, p. 16. t. 2. f. 3. (*media.*) *Ait. Hort. Kew. ed. 1. 2.* p. 79. *Lam. Encycl.* vi. p. 684. *Persoon Synops.* i. p. 488.

S. ligulata. *Murr. in Comment. Gött.* 1781. p. 26. t. 1. *Schkika. Kæmpf. Amæn.* 870. *Jacq. Misc.* ii. p. 327. *ejusd. Icon. var. 1. t.* 80. (*optima.*)

Habitat in Imperii Japonarum locis montosis et humidis inque lapidosis (*Kæmpfer, Thunberg*); etiam in Chinâ. 4. (v. v. c.)

Planta cæspitosa, stolonifera. *Radix* fibrosa. *Stolones* axillares, latè reptantes, ad genicula suprâ comam parvam foliorum et infrâ fibras nonnullas progredientes. *Folia* numerosa, patentia, orbiculato-cordata, longè petiolata, lobato-crenata: crenaturis latissimis obtusis, utrinque pilis setosis adspersa, suprâ opacè viridia, fasciis albis; subtùs rubra. *Scapi* palmares, aut pedales, erecti, petiolique pilis rigidiusculis viscidis deflexis undique vestiti. *Panicula* ramosa, laxiflora. *Bracteæ* lanceolatae, mucronatae, pedicellique pube glutinosâ obsitæ. *Laciniae calycinae* latè ovatae, obtusae, conspicuè trinerves. *Petala* unguiculata: unguibus capillaribus; tria interiora parva,

cordata, acuta; horum lateralìa basi maculâ flavâ notantur, at centrale punctis duobus puniceis ad basin munitum est; duo exteriora maxima, lanceolata, acuta, flaccida, 3-nervia: nervis flexuosis, ramosis.

14. *S. erosa*, foliis lanceolatis acutis glabris runcinato-serratis, paniculâ divaricatâ pyramidatâ, pedicellis elongatis unifloris, petalis oblongo-ovalibus obtusis unguiculatis.

S. erosa. Pursh Amer. Boreal. i. p. 311.

β. foliis hirsutis.

Habitat α in rivulis lapidosis montium excelsiorum Carolinæ et Virginie. Pursh. β in horto Chelseano colitur. γ. (v. v. c.)

Planta cæspitosa. *Folia* numerosa, erecta, lanceolata, acuta, erosè runcinato-serrata, basi integra in petiolum angustata, utrinque glabra, lucida. *Scapi* stricti, pedales v. sesquipedales, teretes, pilis viscidis patentibus undique tecti. *Panicula* divaricata, ramosa, laxiflora, pyramidata. *Pedicelli* elongati, filiformes, uniflori, calycesque pilis glanduliferis crebrè instructi. *Lacinie calycis* ovatæ, obtusæ, obscurè uninerves. *Petala* oblongo-ovalia, alba, unguiculata, 3-nervia: nervis simplicibus strictis, puncto flavo solitario ad basin instructa. *Filamenta* alba. *Antheræ* aureæ.

Sectio 3.

§ *Foliis lobatis.*

15. *S. rotundifolia*, foliis reniformibus inæqualitèr grossèque dentatis; caulinis petiolatis, petalis lanceolatis acutis.

S. rotundifolia. Linn. Sp. Pl. 576. Mill. Dict. n. 5. ejusd. Icon. t. 141. (media.) Scop. Carn. ii. n. 488. Willd. Sp. Pl. ii. p. 651. Curt. Magaz. 424. (bona.) Lapeyr. Pyren.

ren. Saxif. p. 50. t. 26. (*optima*.) *Lam. Encycl.* vi. p. 688.

Persoon Synop. i. p. 489. *Hort. Kew. ed.* 2. 3. p. 69.

Sternb. Saxif. p. 17.

S. foliis caulinis reniformibus dentatis petiolatis, caule paniculato. *Gmel. Sib.* iv. p. 162.

S. foliis reniformibus acutè serratis hirsutis petiolatis, caule ramoso. *Hall. Helv.* n. 975.

S. foliis reniformibus acutè crenatis, caule ramoso folioso. *Hort. Cliff.* 167. *Roy. Lugdb.* 453.

Sanicula montana rotundifolia major. *Bauh. Pin.* 243.

Sanicula alpina. *Cam. Epit.* 764. *Gesn. Fasc.* xix. t. 10. f. 25.

β . *repanda*, major et robustior, foliis latioribus.

S. repanda. *Sternb. loc. cit.* p. 17. t. 5.

S. rotundifolia. *Marsch. à Bieberst. Fl. Taurico-Cauc.* i. p. 315. *Steven de Saxif. Cauc. in Mem. Mosq.* iv. p. 76.

Habitat α in Austriæ, Helvetiæ et Sibiræ alpibus; β in alpestribus Caucasica. 4. (v. v. α et β c.)

Planta densè cæspitosa. *Radix* fibrosa. *Caules* erecti, rigidi, flexuosi, foliosi, palmares pedalesve. *Folia* radicalia reniformia, longè petiolata, inæqualitèr grossèque dentato-serrata; suprà lucida, pilis setosis adspersa; subtùs pubescentia; caulina petiolata radicalibus conformia nisi magis inæqualitèr et profundius dentata: *petioli* semiteretes, undique villosi. *Panicula* divaricata, laxa. *Bractæ* lineares longitudine pedicellorum. *Pedicelli* calycesque pilis glandulosis tecti. *Calyx* patens; lacinia oblongæ, obtusiusculæ, obsoletè 3-nerves. *Petala* lanceolata, acuta, alba, punctis minutis coccineis adspersa, 3-nervia: nervis simplicibus. *Filamenta* alba. *Antheræ* pallidæ.

OBS.

OBS. Var. β ex mente Clariss. Steveni ab rotundifoliâ non differt, tamen mihi in hortis semper in omnibus partibus, præter flores, majorem et robustiorem apparuit.

16. *S. hybrida*, foliis radicalibus petiolatis cuneato-rotundatis crenatis; caulinis minutis integris, caule paniculato. *Sternb. Saxif. p. 17. t. 8. f. 3.*

Habitat in alpibus Pyrenaicis. γ .

Hanc plantam nec vivam neque siccam vidi. Præcedenti valdè affinis videtur, at modò figura Sternbergii fidenda: abundè discrepat staturâ minori et graciliori; foliis basi acutis nec cordatis; caulisque minutis, integris, subsessilibus.

17. *S. granulata*, foliis radicalibus reniformibus inciso-lobatis; caulinis petiolatis, laciniis calycinis lanceolatis obtusis, petalis spathulatis.

S. granulata. *Linn. Sp. Pl.* 576. *Huds. Angl.* 182. *Flor. Dan.* 514. *With. Brit.* 405. *Willd. Sp. Pl.* ii. p. 651. *Lam. Illust. t.* 372. *f.* 1. (mala.) *ejusd. Flor. Franc.* iii. p. 532. *Ibid. Encycl.* vi. p. 689. *Engl. Bot. t.* 500. (bona.) *Smith Brit.* ii. p. 453. *Lapeyr. Pyren. Saxif. p.* 52. *Hort. Kew. ed.* 23. p. 69. *Sternb. Saxif. p.* 16.

S. foliis caulinis reniformibus obtusè lobatis, caule ramoso, radice granulatâ. *Hort. Cliff.* 167. *Fl. Suec.* 350.

S. foliis radicalibus reniformibus obtusè dentatis, caulinis palmatis. *Hall. Helv. n.* 976.

S. rotundifolia alba. *Bauh. Pin.* 309.

S. alba. *Dod. Pempt.* 316.

Sedum rotundifolium erectum, radice granulatâ. *Moris. Hist.* iii. p. 474. § 11. *t.* 9. *f.* 23. (bona.)

β . floribus plenis.

γ . mul-

γ. multicaulis, caulibus pluribus brevioribus, foliis circinato-incisis.

S. granulata, *β. multicaulis.* *Lapeyr. loc. cit. t. 27.*

Habitat α in apricis et nemoribus Europæ borealis et meridionalis, ubique obvia; *β* in hortis colitur; *γ* in alpibus Pyrenaicis. *Lapeyrouse. u. (v. v. sp.)*

Radix granulata. *Caules* erecti, 4—6-unciales pedalesve, ramosi, foliosi, multiflori, villis mollibus viscidis crebrè obsiti. *Folia* radicalia petiolata, reniformia, inciso-lobata, utrinque hirsuta: petiolis villosis; caulina petiolata, palmata. *Bracteæ* lanceolatae, obtusæ. *Pedicelli* elongati, uniflori, calycesque pube glutinosâ instructi. *Flores* magni, campanulati, candidi. *Laciniae calycinae* lanceolatae, obtusæ, 3-nerves. *Petala* spathulata, triplinervia: nervis ramosis flexuosis.

18. *S. bulbifera*, foliis radicalibus reniformibus petiolatis crenatis; caulinis sessilibus inciso-lobatis, laciniis calycinis triangulari-ovatis acutis, caule ramoso multifloro.

S. bulbifera. *Linn. Sp. Pl. 577. Willd. Sp. Pl. ii. p. 651.* (exclus. synonym. *Gunn. Norv. et Flor. Dan.*) *Lam. Encycl. vi. p. 690.* (exclus. synonym. *Gunn. Norv. et Flor. Dan.*) *Persoon Synop. i. p. 489. Lam. et Decand. Fl. Franc. iv. p. 369. Sternb. Saxif. p. 15. t. 12. f. 1. (bona.)*

Sedum rotundifolium erectum soboliferum. *Moris. Hist. iii. p. 474. § 12. t. 9. f. 24. (optima.)*

Sedum ad folia bulbos gerens. *Bauh. Pin. 309. Col. Ecphr. i. p. 318. t. 317. (bona.)*

Habitat in Europæ australis pratis saxosis et umbrosis, in Hispaniâ (*Pavon*). *u. (v. s. in Herb Banks. et Lamb.)*

Radix

Radix granulata. *Caules* erecti, palmares v. pedales, teretes, ramosi, multiflori, pilis viscidis instructi. *Folia* radicalia reniformia, obtusè crenata, utrinque pilosa, longè petiolata: petiolis villis viscidis confertè tectis; caulina omnia sessilia, inferiora inciso-dentata, superiora ovato-oblonga, integra, in axillis bulbos gerentia. *Pedunculi* elongati, uniflori calycesque pube glutinosâ tecti. *Flores* candidi præcedente minores. *Laciniae calycis* triangulari-ovatae, acutae. *Petala* spathulata, triplinervia: nervis flexuosis ramosissimis.

This is undoubtedly the true Linnæan *S. bulbifera*, which is confined to the southern parts of Europe. It is therefore remarkable, that so accurate an observer as Wahlenberg should have described it as a Lapland plant, nearly related to *cernua*, if really specifically distinct from that species, which indeed I am rather inclined to doubt. The figure of *Flora Danica*, quoted by Willdenow and others, belongs evidently to *S. cernua*.

19. *S. cernua*, foliis glabris petiolatis; radicalibus reniformibus inciso-lobatis; caulinis palmatis, laciniis calycinis ovatis obtusis, petalis spathulatis emarginatis, caule simplicissimo subunifloro.

S. cernua. Linn. *Sp. Pl.* 577. *Flor. Dan.* t. 22. (mala.) Gunn. *Norv.* n. 528. t. 9. f. 2. (bona.) Willd. *Sp. Pl.* ii. p. 552. With. *Brit.* 405. Lapeyr. *Pyren. Saxif.* p. 52. Lam. *Encycl.* vi. p. 690. Smith *Brit.* ii. p. 453. Engl. *Bot.* t. 664. (bona.) Persoon *Synop.* i. p. 489. Wahlenb. *Lapp.* 116. Sternb. *Saxif.* p. 18. t. 12. f. 2.

S. foliis palmatis, caule simplici unifloro. Linn. *Fl. Lapp.* 172 t. 2. f. 4. (bona.) Hort. Cliff. 167. *Fl. Suec.* 351. 373.

β. caule

β . caule subramoso paucifloro.

Fl. Dan. t. 390. *S. bulbifera*. *Wahlenb. Lapp.* 116?

Habitat in summis alpibus Lapponicis, Pyrenaic., Helvetic.,
Scotic.; β in Lapponiæ? et Norvegiæ alpibus, nec non
in Sibiriâ (*Pallas*). γ . (v. v. α ; β s. in *Herb. Pallas*.
nunc *Lamb.*)

Radix squamata; squamæ carnosæ e basibus petiolor. fo-
liorum primordialium enatæ. *Caulis* erectus, 4—6-un-
cialis, simplicissimus, flexuosus, foliosus, læviusculus, pi-
lis raris brevibus adpersus. *Folia* radicalia petiolata,
reniformia, glabra, inciso-lobata: lobis ovatis acutis;
caulina petiolata, glabra; inferiora palmata; superiora
indivisa, ovata, ad axillas bulbis parvis aggregatis in-
structa. *Flos* solitarius, terminalis, magnus, campanu-
latus, candidus, nutans. *Pedicellus* brevis, pilis brevi-
bus viscidis, ut et calyx, levitèr adpersus. *Laciniae ca-*
lycinæ ovatæ, obtusæ. *Petala* spathulata, triplinervia:
nervis flexuosis ramosissimis.

20. *S. Sibirica*, foliis hirsutis petiolatis; radicalibus reniformi-
bus palmatis; caulinis digitatis, pedicellis elongatis re-
motis, petalis obovatis: nervis simplicibus, caule filiformi
ramoso.

S. Sibirica. *Linn. Sp. Pl.* 577. *Willd. Sp. Pl. ii.* p. 653.
Lam. Encycl. vi. p. 693. *Persoon Synop.* i. p. 489.
Sternb. Saxif. p. 23. t. 25.

S. foliis reniformibus acutis digitatis, caule ramoso folioso.
Gmel. Sib. iv. p. 162. n. 74.

S. granulata. *Steven. de Saxif. Cauc. in Mem. Mosq.* iv.
p. 77. n. 3? (exclus. synonym.) *Marsch. Fl. Taur. Cauc.* i.
p. 315? (exclus. synonym.)

S. grandiflora. *Sternb. Saxif. t.* 12. f. 4?

S. cymbalaria. *Marsch. à Bieb. Suppl. Fl. Taur. Cauc. p. 292?*
(exclus. synonym. *Willd.*)

Habitat in Sibiria (Gmelin, Pallas), in alpium Caucasica-
rum saxosis præruptis? *Steven, Marschall à Bieberstein.*
4. (v. s. in *Herb. Pallas. nunc Lamb.*)

Radix squamata, fibras numerosas emittens, rudimentis fo-
liorum emarcidorum supernè instructa. *Caules* filifor-
mes, graciles, 4—5-pollicares, ramosi, adscendentes,
foliosi, villis viscidis levitè instructi. *Folia* radicalia
longè petiolata reniformia, lobato-palmata: lobis ovatis
acutis, utrinque hirsuta; caulina digitata, inferiora pe-
tiolata, superiora sessilia. *Petioles* graciles, omnes villosi.
Pedicelli remoti, elongati, capillares, uniflori, calycesque
levitè pubescentes. *Lacinia calycina* ovata, obtusius-
culæ. *Petala* obovata, alba, triplinervia: nervis recti-
usculis, simplicibus.

The above description was taken from specimens in the Pal-
lasian Herbarium, in the possession of A. B. Lambert, Esq.
Sternb. t. 25. corresponds exactly with these specimens; but the
leaves of the latter are more deeply lobed than represented in
the figure. The *S. grandiflora* *Sternb. t. 12. f. 4.*, which is the
granulata of Steven, and the *S. cymbalaria* of Marschall's *Flora*
Taurica, I am inclined to think belongs also to this plant; but
having never seen specimens of it, I am unable to decide. The
roots of this section, whether scaly or fibrous, scarcely afford any
specific character, as they have all a tendency to become scaly.

21. *S. nudicaulis*, foliis reniformibus palmatis glabris, floribus
paniculatis, laciniis calycinis acutis, scapo nudo.

Habitat ad oras occidentales Americæ borealis. *David Nel-*
son. 4. (v. s. in *Herb. Banks.*)

Radix

Radix fibrosa. *Scapi* erecti, nudi, 4—5-pollicares, teretes, glabriusculi. *Folia* radicalia reniformia, petiolata petiolis glabris, lobato-digitata, utrinque glabra: lobis ovatis mucronatis. *Flores* paniculati, magnitudine *S. rivularis*, albi. *Pedicelli* calycesque pilis glandulosis levitèr obsiti. *Laciniae calycinae* triangulari-ovatae, acutae. *Petala* parva, obovata, calyce longiora, triplinervia: nervis rectiusculis, simplicibus. *Filamenta* gracilia stylos æquantia.

22. *S. bracteata*, foliis radicalibus caulinisque longè petiolatis reniformibus inciso-lobatis, floribus congesto-corymbosis bracteatis.

Habitat in Sibiria orientali. *D. Merk.* 4. (v. s. in *Herb. Pallas.* nunc *Lamb.*)

Planta caespitosa. *Radix* fibrosa. *Caules* adscendentes, flexuosi, foliosi, teretes, ramosi, villis viscidis tecti, 3—5-unciales. *Folia* radicalia reniformia, lobato-crenata: lobis obtusis latis, utrinque nudiuscula, longè petiolata; caulina longè petiolata inciso-lobata. *Petioli* basi dilatati villis longis tecti. *Flores* congesto-corymbosi, bracteati, albi, illis *S. cernuae* paulò majores. *Bracteae* numerosae, latissimae, indivisae. *Pedicelli* calycesque pilis glandulosis suppediti. *Laciniae calycinae* latè ovatae, obtusae, obscurè trinerves. *Petala* obovata, alba, calyce paulo longiora, triplinervia: nervis simplicibus, rectiusculis.

23. *S. rivularis*, caule debili simplicissimo, foliis reniformibus longè petiolatis glabris, floribus subternis sessilibus bracteatis.

S. rivularis. *Linn. Sp. Pl.* 577. *Fl. Lapp. n.* 174. *t.* 2. *f.* 7. (bona.) *Fl. Dan.* 118. *Gunn. Norv. n.* 479. *Gmel. Sib.* iv. p. 170. *Willd. Sp. Pl.* ii. p. 652. *Lam. Encycl.* vi. p. 690.

Smith Brit. ii. p. 454. *Engl. Bot.* t. 2275. (*optima*.)

Wahlenb. Lapp. p. 117. *Pursh Fl. Amer. Septent.* i. p. 312.

Sternb. Saxif. p. 19. t. 12. f. 3.

Habitat in Europæ summis alpibus, nempe in Lapponiâ (*Linn.*, *Wahlenberg*), in Norvegiâ (*Gunner*), in Sibiriâ (*Gmelin*), in cacumine alpis Ben Lawers dicti Scotiæ (*Dickson*, *G. Don*). ☉. (v. v.)

Planta annua, lætè virens, debilis. *Radix* fibrosa. *Caules* adscendentes, gracillimi, bipollicares, oligophylli, supernè villis viscidis instructi. *Folia* omnia reniformia, longè petiolata, utrinque petiolisque glabra, 5—6-lobata: lobis ovato-rotundatis obtusissimis. *Flores* terminales, subterni, sessiles, parvi, albi, bracteati. *Bracteæ* subovatae, obtusae, trifidae vel indivisae, sessiles, ad basin florum insidentes et illos æquantes. *Laciniae calycinae* ovatae, obtusissimae, rectae, conniventes. *Petala* ovalia, obtusa, triplinervia, subdistantia, calycem parùm superantia. *Stamina* petalis breviora.

24. *S. nutans*, caule unifolio, racemo nutante paucifloro, laciniiis calycinis lanceolatis acutis.

Habitat ad oras occidentales Americæ septentrionalis insulam Unalaska dictam. *David Nelson.* 2. (v. s. in *Herb. Banks.*)

Planta cæspitosa. *Radix* fibrosa, rudimentis foliorum emarcidiorum suprà tecta. *Caules* erecti, 3—4-unciales, teretes, parcè pubescentes, basi decumbentes, medio geniculati, folio unico instructi. *Folia* radicalia longè petiolata, reniformia, grossè inciso-dentata, utrinque pilis rigidis brevibus adspersa: petiolis hirsutis, latissimè membranaceo-dilatatis; caulium solitarium, petiolatum, conforme.

forme. *Flores* racemosi, candidi, magnitudine *S. bulbiferæ*. *Racemus* nutans, 4—5-florus. *Pedicelli* breves calycesque pilis glanduliferis confertè obsiti. *Lacinia calycinæ* lanceolata, acutæ, sub oculis armatis trinerves. *Petala* obovata, triplinervia : nervis flexuosis, ramosissimis.

S. orientalis, foliis radicalibus rotundatis ; caulinis cuneatis acutè grossèque dentatis, laciniis calycinis ovatis acutis, petalis ovalibus : nervis simplicibus.

S. orientalis. Jacq. Obs. ii. p. 9. t. 34. (optima.) Willd. Sp. Pl. ii. p. 658. (exclus. synonym. Tournef.) Lam. Encycl. vi. p. 700. Persoon Synop. i. p. 489. Steven de Saxif. Cauc. in Mem. Mosq. iv. p. 78.

S. reticulata. Sternb. Saxif. p. 21. t. 13. *S. paradoxa*. ejusd. p. 22. t. 14?

Habitat in Oriente. ☉. (v. s. in Herb. Banks. et Lamb.)

Planta annua. *Radix* gracilis, fibrosa. *Caules* erectiusculi, ramosi, flexuosi, læviusculi, basi decumbentes, foliosi. *Folia* radicalia rotundata, longè petiolata, basi nunquam cordata, grossè æqualitèr dentata : dentibus magnis ovatis, acutis, utrinque glabra, lucida, venis nigrescentibus reticulata ; caulina cuneata, petiolata, basi acuta, apice acutè 5-loba ; floralia subopposita, lanceolata, acuta, integerrima, vix petiolata. *Petioles* graciles, filiformes, parcè glandulosi. *Pedunculi* longissimi, capillares, uniflori, calycesque pilis brevissimis glandulosis levitèr adpersi. *Lacinia calycinæ* brevè ovata, acutæ, obscure trinerves. *Petala* ovalia, sessilia, aurea, calyce duplò longiora, triplinervia : nervis simplicibus rectiusculis.

26. *S. cymbalaria*, foliis inferioribus reniformibus longissimè petiolatis obtusissimè 5-lobis; summis trilobis indivisisve, laciniis calycinis oblongis obtusis, petalis ovatis acutis: nervis ramosis.

S. cymbalaria. Linn. *Sp. Pl.* 579. *Smith Prod. Fl. Græc.* i. p. 277. *Fl. Græc. Icon. ined.* 378.

S. hederacea. Marsch. à Bieberst. *Fl. Taur. Cauc.* i. p. 317. (exclus. synonym.)

S. exigua foliis cymbalariæ. *Buxb. Cent.* ii. p. 40. t. 45. f. 2. (*mala.*)

Geum orientale rotundifolium supinum; flore aureo. *Tournef. Cor.* 18.

Habitat in Oriente (*Tournefort, Buxbaum*), in Parnasso, Delphi, aliisque Græciæ montibus (*Sibthorp*). ☉. (v. s. in *Herb. Banks.*)

Planta annua, debilis. *Radix* tenuissimè fibrosa. *Caules* numerosi, foliosi, gracillimi, ramosissimi, flexuosi, flaccidi, pilis glanduliferis lævissimè adpersi. *Folia* inferiora longissimè petiolata (petiolis capillaribus), reniformia, subpeltata, leviter 5-loba: lobis rotundatis, utrinque glaberrima, suprà nitida et venis tenuissimis reticulata; summa brevè petiolata, triloba v. indivisa. *Pedicelli* longissimi, capillares, oppositifolii, uniflori, calycesque læviusculi. *Flores* parvi, aurei. *Lacinie calycis* oblongæ, obtusæ, reflexæ, conspicuè trinerves. *Petala* ovata, acuta, trinervia (nervis ramosis flexuosis), basi rotundata, brevissimè unguiculata, bipunctata.

