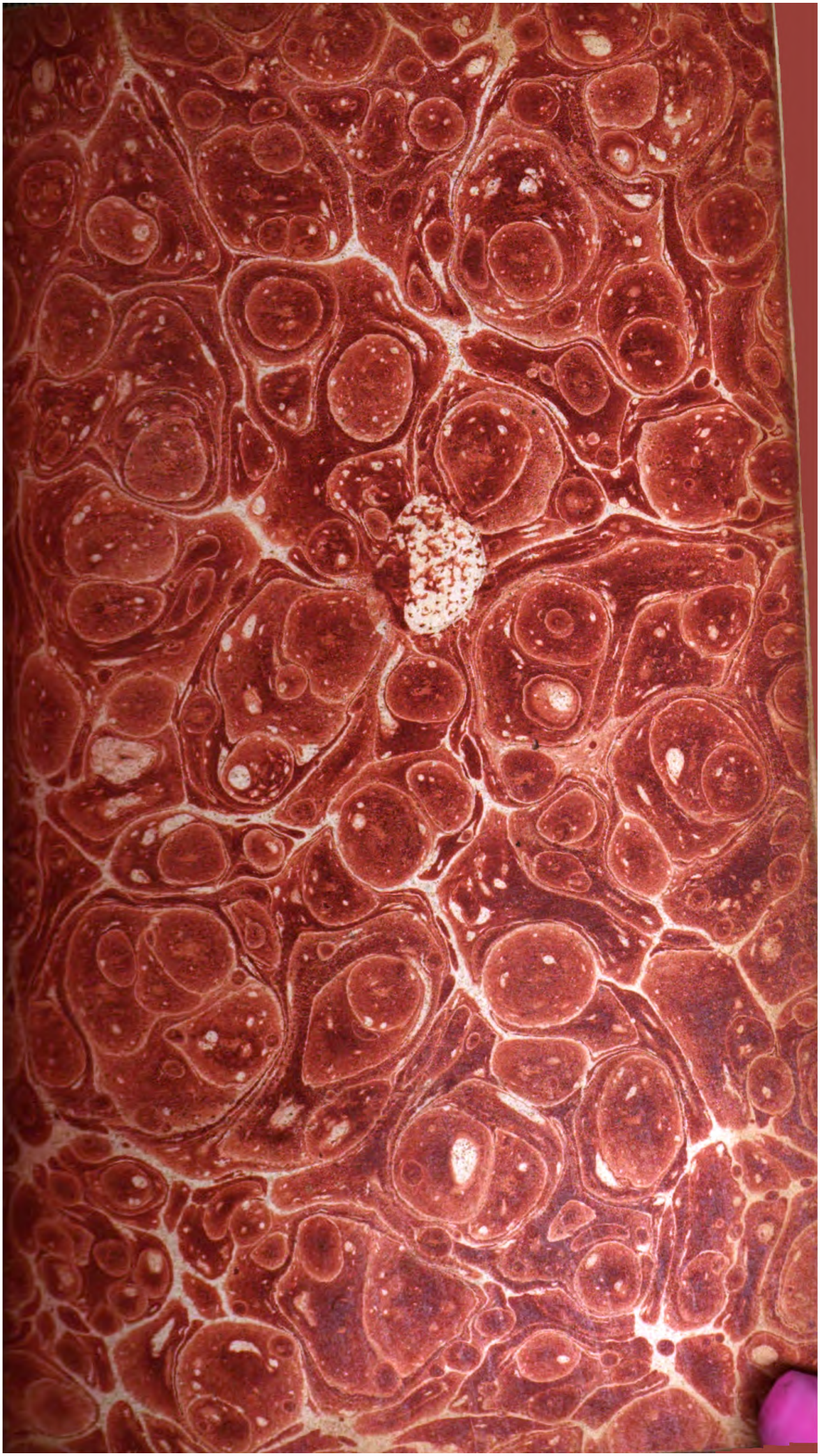

ENGLISH BOTANY;

OR

COLOURED FIGURES

OF

BRITISH PLANTS,

WITH THEIR

ESSENTIAL CHARACTERS, SYNONYMS, AND PLACES OF GROWTH.

TO WHICH WILL BE ADDED

OCCASIONAL REMARKS

BY

JAMES EDWARD SMITH, M.D. F.R.S.