27. *S. hederacea*, foliis inferioribus acutè trilobis; summis ovatis integris, laciniis calycinis ovatis acutis, petalis subrotundis unguiculatis.

S. hede-

S. hederacea. Linn. *Sp. Pl.* 579. Willd. *Sp. Pl.* ii. p. 658.
Persoon Synop. i. p. 489. *Smith Prodr. Fl. Græc.* i. p. 278.
Fl. Græc. Icon. ined. 379.

S. cretica annua minima, hederaceo folio. Tournef. *Cor.* 18.
Habitat in Cretâ (Tournefort), in rupibus humidis umbrosis
Cretæ et Cypri (Sibthorp). ☉. (v. s. in Herb. Banks.)

Planta exigua, annua. *Radix* capillaceo-fibrosa. *Caules*
plures, filiformes, flaccidi, ramosissimi, pilis brevissimis
glanduliferis levitèr adpersi. *Folia* inferiora subovata,
breviùs petiolata, triloba: lobis brevè ovatis, acutis, utrin-
que glaberrima, nitida, venis tenuissimis reticulata; sum-
ma integra, ovata, acuta. *Pedicelli* elongati, capillares,
uniflori, parcè glandulosi. *Flores* parvi, albi. *Lacinie*
calycinæ erectæ, brevè ovatæ, acutæ, trinerves. *Petala*
subrotunda, unguiculata, trinervia: nervis ramosis, flexu-
osis. *Capsula* semi-infera.

Much confusion has hitherto prevailed respecting the three preceding species. Sir James Edward Smith appears to be the only botanist who has examined, or even understood, the *S. cymbalaria* and *hederacea* of Linnæus; the characters of these he has very considerably amended in his admirable *Prodromus Floræ Græcæ*. The *S. orientalis* of Jacquin and Willdenow, given by him as a synonym of *S. cymbalaria*, is a very distinct plant. All three have a general affinity together; but their characters are abundantly distinct. The above descriptions of *S. cymbalaria* and *hederacea* were taken from authentic specimens preserved in the Banksian Herbarium, and were collected by the late Dr. Sibthorp during his travels in Græce*.

* Specimens of *Saxifraga hederacea*, gathered lately in Crete by Dr. Sieber of Prague, are now in the Lambertian Herbarium.

§. *Foliis indivisis.*

28. *S. Hirculus*, foliis lanceolatis obtusis nudis, laciniis calycinis lanceolatis obtusis, petalis spathulatis multinervibus.

S. Hirculus. Linn. *Sp. Pl.* 576. *Fl. Dan.* t. 200. *Huds. Angl.* 181. *Hoffm. Germ.* 144. *Roth. Germ.* i. 184. ii. 468. *With. Brit.* 404. *Willd. Sp. Pl.* ii. p. 649. *Lam. Encycl.* vi. p. 686. *Smith Brit.* ii. p. 451. *Engl. Bot.* t. 1009. (*optima.*) *Persoon Synop.* i. p. 489. *Sternb. Saxif.* p. 29.

S. flava. Lam. *Fl. Franc.* iii. p. 529.

S. foliis caulinis lanceolatis alternis nudis inermibus, caule erecto. Linn. *Suec.* ii. n. 370. *Gmelin Sib.* iv. p. 165. t. 65. f. 3. (*bona.*)

S. petalis latissimis luteis lineatis. Hall. *Helv.* 399. t. 8.

Sedum palustre nardi celticæ foliis, flore luteo. Moris. *Hist.* iii. p. 477. § 12. t. 8. f. 5.

Sedum angustifolium autumnale, flore luteo guttato. *Ibid.* f. 6.

Geum angustifolium autumnale, flore luteo guttato. Dill. in *Raii Synop.* 355.

Chamæcistus friscus, foliis nardi celticæ. Bauh. *Pin.* 466.

Chamæcistus friscus. Ger. *Em.* 1284.

β . caule pedali multifloro, pedunculis villosissimis.

Habitat α in Suecia, Helvetiæ, Lapponiæ, Sibiria, Germaniæ et Angliæ paludibus turfosis; β in Sibiriâ orientali (*Merk*). γ . (α v. v. c. β v. s. in *Herb. Pallas. nunc Lamb.*)

Planta cæspitosa, pulchra, lætè-virens, glabra, surculosa.

Radix fibris longis nigris composita. *Surculi* numerosi, foliosi, procumbentes, glaberrimi. *Caules* erecti, 4—6-unciales rarissimè pedales, foliosi, glabri, pauci rariùs multiflori.

multiflori. *Folia* alterna, lanceolata, obtusa, integerrima, utrinque glabra, basi in petiolum angustata. *Pedunculi* longi, stricti, uniflori, villis fuscis glutinosis confertè tecti. *Flores* magni, speciosi, aurei. *Laciniae calycinae* lanceolatae, obtusae, ciliatae, conspicuè 5-nerves: nervis simplicibus, marginalibus parallelis, approximatis, medio a cæteris remoto. *Petala* spathulata, aurea, multinervia, apice retusa, punctis croceis instructa, basi brevissimè unguiculata, intus ad basin lacunâ oblongâ nectariferâ ex rimâ bivalvi apicibus acutis munita: nervis rectis, simplicibus, basi junctis. *Filamenta* lutea. *Antheræ* croceae.

29. *S. myosotifolia*, flagellis nullis, foliis ovatis acutis muticis setosis, caule nudiusculo trifloro, laciniis calycinis latè ovatis, petalis subrotundis unguiculatis.

Habitat in Sibiriâ. *Pallas*. 4. (v. s. in *Herb. Pallas*. nunc Lamb.)

Planta patens, cæspitosa. *Radix* lignosa fibris numerosis instructa. *Surculi* brevissimi, erecti, conferti. *Caules* subnudi, erecti, biunciales, fragiles, 2—3-flori, pilis setosis undique obsiti. *Folia* conferta, patentia, ovata, acuta, mutica, pilis setosis ad marginem ciliata et utrinque adpersa, basi in petiolum brevem angustata. *Pedunculi* elongati, uniflori, calycesque pilis glanduliferis crebrè tecti. *Flores* ochroleuci. *Laciniae calycis* latè ovatae, acutae, muticae. *Petala* subrotunda, unguiculata, 5-nervia; nervis simplicibus. *Filamenta* compressa, lutescentia, longitudine petalorum. *Antheræ* flavæ. *Styli* breves, crassi.

30. *S. flagellaris*, flagellis axillaribus capillaribus, foliis obovato-spathulatis aristatis cartilagineo-ciliatis, laciniis calycinis

nis lanceolatis, petalis obovatis sessilibus, caule folioso
1—3-floro.

S. flagellaris. Sternb. *Saxif.* p. 25. t. 6. (media.) Steven
de *Saxif. Cauc.* in *Mem. Mosq.* iv. p. 79. Marsch. à
Bieberst. Suppl. Fl. Taur. Cauc. p. 291.

S. setigera. Pursh *Amer. Septent.* i. p. 312.

S. aspera. Marsch. à *Bieberst. Fl. Taur. Cauc.* i. p. 314.
(exclus. synonym.)

Habitat in alpibus Caucasiacis (*Adams*), ad Caput Newnham
dictum ad oras occidentales Americæ borealis (*David
Nelson*), in Insulâ Melville dictâ in sinu maris Grœn-
landici, Baffin's Bay Anglicè dicto (*Sabine, Fisher*).
4. (v. s.)

Planta cæspitosa, flagellifera. *Flagelli* e axillis foliorum enati,
longissimi, capillares, nudi, patentes, ad apices comâ
parvâ foliatâ instructi. *Caules* erecti, simplicissimi, ses-
qui- bi-pollicaresve, foliosi, 1—3-flori, pilis glandulosis
instructi. *Folia* radicalia, conferta, patentia, impetio-
lata, spathulata, utrinque nuda, margine spinulis carti-
lagineis ciliata, apice calloso-aristata; caulina alterna,
obovata. *Pedicelli* brevissimi, uniflori, calycesque pube
glutinosâ tecti. *Flores* aurei magnitudine *S. Hirculi*. *La-
cinia calycinæ* lanceolata, acutæ, extus setosæ. *Petala*
sessilia, obovata, multinervia: nervis parallelis apice di-
chotomis.

This singular species was first discovered by Mr. David Nel-
son, in Captain Cook's third voyage, at Cape Newnham on the
north-west coast of America, from whence the specimens in the
Banksian Herbarium were brought. It has since been found on
the Caucasian alps; and in the late polar expedition it has been
observed in great plenty on the newly-discovered island named
Melville

Melville Island. For specimens from thence I am indebted to the kindness of Joseph Sabine, Esq. Pursh is wrong in stating the flowers to be small and white. The *S. myosotifolia*, which agrees with it in general habit, has numerous erect, short and leafy shoots. Leaves ovate, somewhat acute, awnless, ciliated, and slightly clothed on both sides with stiff bristly hairs. The stem is almost leafless. Peduncles long, erect. The *laciniæ* of the calyx short, triangular-ovate. Petals round, cream-coloured, furnished with a claw, and five straight, simple nerves. The flowers are smaller, and the plant is wholly destitute of the naked filiform *sarmenta* so remarkable in *S. flagellaris*.

31. *S. aizoides*, foliis linearibus mucronatis glabris spinuloso-ciliatis, laciniis calycinis latè ovatis, petalis lanceolato-oblongis trinervibus.

S. aizoides. Linn. *Sp. Pl.* 576. *With. Brit.* 404. *Smith Brit.* ii. p. 452. *Engl. Bot.* t. 39. (*optima*.) *Lam. Encycl.* vi. p. 687. *Sternb. Saxif.* p. 25. t. 8. f. 1. *Lam. et Decand. Fl. Franc.* iv. p. 377. *Wahlenb. Lapp.* p. 115. *ejusd. Carpath.* 117.

S. autumnalis. Linn. *Sp. Pl.* 575. *Huds. Angl.* 180. *Mill. Dict.* n. 10. *Fl. Dan.* t. 72. *Lightf. Scot.* i. p. 222. *Scop. Carn.* i. 293. t. 14. *Willd. Sp. Pl.* ii. p. 650.

S. foliis linearibus sparsis glabris. *Fl. Suec.* 357. 371.

S. foliis subulatis sparsis. *Fl. Lapp.* 178.

S. foliorum margine ciliari, floribus luteis maculosis. *Hall. Helv.* 399.

S. angustifolia autumnalis, flore luteo guttato, foliis florum magis acuminatis. *Breyn. Cent.* 106. t. 48.

S. alpina angustifolia, flore luteo guttato. *Raii Synop.* 353.

Sedum alpinum, flore pallido. *Bauh. Pin.* 284. *Moris. Hist.* iii. p. 477. s. 12. t. 6. f. 3.

Sedum minus IV. *Clus. Hist.* ii. p. 60.

Sedum alpinum primum. *Clus. Pann.* 485. *Ger. Em.* 516.

Habitat in alpium Helvetiæ, Lapponiæ, Styriæ, Angliæ
et Scotiæ rupibus et petrosis humidis copiosissimè.
4. (v. v. sp.)

Planta virens, in cæspitibus planis vegetans. *Radix* fibrosa.
Surculi numerosi, procumbentes, densè foliosi. *Caules*
erecti 2- rariùs 3-pollicares, foliosi, teretes, multiflori,
pube viscidâ tecti. *Folia* alterna, linearia, patentia,
utrinque glaberrima, lucida, apice cartilagineo-mucro-
nata margine spinuloso-ciliata. *Pedunculi* breves, uni-
flori, pube glutinosâ vestiti, in æstivatione decurvati.
Flores subracemosi, flavi. *Lacinia calycina* latè ovata,
obtusæ, margine membranâ tenui sæpiùs ad apicem
parùm laceratâ cinctæ. *Petala* patentia, lanceolato-ob-
longa, calycem superantia, punctis croceis instructa, tri-
plinervia: nervis simplicibus rectis.

I have followed Wahlenberg in uniting the *S. aizoides* and
autumnalis of Linnæus. The Lapland and Swedish plant differs
in no respect from ours, and the leaves are but rarely naked at
their margins. We sometimes meet however with such in seed-
ling plants and others before the flowering season.

32. *S. bronchialis*, foliis confertis lineari-subulatis triquetris mu-
cronatis spinulis cartilagineis ciliatis, laciniis calycinis
ovatis, petalis oblongis, caule oligophyllo multifloro.

S. bronchialis. *Linn. Sp. Pl.* 572. *Willd. Sp. Pl.* ii. p. 644.
Lam. Encycl. vi. p. 679.

S. foliis imbricatis subulatis ciliatis spinosis, caule subnudo
multifloro. *Gmel. Sib.* iv. p. 164. t. 65. f. 2. (*bona.*)

β. *lenensis*,

β. lenensis, surculis brevioribus, foliis longioribus patentibus longè mucronatis, paniculâ majore patente fastigiâtâ.

Habitat α in Sibirîâ (*Gmelin*), in Sibirîâ orientali (*Merk*), ad oras occidentales Americæ borealis (*Nelson*); *β* ad flumen Sibiricum Lenam (*Billings*). *h.* (v. s. in Herb. Banks. et Lamb.)

Planta suffrutescens. *Radix* lignosa, ramosa, fibris pluribus longis instructa. *Surculi* plures, erecti, lignosi, ramosi, crebrè foliosi, basi rudimentis foliorum emarcidorum tecti. *Caules* digitales rariùs palmares, flexuosi, rigidi, fragiles, oligophylli, glabri. *Folia* crebra, imbricata, lineari-subulata, triquetra, rigida, glabra, margine spinulis cartilagineis albis ciliata, apice mucrone calloso instructa; caulina pauca, parva, adpressa, linearia, longe-mucronata versus apicem caulis sensim minora. *Panicula* parva, multiflora. *Pedicelli* dichotomi calycesque levissimè glandulosi. *Flores* parvi, ochroleuci. *Laciniae calycis* breves, latè ovatæ, mucronulatæ. *Petala* oblonga, sessilia, punctis numerosis minutis croceis instructa, conspicuè triplinervia: nervis simplicibus. *Filamenta* gracilia, lutea. *Antheræ* croceæ.

33. *S. tenella*, foliis confertis lineari-subulatis planis pungentibus ciliatis, caule gracili oligophyllo paucifloro, laciniis calycinis lineari-lanceolatis, petalis obovatis.

S. tenella. *Wulfen in Jacq. Collect.* iii. p. 144. t. 17. (*bona.*) *Willd. Sp. Pl.* ii. p. 643. *Lam. Encycl.* vi. p. 678. *Persoon Synop.* i. p. 488. *Sternb. Saxif.* p. 30.

S. nitida. *ejusd.* t. 10. f. 4?

Habitat in Carinthiæ alpibus. *Wulfen.* 4.

Planta suffrutescens? cæspitosa. *Radix* fibrosa. *Surculi* numerosi,

numerosi, basi decumbentes et rudimentis foliorum emar-
 cidorum tecti. *Caules* plures, erecti, sesqui- v. bi-unciales,
 gracillimi, læves, oligophylli, pauciflori. *Folia* conferta,
 imbricata, lineari-subulata, saturatè viridia, suprà plana,
 subtùs carinata, utrinque glabra, nitida, apice spinulâ cor-
 neâ aciculari terminata, margine ciliata; caulina adperssa,
 sparsè remota, parva, plana, aristata. *Pedunculi* terni,
 longi, capillares, uniflori, ferè in racemulum dispositi,
 calycesque pilis brevissimis glanduliferis levitèr suppediti.
Lacinia calycis lineari-lanceolata, aristata. *Petala* ob-
 ovata, alba, immaculata, calycem superantia, obscurè tri-
 plinervia. *Filamenta* gracilia, alba. *Antheræ* flavæ.

Præcedenti affinis; sed triplò minor et gracilior, atque
 notis indicatis diversa. *S. nitida* Clariss. Sternbergi vix
 ullo dubio huic pertinet, figura ejus quæ ad siccam
 facta est omninò mala, et hinc colorem luteum floribus
 attribuet.

34. *S. brachypoda*, foliis linearibus planis pungentibus trinervi-
 bus margine spinulosis, flore terminali solitario brevè-
 pedunculato, petalis obovatis.

Habitat in Nepaliæ alpibus. *Wallich*. 4. (v. s. in *Herb.*
Lamb.)

Radix fibrosa. *Caules* plures, adscendentes, simplicissimi,
 foliosi, pilis setosis undique tecti. *Folia* alterna, linearia,
 plana, glabra, trinervia, suprà nitida, subtùs glauca, apice
 spinulâ aciculari terminata, margine spinulis armata, basi
 subamplexicaulia. *Flos* aureus, terminalis, solitarius,
 brevè-pedunculatus, magnitudine *S. asperæ*. *Calyx* et
 pedunculus pilis setosis patentibus glanduliferis confertè
 obsiti: lacinia ovata, mucronata, conspicuè trinerves,
 margine

margine spinulis ciliatæ. *Petala* obovata, calyce longiora, triplinervia : nervis simplicibus rectis. *Stamina* pistillis vix longiora ; *filamenta* flava ; *antheræ* croceæ.

35. *S. juniperina*, caulibus suffruticosis proliferis, foliis interruptè confertissimis subulato-triquetris rigidis pungentibus, floribus spicatis, petalis obovatis.

S. juniperina. *Marsch. à Bieberst. Fl. Taur. Cauc.* i. p. 314.

Ibid. Supplem. p. 291. *Sternb. Saxif.* p. 31. t. 10. (media.)

Steven de Saxif. Cauc. in Mem. Mosq. iv. p. 79.

Habitat in alpibus Caucasiacis (*Pallas*), in Caucasi rupium fissuris, circa portas Caucasicas et ad radices alpis Kaischaur frequens (*Marschall à Bieberstein*). 4. (v. s. in *Herb. Pallas. nunc Lamb.*)

Planta suffrutescens. *Radix* lignosa fibris numerosis crassiusculis instructa. *Caules* numerosi, digitales, erecti, rigidissimi, confertè foliosi, apice prolifero-ramosi, basi rudimentis foliorum emarcidorum vestiti. *Folia* interruptè confertissima, subulata, subtriquetra, rigida, glabra, suprâ planiuscula, bisulcata, subtùs carinâ planiusculâ, apice spinâ aciculari instructa, basi tenuissimè serrulata. *Spica* terminalis, brevis, brevè-pedunculata, 6—10-flora. *Pedicelli* recti, brevissimi, pube glutinosâ densè obsiti. *Bracteæ* lineares, obtusæ, glandulis ciliatæ. *Flores* lutei magnitudine *S. asperæ*. *Lacinia calycis* ovato-oblongæ, mucronatæ, trinerves, ciliatæ. *Petala* obovata, triplinervia, calyce longiora.

36. *S. aspera*, foliis planis lineari-lanceolatis pungentibus spinulis ciliatis, petalis obovatis : nervis ramosis, caule ramoso.

S. aspera. *Linn. Sp. Pl.* 575. *Ger. Prov.* 423. *Jacq. Aust.*

Aust. v. p. 44. t. app. 31. (bona.) *Mill. Dict.* n. 14.
Willd. Sp. Pl. ii. p. 649. *Lapeyr. Pyren. Saxif.* p. 36.
Lam. vi. p. 678. *Persoon Synop.* i. p. 489. *Sternb.*
Saxif. p. 29.

S. foliis simplicibus ciliatis, caule ramoso. *Hall. Helv.* 403.

S. sedi foliis crenatis asperis. *Scheuch. It.* ii. p. 140. t. 20.
 f. 3.

Sedum alpinum, foliis crenatis asperis. *Bauh. Pin.* 284.

Prod. 132. *Gesn. Fasc.* xxii. t. 6. f. 27. (bene.)

Sedum alpinum hispidum ferè spinosum, flore pallido.

Bauh. Hist. iii. p. 695. *Moris. Hist.* iii. p. 479. s. 12.
 t. 10. f. 25.

Sedum minimum alpinum villosum alterum. *Park. Theat.*
 738.

Habitat in alpihus Helveticis et Pyrenaicis. 4. (v. v. c.)

Planta cæsia, hispida, surculosa. *Surculi* elongati, decum-
 bentes, gemmiferi, villosi, rigidi, rubescentes, densè fo-
 liosi. *Caules* erecti, rigidi, fragiles, 2—3-unciales, ra-
 mosi, rubescentes, pauciflori, pilis brevibus hispidulosi.
Folia lineari-lanceolata, plana, utrinque nuda, striata,
 apice mucrone corneo instructa, margine spinulis ciliata.
Pedunculi longiusculi, rigidi, subuniflori, calycesque pilis
 glanduliferis levitè instructi. *Flores* magni, lactei. *La-*
cinia calycina latè ovata, mucronata, 5-nerves, extus
 rugosæ: marginibus membranaceis nudis. *Petala* ob-
 ovata, triplinervia: nervis ramosis flexuosis. *Filamenta*
 lutea. *Antheræ* aureæ.

37. *S. hispidula*, caulibus filiformibus hispidis, foliis ovatis mu-
 cronatis setosis utrinque unidentatis, flore terminali sub-
 sessili, calycibus setosis.

Habitat

Habitat in Nepaliæ alpibus. *Wallich*. 4. (v. s. in Herb. Lamb.)

Planta tenella. *Caules* plures, sesqui- vel bi-unciales, simplicissimi, graciles, filiformes, adscendentes, pilis setosis patentibus undique densè tecti. *Folia* alterna, sessilia, ovata, mucronata, hispida, margine dente parvo aristato utroque instructa. *Flos* luteus, terminalis, solitarius, brevissimè pedicellatus, in æstivatione nutans. *Calyx* setis glanduliferis hispidus: *laciniæ* triangulari-ovatæ, aristatæ. *Petala* parva, suborbiculata, triplinervia: nervis simplicibus rectis. *Stamina* pistillis longiora; *filamenta* gracilia, flava; *antheræ* intensè crocæ. *Styli* apice incurvi.

38. *S. bryoides*, rosulis globosis, foliis imbricatis subulatis mucronatis ciliatis, laciniis calycinis ovatis obtusis, petalis oblongis, caule oligophyllo unifloro.

S. bryoides. *Linn. Sp. Pl.* 572. *Jacq. Misc.* ii. p. 49. t. 5. f. 1. (*optima*.) *Scop. Carn.* n. 497. t. 15. *Willd. Sp. Pl.* ii. p. 643. *Lapeyr. Pyren. Saxif.* p. 35. *Lam. Encycl.* vi. p. 678. *Persoon Synop.* i. p. 488.

S. foliis lanceolatis ciliatis compactis, caule unifloro. *Hall. Helv.* 969.

S. pyrenaica minima lutea musco similis. *Tournef. Inst.* 253.

Sedum muscosum. *Bauh. Hist.* iii. p. 695. *Scheuch. Alp.* 142. t. 21. f. 2.

Sedum alpinum quartum. *Col. Ecphr.* ii. p. 66. t. 67. f. 1. 2.

Habitat in Austriæ, Helvetiæ, Pyrenaic. alpibus. 4. (v. s. in Herb. Banks. et Lamb.)

Planta densè cæspitosa, rosulata. *Radix* sublignosa fibris pluribus instructa. *Rosulæ* foliorum confertæ, globosæ,

cæsiae. *Caules* plures, erecti, sesqui- v. bi-unciales, rigidi, uniflori, foliis aliquot minimis adpressis et pilis glanduliferis instructi. *Folia* densè imbricata, lineari-subulata, subtriangularia, carinata, glabra, suprà concaviuscula, margine ciliis cartilagineis armata: apicibus incurvis mucrone calloso terminatis. *Flos* ochroleucus magnitudine *S. asperæ*. *Calyx* levitè glandulosus: *laciniæ* ovatae, obtusæ, 5-nerves. *Petala* oblonga punctis aureis adpersa, trinervia: nervis parallelis simplicibus. *Filamenta* gracilia. *Antheræ* croceæ.