MEMBER OF THE ROYAL ACADEMIES OF TURIN, UPSAL, STOCKHOLM, LISBON, ETC. ETC.

PRESIDENT OF THE LINNÆAN SOCIETY.

THE FIGURES BY

JAMES SOWERBY, F.L.S.

—" VIRESQUE ACQUIRIT EUNDO."

Virg.

VOL. IV.

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CHIRONIA Centaurium.
Common Centaury.

PENTANDRIA Monogynia.

Gen. Char. *Corolla* salver-shaped. *Stamina* inserted into the tube. *Antheræ* becoming spiral. *Style* declining. *Seed-vessel* of two annexed valves.

Spec. Char. Stem herbaceous, dichotomously panicled. Leaves ovato-lanceolate. Calyx shorter than the tube.

Syn. Chironia Centaurium. *Curt. Lond. fasc.* 4. *t.* 22. *With. Bot. Arr. ed.* 3. *v.* 2. 255. *Sibth. Ox.* 75. *Woodv. Med. Bot. t.* 157.

Gentiana Centaurium. *Linn. Sp. Pl.* 332. *Huds. Fl. An.* 102. *Relh. Cant.* 100. *Dicks. H. Sicc. fasc.* 7. 3.

Centaurium minus. *Raii Syn.* 286.

A FREQUENT inhabitant of dry gravelly or chalky pastures, scarcely to be cultivated in a manured soil, flowering in the latter part of summer; its blossoms close as soon as gathered, and against rain.

Root small, branching, annual. Stem solitary, erect, about a foot high, with 4 sharp edges, leafy, terminating in several opposite, forked, flowering-branches, which altogether form an upright panicle. Leaves opposite, sessile, entire, 3-nerved, the radical ones somewhat spatulate, the rest lanceolate or elliptical. Each flower is sessile, erect, with a greenish tube, and beautiful pink-coloured polished limb. Segments of the calyx narrow and sharp, about half as long as the tube, to which they adhere. Antheræ incumbent, twisting into a spiral form as they ripen, which is essential to a true *Chironia*, though not observable in all that Linnæus has called so; see *Icones pictæ plant. rar. tab.* 18. The style is declining; stigma capitate, with a transverse notch. The whole herb is smooth, very bitter, well known among rustic practitioners as a stomachic by the name of Lesser Centaury.

Mr. Curtis first referred this plant to its right genus, but neglected to give it a specific character, the definition for which Dr. Sibthorp quotes him having been given by Linnæus, and intended to distinguish it from other species of *Gentiana*, not of *Chironia*. Botanists are often strangely incorrect about essential characters. They indeed require genius and accuracy, but they are the perfection of the art. Dr. Stokes has made several excellent remarks on this plant in the 2d edition of Withering

CHIRONIA littoralis.

Dwarf Tufted Centaury.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* salver-shaped. *Stamens* inserted into the tube. *Anthers* becoming spiral. *Style* declining. *Seed-vessel* of two inflexed valves.

SPEC. CHAR. Stems herbaceous, simple, straight. Leaves linear-obovate. Calyx-teeth awlshaped. Flowers densely corymbose, nearly sessile.

SYN. Chironia littoralis. *Turn. & Dillw. Guide,* 469. *Winch. v.* 2. *pref.* 3.
Ch. pulchella. *Don. Herb. Brit. fasc.* 1. 7.

WE are obliged to Mr. Winch for a fresh wild specimen of this pretty *Chironia*, which we find no difficulty in admitting as a new one, certainly distinct from those in our *t.* 417 and 458, as well as from the varieties, or possibly species, mentioned in *Fl. Brit.* 1393. Mr. Brodie of Brodie observed it on the sea coast in Elginshire, near his residence. It is very abundant on Holy Island, and the neighbouring coast of Northumberland, flowering in June, much earlier than *Ch. Centaurium*. Mrs. Dowson of Geldeston brought it us from Wales.

The root is annual. Stems about two inches high, generally solitary, sometimes accompanied by one or two smaller ones, all stiff and straight, leafy at the top and bottom only. Leaves obovate, narrow, obscurely three-nerved, nearly uniform. Flowers large and handsome, with obtuse segments, numerous, almost sessile, in a very dense forked corymbus. Mr. Turner observes that the comparative proportions of the calyx and tube of the corolla vary. The style is scarcely declined in this species, though it is so in *pulchella*. The anthers are twisted when old or dry.