39. *S. cherlerioides*, rosulis globosis, foliis densè imbricatis spathulatis mucronatis ciliatis, laciniis calycinis semi-ovatis obtusis, petalis obovatis, caule filiformi multifloro.

S. bryoides? *Pallas. Ms.*

Habitat in rupibus Kamtschatkæ. *D. Merk.* 4. (v. s. in *Herb. Pallas. nunc Lamb.*)

Planta in cæspitibus planis et latis vegetans. *Rosulæ* foliorum confertæ, parvæ, globosæ. *Caules* adscendentes, bipollicares, filiformes, graciles, 4—5-flori, foliis paucis minimis ovatis adpressis ciliatis et glandulis sparsim instructi. *Folia* creberrimè imbricata, obovato-spathulata, suprà concava, subtùs convexa, margine ciliata: apicibus inflexis mucronatis. *Fløres* corymbosi, ochroleuci, præcedente multò minores. *Pedicelli* elongati, capillares, uniflori, calycesque glandulis minutis adpersis. *Laciniæ calycinæ* semi-ovatae, obtusæ. *Petala* obovata, calyce duplò longiora, trinervia: nervis simplicibus rectiusculis.

Præcedenti quodammodo accedens, tamen characteres indicati speciem esse distinctissimam monstrant.

Sectio 4.

40. *S. hieracifolia*, foliis petiolatis ellipticis acutis repando-dentatis glabris, pedicellis aggregatis unifloris in spicam dispositis, petalis lanceolatis acutis.
S. hieracifolia. *Waldst. et Kit. Hung.* i. p. 17. t. 18. (*optima*.) *Willd. Sp. Pl.* ii. p. 641. *Lam. Encycl.* vi. p. 674. *Geners. Catal. Scep.* n. 229. *Wahlenb. Carpath.* 119. *Persoon Synop.* i. p. 487.
S. nivalis v. *racemosa*. *Towns. It. Hung.* p. 488. t. 15.
S. rotundifolia. *Geners. Elench. Scep.* n. 372.
Habitat in alpinis Carpathicis. μ . (v. s. in Herb. Banks.)

Radix fibris longissimis crassiusculis simplicibus instructa.
Folia petiolata, patentia, elliptica, acuta, repando-dentata, dentibus remotis mucronulatis, utrinque glabra, pilis articulatis ciliata. *Petioles* dilatati, nervosi, margine membranacei. *Scapus* erectus, palmaris pedalisve, simplicissimus, teres, pilis articulatis glanduliferis undique tectus. *Pedicelli* elongati, uniflori, in fasciculis 4—6-floris aggregati, et per spicam elongatam digesti: fasciculis inferioribus remotis; supremis approximatis. *Bractea* lanceolata, obtusa, ad basin cujusdam fasciculi sita et pedicellorum longitudine. *Calyces* pedicellique pilis brevibus glandulosis tecti: laciniae breves, triangulari-ovatae, acutae. *Petala* ovato-lanceolata, acuta, calyce breviora et angustiora, colore spadiceo-ferrugineo vel lurido. *Filamenta* brevissima. *Antherae* flammeae. *Styli* brevissimi, recurvati.

There is a single specimen of this plant in the Banksian Herbarium from Jacquin, and sent by him under the name of *S. nivalis*, a plant with which the Austrian botanists confounded it.

This plant has never, I believe, been introduced into our gardens; the *Saxifraga pensylvanica* β . being often kept under the name.

41. *S. pensylvanica*, foliis impetiolatis lanceolatis sinuato-denticulatis utrinque pilosissimis, scapo ramoso, floribus corymboso-capitatis, petalis linearibus calyce longioribus.

S. pensylvanica. Linn. *Sp. Pl.* 571. (exclus. synonym. *Pluken.*) Mill. *Dict.* n. 8. Willd. *Sp. Pl.* ii. p. 640. (exclus. synonym. *Plukenetii.*) Lam. *Encycl.* vi. p. 674. Persoon *Synop.* i. p. 487. Hort. Kew. iii. p. 65. Pursh *Amer. Septent.* i. p. 311.

S. foliis radicalibus denticulatis, caule subnudo piloso ramoso, floribus confertis capitatis. Gron. *Virg.* 49.

S. noveboracensis. Cold. *Noveb.* 105.

S. pensylvanica, floribus muscosis racemosis. Dill. *Elth.* 337. t. 253. f. 328. (*bona.*)

β . minor, foliis lævioribus.

Habitat α in Noveboracensis et Virginiae pratis humidis: β in hortis colitur. γ . (v. v. c.)

Radix fibris longissimis crassis simplicibus instructa. *Folia* numerosa, impetiolata, latè lanceolata, acuta, sinuato-denticulata, utrinque pilis articulatis tecta, sæpiùs palmaria, basi angustata. *Scapus* erectus, sesqui- v. bi-pedalis, teres, paniculatim ramosus, pilis articulatis patentibus viscidis undique densè tectus. *Rami* alterni divisi; inferiores remoti; superiores approximato-conferti. *Flores* pedicellati, in corymbis densis semiglobosis dispositi. *Pedicelli* elongati, uniflori, calycesque pilis glanduliferis densissimè obsiti. *Laciniae calycis* ovatae, acutiusculae, obscure trinerves. *Petala* linearia, obtusa, uninervia, squalido-alba, calyce duplò longiora.

42. *S. semi-*

42. *S. semipubescens*, foliis impetiolatis oblongo-ovalibus obtusis glaberrimis denticulatis, scapo ramoso, floribus corymboso-capitatis, petalis ovalibus calycem subæquantibus.

S. semipubescens. Sweet. *Hort. Suburb.* 97.

Micranthes semipubescens. Haworth *Synop. Succul. append.* 321.

S. marilandica. Hortor.

Habitat in Americâ boreali? 2. (v. v. c.)

Radix fibris longissimis simplicibus crassis instructa. *Folia* impetiolata, patentia, oblongo-ovalia, obtusa, crassiuscula, avenia, suprâ nitida, margine denticulata. *Scapus* erectus, pedalis et ultra, ramosus, pilis articulatis glanduliferis levitèr tectus. *Rami* alterni; inferiores remoti, divisi; superiores simplices, conferti. *Flores* pedicellati in corymbis densis semiglobosis dispositi. *Pedicelli* elongati, uniflori, calycesque pilis glanduliferis instructi. *Lacinia calycinæ* triangulari-ovatae, acutæ, sub microscopum trinerves. *Petala* ovalia, obscure trinervia, flavida, calycem subæquantia.

This plant has been cultivated for many years in our gardens under the name of *S. marilandica*; hence it is supposed to be native of North America, which is very probable, from its affinity with *S. pensylvanica*. I cannot however find it mentioned in any of the books which treat of the plants of that country; and it does not appear to have been even taken up by any one, until Mr. Haworth, the author of *Miscellanea Naturalia* and *Synopsis of Succulent Plants*, noticed it in his appendix to the latter work. No doubt can be entertained of its being sufficiently distinct from *S. pensylvanica*, to which it is nearest allied. It is distinguished from it by its oblong-oval, obtuse, and quite smooth leaves, the margins of which are simply denticulated,
not

not sinuated as in *S. pensylvanica* ; by the stem being much less hairy ; and lastly, by its oval petals, about equal the length of the calyx.

43. *S. virginensis*, foliis ovatis acutis dentatis petiolatis, petalis ovalibus : nervis ramosis, scapo paniculatim ramoso.

S. virginensis. Mich. Amer. Bor. i. p. 269. Lam. Encycl. vi. p. 675. Pursh Amer. Sept. i. p. 310.

S. pilosa. Herb. Banks.

S. vernalis. Willd. Hort. Berol. p. 43. t. 43. ejusd. Enum. p. 459. Sternb. Saxif. p. 8.

S. elongata. ejusd. p. 9. t. 4.

S. foliis cordatis ovalibus crenatis, corollâ albâ, caule hirsuto aphylo. Gron. Virg. 160.

Sanicula virginiana alba, folio oblongo mucronato. Pluk. Alm. 331. t. 39. f. 1. et t. 222. f. 5.

Habitat in Virginiae, Carolinae et Novæ-Angliæ montibus, inque Canada. u. (v. v. c. et s. sp.)

Planta pulchella, subcæspitosa. Folia patentia, petiolata, ovata, acuta, dentata, utrinque pilis adspersa. Scapus erectus, palmaris, paniculatim ramosus, pilis mollibus glanduliferis undique tectus, rariùs foliis 1—2 munitus. Rami alterni, recti ; inferiores elongati ; omnes subæquales. Flores parvi, albi. Pedicelli numerosi, graciles, uniflori, pube viscidâ suppediti. Laciniæ calycinæ breves, ovatæ, obsolete 5-nerves : nervis ramosis. Petala ovalia calyce longiora, trinervia : nervis flexuosis, ramosis.

This plant appears to hold the same place among American vegetation as the *S. nivalis* amidst European. This latter plant is not, I am of opinion, to be found in America. I am therefore inclined to think Pursh's *nivalis* belongs to the present species ;

cies; and what convinces me of their being the same is, that there are several specimens in his Canadian Herbarium (now in Mr. Lambert's possession) of *S. virginiensis* under the name of *S. nivalis*.

44. *S. nivalis*, foliis subrotundo-obovatis undulato-crenatis subsessilibus, scapo simplici, floribus congesto-capitatis, petalis subrotundis unguiculatis: nervis simplicibus.

S. nivalis. *Linn. Sp. Pl.* 573. (exclus. synonym. *Gron. Virg.*) *Huds. Angl.* 180. *Lightf. Scot.* i. p. 221. cum fig. (mala.) *Willd. Sp. Pl.* ii. p. 645. *With. Brit.* 403. *Lam. Encycl.* vi. p. 683. *Smith Brit.* ii. p. 449. *Engl. Bot.* t. 440. (bona.) *Persoon Synop.* i. p. 488. *Sternb. Saxif.* p. 12. *Wahlenb. Lapp.* 113.

S. foliis subovatis crenatis, caule nudo, floribus capitatis. *Linn. Suec.* 354. 368.

S. caule nudo simplici, foliis elliptico-subrotundis crenatis, floribus capitatis. *Linn. Suec.* 176. t. 2. f. 5. 6. (mala.)

S. foliis oblongo-rotundis dentatis, floribus compactis. *Raii Angl.* iii. p. 354. t. 16. f. 1.

Sempervivum minus dentatum. *Mart. Spitzb.* 43. t. F. f. A. *Sedum III.* *Oed. Dan.* t. 28. (pessima.)

Habitat in summis alpibus Lapponiæ, Scotiæ, Spitzbergens. et Angliæ borealis. 4. (v. v. sp.)

Planta subcæspitosa. Folia subrotundo-obovata, undulato-crenata, subsessilia, suprâ glabra, subtùs villosa, humi patentia. *Scapus* erectus, 3-uncialis, simplex, villis viscidis confertè tectus. *Flores* congestè capitati, bracteati. *Bracteæ* lanceolatae, acutæ, ciliatæ. *Pedicelli* breves calycesque pube viscidâ obsiti. *Lacinia calycis* triangulares obscure trinerves. *Petala* subrotunda, unguiculata, triplinervia:

plinervia: nervis simplicibus, primùm candida demùm rubescentia, calycem excedentia. *Filamenta* brevissima, alba postea rubescentia.

45. *S. longiscapa*, foliis ovatis serratis longè petiolatis, thyrsos ovato, laciniis calycinis ovatis acutis.

Habitat in Sibiriâ. *Pallas* 4. (v. s. in *Herb. Pallas. nunc Lamb.*)

Radix fibrosa. *Folia* ovata, subacuta, serrata, longè petiolata, plana, utrinque hirsuta. *Scapus* erectus, palmaris, filiformis, teres, simplicissimus, pilis patentibus glanduliferis densè tectus. *Flores* thyrsoides: *thyrsos* ovato, denso. *Pedicelli* brevissimi, calycesque pube brevi vestiti. *Laciniae calycinae* ovatae, acutae, obscure trinerves. *Petala* parva, ovata, alba, vix calyce longiora. *Filamenta* brevissima, alba. *Antherae* luteae.

Præcedenti arctè affinis, sed satis diversa videtur: foliis ovatis planis serratis longè petiolatis, scapo duplò longiore, floribus thyrsoides, petalis ovatis.

46. *S. davurica*, foliis cuneiformibus longè petiolatis basi attenuatis apice grossè inciso-dentatis, floribus laxè-paniculatis, petalis ellipticis acutis.

S. davurica. *Willd. Sp. Pl.* ii. p. 645. *Lam. Encycl.* vi. p. 684. *Persoon Synop.* i. p. 488. *Sternb. Saxif.* p. 13.

S. punctata. *Pall. It.* iii. app. n. 91. t. P. f. 2. (bona.)

Habitat in summis alpibus Davuriæ prope limitem nivis perpetuæ. *Pallas*. 4. (v. s. in *Herb. Pallas. nunc Lamb.*)

Planta densè cæspitosa. *Radix* fibrosa. *Folia* cuneiformia, longè petiolata, utrinque pubescentia, basi attenuata, integerrima, apice grossè acutèque inciso-dentata. *Petioles* lineares,

lineares, plani, basi latè dilatati. *Scapi* erecti, digitales rariùs palmares, ramosi, pilis glanduliferis parcè obsiti. *Flores* laxè paniculati. *Pedicelli* dichotomi calycesque pube glutinosâ tecti. *Lacinia calycinæ* triangulari-ovatæ, acutæ. *Petala* elliptica, acuta, trinervia, alba, basi punctis binis flavis minutis munita.

There are many fine specimens of this very distinct and little known plant in the Herbarium of the celebrated Pallas, in the possession of A. B. Lambert, Esq. Some botanists have supposed this plant to be nearly allied to *S. cuneifolia*; and a slight variety of this is cultivated in the gardens under the name.

47. *S. pyrolifolia*, foliis ovalibus coriaceis petiolatis glabris nitidis crenatis, floribus paniculatis, petalis linearibus.

Habitat in Kamtschatkâ (*Merk*), in insulâ oræ occidentalis Americæ borealis Unalaska dictâ (*David Nelson*).

¶ (v. s. in Herb. Banks. et Pallas. nunc Lamb.)

Species distinctissima. *Pyrolam* refert. *Radix* lignosa, patens, fusca, fibris instructa, supernè rudimentis foliorum emarcidorum tecta. *Folia* ovalia, coriacea, petiolata, utrinque glabra, suprâ nitida, reticulata, margine crenata. *Petioles* breves, dilatati, margine membranacei, ciliati. *Scapus* adscendens, 5-pollicaris, pilis glanduliferis levitèr adpersus. *Flores* coarctato-paniculati, parvi, albi. *Pedicelli* multiflori calycesque pube brevi glutinosâ obsiti. *Lacinia calycinæ* brevissimæ, obtusæ. *Petala* linearia, calyce longiora. *Filamenta* pallida. *Antheræ* flavæ. *Styli* recti.

Sectio 5.

§. *Foliis indivisis, plerumque rosulatis impetiolatis.*

48. *S. Cotyledon*, foliis planis spathulatis cartilagineo-serratis, calycibus densè glandulosis: laciniis lineari-lanceolatis, petalis oblongo-spathulatis.

S. Cotyledon. *Linn. Sp. Pl.* 570. *Fl. Dan.* t. 241. (*optima*.)
Olaus It. Island. p. 433. *Wahlenb. Lapp.* p. 111. (exclus. *synon. Willd.*)

S. pyramidalis *Lapeyr. Pyren. Saxif.* p. 32. *Sternb. Saxif.* p. 2. t. 2. *Persoon Synops.* i. p. 489.

S. pyramidata. *Mill. Dict.* n. 4.

S. foliis lingulatis radicalibus margine cartilagineo acutè serratis, floribus paniculatis. *Linn. Suec.* 356. 366.

S. foliis radicalibus in orbem positis: serraturis cartilagineis. *Linn. Lapp.* 177. t. 2. f. 2.

S. foliorum orâ cartilagineâ, caule triplicato ramoso, petalis immaculatis. *Hall. Helv.* n. 977.

S. sedi folio flore albo multiflora. *Tournef. Inst.* 252.

Sedum serratum, flore albo, multiflorum. *Dod. Pempt.* 113.
Robert. Icon. 91.

Habitat in alpibus Lapponiæ, Norvegiæ, Islandiæ, Helvetiæ, Pyrenæorum. *u.* (v. v. c.)

Planta densè cæspitosa. *Caules* erecti, pedales, pyramidato-ramosissimi, multiflori, foliosi, pilis glanduliferis confertissimè tecti. *Folia* radicalia in rosulis latè expansis, plana, spathulata, utrinque glabra, suprâ lucida, apice rotundata, mucronata, margine acutè argenteo-serrata; caulina brevia, cuneiformia, patentia. *Pedunculi* multiflori, racemosi, cernui. *Flores* magni, campanulati, candidi. *Calyces* pedicellique pilis glanduliferis densè

densè obtekti: laciniaë lineari-lanceolataë, obtusæ. *Petala* oblongo-spathulata, impunctata, conspicuè triplinervia: nervis simplicibus.

49. *S. lingulata*, foliis lineari-lingulatis canaliculatis tuberculato-crenatis, calycibus densè glandulosis: laciniis semi-ovatis obtusis, petalis ovalibus.
- S. lingulata*. *Bellardi in Act. Taur.* v. p. 226. *ejusd. App. ad Fl. Pedem.* p. 20.
- S. Cotyledon*. *Mill. Dict. n.* 2. *Willd. Sp. Pl.* ii. p. 638. *Lam. Encycl.* vi. p. 670. *Scop. Carn. ed. ii. n.* 489?
- S. longifolia*. *Lapeyr. Pyren. Saxif.* p. 26. t. 11. *Persoon Synop.* i. p. 487. *Lam. et Decand. Fl. Franc.* iv. p. 359. *ejusd. Synop.* p. 317.
- S. montana pyramidata*, folio longiore. *Tournef. Inst.* 253.
- β. media*, foliis brevioribus, caule supernè paniculato.
- S. longifolia β. media*. *Sternb. Saxif. p. i. t. 1. α. (bona.)*
- Cotyledon minor*. *Hort. Eystet. Ord.* v. pl. 10. f. 1.
- Sedum serratum alterum*, foliis longis angustis. *Raii Hist.* ii. p. 1045. n. 1.
- Sanicula montana crenata*, folio longiore, pediculo folioso. *Pluken. Phyt. t.* 222. f. 1.
- γ. crustata*, quadruplò minor; foliis angustissimis margine insignitè crustaceo-porosis, paniculâ pauciflorâ.
- S. longifolia γ. minor*. *Sternb. l. c. t. 1. b.*
- S. crustata*. *Vest. Man. Bot.* p. 656. *Hoppe Bot. Tasch.* 1805. p. 237. t. 1. *Bot. Bibl.* 1805. p. 42. et 369. *Dicks. Hort. Sicc. fasc.* 1.
- δ. subnana*, flabelliformis; cauliculis simplicibus. *Lapeyr. loc. cit.*

Habitat α in summis alpibus Pyrenæorum et Helvetiæ, in alpibus maritimis aliisque locis alpinis Montregalensi-

bus; β in Carniolæ et Carinthiæ alpibus, etiam in montibus Pontebanis; γ in alpibus Helveticis, Carniolicis, Carinthiacis et Pyrenæorum; δ in summis Pyrenæorum.
 4. (α et γ v. s; β v. v. c.)

Planta densè cæspitosa. *Caules* erecti, sesquipedales, flexuosi, à basi pyramidato-ramosissimi, foliosi, pilis glanduliferis confertissimè tecti. *Folia* radicalia in rosulis latè expansis, lineari-lingulata, longissima, rigida, glauca, utrinque glabra, suprà canaliculata, subtùs obtusè carinata, basi ciliata, apice recurvata, margine crustaceo-porosa et tuberculato-crenata; caulina linearia, obtusa, recta, tuberculato-crenata, apice recurvata. *Pedunculi* longi, patentes, multiflori, calycesque pube brevi glandulosâ ferrugineâ densè obsiti. *Flores* plani. *Lacinia calycinæ* breves, semi-ovatae, obtusissimæ. *Petala* ovalia, alba, conspicuè triplinervia (nervis simplicibus), punctis numerosis roseis instructa.

50. *S. Aizoon*, foliis brevibus cuneatis argenteo-serratis, floribus corymbosis, calycibus glabris: laciniis acutis, petalis suborbiculatis.

S. Aizoon. *Murr. Syst. ed. 14. p. 411. Jacq. Austr. v. t. 438. (bona.) Willd. Sp. Pl. ii. p. 639. (exclus. synonym. Fl. Lapp. et Seguiet. Ver.) Lapeyr. Pyren. Saxif. p. 33. Lam. Encycl. vi. p. 672. (exclus. Fl. Lapp. et Seguiet. Ver.) Persoon Synop. i. p. 487. Hort. Kew. ed. 2. 3. p. 65. Sternb. Saxif. p. 3. t. 3. f. a. (media.) (exclus. synonym. Willd. Hort. Berol. Lapeyr. Pyren. p. 33. t. 15. nec non Linn. Suec. et Lapp. et Seguiet. Veron.) Wahlenb. Carpath. p. 116.*

S. paniculata. *Mill. Dict. n. 3.*

S. foliorum orâ cartilagineâ, serratâ, petiolis paucifloris,
petalis

petalis punctatis. *Var. β.* foliis brevioribus et latioribus.
Hall. Helv. 978.

S. foliis subrotundis serratis. *Tournef. Inst.* 252.

Cotyledon minor, foliis subrotundis serratis. *Bauh. Pin.* 285.
Prod. 133. *Raii Hist.* p. 1046. n. 5.

Sedum montanum roseum, serratum, foliis rubrotundis. *Barrel. Icon.* t. 1310.

Sedum serratum album bicorné, brevior folio, marginibus argenteis. *Moris. Hist. s.* 12. t. 9. f. 19.

Cotyledon minus, sedi folio, montanum. *Lob. Adv.* p. 165.

β. retusa, duplò minor; foliis brevioribus retusis.

S. Aizoon β. minor brevifolia. *Sternb. loc. cit.* t. 3. f. *β.*

Habitat in Austriæ, Helvetiæ, Carpathiæ et Pyrenæorum alpibus. *γ.* (v. v. c. *α* et *β.*)

Planta in cæspitibus latis et planis densè vegetans. *Caules* erecti, firmi, simplices, 4—5-unciales, foliosi, nitidi, pilis glanduliferis levitèr adpersi. *Folia* radicalia in rosulis conferta et conniventia, cuneiformia, plana, glauca, margine argenteo-serrata, basi ciliata; caulina obovata, mucronulata, ciliato-serrata, subadpressa. *Flores* corymbosi, sequenti majores, pulcherrimi. *Pedunculi* elongati, subbiflori, glabriusculi. *Calyx* glaberrimus: laciniæ brevè-triangulari-ovatae, acutæ. *Petala* suborbiculata, oculis armatis trinervia (nervis ramosiusculis), lactea, punctis roseis minutis instructa. *Filamenta* brevia, compressa. *Styli* brevissimi.

51. *S. intacta*, foliis linearibus acutis strictis argutè argenteo-serratis, calycibus parçè glandulosis: laciniis obtusis, petalis ovalibus.