√

CHIRONIA pulchella.

Dwarf branched Centaury.

PENTANDRIA Monogynia.

Gen. Char. *Cor.* salver-shaped. *Stamina* inserted into the tube. *Antheræ* becoming spiral. *Style* declining. *Seed-vessel* of two inflexed valves.

Spec. Char. Stem herbaceous, much branched all the way up. Leaves ovate. Calyx-teeth awl-shaped, above half as long as the tube. Flowers on stalks.

Syn. Chironia pulchella. *Swartz in Stockholm Transf. for* 1783, *p.* 85. *t.* 3. *f.* 8, 9. *With.* 255.
Gentiana Centaurium β *Linn. Sp. Pl.* 333. *With.* 255.
Centaurium minus, palustre, ramosissimum, flore purpureo. *Vaill. Paris.* 32. *t.* 6. *f.* 1.

SENT from Gorlestone Norfolk, near the sea, by D. Turner Esq. where it was first found by Robert Stone Esq. a gentleman to whom the botany of Norfolk and Suffolk is much indebted. Dr. Withering received it from Cornwall. It appears to be annual, flowering in September.

Root small, branching. Stem very much branched from the bottom, forming a low bushy herb very various as to luxuriance, forked, smooth, with 4 sharp edges. Leaves ovate; the lower ones very broad; those which accompany the upper flowers lanceolate. Flowers not sessile as in *C. Centaurium*, t. 417, but on shortish stalks, from each divarication of the stem, erect. Calyx deeply divided into 5 narrow awl-shaped segments, more than half as long as the tube of the corolla, which is extremely slender and membranous; the limb is of a full pink, more delicate and narrow than that of *C. Centaurium*. Neither do the antheræ twist so much in ripening as those of that species, making scarcely one turn. In the germen, style, &c, we have found no great difference. Our figure of the *Centaurium* represents the stigmas closed, and partly fading; in that of the *pulchella* we have drawn them spreading, as before impregnation. Capsule long, cylindrical, invested with the corolla. Seeds very numerous.

We are certain from the specimen communicated by Rosen to Linnæus that this is his *Gentiana Centaurium var.* β, and we are equally certain from Dr. Swartz's original specimen that it is his G. *pulchella*, though he describes his with a simple stem and solitary flower, having met with it only in a starved state. The characters above given seem to make it distinct from *Centaurium*, though both species vary so much in luxuriance that they sometimes approach very near each other in that respect. The Linnæan Herbarium has a Swedish plant referred to *Centaurium*, in which the calyx is longer than the tube, leaves narrow, spatulate, and the stem unbranched. We suspect it must be different from both the above, but have not observed it in England.

March 1 1790 Published by J. Sowerby London.

4.

SAMOLUS Valerandi.

Brook-weed, or Water Pimpernel.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* ſalver-ſhaped, 5-cleft, with intermediate ſcales. *Stam.* inſerted into the tube, oppoſite to the ſegments. *Capſ.* half inferior, of one cell, with 5 teeth.

SPEC. CHAR. Leaves blunt. Cluſter many-flowered. A ſmall bractea on each flower-ſtalk.

SYN. Samolus Valerandi. *Linn. Sp. Pl.* 243. *Sm. Fl. Brit.* 259. *Hudſ.* 94. *With.* 246. *Hull.* 52. *Relb.* 92. *Sibth.* 79. *Abbot.* 49. *Curt. Lond. faſc.* 4. *t.* 20. *Raii Syn.* 283.

THE Water Pimpernel is found, as Linnæus mentions, in almoſt every quarter of the globe and under very different latitudes. We have had occaſion to remark that this circumſtance, however uncommon with plants as well as animals in general, happens to ſeveral aquatics. The *Samolus* has little affinity to its neighbouring genera in the 5th Claſs of Linnæus, for inſtead of the natural order of *Lyſimachiæ* to which M. De Juſſieu refers it, I cannot help conſidering it, more eſpecially from its approximation to *Montia*, as belonging to his *Portulaceæ*; and Mr. Dryander has well obſerved that the *Sheffieldia* of Forſter, a New Holland plant, is but another ſpecies of *Samolus*.

S. *Valerandi* is not very common in England or Scotland. It occurs chiefly in clear watery boggy places upon a gravelly ſoil, flowering in July, and is perennial.

Root of many ſimple fibres. Whole herb ſmooth, pale-green, a little ſucculent, about a foot high. Stem round, terminating in one or more long cluſters of numerous white flowers, each on its own flower-ſtalk, in the middle of which ſtands a ſmall bractea. The leaves are alternate, obovate and entire. Stamina included within the corolla, which is a little longer than the calyx. Five ſmall ſcales between the lobes of the corolla form the eſſential generic character. The capſule is rather more below than above the calyx, and opens with 5 teeth at the top.

/

[illegible]

LINNÆA Capreolata.

The perfoliate Honeysuckle.

PERIANTHIUM Monogynum.

Gen. Char. [illegible] inferior, of 2 leaves with several [illegible].

Spec. Char. Flowers [illegible] terminal. Leaves [illegible] the uppermost united and perfoliate.

Syn. Lonicera Capreolata. Linn. Sp. Pl. 248. Sm. F. Brit. 202.

Periclymenum perfoliatum. [illegible]

THE first information of this species of native of Britain was communicated to me by the Rev. T. Hunt of Aston, Staffordshire, who found it plentifully in a wood near Eaton, Oxfordshire. I hesitated to admit it into a place in common in gardens; but Mr. Pelham having discovered it at Elton, Cambridgeshire, in his opinion certainly wild, I now no longer refuse it a place in the Flora Britannica. It has probably been overlooked as one of the many varieties of the Common Honeysuckle, from all which however it is perfectly distinct, and easily to be known by the upper leaves being perfoliate, not to mention many other marks. It flowers in May or June.

The whole twining form climbs upon bushes and trees, and is clothed with opposite entire smooth leaves, glaucous beneath, all which are in some degree connate by their footstalks, but one or two of the uppermost pairs are perfectly united and perfoliate. The flowers grow in whorls, usually in the bottoms of these upper leaves, and are fragrant, yellowish, with a bluish-purple tube. Their structure is singular, one segment of the limb being much deeper than the rest and greatly dilatated. Berries elliptical, orange-red, crowned with the almost entire calyx.

The fruit only in our figure is taken from a garden specimen, the rest from a wild one gathered at Elton by J. Haine Esq. Trinity-hall, Cambridge.

6.

LONICERA Periclymenum.

Common Honeyſuckle, or Woodbine.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* of 1 petal, irregular. *Berry* inferior, of 2 cells, with ſeveral *ſeeds.*

SPEC. CHAR. Heads of flowers ovate, imbricated, terminal. Leaves all ſeparate, deciduous. Flowers ringent.

SYN. Lonicera Periclymenum. *Linn. Sp. Pl.* 247. *Sm. Fl. Brit.* 260. *Hudſ.* 94. *With.* 246. *Hull.* 53. *Relh.* 93. *Sibth.* 81. *Abbot.* 49. *Curt. Lond. faſc.* 1. *t.* 15.

Caprifolium Germanicum. *Raii Syn.* 458.

THIS elegant plant which decorates our hedges ſo abundantly, and whoſe flowers perfume the air ſo delightfully in an evening or after rain, differs eſſentially from that in the laſt plate in having all the leaves diſtinct, not perfoliate, the flowers collected into an ovate head, not axillary, and the fruit crowned with a five-toothed calyx, inſtead of the nearly entire rim obſervable in the other. The berries are alſo rounder, of a darker red, and often roughiſh. The twining ſtem climbs to a conſiderable height upon trees and buſhes. The leaves are entire, for the moſt part ſeſſile, generally of a full green and ſmooth, paler beneath, often hairy, and in that caſe they are all over of a lighter hue. There ſometimes occurs a remarkable variety with ſinuated, generally variegated, leaves, called the Oak-leaved Honeyſuckle.

The Common Honeyſuckle is liable to many variations in the different degrees of ſmoothneſs or hairineſs of its leaves, fruit and younger branches, as well as in the colour of its flowers, which are either externally of a deep red, or altogether of a pale yellowiſh hue; by the ſea ſide they are often quite green. We have not however been able to find any ſpecific diſtinction between theſe varieties. They all flower moſt plentifully in June and July, but occaſionally throughout the autumn alſo.