S. intacta. *Willd. Hort. Berol.* ii. p. 75. t. 75. (*bona.*) *ejusd. Enum.* p. 459.

S. recta.

- S. recta.* Lapeyr. *Pyren. Saxif.* p. 33. t. 15. (*optima.*)
S. Cotyledon. Marsch. à Bieberst. *Fl. Taur. Cauc.* i. p. 313.
 (exclus. synonym.)
S. Aizoon. Steven de Saxif. *Cauc. in Mem. Mosq.* iv. p. 74.
 (exclus. synonym.)
S. cartilaginea. Sternb. *Saxif.* p. 5. t. 3. c.
S. foliorum orâ cartilagineâ, serratâ, petiolis paucifloris, petalis punctatis. Var. α . Hall. *Helv.* 978.
S. sedi folio angustiore, serrato. Tournef. *Inst.* 252. Seguier. *Ver.* 448. t. 9. f. 1.
Sedum serratum album bicornè, longiore folio, marginibus argenteis. Moris. *Hist. s.* 12. t. 9. f. 20.
Sedum serratum. J. Bauh. *Hist.* iii. 689.
Aizoom serratum. Val. Cord. *Hist. pl.* 92.
Habitat in alpinis Tyrolensibus, Pyrenaicis et Caucasiacis.
 2. (v. v. c.)

Planta in cæspitibus conicis densis vegetans. *Caules* erecti, palmares v. pedales, præcedenti rigidiores, foliosi, pilis glanduliferis confertè tecti. *Folia* radicalia in rosulis aggregata, stricta, linearia, acuta, plana, glauca, utrinque glabra, argutè argenteo-serrata, basi ciliata; caulina spatulata, subadpressa, ciliato-serrulata. *Flores* racemosi. *Pedicelli* subbiflori, incurvi, præcedente breviores, pilis glanduliferis crebrè tecti. *Calyx* pilis raris adpersus: lacinia ovata, obtusa. *Petala* ovalia, obscure trinervia (nervis simplicibus rectiusculis), lactea, punctis minutis roseis raris instructa. *Filamenta* compressa. *Styli* brevissimi.

Linnæus confounded the three preceding species under *S. Cotyledon*, a name which I have preferred retaining to the plant described by him in *Flora Laponica* and *Flora Suecica*, and of which

which there is a good figure in *Flora Danica*. They afford abundant characters to keep them distinct, and these marks always remain constant in cultivation, and when re-produced from seed. The *S. Cotyledon* is remotely distinct from all of them.

52. *S. mutata*, foliis planis spathulatis cartilagineo-crenatis ciliatisque, calycibus densè glandulosis : laciniis latè-ovatis acutis, petalis lineari-lanceolatis acuminatis.

S. mutata. Linn. Sp. Pl. 570. Jacq. Icon. Rar. 3. t. 466. (optima,) ejusd. Collect. i. p. 284. Curt. Mag. 351. Willd. Sp. Pl. ii. p. 640. Lapeyr. Pyren. Saxif. p. 31. Lam. Encycl. vi. p. 672. Persoon Synop. i. p. 487. Hort. Kew. ed. 2. 3. p. 65. Sternb. Saxif. p. 6.

S. foliorum orâ cartilagineâ rarissimè dentatâ, petalis maculosis. Hall. Helv. 979. t. 16.

S. foliorum limbo cartilagineo integro, spicâ longâ, floribus purpureo-croceis. Hall. Helv. edit. prior. Segu. Ver. iii. p. 199. Burs. XVI. 98.

Geum alpinum majus viscosum, foliis oblongo-rotundis, atro-rubentibus et croceis floribus. Scheuch. It. ii. p. 124.

Habitat in alpinis Helvetiæ, Carniolæ, Italiæ et Pyrenæorum. 4. (v. s. in Herb. Banks. et Lamb.)

Species distinctissima. *Planta* densè cæspitosa. *Caules* erecti, palmares v. pedales, foliosi, pilis patentibus glanduliferis confertissimè tecti. *Folia* radicalia in rosulis latè expansis, spathulata, plana, utrinque glabra, margine cartilagineo-crenata, villis longis numerosis patentibus fimbriata; caulina obovata, basi ciliata, apice cartilagineo-crenata. *Flores* paniculati. *Pedunculi* calycesque pube molli ferrugineâ glutinosâ densè tecti. *Lacinie calycine* latè-triangulari-ovatæ, acutæ, obsoletè nervosæ.

Petala

Petala lineari-lanceolata, acuminata, trinervia, crocea, maculis saturatioribus instructa. *Filamenta* crocea. *Antheræ* fulvæ.

53. *S. media*, foliis radicalibus aggregatis lingulatis integerrimis; margine cartilagineo suprâ punctato, petalis obtusis calyce brevioribus. *Smith Prod. Fl. Græc.* i. p. 276.

S. media. *Gouan Illustr.* 27. *Poiret in Lam. Encycl.* vi. p. 675. t. 372. f. 6. *Fl. Græc. Icon. Ined.* 376. *Sternb. Saxif.* p. 6.

S. calyciflora. *Lapeyr. Pyren. Saxif.* p. 28. t. 12. (*optima.*) *Persoon Synops.* i. p. 487.

S. cæsia. *Linn. Mantiss.* 382. nec *Sp. Pl. ex Smithio loc. cit.*

S. alpina parva, sedi folio, non serrata. *Mich. Plant. Rom. et Neap.* n. 704.

Habitat in Pyrenæorum rupibus calcareis (*Gouan, La Peyrouse*); in Olympi Bithyni cacumine (*Sibthorp*). 4. (v. s. in Herb. Banks.)

Planta in cæspitibus conicis vegetans. *Caules* erecti, digitales, simplices, rigidi, villis tortuosis ferrugineis viscidis densè tecti. *Folia* radicalia in rosulis aggregata, imbricata, lingulata, mucronata, rigida, glauca, utrinque glabra, suprâ plana, punctata, subtùs convexa, subcarinata, margine integerrima, cartilaginea, nuda, basi ciliata; caulina cuneata glanduloso-pilosa. *Flores* racemosi, bracteati. *Pedicelli* breves, uniflori, calycesque villis viscidis densè obsiti. *Calyces* campanulati: laciniae brevè-triangulari-ovatae, acutae, rectae, conniventes. *Petala* parva, obovata, atro-purpurea, cum genitalibus intra calycem inclusa.

54. *S. Lapeyrousii*, foliis radicalibus aggregatis lingulatis integerrimis : margine cartilagineo, floribus paniculatis, petalis obovatis integerrimis conniventibus calyce longioribus.

S. luteo-purpurea. *Lapeyr. Pyren. Saxif.* p. 29. t. 14. *Lam. Encycl.* vi. p. 675. *Persoon Synop.* i. 487. *Sternb. Saxif.* p. 7.

Habitat in Pyrenæorum rupibus calcareis. *La Peyrouse*. 4.

Pedunculi calycesque pube purpureâ viscidâ densissimè vestiti.

Obs. Species prorsùs mihi incognita nisi ex figurâ et descriptione Clariss. Lapeyrouse, a quibus characterem suprâ scriptum desumpsi, verè præcedenti admodùm affinis est ; sed floribus paniculatis et petalis citrinis calyce longioribus videtur differe. Forsàn hybrida inter *S. mediam* et sequentem.

55. *S. aretioides*, foliis aggregatis lineari-lingulatis strictis mucronulatis carinatis glaucis cartilagineo-marginatis, caule glutinoso-tomentoso, petalis lineari-spathulatis apice crenulatis.

S. aretioides. *Lapeyr. Pyren. Saxif.* p. 28. t. 13. *Lam. Encycl.* vi. p. 676. *Persoon Synon.* i. p. 487. *Sternb. Saxif.* p. 7.

S. pyrenaica lutea minima, sedi foliis densissimè congestis. *Tournef. Inst.* 253.

Habitat in rupibus calcareis Pyrenæorum (*La Peyrouse*), in Helvetiæ alpibus Barèges dictis (*Prof. Stromeyer*). 4. (v. s. in Herbar. Ventenat, nunc in Museo Lessertiano.)

Planta densè cæspitosa. *Radices* lignosæ. *Rosulæ* semiuunciales, confertæ, ad bases foliis emarcidis undique

densè imbricatæ. *Caules* erecti, sesquiunciales, teretes, foliisque caulinis lingulato-linearibus obtusis tomento glutinoso tecti. *Folia* aggregatim imbricata, lineari-lingulata, stricta, obsoletè mucronulata, glauco-viridia, subtus obtusè carinata, suprâ punctis remotis paucis juxta margines perforata, basi ciliato-denticulata: oris cartilagineis. *Flores* terni, aurei. *Pedicelli* calycesque pubescentibus. *Calycis* laciniae brevè ovatae, acutae, carnosae. *Petalata* lineari-spathulata, triplinervia, apice emarginata et crenulata: nervis strictis; lateralibus bifurcis. *Stamina* inæqualia pistillis breviora; *filamenta* pallidè lutea; *antherae* aureae.

Obs. Duabus præcedentibus affinis, at notis indicatis et plantâ multò minore distinctissima est.

56. *S. burseriana*, foliis aggregatis subulatis pungentibus lævibus glaucis, caule subunifloro, laciniis calycinis ovatis, petalis subrotundis oræ crispatis: nervis ramosis.

S. burseriana. *Linn. Sp. Pl.* p. 572. *Wulfen in Jacq. Misc.* i. p. 152. *t.* 17. *f.* 3. (*optima.*) *Willd. Sp. Pl.* ii. p. 642. *Lam. Encycl.* vi. p. 677. *Persoon Synops.* i. p. 488. *Sternb. Saxif.* p. 33. *t.* 10. *f.* 1.

S. foliis glaucis acutis monanthis, caule folioso. *Segu. Ver.* iii. p. 201. *t.* 5. *f.* 2.

Sedum alpinum, saxifragæ albæ flore. *Bauh. Pin.* 284. *Burs.* XVI. 6.

Sedum montanum minimum, caryophylli folio, lacteo flore. *Raii Hist.* ii. p. 1041. *n.* 8.

Sedum alpinum quartum. *Col. Ecphr.* ii. p. 66. *f.* 4.

β . caule subbifloro. *Sternb. loc. cit.* *t.* 10. β .

γ . *Vandelli*, foliis ciliatis, caule subquadrifloro.

S. bur-

- S. burseriana*, β . *Jacq. Misc.* i. p. 153. *Lam. Encycl.* vi. p. 677. *Persoon Synop.* i. p. 488.
- S. Vandelli*. *Sternb. Saxif.* p. 34. t. 10. f. 3.
- S. burseriana*. *Lapeyr. Pyren. Saxif.* p. 35.
- S. foliis compactis plicatis pungentibus, caule viscido paucifloro.* *Hall. Helv.* 983. *Act. Helv.* vi. p. 10.
- S. foliis aggregatis subulatis lævibus, caule subnudo multifloro.* *Vandelli It. Ined.* f. 2. (ex *Sternb. l. c.*)
- Sedum minimum Syriacum, luteolo flore saxifragæ albæ.* *J. Bauh. Hist.* iii. p. 696. *Lobel. Obs.* p. 204. *Icon. Pl.* 376. *Dod. Pempt.* p. 132. n. 3. *Moris. Hist.* iii. p. 476. s. 12. t. 8. f. 1.
- Habitat* α in Taurero Radstattiensi (*Hoppe*), in alpibus Carinthiæ et Carniolæ (*Wulfen, Hohenwart, Vest*), in montibus Lessinensibus (*Seguier*), Tridentinis (*Ray*). In monte Grappa prope Bassanum in Italiâ superiori ipse legi. *Sternb. loc. cit.*
- β . in alpe vicina Stoi Clagenfurtii. *Vest.*
- γ . in monte Couza non procul a Lario Lacu (*Vandelli*), in Helvetiæ alpibus (*Schleicher, Sternb. loc. cit.*) γ . (v. s. α in Herb. Banks.)

Planta densè cæspitosa. *Radix* lignosa, fibris numerosis instructa. *Surculi* erecti, brevissimi, basi rudimentis foliorum emarcidorum tecti, apice rosulati. *Caules* plures, erecti, bipollicares, oligophylli, uniflori, pilis glanduliferis brevibus tecti. *Folia* aggregata, subulata, triquetra, mucronata, glabra, rigida, glauca; caulina pauca, multò minora, adpressa. *Flos* magnus, pulcherrimus. *Calyx* pube glandulosâ obsitus; *laciniae* latè ovatæ, acutæ, conspicuè nervosæ. *Petala* latè subrotunda, lactea, triplinervia, nervis ramosissimis flexuosis flavescentibus lineata: orâ crispatâ.

57. *S. retusa*, caule subtrifloro, foliis imbricatis oblongo-trigonis acutis suprâ perforato-punctatis, petalis lanceolatis acutis, stylis corollam longè superantibus.

S. retusa. *Gouan Illustr.* 28. t. 18. f. 1. *Lapeyr. Pyren. Saxif.* p. 38. t. 18. (*optima.*) *Lam. et Decand. Fl. Franc.* iv. p. 365. *Persoon Synop.* i. p. 488. *Sternb. Saxif.* p. 37. *Wahlenb. Carpath.* 118.

S. imbricata. *Lam. Franc.* iii. p. 531? *S. purpurea.* *All. Ped.* 1531. t. 21. f. 2. (*bona.*)

S. oppositifolia, γ. *Willd. Sp. Pl.* ii. p. 648. *Lam. Encycl.* vi. p. 685.

S. alpina ericoides, flore purpurascente. *Tournef. Inst.* 258.

Sedum alpinum ericoides cæruleum. *Bauh. Prod.* 132.

Hist. iii. p. 694.

Habitat in summis alpibus Pedemontanis, Pyrenaicis et Delphinatis. γ. (v. s.)

Planta cæspitem valdè compactum et durum formans.

Surculi procumbentes, rigidi, ramosi, densissimè foliosi.

Caules numerosi, erecti, sesqui- v. bi-unciales, rigidi, oligophylli. *Folia* arcuè quadrifariam imbricata, parva, oblonga, trigona, durissima, glabra, nitida, basi ciliata, supra aciem punctis ternis minutis perforata, apice recurvata, acuta. *Flores* terminales, subterni, purpurei. *Pedicelli* calycesque pube brevi glandulosâ instructi. *Calycis* laciniae oblongo-ovatae, obtusae, margine nudae. *Petala* lanceolata, acuta, triplinervia: nervis parallelis simplicibus. *Filamenta* capillaria, pallidè lilacina, corollâ longiora. *Antheræ* violaceae. *Styli* stricti, longissimi.

58. *S. oppositifolia*, caule unifloro, foliis imbricatis ovatis planis obtusis ciliatis, laciniis calycis latè ovatis obtusis, petalis obovatis 5-nervibus, genitalibus corollâ brevioribus.

S. op-

S. oppositifolia. Linn. *Sp. Pl.* 575. *Fl. Sueo.* 359. 369. *Fl. Lapp.* 179. *t.* 2. *f.* 1. *Fl. Dan.* *t.* 34. *Gunn. Norv.* 53. *Huds. Angl.* 180. *Allion. Pedem.* 1529. *t.* 21. *f.* 3. (*bona.*) *Vahl. in Act. Hist. Nat. Hafn.* 2. 1. *p.* 51. *With. Brit.* 404. *Willd. Sp. Pl.* ii. *p.* 648. *Lapeyr. Pyren. Saxif.* *p.* 36. *t.* 16. (*optima.*) *Lam. Encycl.* vi. *p.* 686. *Smith Brit.* ii. *p.* 451. *Engl. Bot.* *t.* 9. (*bona.*) *Lam. et Decand. Fl. Franc.* iv. *p.* 364. *Sternb. Saxif.* *p.* 36. *Hohenwart et Reiner It.* i. *p.* 133. *t.* 3. (*ex Sternb.*) *Wahlenb. Carpath.* 118. *Pursh Amer. Septent.* i. *p.* 311.

S. cærulea. *Persoon Synops.* i. *p.* 488.

S. caule repente, foliis quadrifariam imbricatis cartilagineis ciliatis. *Hall. Helv.* 980.

Sedum alpinum ericoides purpurascens. *Bauh. Pin.* 284.

Prod. 152. *Moris. Hist.* i. *p.* 480. *s.* 12. *t.* 10. *f.* 36.

Habitat in rupibus alpinis Lapponiæ, Scotiæ, Helvetiæ, Spitzbergensis, Pyrenæorum, Angliæ et Americæ borealis. 4. (v. v. sp.)

Planta cæspitem planum et latum formans. *Surculi* breves, procumbentes, gemmiferi, rubescentes, villis viscidis leviter adpersi. *Caules* numerosi, unciales, erecti, uniflori, rubri, foliorum 2—3 jugis muniti. *Folia* ovata, plana, obtusa, glabra, ciliata, obscure viridia; adultiora quadrifariam imbricata, apice cartilaginea, 1—2 poris minutis sæpius perforata; juniora in surculis opposita, subdistantia; caulina opposita, remota, obovata. *Flos* magnus, pulcherrimus, lilacinus, terminalis, solitarius, sessilis. *Calyx* glandulosus: laciniae latè ovatæ, obtusæ, carnosæ, rectæ, obscure trinerves, margine ciliatæ. *Petalæ* obovata, lilacina, 5-nervia: nervis flexuosis ramosisculis. *Genitalia* corollæ breviora; *filamenta* gracilia, rosea; *antheræ* violaceæ. *Styli* breves, crassi.

59. *S. biflora*, caule subtrifloro, foliis planis spathulatis laxis, petalis lineari-oblongis, genitalibus corollâ longioribus.
S. biflora. *Allion. Pedem.* 1530. *t.* 21. *f.* 1. (*bona.*) *Lapeyr. Pyren. Saxif.* p. 37. *t.* 17. (*optima.*) *Lam. et Decand. Fl. Franc.* iv. p. 365. *Persoon Synops.* i. p. 488. *Sternb. Saxif.* p. 37. *Hohenwart et Reiner. It.* i. p. 138. *t.* 2. *f.* 2. (*ex Sternb.*)
S. oppositifolia, β . *Willd. Sp. Pl.* ii. p. 648. *Lam. Encycl.* vi. p. 685.
S. foliis imbricatis ovatis, caulibus reptantibus bifloris. *Hall. Helv.* 981.

Habitat in Pyrenæorum et Helvetiæ alpibus. γ . (v. s.)

OBS. Summoperè quidem affinis est *S. oppositifoliæ*, sed plantâ majore et laxiore, et notis constantibus in definitionibus expressis satîs distincta.

60. *S. cæsia*, foliis lineari-oblongis aggregatis cretaceo-glaucis insignitèr recurvatis carinatis, petalis rotundatis unguiculatis, caule oligophyllo multifloro.
S. cæsia. *Linn. Sp. Pl.* 571. *Jacq. Aust.* *t.* 374. *Scop. Carn. ed.* ii. 495. *t.* 15. *Willd. Sp. Pl.* ii. p. 641. *Lam. Encycl.* vi. p. 676. *Lam. et Decand. Fl. Franc.* iv. p. 363. *Persoon Synops.* i. p. 487. *Sternb. Saxif.* p. 34.
S. recurvifolia. *Lapeyr. Pyren. Saxif.* p. 30.
S. foliis crassis duris recurvis subtùs sulcatis, basi ciliatis. *Hall. Helv.* 982.
S. alpina minima, foliis cæsiis deorsùm recurvis. *Segu. Veron.* 449. *t.* 9. *f.* 2. (*bona.*)
Sedum alpinum album, foliolis compactis. *Bauh. Pin.* 284. *Moris. Hist.* iii. s. 12. *t.* 7. *f.* 32.
Sedum alpinum minimum, foliis cinereis, flore candido. *Scheuch. Alp.* 49. 141. *t.* 21. *f.* 1.

Sedi

Sedi species minima. *Gesn. fasc. 24. t. 11. f. 30.*

β. major, caule robustiore et altiore valdè villosa.

Habitat α in alpidibus Helveticis, Austriacis, Pyrenæicis, Baldo; *β* in Lusitaniâ (*Gage*). *γ*. (v. v. c. et s. sp.; *β* v. s. in Herb. Banks.)

Radix lignosa, ramosa. *Surculi* erecti, brevissimi, rigidissimi, cæspitem planum et valdè compactum formant. *Caules* plures, erecti, 2—3-pollicares, tenuitè filiformes, rigidi, fragiles, oligophylli, multiflori, glabriusculi, fucati. *Folia* radicalia aggregata, imbricata, lineari-oblonga, obtusa, glabra, rigida, cretaceo-glaucis, subtùs carinata, suprà convexa, foraminibus numerosis minutis perforata, basi angustata, ciliata, medio insignitè recurvata: substantiâ frangibili crustaceâ; *caulina* pauca, sparsa, parva, squamæformia, adpressa. *Flores* lactei in paniculam parvam dispositi. *Pedicelli* in æstivatione decurvati, postremò erecti, *calyces*que pilis brevissimis glanduliferis parcè suppediti. *Laciniae calycinæ* breves, latè ovatae, obtusissimæ, obsoletè trinerves, margine membranaceæ. *Petala* rotundata, triplinervia (nervis lateralibus ramosis), basi unguiculata: limbo orbiculato, retuso, patenti. *Genitalia* corollæ breviora.

61. *S. diapensioides*, foliis linearibus strictis carinatis aggregato-imbricatis cretaceo-glaucis, caule polyphyllò paucifloro densè glanduloso-piloso, laciniis calycinis elliptico-oblongis.

S. diapensioides. *Bellardi Act. Acad. Taur. v. p. 227. ejusd. Append. ad Fl. Pedem. p. 21. t. 3. Sternb. Saxif. p. 35. t. 9. (mala.)*

S. cæsia, β. Lam. Encycl. vi. p. 676.

Habitat

Habitat in alpinis Pedemontanis et Helveticis. γ . (v. s. in Herb. Lessertiano specim. in cacumine Cenis montis lecta.)

Planta densissimè cæspitosa. *Radix* lignosa. *Surculi* lignosi, semiunciales, erecti, conferti, creberrimè foliosi. *Caules* erecti, teretes, polyphylli, 2- rarissimè 3-pollicares, pilis patentibus glanduliferis undique densè tecti. *Folia* surculina linearia, obtusa, stricta, cretaceo-glaucæ, undique arctè aggregato-imbricata, glabra, subtùs obtusè carinata, margine cartilaginea, basi ciliata, apice punctis 1—2 perforata; caulina linearia, obtusa, densè glanduloso-pilosa, recta, sensim parùm latiora. *Flores* 3—4 vel 5 in capitulum terminalem, campanulati, candidi, *S. cæsiâ* majores. *Pedicelli* breves calycesque pilis patentibus glanduliferis conferti. *Calycis laciniæ* elliptico-oblongæ, obtusæ. *Petala* basi angustata (unguiculata): limbo patente, orbiculato, 5-nervi. *Stamina* pistilla subæquantia; *filamenta* lutea; *antheræ* aureæ.

Obs. Habitu omninò *S. cæsiæ*, à quâ tamen abundè discrepat: foliis strictis, caule polyphylo densè piloso paucifloro, floribus majoribus, laciniis calycinis elliptico-oblongis.

62. *S. fimbriata*, rosulis sphæricis, foliis appressè imbricatis orbiculato-obovatis: marginibus membranaceis ciliisque longis fimbriatis, pedunculo solitario nudo unifloro.

Habitat in Capite Newnham dicto ad oras occidentales Americæ borealis. *David Nelson*. γ . (v. s. in Herb. Banks.)

Planta canescens cæspites planos patentes efficiens. *Rosulæ* confertissimæ sphæricæ. *Folia* appressè imbricata, obovata, trinervia, utrinque glabra, punctis pellucidis fenestrata, intùs concava, extùs convexa, apice orbiculata, margine

margine membranâ scariosâ et ciliis longis cuspidatis inflexis fimbriata. *Pedunculus* solitarius, uncialis, uniflorus, nudus. *Calyx* obconicus: laciniae brevè ovatae, obtusae, margine ciliatae. *Petala* mihi ignota.

63. *S. serpyllifolia*, virens; surculis repentibus, foliis ovatis obtusis petiolatis denudatis, caule filiformi oligophyllo unifloro, petalis orbiculatis: nervis ramosis.

S. serpyllifolia. *Pursh Amer. Septent.* i. p. 310.

Habitat in capite Newnham dicto, ad oras occidentales Americæ septentrionalis. *David Nelson.* u. (v. s. in *Herb. Banks.*)

Species distinctissima. *Planta* virens, patens, cæspitosa. *Surculi* ramosi, repentes, rigidi, densè foliosi. *Caules* plures, filiformes, graciles, erecti, 2—3-unciales, paucifolii, uniflori, rubescentes, fucati, glandulis brevissimis levitèr sparsi. *Folia* conferta, ovata, obtusa, petiolata, plana, recurvato-patentia, integerrima, utrinque glabra, viridia, nitida, impunctata: caulina linearia, obtusa, multò minora. *Flos* terminalis, magnus, aureus? *Calyx* nitidus parcè glandulosus: laciniae breves, latae, obtusae. *Petala* orbiculata, brevè unguiculata, triplinervia: nervis ramosis, rectiusculis. *Filamenta* brevia, lutescentia? *Antheræ* flavæ? *Styli* brevissimi.

64. *S. parnassifolia*, caule erecto folioso 3—4-floro, foliis cordatis amplexicaulibus glabris, petalis obovatis 5-nervibus.

Habitat in Nepaliæ alpibus. *Wallich.* u. (v. s. in *Herb. Lamb.*)

Species ab omnibus longè diversa, plantam minorem *Parnassiae palustris* nè parùm refert. *Caules* plures, erecti,

tripollicares, teretes, glabri, rigidi, foliosi, 3—4-flori. *Folia* alterna, sessilia, cordata, amplexicaulia, obtusa, utrinque glabra, subtus nervosa, margine glandulis levitè ciliata. *Pedunculi* breves, uniflori, calycesque glandulis levitè instructi. *Flores* lactei. *Laciniae calycinae* triangulari-ovatae, mucronatae, trinerves. *Petala* obovata, 5-nervia (nervis simplicibus rectiusculis), basi angustata. *Antherae* croceae.

65. *S. androsacea*, foliis radicalibus confertis ellipticis obtusis pilosis integerrimis tridentatisve, laciniis calycinis obtusissimis, petalis spathulatis, caule nudiusculo subbifloro.

S. androsacea. *Linn. Sp. Pl.* 571. *Gerard. Fl. Gall. Prov.* 423. *Jacq. Aust.* iv. t. 389. *Willd. Sp. Pl.* ii. p. 641. *Lam. Encycl.* vi. p. 674. *ejusd. Fl. Franc.* iii. p. 525. *Lam. et Decand. Fl. Franc.* iv. p. 367. *Persoon Synops.* i. p. 487. *Sternb. Saxif.* p. 42. t. 11. f. a. *Wahlenb. Carpath.* 116.

S. pyrenaica. *Scop. Carn. edit.* 2. 498.

S. foliis hirsutis ellipticis et tridentatis, caule paucifloro. *Hall. Helv.* 984. *Ibid. It. Helv.* n. 69. p. 292. t. 2.

S. alpina, *Androsaces villosae* habitu. *Hall. Comm. Nor.* 1736. t. 1. f. 3.

Sedum alpinum tertium. *Col. Ecphe.* ii. p. 66 et 67. f. ultima.

Habitat in Helvetiâ, Austriâ, Carniolâ. &c. (v. v. c.)

Planta densissimè caespitosa habitu omninò *Androsaces*. *Radix* fibrosa. *Caules* erecti 2- rariùs 3-pollicares, nudiusculi, subbiflori, pilis glanduliferis articulatis patentibus tecti, sæpiùs foliis 1—2 muniti. *Folia* radicalia conferta, elliptica, obtusa, integra, rariùs tridentata, utrinque pilis articulatis instructa, basi in petiolum angustata, subtus

subtilis conspicuè nervosa. *Pedicelli* brevissimi calyces-
que pube viscidâ suppediti. *Calyx* obturbinatus: laciniae
ovatae, obtusissimae, nervosae. *Petala* spathulata, can-
dida, triplinervia (nervis simplicibus, strictis), calyce
ferè triplò longiora. *Filamenta* brevia, lutea. *Antherae*
flavæ.

66. *S. spathulata*, gemmifera; surculis crebrè foliosis, foliis in-
tegerrimis spathulatis fimbriatis, laciniis calycis ovato-
oblongis obtusis, petalis obovatis, caule nudiusculo subbi-
floro.

S. spathulata. Desf. *Atlant.* ii. p. 342. t. 96. f. 2. Lam.
Encycl. vi. p. 692. Persoon *Synop.* i. p. 489. Sternb.
Saxif. p. 58.

Habitat in Atlantis cacumine prope Belide. Desfontaines.
4. (v. s. in Herb. Lessertiano specim. à Clariss. Desfon-
taines communicata.)

Planta densè cæspitosa, *Surculi* plures, breves, procum-
bentes, creberrimè foliosi, foliis emarcidis ad eorum
bases persistentibus. *Caules* erecti, teretes, capillares,
1—2½-pollicares, nudiusculi, pilis brevissimis raris ad-
spersi, 1—3-pluri-flori è flosculis lateralibus sæpiùs abor-
tientibus (caule unifloro) ferè semper orti. *Folia* parva,
spathulata, integerrima, fimbriata: laminâ orbiculatâ,
basi in petiolum brevissimum angustatâ; nonnulla tri-
fida lobis acutiusculis necnon vidi. *Pedicelli* calyces-
que pube brevissimâ parcè suppediti. *Laciniae calycinae*
ovato-oblongæ, obtusæ. *Petala* obovata, triplinervia,
lactea, calyce longiora. *Genitalia* petalis breviora. *Sta-*
mina inæqualia; *filamenta* lutescentia; *antheræ* aureæ.

Obs. Faciè *S. globulifera*, sed ab eâ satis distincta. Forsàn
ad ultimam sectionem meliùs relata esset.

67. *S. Sedioides*, caulibus erectiusculis, foliis lineari-lanceolatis acutis glabris, pedunculis elongatis capillaribus unifloris, petalis linearibus mucronulatis calycem subæquantibus.

S. Sedioides. Linn. *Sp. Pl.* 572. Jacq. *Misc.* ii. p. 134. t. 21. f. 22. (*optima.*) Willd. *Sp. Pl.* ii. p. 642. (exclus. syn. Allion. *Ped.*) Lapeyr. *Pyren. Saxif.* p. 47. Lam. *Encycl.* vi. p. 675. (exclus. syn. Allion. *Ped.*) Persoon *Synop.* i. p. 488. Sternb. *Saxif.* p. 97. t. 7. f. α et β . (*malæ.*) et t. 9. β .

Saxif. trichoides. Scop. *Carn.* 496. t. 15. (*bona.*)

S. Hohenwartii. Sternb. *Saxif.* p. 26. t. 7.

S. Seguiarii. ejusd. t. 9. β .

S. alpina minima, foliis lingulatis in orbem actis, flore ochroleuco. Segu. *Veron.* 450. t. 9. f. 3. (*pessima.*)

S. alpina muscoides, foliis superioribus oblongis, inferior. rotundioribus et circumactis. Segu. *Veron.* iii. p. 203. t. 5. f. 3. (*bona.*)

β . *colorata*, petalis antherisque purpurascentibus.

S. Hohenwartii β . Sternb. *Saxif.* p. 26. t. 9. β .

γ . *aphylla*, foliis inferioribus sæpè trifidis.

S. aphylla. Sternb. *l. c.* p. 40. t. 11. β .

S. muscoides. Wahlenb. *Carpath.* 122.

Habitat α in alpibus Tridentinis, Carinthiacis, Carniolicis, Salisburgens., Pyrenaicis, Arragonicis, Baldo ; β et γ in alpibus Austriacis. γ . (v. s.)

Planta cæspitosa, lætè virens, tenera. *Radix* fibrosa, capillacea. *Caules* numerosi, adscendentes, debiles, valdè foliosi, sesqui- vel bi-pollicis longi, glandulis brevissimis levitè adpersi. *Folia* ima aggregata, spathulata, patentia ; superiora erecta, lineari-lanceolata, acuta, alterna ; omnia lætè viridia utrinque glabra, nitida, conspicuè trinervia,

trinervia, margine glandulis ciliata. *Pedunculi* elongati, capillares, uniflori, terminales, glandulis minutis adpersi. *Flores* minimi, lutescentes. *Laciniae calycinae* ovatae, obtusiusculae, trinerves. *Petala* parva, linearia, mucronulata, calycem vix excedentia, trinervia : nervis parallelis simplicibus. *Filamenta* brevissima, lutea. *Antherae* flavae.

The present species is readily distinguished by its slender habit and numerous ascending leafy stems, of a beautiful green, which are furnished with a few thin and scattered, short, glandular hairs ; by its long, slender, capillary peduncles ; and lastly, by its small, linear, pointed petals, scarcely exceeding the length of the calyx. I regret having been obliged to differ so widely in opinion from the Count de Sternberg, who certainly has not studied the present species with due care, as is evident from his description and figures, both of which are miserably defective in point of botanical accuracy. The following species, *S. tenera*, is distinguished from this, to which it is nearly related, by its much more tufted habit ; by its obtuse leaves, which, together with the stems, are thickly clothed with glandular hairs ; by the oblong laciniae of its calyx ; and in having the flowers double the size, with obovate, retuse petals, nearly twice the length of the calyx. In the figures of *S. sedioides* given by Sternberg, the petals are erroneously exhibited as obovate ; and were it not for the habit, which is clearly that of *S. sedioides*, I should certainly have been inclined to refer them to the following species. The figure given by him under the name of *S. Hohenwartii* shows the flowers much more correctly. The variety β I have not seen : it therefore rests wholly on the authority of Sternberg, who states the petals and anthers to be of a purplish colour. The varieties I have marked agree with *S. sedioides* in every essential point ; but how far they are to be regarded as permanent varieties I have not had opportunities of determining.

68. *S. tenera*, surculis brevibus crebrè foliosis, foliis lineari-oblongis obtusis caulibusque glanduloso-pilosis, laciniis calycinis oblongo-ovatis, petalis obovatis retusis calycem superantibus.

S. tenera. *Sut. Fl. Helv.* i. p. 245. *Vill. Delph.* iii. p. 666. *Sternb. Saxif.* p. 28. t. 9. f. 4.

S. planifolia. *Lapeyr. Pyren. Saxif.* p. 31. *Lam. Encycl.* vi. p. 677. *Lam. et Decand. Fl. Franc.* iv. p. 367. *Sternb. Saxif.* p. 28. t. 7. f. 3. (mala.)

S. muscoides. *Allion. Ped.* 1528. t. 61. f. 2. (exclus. synon.)

S. foliis mollibus ellipticis subhirsutis, caule paucifloro. *Hall. Helv.* n. 985.

S. alpina pallidè lutea, foliis latiusculis non incisis, radice crassâ. *Mich. Pl. Rom. et Neapol.* 829.

Sedum alpinum, tertio simile alterum. *Colum.* ii. p. 66. et 67. f. ad dextram.

Habitat in alpinis Helveticis, Pedemontanis, Pyrenæorum, et in Monte Cenisio. 4. (v. s. specim. quæ Clariss. Kunth mihi benevolè dedit.)

Herba densissimè cæspitosa. *Surculi* brevissimi sæpiùs tamen unciales aut ultra, creberrimè foliosi, ad basin foliis emarcidis aggregato-imbricatis. *Caules* capillares, 1—2-pollicares, erecti, simplicissimi, 1—3-flori, pilis glanduliferis brevibus undique densè tecti. *Folia* radicalia et surculina lineari-oblonga, obtusa, conferta, mollia, utrinque pilis brevibus glanduliferis tecta; caulina ovali-oblonga, in cæteris, radicalibus similia. *Flores* ochroleuci *S. sedioidi* duplò majores. *Calyces* obconici, densè glanduloso-tomentosi: laciniæ oblongo-ovatae, obtusæ. *Petalata* obovata, retusa, calycem ferè duplò excedentia, tripli-

triplinervia : nervis simplicibus ; lateralibus incurvis ; medio recto. *Stamina* subæqualia ; *filamenta* lutescentia ; *antheræ* aureæ. *Styli* graciles, recti, *stamina* subæquantes.

OBS. A *S. sedioide* facile distinguitur : foliis cauleque dense glanduloso-pilosis, petalis obovatis retusis calycem duplò excedentibus.

An examination of specimens of the *S. tenera* of Suter, and of the *S. planifolia* of La Peyrouse, prove that they are the same ; not even varieties : I have therefore preferred that of Suter as being the less objectionable name.

§. *Foliis 5—3-partitis petiolatis.*

69. *S. geranioides*, foliis reniformibus 3—5-lobo-palmatis pubescentibus longè-petiolatis : segmentis cuneatis inciso-dentatis, paniculâ coarctatâ multiflorâ, laciniis calycinis lineari-lanceolatis obtusis, petalis oblongis planis.

S. geranioides. *Linn. Sp. Pl.* 578. *Amæn. Acad.* iv. p. 271. *Willd. Sp. Pl.* ii. p. 652. (exclus. synonym. *Gmel. Sib.*) *La-peyr. Pyren. Saxif.* p. 66. t. 43. (bona.) *Lam. Encycl.* vi. p. 691. *Lam. et Decand. Fl. Franc.* iv. p. 372. *Persoon Synop.* i. p. 489. *Hort. Kew.* iii. p. 70. *Sternb. Saxif.* p. 49.

S. quinquefida. *Lam. Franc.* iii. p. 533.

S. foliis radicalibus palmato-quinquelobis trifidis ; lateralibus coalescentibus ; rameis subulatis, laciniis calycinis dilatatis. *Gouan Illust.* 28. t. 18. f. 2.

S. pyrenaica, tridactylites latifolia. *Tournef. Inst.* 253.

Habitat in Pyrenæis. 4. (v. v. c.)

Planta dense cæspitosa. *Radix* sublignosa, rudimentis foliorum emarcidorum suprâ dense instructa. *Surculi* breves, conferti,

conferti, rigidi, erecti, rubescentes. *Caules* erecti, palmares, rigidi, rubri, pilis glanduliferis undique instructi. *Folia* radicalia longè petiolata, erecta, 3—5-lobo-palmata, cucullata, utrinque pube brevi densâ valdè glutinosâ densè obsita: lobi cuneati, inciso-dentati: dentibus magnis obtusis; *caulina* pauca sessilia inferiora digitata; superiora indivisa: segmentis lanceolatis. *Petioli* semiteretes, pilis viscidis suppediti. *Panicula* coarctata, multiflora. *Bracteæ* lanceolatae, integrae, obtusae. *Flores* campanulati, candidi. *Calyces* ut et pedicelli pube glutinosâ omninò tecti: laciniæ lineari-lanceolatae, trinerves, apice reflexae, obtusae. *Petala* oblonga, triplinervia: nervis simplicibus, strictis. *Stamina* inæqualia; *filamenta* elongata, lutescentia; *antheræ* aureae. *Styli* breves, staminibus duplò breviores.

70. *S. irrigua*, foliis villosis; radicalibus 5-partito-palmatis longè petiolatis; caulinis digitatis: segmentis cuneato-oblongis mucronatis trifidis, paniculâ laxâ, laciniis calycinis linearibus acutis, petalis spathulatis.

S. irrigua. *Fisch. Hort. Gorenk. Spreng. Cent. Spec. minus cognit. p. 36. Marsch. à Bieberst. Cent. Plant. Rar. Rossic. ii. t. 73. Steven de Saxif. Cauc. in Mem. Mosq. iv. p. 82. n. 12. Sternb. Saxif. p. 60.*

S. petræa. *Pall. Ind. Taur. Habl. Taur. p. 147.*

S. aquatica. *Marsch. à Bieberst. Fl. Taur. Cauc. i. p. 317. (exclus. synonym. Lapeyr. et Persoon.)*

S. foliis radicalibus reniformibus 5-lobis multifidis; caulinis linearibus, caule subnudo. Gmel. Sib. iv. p. 171. (exclus. synonym. Linn.)

Habitat in Tauriâ inter rupes ad fontes Salghir (*Pallas, Marschall à Bieberstein*), in Sibiriâ nempè in udis pratis sylvosis

sylvosis ab Aldano ad Urak (*Gmelin*), in altissimis præruptis Jaikæ (*Pallas*). 4. (v. v. c. et s. sp. in Herb. Pallas. nunc Lamb.)

Planta cæspitosa, herbacea, magnitudine præcedentis at multò mollior et laxior, nunquam surculosa. *Caules* erecti, palmares, flexiliores, villis articulatis suppediti, virides. *Folia* radicalia cucullata, reniformia, 5-partito-palmata, longè petiolata; caulina trifida sessilia: *segmenta* radicalium cuneato-oblonga, trifida: lobis tridentatis: dentibus acutis, aristatis; caulinorum lanceolata, indivisa, mucronata. *Petioli* semiteretes longissimi, lenti, erecti, suprà canaliculati, undique villis longis, articulatis, viscidis densè tecti. *Panícula* laxa, multiflora. *Bracteæ* palmatæ. *Flores* majores, campanulati, pulchri, candidi. *Calyces* cum *pedunculis* villis viscidis instructi: *laciniæ* lineares, acutæ, intùs concavæ. *Petala* spathulata, triplinervia: nervis simplicibus, rectis. *Stamina* inæqualia; *filamenta* viridia; *antheræ* luteæ. *Styli* elongati, staminibus subæquales.

This is a very distinct and well-marked species, readily distinguished from the preceding by its loose, herbaceous habit, slightly covered with long villous hairs; leaves much more deeply divided; lobes acute; stem limber, green, villous. Panicles loose, many-flowered; *laciniæ* of the calyx acute; petals broader, spathulate; limb spreading. Marschall von Bieberstein in his Supplement to the *Flora Taurico-Caucasica* mentions the petals as being unequal, and slightly three-toothed at the apex; but these marks are by no means constant; for I have never observed them either in cultivated or in dried specimens.

71. *S. maderensis*, surculis lignosis, foliis confertis cuneiformibus longè-petiolatis basi acutis apice inæqualitèr inciso-lobatis, laciniis calycinis latè ovatis acutis.

Habitat in Ins. Madeira. *Masson*. 2. (v. s. in Herb. Banks.)

Planta densè cæspitosa. *Surculi* erecti, rigidi, lignosi, basi rudimentis foliorum emarcidorum crebrè instructi. *Caules* plures, adscendentes, 4-unciales, filiformes, graciles, oligophylli, pauciflori, pilis brevissimis glanduliferis levitèr sparsi. *Folia* radicalia conferta, cuneiformia, longè petiolata, pubescentia, basi acuta, apice inæqualitèr inciso-lobata: lobis brevè ovatis, acutis; caulina inferiora palmata; superiora indivisa, acuta. *Petoli* filiformibus, teretibus, rigidis, levitèr villis ciliati. *Calyx* obconicus, ut et *pedicelli* pube glutinosâ tectus: laciniæ triangulari-ovatae, acutæ. *Petala* non vidi.

72. *S. pedatifida*, foliis radicalibus reniformibus pedatifidis viscidis subvillosis: segmentis lineari-lanceolatis acutis, paniculâ fastigiata, laciniis calycinis lineari-lanceolatis mucronatis, petalis angustè spathulatis.

S. pedatifida. *Ehrh. Easicc.* n. 15. *Smith in Act. Soc. Linn.* x. p. 340. *Engl. Bot.* t. 1278. (*optima*.) *Compend. Fl. Brit.* p. 67.

S. quinquefida, *var.* *Lam. Fl. Fr.* iii. p. 533?

β. ladanifera, glabra; foliis profundius sectis cauleque glutinosis.

S. ladanifera. *Lapeyr. Saxif. Pyren.* p. 65. t. 42. *Lam. Encycl.* vi. p. 691. *Lam. et Decand. Fl. Franc.* iv. p. 373. *Persoon Syn.* i. p. 490.

Habitat α in Helvetiæ alpibus (*Ehrhart*), in Pyrenæis (*Tournefort*), in rupibus Scotiæ montium (*G. Don et J. Mackay*); β in Pyrenæis, *La Peyr.* 2. (v. v. c. et s. sp. α et β.)

Herba

Herba in cæspitibus densis, conicis, vegetans, villis molli-
bus præsertim folia et petioli, instructa; et tota succo
glutinoso tecta, in β (quæ nuda est) densiore et ladano
simili nitido, et e quo venit gratus et subtilis odor, spi-
rare quem memorat Clariss. La Peyrouse, et ipse obser-
vavi. *Surculi* erecti, sublignosi, 3—4-pollicares, basi ru-
dimentis foliorum emarcidorum tecti. *Caules* erecti, pal-
mares, glabriusculi, rubri, nitidi. *Petioli* longi, com-
pressi, villosi (in β nudi), basi dilatati et caulem am-
plexantes. *Folia* radicalia numerosa; adultiora patentia;
juniora erecta; omnia profundè tripartita: segmentis la-
teralibus 2—3-fidis, intermedio cuneato-trifido vel inte-
gerrimo: lobis lineari-lanceolatis acutis aristatisque; *cau-
lina* brevè petiolata, profundè tripartita: segmentis line-
aribus integerrimis; supremis et rameis simplicibus, line-
ari-lanceolatis, acutis. *Paniculæ* confertæ, fastigiatae,
multifloræ. *Pedicelli calycesque* pube brevissimâ gluti-
nosâ tecti. *Flores* campanulati, candidi, *S. geranioide*
multò minores: limbo patente. *Calycis laciniae* lineari-
lanceolatae, mucronatae: mucrone aristato, inflexo. *Pe-
tala* angustè spathulata, triplinervia: nervis simplicibus.
Stamina pistillis subæqualia; *filamenta* pallidè luteo-vi-
rescentia; *antheræ* aureæ.

Obs. Species ab omnibus satis distincta. Plures Botanici
cum *S. geranioide*, cui in pluribus sed præsertim habitu
convenit, confusi sunt; tamen characteribus indicatis ab
eâ etiam abundè discrepat. Var. β parùm in habitu re-
cedit, et ferè villorum absentia nec non succo ladano si-
mili densiùs tecto; sed ut species diversa nequaquam
habenda sit.

73. *S. ceratophylla*, surculis lignosis, foliis bi- tri-partitis petiolisque rigidis glabris : segmentis subulatis corneo-mucronatis, caule glutinoso, calycibus fucatis glabris : laciniis ovatis apice recurvis mucronatis, petalis oblongis.

S. ceratophylla. Dryander in Hort. Kew. iii. p. 70.

S. trifurcata. Schrad. Hort. Gött. fasc. i. p. 13. t. 7. Sternb. Saxif. p. 49.

S. petræa. Herb. Pavon.

Habitat in Hispaniâ. Pavon. 2. (v. v. c. et s. spont. à Clar. Pavon comm. in Herb. Lamb.)

Planta densè cæspitosa, tota glaberrima. *Surculi* numerosi, breves, lignosi, stricti, rigidissimi, fragiles. *Caules* numerosi, erecti, palmares, ramosi, rigidi, fragiles, basi rubescentes, succo viscido undique fucati. *Petioles* longissimi, filiformes, rigidi, fragiles, nudi, suprâ canaliculati. *Folia* profundè bi- tri-partita, carnosâ, glaberrima : segmentis subulatis, divaricatis, suprâ canaliculatis, apice mucrone corneo, recurvo instructis ; caulina petiolata, tri-partita : segmentis simplicibus. *Flores* numerosi, candidissimi, in paniculam ramosam laxam dispositi. *Calyces* urceolati pedicellique succo viscoso undique obsiti et nitidissimè fucati : laciniæ ovatæ, erectæ, conniventes, extûs convexæ, margine membranaceæ, apice mucrone corneo recurvato instructæ. *Petala* oblonga, obtusa, integerrima, demùm flaccida, triplinervia : nervis simplicibus strictis.