Nov.r 1. 1800. Published by Ja.s Sowerby, London

LONICERA Periclymenum.

Upright Honeysuckle.

PENTANDRIA Monogynia.

Gen. Char. Cor. of 1 petal, irregular. Berry inferior, with leaves less.

Spec. Char. Stalks two-flowered. Berries distinct. Leaves entire, downy.

Syn. Lonicera Periclymenum. Linn. Sp. Pl. 248. Berk. Catalog. ed. 2. n. 2. Willd. 241. Sym. Syn. 59. Huds. 53.

Periclymenum vulgare germanicum. Ger. em. 1294.

BERKENHOUT, in the authority of Wallis's History of Northumberland, mentions this plant as growing in the fissures of rocks under the Roman wall near Shewing-Sheels, a kind of fountain in which it found seem to be truly wild: but its being frequent in gardens has made me consider it hitherto as a doubtful native, notwithstanding the opinion of Dr. Withering. I shall no longer dispute the point, having received the specimen here figured from Mr. W. Borrer junior, who found this plant "growing plentifully, and certainly wild, in a coppice called the Hackeres, to the east of Houghton bridge, 4 miles from Arundell, Suffex." It flowers in July.

The stem is upright, bushy, very much branched. Branches opposite, round; those of the present year downy and leafy. Leaves opposite, on foot-stalks, ovate, rather pointed, entire, flexible, clothed on both sides with short soft hairs, deciduous. Flowers inodorous, in pairs, on solitary axillary stalks shorter than the leaves. Outer bracteæ a pair of awl-shaped hairy spreading leaves; inner, a concave blunt hairy scale under each germen. Calyx in 5 obtuse lobes. Corolla yellowish white, often tinged with red, downy; the upper lip four-cleft, lower undivided. Stamina equal, downy, shorter than the corolla. Berries oval, red, separate, of one cell, juicy, containing 6 or more seeds.

Aug.t 1 1801 Published by Jas Sowerby London.

8.

RHAMNUS catharticus.

Buckthorn.

PENTANDRIA Monogynia.

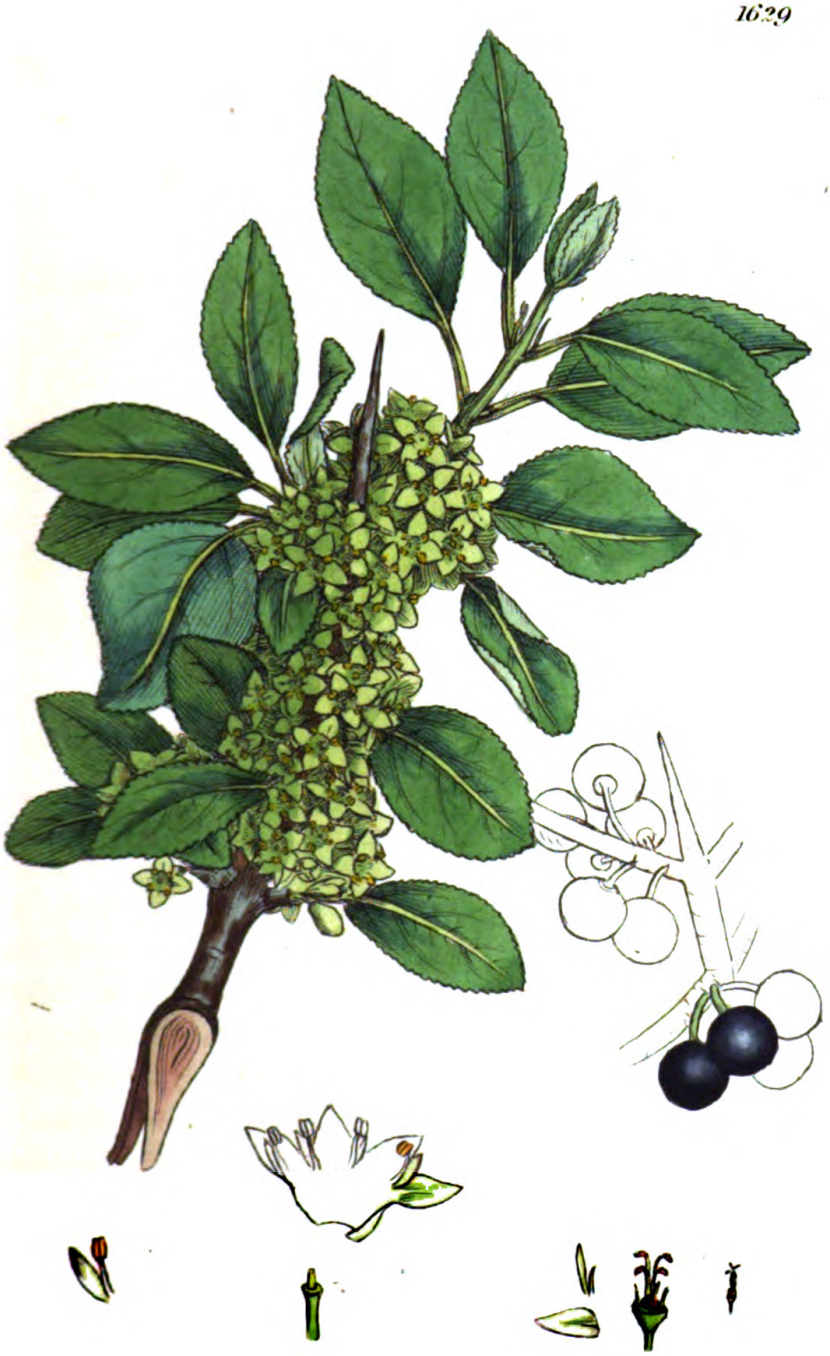
GEN. CHAR. *Cal.* tubular. *Petals* 5, opposite to the stamina. *Berry* superior, with few seeds.