74. *S. obtusifida*, surculis lignosis, foliis tripartitis petiolisque angustissimis rigidis glabris : segmentis linearibus obtusissimis, calycibus pubescentibus : laciniis ovatis obtusis, petalis obovatis.

Habitat in Hispaniâ. Pavon. 2. (v. s. in Herb. Pavon. nunc Lamb.)

Planta

Planta densissimè cæspitosa, glaberrima, intensè viridis. *Surculi* erecti, 1- aut $1\frac{1}{2}$ -pollicares, lignosi, rigidi, foliosi. *Caules* erecti, 4-unciales, oligophylli, glabri, 4—5-flori. *Petiolì* angustissimi, simplices, glabri, subtùs carinati, rigidissimi. *Folia* profundè tripartita : segmenta linearia, obtusissima, glabra, nitida ; lateralibus porrectis, distantibus, sæpiùs bifidis. *Pedicelli* uniflori, pubescentes. *Flores* campanulati, albi. *Calyx* pubescens : laciniis ovatis, obtusis. *Petala* integerrima, obovata, triplinervia : nervis apice bi- vel tri-furcatis. *Stamina* stylos æquantia ; filamenta lutescentia ; *antheræ* flavæ.

Obs. Species distinctissima, præcedentis habitu.

75. *S. ajugifolia*, surculis procumbentibus, foliis 5-partitis ; segmentis lanceolatis mucronatis, caule ramoso, laciniis calycinis ovatis mucronatis, petalis planis obovatis.

S. ajugifolia. *Linn. Amæn. Acad.* iv. p. 271. *Sp. Pl.* 578. *Gerard. Fl. Galloprov.* p. 224. *Willd. Sp. Pl.* ii. p. 653. *Lapeyr. Fl. Pyren. Saxif.* p. 56. t. 31. (mala.) *Lam. Encycl.* vi. p. 692. *Lam. et. Decand. Fl. Franc.* iv. p. 371. *Persoon Synop.* i. p. 489. *Hort. Kew.* iii. p. 70. *Sternb. Saxif.* p. 46. *Wahlenb. Carpath.* 122.

Habitat in Galloprovinciæ montibus, et etiam in Pyrenæis.

4. (v. v. c.)

Herba virens, villis mollibus, raris, viscidis ad petiolos densioribus instructa, ante anthesin densè cæspitosa, postmodò laxa, surculosa. *Surculi* elongati, laxè procumbentes, rubescentes. *Caules* adscendentes, 4—6-unciales, ramosi, flexuosi, multiflori, villis viscidis levitèr adpersi, basi rubescentes. *Folia* radicalia et surculina longè petiolata, profundè 5-partita : segmentis lanceolatis, recurvatè mucronatis, divaricatis, utrinque glabris, margine ciliatis ;

ciliatis; caulina omnia indivisa, lanceolata, acuminata. *Flores* magni, campanulati, albi. *Calyces* pedicellique pilis glanduliferis obsiti: laciniae ovatae, trinerves, mucronatae, mucrone recurvo. *Petala* obovata, triplinervia: nervis simplicibus, rectiusculis.

76. *S. affinis*, surculis procumbentibus, foliis 5-partitis: segmentis linearibus mucronatis, laciniis calycinis linearibus aristatis, petalis oblongis: marginibus inflexis.

Habitat 4. (v. v. c.)

Herba jucundè virens, villis mollibus et viscidis adspersa, ante anthesin densè caespitosa, postea laxa, surculosa. *Surculi* procumbentes, elongati, rubescentes, villis viscidis parcè instructi. *Caules* adscendentes, tripollicares, laeves, nitidi, pauciflori. *Folia* radicalia 5-partita, surculina plerumque tripartita: segmenta linearia, mucronata: mucrone recurvo aristato; caulina omnia indivisa, linearia, mucronata. *Pedicelli* elongati, uniflori, calycesque pube viscidâ obsiti. *Flores* albi præcedente minores. *Calycis laciniae* lineares, trinerves, aristatae. *Petala* oblonga, triplinervia, margine inflexa: nervis rectiusculis, simplicibus.

I first noticed this species in the Royal Botanic Garden at Edinburgh, where the zeal and industry of my esteemed friend Mr. Macnab has brought together so many rarities. There I observed it for several years successively; and having since seen it in several collections about London, I am convinced of its being sufficiently distinct from its nearest ally *S. ajugifolia*, with which it is not unfrequently confounded. Both it and *ajugifolia* being cultivated together in the Edinburgh Botanic Garden, on comparing them I found the following, and which subsequent obser-

observations have led me to consider permanent, marks. *S. affinis* is a much smaller and slenderer plant, and of a more lively green colour. *Segments* of the leaves narrow, linear. *Stems* much slenderer and shorter, few-flowered. *Laciniae* of the calyx linear, terminated with a long point. *Petals* oblong, with their margins inflected. This curious conformation of the petals is of itself an important differential mark ; for in this respect it stands isolated among the numerous species which surround it, as *Rosa involuta* does among those of its tribe.

77. *S. pentadactyla*, surculis erectis brevibus, foliis longè-petiolatis glabris quinquepartitis : segmentis linearibus obtusis subtùs costatis, laciniis calycinis lanceolatis acutis, petalis obovatis : nervis ramosis.

S. pentadactylis. *Lapeyr. Fl. Pyren. Sarif.* p. 64. t. 40. *Lam. Encycl.* vi. p. 696. *Lam. et Decand. Fl. Franc.* iv. p. 374. *Persoon Synop.* i. p. 489.

Habitat in Pyrenæis. *La Peyrouse.* 4. (v. s. in Herb. Banks.)

Herba glabra, lætè-virens, densè cæspitosa. *Surculi* erecti, breves, parùm lignosi, rigidi. *Caules* erecti, 3—5-unciales, ramosi, teretes, glabri, flexuosi. *Petoli* longissimi, compressi, lineares, glabri, subtùs costati, rigidi-usculi. *Folia* radicalia brevissimè petiolata, patentia, surculina longè-petiolata, erecta, omnia profundè 5-partita : segmenta linearia, obtusa, patentia, subtùs costata. *Flores* candidi, in paniculam laxam dispositi. *Pedicelli* elongati calycesque glabri. *Laciniae calycinæ* lanceolatae, acutæ, trinerves. *Petala* obovata, triplinervia : nervis flexuosis ramosis. *Filamenta* gracilia, stylis elongatis breviora.

This species is very nearly related, on the one hand, to my *S. obtusifida*, and on the other to *S. exarata* ; but having only seen
imperfect

imperfect specimens of it, I am unable to decide positively to which of the two it is nearest allied. It appears to be nearer akin to *S. obtusifida*; still, however, I think they are specifically different. At the suggestion of Sir James Edward Smith, I have taken the liberty of changing the termination of the specific name, as being less consonant to established rules.

78. *S. latifida*, surculis erectis brevibus, foliis radicalibus surculinisque latè-cuneatis glaberrimis 3—5-lobis: lobis latè-ovatis acutis, calycibus glabris: laciniis ovato-lanceolatis mucronulatis, petalis spathulatis: nervis simplicibus.

S. adscendens. *Herb. Pavon.*

Habitat in Hispaniâ. *Pavon.* 4. (v. s. in *Herb. Lamb.*)

Planta glaberrima, latè-virens, cæspitosa. *Surculi* erecti, 2-pollicares, rigidiusculi. *Caules* erecti, palmares, ramosi, glabri, polyphylli, multiflori. *Folia* radicalia et surculina latè-cuneata, glaberrima, 3—5-loba: lobis latè-ovatis, mucronulatis, planis; caulina inferiora conformia sed profundius lobata: lobis lanceolatis; superiora indivisa. *Pedunculi* elongati, subbiflori, glabri. *Calyces* glabri: laciniæ ovato-lanceolatae, mucronulatae. *Petala* spathulata, candida, triplinervia: nervis simplicibus. *Stamina* pistillis breviora; *filamenta* lutescentia; *antheræ* aureæ.

79. *S. decipiens*, villosissima; foliis 5-fidis trifidisve: segmentis ovato-oblongis obtusis muticis, laciniis calycinis triangulari-ovatis obtusis muticis, petalis orbiculatis.

S. decipiens. *Ehrhart. Beytr.* v. p. 47. *Persoon Synop.* i. p. 490. *Sternb. Saxif.* p. 55. t. 23.

S. cæspitosa. *Fl. Dan.* t. 71.

S. petræa.

- S. petræa*. Roth Tent. i. p. 184. With. Brit. 890.
S. palmata. Smith Brit. ii. p. 456. Eng. Bot. t. 455.
S. villosa. Willd. Enum. 462.

Habitat in apricis saxosis Germaniæ (Ehrhart, Schreber, Panzer), in rupibus Cambro-Britanniæ (Griffith), Bohe-
 miæ (Sternberg). 4. (v. v. c.)

Herba villosissima, canescens, ante anthesin densè cæspi-
 tosa, postmodò laxa, surculosa. *Surculi* elongati, pro-
 cumbentes. *Caules* erecti, foliosi, multiflori, 4—6-unci-
 ales. *Folia* radicalia 5-fida vel trifida: segmenta latè
 oblongo-ovata, obtusa, mutica; caulina ima sæpiùs par-
 tita; superiora indivisa, lanceolata. *Flores* magni, pa-
 tentes, lactei. *Calyces* pedunculique pube canâ viscidâ
 densè tecti: laciniæ triangulari-ovatæ, obtusæ, muticæ,
 obsoletè trinervosæ. *Petala* plana, orbiculata, integer-
 rima, triplinervia: nervis simplicibus, rectiusculis.

80. *S. hirta*, villosissima; foliis radicalibus 5-fidis; surculinis
 trifidis: segmentis ovato-lanceolatis acutis, laciniis caly-
 cinis triangulari-ovatis acutis, petalis obovatis.

S. hirta. Donn Cant. ed. 5. 107. Engl. Bot. t. 2291. Smith
 Compend. Fl. Brit. p. 66.

Habitat in rupibus Hiberniæ (J. T. Mackay), Scotiæ occi-
 dentalis (G. Don). 4. (v. v. c. et s. spont.)

Herba villosissima, canescens, ante anthesin densissimè
 cæspitosa, postea laxa, surculosa. *Surculi* decumbentes,
 flexuosi. *Caules* erecti, 3—5-pollicares, polyphylli, pau-
 ciflori, villis viscidis densè instructi, basi rubescentes.
Folia radicalia 5-fida; surculina trifida petiolis dilatatis
 subæqualia: segmenta ovato-lanceolata, acuta; caulina
 inferiora profundè tripartita: segmentis linearibus, mu-
 cronatis;

cronatis ; superiora indivisa. *Flores* albi, præcedente minores. *Calyces* pedicellique pilis glanduliferis confertissimè tecti : laciniaè latè triangulari-ovataè, mucronatè acutæ. *Petala* obovata, integra, triplinervia : nervis simplicibus, strictis. *Stamina* stylos subæquantia ; *filamenta* flavida ; *antheræ* luteæ.

Sir J. E. Smith has justly remarked in English Botany, that this species approaches very near to *S. decipiens* (*palmata*, Sm.) ; still, however, I think with him that it is specifically distinct. It differs from *decipiens* in its less robust habit, acute segments of its leaves, and acute laciniaè of its calyx, its smaller flowers, and obovate petals. My friend Mr. J. T. Mackay first discovered this species on the Irish mountains. It has also been observed by the late Mr. G. Don of Forfar, on rocks in the Western Highlands. The Scottish specimens in Mr. Don's Herbarium agree exactly with Irish ones from Mr. Mackay, and with the admirable figure in English Botany.

81. *S. platipetala*, villosa ; surculis elongatis, foliis 5—3-partitis : segmentis linearibus acutis aristatisque, laciniis calycinis ovatis mucronatis, petalis orbiculatis.

S. platipetala. *Smith in Act. Soc. Linn.* x. p. 391. *Engl. Bot. t.* 2276. (*optima.*) *Compend. Fl. Brit.* 66.

Habitat in Scotiæ alpibus, *G. Don* ; in alpibus Cambro-Britannicis, *Dawson Turner.* 4. (v. v. spont.)

Herba villosa, ante anthesin densissimè cæspitosa, postea laxè diffusa, surculosa. *Surculi* numerosi, longissimi, prostrati. *Caules* erecti, 5—6-unciales, foliosi, multiflori. *Folia* radicalia profundè partita ; surculina tri-rariùs quinque-partita, petiolis angustè linearibus duplò vel triplò breviora : segmenta linearia, acuta, setâ longâ tenui terminata ;

terminata; *caulina* inferiora profundè 5-partita; superiora indivisa, lanceolata, acuminata. *Flores* patentes, lactei, majusculi. *Calyces* pedunculique pube glandulosâ densè suppediti: laciniae triangulari-ovatae, mucronatae (mucrone recto), conspicuè trinerves. *Petala* orbiculata, plana, integra, extùs præsertim in æstivatione, ad apicem rosea, basi parùm angustiora, triplinervia: nervis lateralibus incurvis, ramulosis; medio recto, simplici. *Stamina* æqualia, stylis vix longiora; *filamenta* pallida; *antheræ* luteæ.

82. *S. incurvifolia*, glabriuscula; foliis radicalibus 5-fidis; surculinis trifidis: segmentis lanceolatis obtusis incurvis, laciniiis calycinis ovatis acutis, petalis subrotundis emarginatis.

S. incurva. Mackay in literis.

Habitat in Hiberniæ rupibus alpinis. J. T. Mackay. 4.
(v. v. c.)

Planta virens, densissimè cæspitosa, ante anthesin glaberrima, postmodum villis longis viscidis adspersa. *Surculi* breves, erecti. *Caules* stricti, tripollicares, foliosi, 2—3-flori. *Folia* radicalia aggregata, 5-fida, palmata; surculina trifida petiolis latè dilatatis vix breviora: segmenta lanceolata, obtusa, incurvata; *caulina* inferiora palmatifida; superiora indivisa. *Flores* albæ. *Calyces* pedicellique pilis glanduliferis suppediti: laciniae latè ovatae, acutae, muticae. *Petala* subrotunda, emarginata, triplinervia: nervis simplicibus.

The present species has, I believe, been found no where else except in Ireland. Having cultivated it for many years, I do

not hesitate to give it with confidence as a distinct species. Its short upright shoots ; its inflected leaves, and emarginate petals ; its stems never bearing above two or three flowers ; and lastly, its being nearly smooth, will always prevent its being confounded with the three preceding species. In some respects, but especially in habit, it approaches near to *S. cæspitosa*, Linn. It differs however from it by its emarginate petals ; by the longer and inflected segments of its leaves ; and likewise by the whole plant being almost smooth, and nearly double the size.

83. *S. denudata*, glaberrima ; foliis radicalibus 5-fidis ; surculi-
nis tripartitis : segmentis lineari-subulatis acutis, laciniis
calycinis lanceolatis mucronulatis, petalis obovatis emar-
ginatis.

Habitat in montibus Grampianis in Angusiâ Scotiæ. *G. Don.*
γ. (v. v. spont.)

Herba glaberrima, lætè viridis, in cæspitibus densis parvis
vegetans. *Surculi* brevissimi, conferti, erecti, crebrè fo-
liosi. *Caules* erecti, sesquipollicares, oligophylli, sub-
biflori, purpurascens, pilis glandulosis levitè instructi.
Folia radicalia 5-fida ; surculina tripartita : segmenta li-
neari-subulata, acuta, aristâ terminata, carnosâ, glabra,
nitida ; *caulina* ima tripartita, cæteris indivisis. *Flores*
campanulati, candidi. *Calyces* pilis glanduliferis parcè
suppediti : laciniæ lanceolatæ, mucronulatæ mucronulo
reflexo. *Petala* obovata, emarginata, trinervia : nervis
simplicibus strictis. *Filamenta* luteo-virescentia. *Antheræ*
aureæ.

The late Mr. G. Don discovered this species many years ago on
rocks on the summits of the mountains of Angus, near the con-
fines of Aberdeenshire, where it grows in little dense tufts, flower-
ing

ing in June. The stem has never more than one or two flowers. The leaves are quite smooth and shining, except the petioles, which are slightly fringed with soft villous hairs. The narrower segments of its leaves, which are acute, straight and awned, and the lanceolate laciniae of its calyx, as well as its obovate petals, at once distinguish it from *S. incurvifolia*. It cannot be confounded with *S. cæspitosa*, as will be seen on a comparison of their characters. The late Mr. Don cultivated it under the name of *S. lævis*; but it is very distinct from the *lævis* known in the gardens, which is the *S. condensata* of Gmelin's *Fl. Badensis*.

84. *S. Sternbergii*, glabra; foliis radicalibus palmatifidis; surculinis trifidis indivisisve: lobis ovatis acutis muticis, laciniiis calycinis ovatis mucronatis, petalis obovatis: nervis ramosissimis.

S. Sternbergii. Willd. *Enum.* p. 462. *Sternb. Saxif.* p. 56. t. 24. (*mala.*)

S. palmata. Panz. in *Sturm. Deutsch. Fl.* 26. *Heft.* t. 10. f. 2. (*ex Sternb. l. c.*)

Habitat in Agro Norimbergensi Germaniæ. Panzer. 4. (v. v. c.)

Herba lætè virens, glaberrima, densè cæspitosa. *Surculi* brevissimi, conferti. *Caules* erecti, 3—4-unciales, glabri, 2—3- rariùs 4-flori. *Folia* radicalia 5-fida, palmata; surculina trifida aut indivisa: lobis ovatis acutis muticis; *caulina* omnia indivisa, cuneata, acuta, glabra, nitida, conspicuè nervosa. *Flores* magni, albi. *Calyces* pedicellique pilis glanduliferis brevissimis adpersi: laciniae ovatae mucronatae trinerves: mucrone recurvo. *Petala* obovata, triplinervia: nervis flexuosis, ramosissimis.

OBS.

Obs. Figura Sternbergii, quæ dubia ob habitum diversum et caulem ramosum hirsutum, ad *S. decipientem* potiùs spectare videtur.

85. *S. pulchella*, glabra; foliis radicalibus 5-fidis; surculinis trifidis: segmentis linearibus obtusis, laciniis calycinis latè-ovatis obtusis, petalis orbiculatis: nervis ramulosis.

Habitat in Germaniâ? 4. (v. v. c.)

Herba glabra, saturatè virens, densissimè cæspitosa, ad anthesin pilis brevibus glanduliferis adspersa, surculosa. *Surculi* breves, erecti. *Caules* erecti, $2\frac{1}{2}$ —3-pollicares, 2—3-flori, nitidi, pilis glanduliferis parcè suppediti. *Folia* radicalia 5-fida, palmata; surculina trifida: segmenta linearia, obtusa, carnosæ, marginata, apice mucronulo tenui instructa; *caulina* inferiora digitato-5-partita; superiora tripartita. *Flores* lactei, magnitudine ferè præcedentis. *Calyces* pedicellique pube glandulosâ instructi: laciniæ latè-ovatæ, obtusæ. *Petala* suborbiculata, triplinervia: nervis ramosiusculis. *Stamina* brevissima; *filamenta* virescentia; *antheræ* luteæ.

My friend Mr. Anderson, of the Chelsea Botanic Garden, received this species from Germany under the name of *S. Sternbergii*. It is, however, in several respects very distinct from that species. I do not remember to have seen it any where else but with him, nor have I met with specimens of it either in the Herbariums of London or Paris.

86. *S. tridentata*, glabra; foliis radicalibus 5-fidis; surculinis longè petiolatis acutè tridentatis, laciniis calycinis triangulari-ovatis mucronatis, petalis spathulatis.

Habitat 4. (v. v. c.)

Herba

Herba densissimè cæspitosa, ante anthesin glaberrima, postea surculosa, villis viscidis levitè sparsa. *Surculi* brevissimi, erecti, conferti, crebrè foliosi. *Caules* erecti, triunciales, graciles, oligophylli, pauciflori, purpurascens, nitidi, pilis glanduliferis parcè tecti. *Folia* radicalia patentia, 5-fida; surculina erecta, longè petiolata (petiolis gracilibus villis ciliatis), spathulata, plerumque tridentata: dentibus brevibus ovatis mucronulatis; lateralibus minoribus. *Pedicelli* breves, uniflori, calycesque pube brevi viscidâ tecti. *Flores* nivei. *Calycis laciniæ* triangulari-ovatae, mucronatae. *Petala* spathulata, triplinervia: nervis simplicibus, strictis. *Stamina* inæqualia; *filamenta* viridia; *antheræ* aureæ.

I met with this plant in Mr. Knight's exotic nursery, King's Road, Chelsea. It is specifically distinct from all the species with which I am acquainted. Its native country, however, I have not been able to ascertain.

87. *S. andicola*, villosissima; foliis radicalibus trifidis: segmentis lanceolatis acutis; surculinis superioribus linearibus simplicibus acutis, laciniis calycinis ovatis acutis, petalis obovato-orbiculatis: nervis ramosis.

S. villosa. Pavon Mss.

Habitat in frigidissimis Peruviae. Pavon. 4. (v. s. in Herb. Pavon. in Mus. Lamb.)

Herba villosissima, densissime cæspitosa. *Surculi* breves, decumbentes. *Caules* erecti, sesqui- vel bi-pollicares, foliosi, 3—4-flori, villis viscidis confertissimè obsiti. *Folia* radicalia patentia, trifida, brevè-petiolata (petiolis dilatatis subtùs nervosis); surculina inferiora trifida: segmentis lineari-lanceolatis, acutis, subtùs conspicuè trinerviis,

nervibus, superiora indivisa, lineari-lanceolata, acuta, subtùs trinervia; *caulina* ima tripartita, superioribus indivisis. *Flores* lactei, subcorymbosi. *Calyx* densè glanduloso-pilosus: lacinia ovata, mucronulata. *Petala* obovato-orbiculata, triplinervia: nervis lateralibus, conniventibus, ramosis; medio recto, subsimplici. *Filamenta* brevia, lutescentia. *Antheræ* flavæ.

Nothing is probably more interesting to botanists than species of those genera, which are chiefly confined to the colder zones, from tropical climates. Among the rich and highly interesting harvest of plants discovered by the celebrated authors of the *Flora Peruviana*, Ruiz and Pavon, are several species of *Saxifraga*; of each of which there are excellent specimens in the Herbarium of Don Jose Pavon, now in the possession of A. B. Lambert, Esq. The present is totally distinct from every other species. I would have most willingly retained the name given to it by its discoverer; but as that name has been already applied to a very different plant, namely, *S. decipiens*, to prevent any ambiguity or confusion I have judged it best to change it.

88. *S. cæspitosa*, foliis radicalibus aggregatis 5—3-fidis indivisisve: segmentis lineari-lanceolatis obtusis, caule oligophyllo paucifloro, laciniis calycinis ovatis obtusis, petalis conniventibus obovato-rotundatis.

S. cæspitosa. Linn. *Sp. Pl.* 578. *Fl. Succ.* ii. n. 376. *Fl. Lapp. edit. alter.* 142. *Gunn. Norv.* n. 1047. t. 7. f. 3. *an etiam f. 4?* Smith *Brit.* ii. p. 455. *Engl. Bot.* t. 794. *Prod. Fl. Græc.* i. p. 277. *Wahlenb. Lapp.* 119.

S. grœnlandica. *Sp. Pl.* 578. *Gunner. Norv.* 689. t. 7. f. 1. (*optima.*) Lapeyr. *Pyren. Saxif.* p. 39. t. 19. *Persoon Synop.* i. p. 490. *Sternb. Saxif.* p. 53.

S. foliis

S. foliis petiolatis trifidis, caule subfolioso viscido. Hall.
Helv. n. 989.

S. tridactylites grœnlandica, cauliculis valdè foliosis. Dill.
Eltham. p. 337. *t.* 353. *f.* 329.

S. tridactylites alpina minor et villosa. Tourn. *Inst.* 252.

Sedum tridactylites, alpinum minus. Bauh. *Pin.* 284. *Prod.*
131.

Habitat in Lapponiæ, Sueciæ, Helvetiæ, Norvegiæ et Pyrenæorum alpi-
bus; etiam in Grœnlandiâ et rupibus alpi-
nis Cambro-Britanniæ. 4. (v. v. c. et s. spont.)

Planta densissimè cæspitosa, pilis glanduliferis brevibus confertissimè suppleta. *Surculi* brevissimi, creberrimè foliosi, basi foliis emarcidis densè imbricati. *Caules* erecti, 1—2-unciales aut rariùs ultrà, teretes, oligophylli, 1—3-flori, in cultâ sæpiùs 4-flori. *Folia* radicalia aggregata, imbricata, sæpius 5-fida, nunc 3-fida aut indivisa: segmenta lineari-lanceolata, obtusa, carnosà, obscurè nervosa; *caulina* ima palmata, summis plerumque tripartitis: segmentis linearibus. *Pedicelli* breves, uniflori, calycesque pube brevissimâ viscidâ tecti. *Flores* majusculi, lactei. *Lacinie calycinæ* ovatae, obtusæ, carnosæ, obsoletè trinerves. *Petala* obovato-rotundata, conniventia, calyce duplò longiora, triplinervia: nervis simplicibus; medio recto; lateralibus curvatis. *Filamenta* lutea. *Antheræ* flavæ.

Much confusion has existed, and still exists, even in our latest works on *Saxifragæ*, regarding this species, which appears to have arisen chiefly from the improper synonyms Linnæus added to his plant. No doubt, had Linnæus seen the plant those authors which he quoted intended by their imperfect figures and descriptions, he would have been at once convinced of its being widely

different from the Swedish and Lapland plant. Indeed no two species can be more dissimilar than it and the *S. muscoides* of Wulfen, which La Peyrouse and Sternberg in their excellent works still insist on as being the real *cæspitosa* of Linnæus.

S. cæspitosa varies much in size, and in the number of flowers on each stalk, as well as of its cauline leaves. There are specimens from the Linnæan Herbarium, collected by the late Dr. Solander on the Lapland alps, and preserved in the Banksian Herbarium, which accord exactly with Gunner's figure 3. They are taller and stronger than the general state of *S. cæspitosa*; but in no essential points do they differ. Gunner's figure 4, notwithstanding the greater number of flowers, ought also to be referred to this plant; it certainly does not represent *S. decipiens*. I am inclined to think Willdenow's *cæspitosa* belongs more probably to *S. exarata* than to this.

89. *S. stellata*, foliis creberrimis appressè imbricatis 5-fidis trifidisve: segmentis lineari-oblongis obtusis, caule bifloro, laciniis calycinis ovatis acutis, petalis obovatis.

S. stellata. Pavon Mss.

Habitat in frigidissimis Andium Peruviae. Pavon. 4. (v. s. in Herb. Pavon. nunc in Mus. Lamb.)

Herba densè cæspitosa, *Fragosæ corymbosæ* (Fl. Per.) habitu admodum similis, pube glandulosâ tecta. *Surculi* erecti, conferti, foliis undique crebrè imbricati. *Caules* erecti, vix unciales, graciles, biflori. *Folia* creberrima, appressè imbricata, omnia 5-fida vel trifida: segmenta lineari-oblonga, obtusa, carnosâ, subtùs uninervia; caulina simplicia, linearia, obtusa. *Petoli* breves, latissimè dilatati. *Flores* lactei, majusculi. *Calyces* pube glandulosâ brevi densè tecti: laciniæ ovatæ, acutæ. *Petala* obovata, triplinervia: nervis simplicibus strictis.

OBS.

Obs. A *S. cæspitosa* longè discrepat : habitu, foliis creberrimis appressè imbricatis, petiolis latissimè dilatatis, laciniis calycinis acutis et petalis obovatis.

91. *S. Bonplandii*, pubescens ; foliis congestis 5-fidis trifidisve : segmentis linearibus obtusis, laciniis calycinis lanceolatis acutis, petalis obovatis.

S. peruviana. Bonpland in Sternb. *Saxif.* p. 55. t. 22.

S. alpina. Pavon Mss.

Habitat in Andium Peruvianorum summis Cordilleras dictis.

Pavon, Bonpland. 4. (v. s. in Herb. Pavon. nunc in Mus. Lamb.)

Herba densissimè cæspitosa, pilis brevissimis glanduliferis confertissimè oblecta. *Surculi* breves, adscendentes, crebrè foliosi. *Caules* numerosissimi, unciales, erecti, oligophylli, glanduloso-tomentosi. *Folia* radicalia et surculina congesta, imbricata, quinque- vel tri-partita : segmenta linearia, obtusa, carnosæ, enervia ; caulina inferiora tripartita : summis simplicibus lineari-lanceolatis. *Petioles* brevissimi, lineares. *Flores* albi, terminales, terni, capitati, subsessiles, rariùs solitarii. *Calyces* obconici, tomento glanduloso densè tecti : laciniæ lanceolatæ, acutæ, rectæ. *Petala* obovata, triplinervia : limbo orbiculato, patente : nervis simplicibus ; lateralibus incurvis. *Stamina* stylis longiora ; *filamenta* alba ; *antheræ* flavæ.

This is the only species of *Saxifraga* discovered by the illustrious travellers Humboldt and Bonpland in South America. While in Paris, my esteemed friend M. Kunth, the celebrated editor of the *Nova Genera et Species Plantarum*, had the kindness to permit me to examine the specimens of this plant in the Humboldtian Herbarium. These specimens appeared more diffuse and stronger than those of *S. alpina* (Pavon) in the Lam-

bertian Herbarium ; but in every essential point they seemed to coincide.

91. *S. magellanica*, caulibus cæspitosis procumbentibus, foliis linearibus trifidisve confertissimis glabris, ramis floriferis nudis axillaribus brevissimis unifloris. *Lam. Encycl.* vi. p. 686.

S. magellanica, foliis congestis viscoso-pubescentibus ; inferioribus trifidis ; superioribus simplicibus, floribus subbinatis subsessilibus. *Persoon Synop.* i. p. 491. *Sternb. Saxif.* p. 39. t. 11. a.

Habitat ad Fretum Magellanicum. *Commerson.*

Planta cæspitosa. *Caules* breves, procumbentes, foliosi. *Folia* inferiora trifida ; superiora indivisa, linearia, obtusa, glabriuscula. *Flores* solitarii, brevissimè pedunculati. *Pedunculi* nudi. *Calyx* glaber : laciniis linearibus, obtusis. *Petala* obovata, calyce duplò longiora. *Lam. loc. cit.* (ex Gall. vers.)

I am sorry that while at Paris I neglected to examine the specimens of this in Commerson's Herbarium ; I have therefore followed Lamarck, as being the first who described it, in preference to Persoon and Sternberg, whose descriptions, and also the figure of the latter, disagree with Lamarck's description in some important points.

92. *S. exarata*, pubescens ; foliis radicalibus quinque- tri-partitisve ; surculinis tripartitis : segmentis linearibus obtusissimis suprà exaratis, caule multifloro, laciniis calycinis ovato-oblongis obtusis, petalis obovatis : nervis simplicibus.

S. exarata. *Villars. Delph.* iv. p. 674. t. 45. *Lam. et Decand. Fl. Franc.* iv. p. 374.

S. ner-

- S. nervosa*. Lapeyr. *Pyren. Saxif.* p. 63. t. 39. Lam. *Encycl.* vi. p. 696. Persoon *Synop.* i. p. 490. Marsch. à Bieberst. *Fl. Taur. Cauc.* i. p. 316. Sternb. *Saxif.* p. 52.
- S. hypnoides*. Allion. *Ped.* 1538. t. 21. f. 4. (excl. synon.)
- β . *pubescens*, foliis radicalibus surculinisque profundè tripartitis : segmentis lateralibus bifidis, floribus longè pedunculatis subcorymbosis.
- S. pubescens*. Poir. *Act. Toul.* iii. p. 327. Lam. et Decand. *Fl. Franc.* iv. p. 375. Sternb. *Saxif.* p. 53.
- S. mixta* α et β . Lapeyr. *Pyren. Saxif.* p. 41. t. 21. Persoon *Synop.* i. p. 490.
- S. cæspitosa*. Villars. *Delph.* iv. p. 672. (excl. syn.) Wulfen in Jacq. *Collect.* i. p. 290 ? Willd. *Sp. Pl.* ii. p. 656 ?
- γ . *intricata*, foliis radicalibus confertis patentibus cuneatis 5-fidis, pedunculis divaricatis.
- S. intricata*. Lapeyr. *Saxif. Pyren.* p. 58. t. 33. Lam. et Decand. *Fl. Franc.* iv. p. 374. Persoon *Synop.* i. p. 490.
- Habitat* α in summis alpibus Pyrenæorum (*La Peyrouse*), Delphinatus (*Villars*), Sabaudiaë et Pedemontis (*Allioni*), Caucasi (*Marschall à Bieberstein*) ; β et γ in Pyrenæis (*La Peyrouse*), β etiam in Terrâ Novâ (*Herb. Banks.*)
 μ . (v. v. c. α , et s. spont. β et γ .)

Planta ante anthesin densissimè cæspitosa, postea surculosa, pilis brevissimis glanduliferis densè pubescens. *Surculi* erecti, bi- vel tri-unciales, rigidiusculi. *Caules* erecti, 3—4- rariùs 5-pollicares, multiflori, pube brevi viscidissimâ confertè suppediti. *Folia* radicalia 5—3-partita, deflexo-patentia, rosulata ; surculina erecta, tripartita, rarissimè indivisa : segmenta linearia, obtusissima, suprâ nervis lineatis exarata ; *caulina* profundè tripartita : segmentis lateralibus sæpè bifidis. *Petioles* lineares plani, conspicuè

conspicuè trinerves. *Pedunculi* filiformes, uniflori, folio profundè tripartito bracteam mentiente ad basin cujusque instructi, laterales subæquales; terminali brevior. *Flores* candidi. *Calyces* obconici, pube brevi densâ instructi: laciniaë ovato-oblongæ, obtusæ, carnosæ, obsolete trinerves. *Petala* obovata, calyce duplò longiora, triplinervia, apice retusa: nervis simplicibus, strictis. *Stamina* subæqualia; *filamenta* lutea; *antheræ* aureæ.

I have reduced to this plant the *Saxifraga intricata* and *mixta* of La Peyrouse, and the *pubescens* of Poiret, as neither of them affords sufficient or permanent characters to establish them as distinct species. It varies much in size and in the number of the segments of its leaves; and likewise in the number of flowers on a stalk; but its prominent features are always the same.

93. *S. Pavonii*, pubescens; foliis tripartitis: segmentis linearibus acutis nervosis, petiolis linearibus dilatatis subtùs costatis, laciniaë calycinis linearilanceolatis acutis, petalis obovatis.

Habitat in Andium Peruvianorum locis frigidissimis. *Pavon.* 4. (v. s. in Herb. Pavon. nunc in Mus. Lamb.)

Herba pubescens, in cæspitibus densis, planis vegetans. *Surculi* brevissimi, basi foliis emarcidis crebrè instructi. *Caules* erecti, 4—5-unciales, oligophylli, 3—5-flori, pilis brevissimis glanduliferis tecti. *Folia* omnia tripartita, subtùs insignitèr costata; inferiora deflexo-patentia; superiora erecta: segmenta linearia, acuta; lateralibus rarissimè unidentatis; *caulina* inferiora tripartita; superiora simplicia, linearilanceolata, acuta. *Petiolis* dilatati, lineares. *Pedunculi* elongati, uniflori calycesque pube brevissimâ glandulosâ densè tecti. *Flores* lactei, ad siccationem

cationem lutescentes. *Calycis laciniae* lineari-lanceolatae, acutae. *Petala* obovata, triplinervia : nervis rectiusculis, simplicibus.

Obs. A præcedente distinctissima : segmentis foliorum acutis, laciniis calycinis lineari-lanceolatis acutis et aliis characteribus.

94. *S. pedemontana*, pubescens; foliis aggregatis cuneato-spathulatis digitato-sectis exaratis : segmentis lineari-oblongis integris tridentatisve, floribus corymbosis, laciniis calycinis lineari-elongatis acutis, petalis oblongo-spathulatis.

S. pedemontana. *Allion. Ped. n.* 1540. *t.* 21. *f.* 6. (*optima.*) *Lam. et Decand. Fl. Franc.* iv. *p.* 372. *Persoon Synop.* i. *p.* 490.

S. cymosa. *Waldst. et Kit. Pl. Rar. Hung.* *p.* 91. *t.* 88.

S. heterophylla. *Sternb. Saxif.* *p.* 50. *t.* 20. *f.* 1. *et* 2.

Habitat in alpinis Pedemontanis (*Allioni, Bellardi, et Balbis*), Marmaroszensibus (*Waldstein et Kitaibel*). *u.* (v. s. in *Herb. Ventenat.* nunc in *Mus. Lessertiano*).

Planta densè cæspitosa. *Radix* fusca, foliorum emarcidorum rudimentis densissimè tecta. *Surculi* brevissimi, densè foliosi. *Caules* erecti, teretes, 4—5-pollicares, multiflori, pube brevissimâ glutinosâ undique tecti. *Folia* aggregata, cuneato-spathulata, levitèr pubescentia, digitatim secta, suprâ exarata, subtùs costata ; adultiora deflexo-patentia ; juniora erecta : segmentis lineari-oblongis, acutis, integerrimis tridentatisve ; *caulina* inferiora cuneata, digitato-secta ; suprema tripartita : segmentis linearibus acutis. *Flores* magni, campanulati, candidi, corymbosi. *Calyces* profundè 5-partiti pedicellique pube brevi viscidâ densè tecti : *laciniae* lineares, elongatae,

elongatæ, acutæ, rectæ. *Petala* oblongo-spathulata, tripplinervia : nervis rectis, simplicibus. *Genitalia* petalis breviora ; *filamenta* capillaria, lutescentia ; *antheræ* aureæ. *Styli* erecti, staminibus breviores.

I had an opportunity, while in Paris in August 1821, of examining several very fine specimens of this truly distinct species in the Herbarium of the late M. Ventenat, now in the possession of Baron Benjamin De Lessert. I take this opportunity, therefore, of acknowledging my thanks to M. De Lessert for his kindness in permitting me to examine his extensive and valuable collection. These specimens were collected on the Pedemontese alps by Drs. Bellardi and Balbis, who communicated them to M. Ventenat. The Count de Sternberg is of opinion, that the *cæspitosa* of Wulfen is the same as this species ; but I am rather inclined to think (judging from the description) that Wulfen's plant belongs to *S. exarata*.

95. *S. moschata*, pubescens ; foliis radicalibus trifidis ; surculinis trifidis indivisisve nervosis : segmentis linearibus acutiusculis, caule filiformi subracemoso, petalis angustè-ovalibus calycem vix superantibus.

S. moschata. *Wulfen in Jacq. Misc.* ii. p. 128. t. 21. f. 2. (bona.) *Murr. Syst. Veg.* xiv. p. 414. *Willd. Sp. Pl.* ii. p. 656. *Lapeyr. Pyren. Saxif.* p. 61. t. 37. (media.) *Lam. Encycl.* vi. p. 695. *Persoon Synop.* i. p. 490. *Sternb. Saxif.* p. 41. t. 11. f. 3.

S. cæspitosa. *Scop. Carn.* 494. t. 14.

S. exarata. *Allion. Ped.* 1539. f. 2. (mala.)

S. muscoides. *Sternb. Saxif.* p. 39. t. 11. f. 2. (omiss. var. β et γ , et exclus. synonym. *Smith Brit.*)

Sedulum quod moschatellina alpina lutea vocari potest. *Gesn. fasc.* xxv. t. 6. f. 31.

Tridactylites

Tridactylites alpina. Bauh. Hist. iii. p. 754. (fig. benè.)
Habitat in alpihus Carinthiacis, Carniolicis, Sabaudicis,
Salisburgensibus, inque Pyrenæis. 4. (v. v. c.)

Planta ante anthesin densè cæspitosa, læviuscula, postmodum surculosa, glandulis brevissimis densè pubescens. *Surculi* erecti, elongati, graciles. *Caules* erecti, filiformes, graciles, 2—3-unciales, nudiusculi, 3—5-flori. *Folia* radicalia trifida, patentia, longè-petiolata; surculina plerumque trifida rariùs indivisa, erecta, etiam longè petiolata, omnia suprà lineis exarata: segmenta linearia, acutiuscula. *Petioles* angustè lineares, tenues, submembranacei, suprà lineâ exarati. *Flores* racemosi, brevè pedicellati, ad basin cujusque pedicelli folio tripartito bracteam mentiente instructi. *Calyces* obconici, densè glandulosi pubescentes: laciniæ lineares, obtusæ. *Petala* angustè ovalia, acutiuscula, lutea, triplinervia, calyce parùm longiora: nervis simplicibus, strictis. *Filamenta* brevissima, virescentia. *Antheræ* luteæ.

The Count de Sternberg's *t.* 11. *f.* 3. is a very good representation of this plant, and not inferior to Jacquin's; but he has inadvertently confounded it with the two following, from which it is very distinct. His variety γ I have no doubt belongs to *S. pygmæa*.

96. *S. muscoides*, glaberrima; foliis radicalibus integris trifidisve; surculinis omnibus linearibus indivisis obtusis enervibus, caule gracillimo subtrifloro, petalis linearibus calyce parùm longioribus.

S. muscoides. Wulfen in Jacq. Misc. ii. p. 125. Willd. Sp. Pl. ii. p. 656. (exclus. synonym. Scop. Carn.) Lam. Encycl. vi. p. 697. Persoon Synop. i. p. 491. Lam. et De-

- cand. Fl. Franc.* iv. p. 376. *Marsch. à Bieberst. Fl. Taur. Cauc.* i. p. 316. *Sternb. Saxif.* p. 39.
- S. cæspitosa.* *Huds. Angl.* p. 181. (exclus. synonym. *Linn. et Fl. Dan.*) *Lapeyr. Pyren. Saxif.* p. 59. t. 35. an item t. 34? *Sternb. Saxif.* t. 11. f. 1 (media.)
- S. moschata.* *With. Brit.* ii. p. 406.
- S. pyrenaica.* *Vill. Delph.* iii. p. 671.
- S. pyrenaica, foliis partim integris partim trifidis.* *Tournef. Inst.* 253. *Segu. Veron.* iii. p. 205. et i. p. 451. t. 9. f. 4. (benè.) *Hall. Opusc.* 292. t. 1.
- S. foliis integris et trifidis, caule subnudo paucifloro.* *Hall. Helv.* 988.
- Habitat* in alpidibus Carinthiacis (*Wulfen*), Helveticis (*Haller*), Tridentinis (*Seguier*), Delphinatis (*Villars*), Gilanensibus Persiæ (*Herb. Pallas*), Caucasicis (*Marschall à Bieberstein*), Pyrenæorum (*La Peyrouse*), in montibus supra Ambleside in Westmorlandiâ (*Hudson*). 4. (v. v. c.)

Planta virens glaberrima, densissimè cæspitosa. *Surculi* erecti, longiusculi, graciles. *Caules* erecti, biunciales, nudiusculi, filiformes, gracillimi, plerumque triflori, levitèr glandulosi. *Folia* radicalia, integra vel trifida : lobis brevibus obtusis ; surculina omnia linearia, indivisa, obtusa, enervia, marginata, utrinque glaberrima nitida, rariùs ad margines glandulis brevissimis parcissimè instructa. *Pedicelli* breves, graciles ; laterales medio longiores calycesque glandulis brevissimis suppediti. *Laciniae calycinæ* lanceolatae, obtusissimæ, trinerves. *Petala* linearia, pallidè lutescentia, obtusa, emarginata, trinervia, calyce parùm longiora : nervis parallelis, simplicibus. *Genitalia* brevissima ; *filamenta* pallida ; *antheræ* fuscae.

The above species, notwithstanding its being probably the
most

most distinct of the whole section, has given rise to much confusion. It has been regarded by most authors as the real *cæspitosa* of Linnæus, as I have already shown in speaking of that plant. I am glad in being able to fix it as a British species, and also to restore to it the synonyms of Hudson and Withering, which I have done without hesitation from specimens collected at Ambleside in Westmoreland, and which had been sent to my late father, and preserved in his Herbarium.

97. *S. pygmæa*, glaberrima; surculis brevissimis rosulatis, foliis lanceolatis enervibus glabris apice obscendente-obtusis, laciniis calycinis latè ovatis, petalis ovalibus vix calyce longioribus.

S. pygmæa. *Haworth Misc. Nat.* p. 168.

S. muscoides γ *hemisphærica.* *Lapeyr. Pyren. Saxif.* p. 60. t. 36. (*optima.*) *Persoon Synop.* i. p. 491.

S. moschata. *Engl. Bot.* t. 2214. (exclus. synonym.)

S. moschata, β . *Lapeyr. l. c.* p. 62. t. 38.

S. moschata γ . *Sternb. Saxif.* t. 11. β . f. 2.

Habitat in Pyrenæis, *La Peyrouse.*

Planta glaberrima, densissimè cæspitosa, patula, humi depressa. *Surculi* brevissimi, rosulati, crebrè foliosi. *Caules* filiformes, graciles, paucifolii, 3—4-flori, glandulis brevissimis suppediti. *Folia* lanceolata, patentia, rosulata, carnosæ, enervia, marginata, glabra, nitida, apice obscendente-obtusa. *Flores* hujus sectionis omnium minimi fulvo-lutescentes. *Calyces* pedicellique glandulosi: laciniæ breves, latè-ovatae, obtusissimæ, trinerves. *Petala* ovalia, integra, vix calyce longiora, viridi-lutescentia, punctis nitidis suprâ adspersa, trinervia: nervis simplicibus, fusco-rubris. *Filamenta* brevissima, purpurea. *Antheræ* minutæ, fulvæ.

OBS. Præcedenti valdè affinis, sed satis differt: humiliore et densiore, surculis vix ullis, foliis lanceolatis brevioribus crassioribusque apice obscendente-obtusis, laciniis calycinis brevibus latè-ovatis, petalis ovalibus integris: nervis fusco-rubris, filamentis purpureis, antheris fulvis.

Mr. Haworth first distinguished this species in his *Miscellanea Naturalia*, and gave it the very apt name which it now bears. This plant is given in *English Botany* as a British species, and, on the authority of the late Mr. James Donn of Cambridge, is said to be a native of Scotland: but some other plant must have been intended; for I doubt much whether the present has been ever found any where in Britain. In Scotland I am certain it has not.

98. *S. tricuspidata*, foliis radicalibus aggregatis cuneiformibus ciliatis acutè tridentatis, caule adscendente racemoso, petalis lanceolatis calyce triplò longioribus. *Willd. Sp. Pl.* ii. p. 657.

S. tricuspidata. *Rottb. Act. Hafn.* x. p. 446. t. 6. *Gunn. Norveg.* 1046. *Fl. Dan.* t. 976. (bona.) *Retz. Prod. Fl. Scand.* ed. ii. n. 522. *Lam. Encycl.* vi. p. 693. *Persoon Synop.* i. p. 490. *Sternb. Saxif.* p. 54. *Pursh Amer. Sept.* i. p. 313.

Habitat in Grœnlandiâ et Terrâ Novâ. 4. (v. s. in Herb. Banks.)

Planta densissimè cæspitosa, glabra. *Surculi* brevissimi. *Caules* laterales, adscendentes, teretes, 4—5-unciales, oligophylli, glabriusculi, multiflori. *Folia* radicalia aggregata, oblongo-cuneata, apice acutè tridentata: dente medio majore triangulari; lateralibus mucronatis: paginâ utrinque glabrâ: margine ciliato; *caulina* inferiora tridentata; superiora indivisa. *Pedicelli* elongati, uniflori, calycesque levitè glandulosi. *Flores* lutei, magnitudine
S. Hir-

S. Hirculi. *Laciniae calycinae* breves, ovatae, obtusae. *Petalae* lanceolatae, calyce triplò longiora, punctata, triplinervia: nervis parallelis, simplicibus. *Filamenta* lutescentia, stylis longiora. *Antherae* croceae.

99. *S. tridactylites*, foliis primordialis integris spathulatis; caulinis quinquefidis trifidisve, calycibus urniformibus: laciniiis brevissimis, petalis obovatis apice truncatis.
- S. tridactylites.* *Linn. Sp. Pl.* 578. *Fl. Suec.* 353. 375. *Gerard. Fl. Gall.* 422. *Gouan Monsp.* 210. *Gunn. Norv.* 544. *Scop. Carn.* 550. *Pollich. Pal.* 403. *Huds. Angl.* 182. *Lightf. Scot.* 224. *Curtis Lond. fasc. ii. t. 28.* *Vill. Delph. IV. p.* 669. *Roth Germ. i.* 184. *ii.* 469. *With. Brit.* 406. *Hoffm. Germ.* 145. *Willd. Sp. Pl. ii. p.* 654. *Lam. Encycl. vi. p.* 693. *Smith Brit. ii. p.* 455. *Engl. Bot. t.* 501. (*media.*) *Lam. et Decand. Fl. Franc. iv. p.* 369. *Persoon Synop. i. p.* 490. *Marsch. à Bieberst. Fl. Taur. Cauc. i. p.* 315. *Sternb. Saxif. p.* 44. *t.* 17. *Wahlenb. Lapp. 218. ejusd. Carpath. 121.*
- S. annua.* *Lapeyr. Pyren. Saxif. p.* 53.
- S. foliis omnibus trilobis basi angustis, caule erecto.* *Linn. Fl. Lapp. 173. Hort. Cliff. 168.*
- S. foliis petiolatis trilobatis, caule erecto ramoso et folioso.* *Hall. Helv. 986.*
- S. foliis trifidis basi angustis, caule erecto.* *Roy. Lugd. Batav. 457. Sauv. Monsp. 208.*
- Sedum tridactylites tectorum.* *Bauh. Pin. 285. Moris. Hist. iii. p.* 478. *s.* 12. *t.* 9. *f.* 31. (*bona.*)
- Paronychia altera.* *Dod. Pempt. 113. Tabern. 805.*
- Paronychia rutaceo folio.* *Blackw. t.* 212.
- β. alpicola*, major; foliis radicalibus congestis; caulinis numerosioribus plerumque 5-dentatis, floribus duplò majoribus.
- S. tridac-*

- S. tridactylites*, β . *Linn. Sp. Pl. ed. i. p. 404. Fl. Suec.*
353. 375. *Fl. Lapp. 173.* (exclus. synonym. *Ponæ*.)
- S. adscendens*. *Sp. Pl. ed. altera 579, Mant. p. 884. Allion.*
Ped. 1537. t. 22. f. 3. Wulfen apud Jacq. Coll. i. p. 197.
t. 11. 12. f. 1. 2. Persoon Synop. i. p. 490.
- S. petræa*. *Gunn. Norv. 427. t. 9. f. 1. 3.* (exclus. sy-
non. et descrip. *Linn.*) *Fl. Dan. t. 680. Vahl. in Act.*
Hist. Nat. Hafn. 2. 1. p. 10. Willd. Sp. Pl. ii. p. 654.
(exclus. synonym. *Linn.*) *Lam. Encycl. vi. p. 694.* (exclus.
synonym. *Linn.*) *Lam. et Decand. Fl. Franc. iv. p. 370.*
Wahlenb. Lapp. 219. (exclus. synonym. *Linn.*) *ejusd. Car-*
path. 122. (exclus. synonym. *Linn.*)
- S. hypnoides*. *Scop. Carn. 499. t. 16.*
- S. Scopolii*. *Vill. Delph. IV. p. 670.*
- S. controversa*. *Sternb. Saxif. p. 43. t. 16. fig. omnes.*
- Sedum tridactylites alpinum*, caule folioso. *Bauh. Pin. 284.*
Habitat α in Europæ arenosis copiosè; β in Lapponiæ,
Norvigie, Sabaudie, Carinthie, Carpathorum alpinis.
○. (v. v. spont. α , β v. s.)

Radix fibrosa, annua. *Caules* erecti, ramosi, teretes, flexuosi,
multiflori, pilis brevibus glanduliferis instructi. *Folia*
radicalia conferta, spathulata, patentia, indivisa, peti-
olata; caulina cuneiformia, carnosa, quinquefida aut tri-
fida vel rariùs tridentata: basi angustata petiolique glan-
dulis ciliata, lobis obtusiusculis. *Pedunculi* recti, fili-
formes, subuniflori, calycesque pube viscidâ brevi tecti.
Flores parvi, candidi. *Calyces* urniformes: lacinie bre-
vissimæ, obtusæ, obscure trinerves. *Petala* obovata, tri-
nervia, apice truncato-obtusa, calyce paulò majora: ner-
vis simplicibus, rectis. *Filamenta* alba, brevissima. *An-*
theræ luteæ. *Styli* recurvati.

100. *S. petræa*, foliis radicalibus 5-lobo-palmatis; caulinis tripartitis incisisque, pedunculis longissimis unifloris, laciniis calycinis linearibus acutis, petalis obovatis apice truncatis emarginatisque calyce duplò majoribus.
- S. petræa.* Linn. *Sp. Pl.* 578. (exclus. plerisq. synonym.) *Wulfen in Jacq. Coll.* i. p. 200. *Jacq. Icon. Rar.* i. t. 81. (bona.) *Hoffm. Germ.* 145?
- S. geranioides.* Host. *Synop.* 231.
- S. rupestris.* Willd. *Sp. Pl.* ii. p. 653.
- S. Pona.* Sternb. *Saxif.* p. 47. t. 18. (mala.) et t. 11. f. 6.
- S. alba petræa.* Pona Bald. *apud Clus. Hist.* ii. p. 337. cum figurâ bonâ. *Pona It.* p. 183. *Segu. Veron.* i. p. 447.
- S. bianca.* Calceol. *It.* 12.
- Sedum tridactylites majus album.* Bauh. *Pin.* 284. *Prod.* 31. *Raii Hist.* XIX. p. 1043. *Moris. Hist.* iii. p. 379. s. 12. t. 9. f. 28. (benè.)
- Sanicula aizoides alpina trifido folio major alba.* Pluken. *Alm.* 331. t. 222. f. 3.
- Habitat in præruptis saxosis Montis Baldi (Pona, Seguiet, Sternberg), in Carinthiæ alpibus (Wulfen). ☉. (v. s. in Herb. Banks.)*

Planta diffusè ramosa, pilis patentibus glanduliferis instructa. *Radix* fibrosa, annua. *Caules* erecti, basi ramosi, 4—5-unciales. *Rami* elongati, subfastigiati. *Folia* radicalia longè petiolata, 5-lobo-palmata, basi subreniformia: lobis latè ovatis, obtusis; *caulina* omnia petiolata, ima tripartita; summa indivisa, elliptica, utrinque acuta, multinervosa: segmentis inferiorum cuneatis; lateralibus bifidis medio plerumque trifido: lobis acutis. *Pedunculi* longissimi, uniflori, calycesque pube viscidâ tecti. *Flores* candidi, illis *S. tridactylitis* quadruplò majores.

majores. *Calyx* urceolatus: laciniae lineares, acutae, trinerves. *Petala* obovata, calyce duplò majora, triplinervia, apice truncata et emarginata: nervis simplicibus.

The above description was taken from a specimen collected on Mount Baldo, and preserved in the Banksian Herbarium. Notwithstanding the very accurate figure which Pona has given of this plant, authors have been much disagreed regarding it. It is undoubtedly the plant Linnæus intended by his *S. petræa*, although his synonyms are very incorrect. The learned Gunner justly remarks, in speaking of his *petræa* (*tridactylites* β), that it ill accorded with the description in the *Species Plantarum*, which has evidently been taken from figures or specimens of the present species, although Linnæus regarded them as the same.

101. *S. adscendens*, foliis profundè tripartitis: segmentis cuneatis multifidis, pedunculis multifloris, petalis ovalibus integris, caule adscendente paniculato.

S. adscendens. Vahl. in *Act. Hist. Nat. Hafn.* 2. 1. p. 12. Willd. *Sp. Pl.* ii. p. 655. (exclus. omnib. synonym. præter *Vahlîi* et *Gouanii*.) Lam. *Encycl.* vi. p. 695. (exclus. plerisque synonym.) Lam. et Decand. *Fl. Franc.* iv. p. 370. (exclus. synonym. Linn.)

S. petræa. Gouan *Illust.* 29. t. 17. f. 3. (*bona*.)

S. aquatica. Lapeyr. *Pyren. Saxif.* p. 53. t. 28. (*optima*.) Persoon *Synop.* i. p. 490. Sternb. *Saxif.* p. 48. t. 19. f. 1. et 2. (*bonæ*.)

β . caule virgato, foliorum lobis acutis subpinnatis, petalis lutescentibus. Lapeyr. *loc. cit.* t. 29.

Habitat α et β in scaturiginosis Pyrenæorum. μ . (v. s. α in Herb. Vent. nunc in Mus. Lessertiano, et item in Herb. Banks.)

Radix

Radix fibrosa, perennis, cæspitosa. *Surculi* plures, breves, foliosi. *Caules* adscendentes, pedales aut ultra, foliosi, crassitie pennæ anserinæ, succulenti, pilis glanduliferis patentibus confertè suppediti. *Folia* radicalia petiolata, 5-lobo-palmata, carnosâ, utrinque glabra: segmentis latè cuneatis, inciso-dentatis; *caulina* omnia petiolata, profundè tripartita: segmenta in lobis lanceolatis obtusiusculis multisecta. *Petioles* breves, ad bases præsertim radicalium latissimè dilatati. *Flores* coarctato-paniculati, albi, rariùs lutescentes. *Pedunculi* multiflori calycesque pube glandulosâ tecti. *Calyx* obconicus: laciniae ovato-oblongæ, obtusiusculæ. *Petala* ovalia, integra, triplinervia: nervis simplicibus, rubescentibus. *Stamina* inæqualia stylis longiora; *filamenta* lutescentia; *antheræ* aureæ.

This, which is a very distinct species, is the largest of the whole section, often exceeding a foot in height. I have retained Vahl and Willdenow's name in preference to that of La Peyrouse, on account of its priority.

102. *S. cuneata*, glabra; foliis inferioribus longè-petiolatis cuneatis 5-lobatis; superioribus subsessilibus lanceolatis indivisis, caule adscendente paniculato, petalis oblongis.

S. cuneata. Willd. *Sp. Pl.* ii. p. 658. *Lam. Encycl.* vi. p. 700. *Persoon Synop.* i. p. 489.

S. cuneifolia. Cavan. *Icon.* iii. p. 25. t. 248.

Habitat in Hispaniæ montibus frigidis juxta Castellfort. *Cavanilles.* 4.

Radix fibrosa, perennis. *Caules* plures, adscendentes, glabri. *Folia* inferiora longè petiolata (petiolis filiformibus), cuneata, utrinque glabra, basi integerrima, apice 5-loba (lobis ovatis, acutis); superiora indivisa, sessilia, lance-

olata, acuta. *Flores* paniculati. *Pedunculi* elongati, filiformes, stricti, uniflori, calycesque læviusculi. *Lacinia calycinæ* ovatae, acutæ. *Petala* oblonga, obtusa, candida. *Stamina* corollâ breviora. *Cavan. loc. cit.*

OBS. Exempla hujus speciei nunquam à me visa; attamen ex descriptione et figurâ Clariss. Cavanillesii speciem ab omnibus esse satis diversam licet judicare. An rectè in hac sectione aut meliùs in quartâ sit collocanda?

103. *S. globulifera*, gemmifera; surculis brevibus, foliis surculinis 5-fidis trifidisve nunc simplicibus lanceolatis acutis aristatisque, floribus paniculatis, laciniis calycinis ovali-oblongis obtusis, petalis obovatis.

S. globulifera. *Desf. Atlant. ii. p. 342. t. 96. f. 1. Lam. Encycl. vi. p. 699. Persoon Synop. i. p. 490. Sternb. Saxif. p. 45.*

Habitat in cacumine Atlantis. *Desfontaines. 4.* (v. s. in *Herb. Lessertiano*, specim. à Clar. Desfontainio communicata.)

Planta cæspitosa. *Radix* fibrosa. *Surculi* 1—2-unciales, foliosi, basi rudimentis foliorum emarcidorum instructi. *Caules* erecti, filiformes, tripollicares, foliis paucis minutis muniti, glabri. *Folia* radicalia et surculina, petiolata, 5-fida vel trifida (segmentis lanceolatis), nunc simplicia lanceolata, acuta, setâ diaphanâ terminata, triplinervia: nervis divisis. *Petioli* ciliati. *Axillæ* foliorum gemmis subrotundis, pedunculatis, è foliis (simplicibus) ciliatis appressè imbricatis, posteriorum surculorum formati instructæ. *Flores* candidi, *S. hypnoide* duplò minores, 5—7 in paniculam dispositi. *Pedicelli* tenues calycesque pube glutinosâ levitèr suppediti. *Lacinia calycinæ* ovali-oblongæ, obtusæ. *Petala* obovata, calyce

calyce duplò longiora, triplinervia : nervis simplicibus rectis.

OBS. *S. hypnoidi* affinis, sed satìs distincta.

104. *S. hypnoides*, gemmifera ; surculis longissimis procumbentibus, foliis radicalibus quinque- tri-partitisve ; surculinis simplicibus linearibus rigidis ciliatis mucronato-aristatis, laciniis calycinis triangulari-ovatis aristatis, petalis subrotundo-obovatis.

S. hypnoides. *Sp. Pl.* 579. *Fl. Dan.* t. 348. *Mill. Dict.* 12. *Huds. Angl.* 182. *Lightf. Scot.* 224. *With. Brit.* 407. *Villars Delph.* iv. p. 674. t. 45. *Willd. Sp. Pl.* ii. p. 658. *Lapeyr. Pyren. Saxif.* p. 57. t. 32. *Smith Brit.* ii. p. 457. *Engl. Bot.* t. 454. (mala.) *Lam. Encycl.* vi. p. 698. *Persoon Synop.* i. p. 490. *Lam. et Decand. Fl. Franc.* iv. p. 376. *Sternb. Saxif.* p. 45.

S. procumbens ; foliis linearibus integris trifidisque. *Hort. Cliff.* 168. *Roy. Lugdb.* 453. *Sauv. Monsp.* 208. *Gort. Gelr.* 248.

Sedum alpinum, trifido folio. *Bauh. Pin.* 284. *Moris. Hist.* iii. p. 479. s. 12. t. 9. f. 26. (bene).

Sedum muscosum, trifido folio. *Raii Syn.* 354.

Sedum alpinum 7. *Clus. Pann.* p. 491.

β . *viscosa*, mollior et laxior ; floribus majoribus.

S. viscosa. *Hortorum*.

γ . *angustifolia*, surculis adscendentibus, foliis longioribus.

S. angustifolia. *Hortulanorum*.

δ . *muscosa*, duplò minor et tenerior ; segmentis foliorum minimis, floribus minoribus.

ϵ . *pulchella*, robustior ; surculis crassioribus rigidioribusque, gemmis obtusis confertioribus, foliis surculinis latioribus suprà sulco exaratis, petalis latioribus.

Habitat α in alpinis Helveticis, Austriacis, Pyrenaicis, Cambro-Britannicis, Angliæ borealis; in Scotiæ montibus passim; $\beta, \gamma, \delta, \epsilon$ in alpinis Scoticis. γ . (v. v. spont.)

Herba ante anthesin densissimè cæspitosa, glaberrima, postea laxa, surculosa, villis mollibus adspersa. *Surculi* procumbentes, longissimi, rigidiusculi, rubescentes. *Caules* erecti, 3—4-unciales, rubescentes, nitidi, fragiles, 2—4-flori. *Folia* radicalia quinque- vel tripartita rariùs indivisa, glabra, margine villis parvis ciliata: segmentis linearibus, aristatis; surculina omnia indivisa, linearia, acutissima, aristâ longâ terminatâ, ad axillas gemmis ovatis, acutis instructa; *caulina* pauca, lineari-lanceolata, indivisa. *Pedunculi* elongati, subuniflori calycesque pube brevissimâ viscidâ densè suppositi. *Laciniae calycinae* triangulari-ovatae, trinerves, mucronato-aristatae: mucrone recto. *Petala* subrotundo-ovata, plana, conspicuè triplinervia, candida, apice extus rosea: nervis simplicibus, rectis.

105. *S. condensata*, surculis procumbentibus abbreviatis, foliis radicalibus 5-partitis; surculinis trifidis: segmentis linearibus glabris aristatis, laciniis calycinis triangulari-ovatis acutis muticis, petalis ovalibus.

S. condensata. *Gmel. Fl. Baden.* ii. p. 226. t. 3.

S. densa et lævis. *Hortulanorum*.

Habitat in Sponhemiae rupibus (*Gmelin*), in alpinis Scoticis (*G. Don*). γ . (v. v. spont.)

Herba glaberrima, nitida, jucundè viridis, ante anthesin densissimè cæspitosa, postmodò surculosa. *Surculi* procumbentes, abbreviati, gemmis destituti. *Caules* plures, erecti, bi- rariùs tri-pollicares, nudiusculi, glaberrimi, nitidi,

nitidi, 2—3-flori. *Folia* radicalia 5-partita; surculina trifida ad axillas nuda: segmenta angustè linearia acuta et brevè aristata. *Pedunculi* glabri, nitidi, uniflori, in æstivatione curvati. *Calyx* pube brevissimâ levitè instructus: laciniae ovatae, acutae, muticae. *Petala* ovalia, alba, triplinervia, apice extùs rosea: nervis simplicibus, strictis.

This species approaches near to the preceding; but having proved it in cultivation, I am now fully satisfied of its being a distinct species. Its habit is so different, that it may be known at all times of the year by it alone. Its *surculi* are three times shorter than those of *hypnoides*, always quite smooth and green, never red, and destitute of the bulbous buds so remarkable in *S. hypnoides*. The latter species is found alike in the plains, as well as on the tops of mountains. The *S. condensatà*, on the contrary, is met with only in elevated regions. It is not confined to one spot alone, but extends over all the Scottish mountains.

106. *S. elongella*, surculis erectis brevibus, foliis radicalibus 5-tri-fidisve; surculinis plerumque tridentatis: dentibus mucronulatis, laciniis calycinis ovatis muticis, petalis obovatis.

S. elongella. *Smith in Act. Soc. Linn. x. p. 340. Engl. Bot. t. 2277.* (exclus. synonym. *Donn Cantab.*) *Compend. Fl. Brit.* 66.

Habitat in Angusiâ Scotiæ in rupibus humidis juxta Lintrathen. *G. Don. 4. (v. v. c.)*

Herba densissimè cæspitosa, ante anthesin glaberrima, postmodùm villis tenuissimis parcissimè instructa. *Surculi* erecti, breves, rigidiusculi, basi foliis emarcidis crebrè instructi.

instructi. *Caules* erecti, bi- rariùs tri-unciales, subnudi, 2—3-flori, glabriusculi. *Folia* radicalia 5-fida aut trifida, (segmentis lanceolatis,) rarissimè simplicia; surculina plerumque tridentata aut rarò indivisa: dentibus latè ovatis, mucronulatis. *Petioles* tenues, dilatati. *Pedunculi* longissimi, uniflori, calycesque pilis glanduliferis levitè sparsi. *Laciniae calycinae* ovatae, acutae, muticae, trinerves. *Petala* obovata, utrinque alba, triplinervia: nervis lateralibus, curvatis, ramulosis; medio simplici, recto.

This species is totally distinct from all the varieties of *S. hypnoides*, one variety of which is often cultivated in the gardens under the name, and mentioned in Donn's *Cambridge Catalogue*. I am therefore happy in having an opportunity of giving a full description of the real plant. In its native habitat it frequently bears long solitary peduncles, terminated by only one flower: but culture alters it in this respect.

107. *S. leptophylla*, surculis procumbentibus longissimis, foliis radicalibus 5-partitis; surculinis tripartitis indivisisve: segmentis lineari-lanceolatis acutissimis divaricatis, laciniiis calycinis oblongo-ovatis, petalis spathulatis integris.

S. leptophylla. Persoon *Synop.* i. p. 490.

S. retroflexa. Hortulanorum.

β . *angustifida*, tenerior; segmentis foliorum angustioribus.

S. angustifida. Hortulanorum.

Habitat α in alpibus Helveticis, et in Cambro-Britanniæ montibus; β in montibus Cambro-Britannicis. γ . (v.v.c.)

Planta ante anthesin glaberrima, densissimè cæspitosa, postea laxè diffusa, surculosa, villis viscidis levitè sparsa.

sparsa. *Surculi* decumbentes, filiformes, graciles, longissimi, virides, gemmis destituti. *Caules* plures, erecti, 3—4-pollicares, flexuosi, glabriusculi, nitidi, multiflori. *Folia* radicalia profundè 5-partita; surculina tripartita rariùs indivisa, in axillis nuda: segmentis lineari-lanceolatis, acutissimis, aristatis, divaricatis; lateralibus horizontalitè porrectis. *Flores* cernui, candidi. *Pedunculi* elongati calycesque pilis glanduliferis suppositi. *Laciniae calycinae* oblongo-ovatae, trinerves, mucrone reflexo apice instructae. *Petala* spathulata, integerrima, triplinervia: nervis simplicibus, rectis. *Stamina* aequalia; *filamenta* alba; *antherae* aureae.

This species, as well as its variety β , is cultivated by my friend Mr. Macnab, of the Royal Botanic Garden, Edinburgh, who received them from Wales. I have since my arrival in London had an opportunity of examining flowering specimens of it. The spreading divaricated segments of its leaves are a very striking character, and readily distinguish it from its congeners; but nevertheless it affords sufficient marks besides that to rank it as a species.

108. *S. latevirens*, surculis procumbentibus elongatis, foliis 5—3-partitisve: segmentis linearibus acutis, laciniis calycinis lanceolatis mucronatis, petalis spathulatis emarginatis.
Habitat in Scotiæ alpibus. *G. Don.* 4. (v. v. spont.)

Herba lætissimè virens, ante anthesin densissimè cæspitosa, glaberrima, postea laxè diffusa, surculosa, villis longis adspersa. *Surculi* elongati, procumbentes, gemmis destituti. *Caules* pauci, erecti, tripollicares, glabri, oligophylli, subtriflori rariùs uniflori. *Folia* radicalia 5-partita; surculina omnia tripartita: segmenta linearia,
acuta,

acuta, apice recurvata; *caulina* ima 5-fida, superiora indivisa lanceolata, acuminata. *Flores* campanulati, candidi, in æstivatione cernui. *Calyces* pedicellique pubescenti instructi: *laciniæ* lanceolatæ, trinerves, mucronatæ: mucrone recurvo. *Petala* spathulata, triplinervia, apice emarginata: nervis simplicibus, strictis, viridibus.

This very distinct and elegant species was first discovered by the late Mr. G. Don of Forfar, on the mountains of Angusshire and Aberdeenshire, where it grows on moist rocks in very elevated situations. I have also observed it myself subsequently on hills to the north of Loch-Lomond. Plants of it from that quarter are now growing in the garden of my highly valued friend, Patrick Neill, Esq., Secretary of the Wernerian Natural History and Caledonian Horticultural Societies of Edinburgh.

In concluding this Monograph, I have to make (p. 348) an important alteration in the specific character of *S. ligulata*, namely, to substitute *glabris* for *utrinque hirsutis*; the paginae of the leaves being quite smooth. A similar alteration is also necessary in the description of the same species.