SPEC. CHAR. Spines terminal. Flowers four-cleft, dioecious. Leaves ovate. Stem upright. Seeds four.

SYN. Rhamnus catharticus. *Linn. Sp. Pl.* 279. *Sm. Fl. Brit.* 261. *Huds.* 98. *With.* 256. *Hull.* 53. *Relh.* 94. *Sibth.* 82. *Abbot.* 52. *Woodv. Med. Bot. t.* 114. *Fl. Dan. t.* 850. *Raii Syn.* 466.

NOT rare in hedges and bushy places, flowering in May or June, and ripening its berries about Michaelmas.

It forms a hard, rigid, spreading shrub, with alternate, or often nearly opposite, branches, each tipped with a strong thorn. First leaves in clusters from the flowering buds, but those on the fresh branches are opposite; all grow on downy footstalks, and are ovate, serrated, strongly veined, downy when young, deciduous. Stipulæ linear, soon falling off. Flowers on short, simple, clustered stalks, yellowish green. Calyx-lobes, petals and stamina 4. Lobes of the stigma 4, sometimes but 3, and the seeds agree with them in number. In flowers with perfect stamina the petals are elliptical, and the germen for the most part obsolete and abortive; in those with a fertile germen the petals are linear, and the stamina scarcely more than minute bristles. Sometimes, however, both organs are perfect in the same flower. The berries are globular, black, nauseous, well known for their purgative quality, which is not of the mildest or most salubrious kind. In an unripe state they dye yellow, but are esteemed far inferior to those of *R. infectorius* brought from the Levant.



Aug. 1st 1806. Published by Ja.s Sowerby London.

9.

RHAMNUS Frangula.
Berry-bearing Alder.

PENTANDRIA Monogynia.

GEN. CHAR. *Cal.* tubular. *Petals* 5, oppofite to the ftamina. *Berry* with few feeds.

SPEC. CHAR. Spines none. Flowers hermaphrodite. Leaves fmooth, entire. Seeds two.

SYN. Rhamnus Frangula. *Linn. Sp. Pl.* 280. *Hudf. Fl. An.* 98. *With. Bot. Arr.* 240. *Relh. Cant.* 96. Frangula, feu Alnus nigra baccifera. *Raii Syn.* 465.

THIS fhrub occurs in woods and thickets occafionally in various parts of England, whether in Scotland or not is doubtful. It flowers early in May. The berries are ripe in July.

The ftem grows 3 or 4 feet high, with numerous forked branches. Leaves on the young ones only, oppofite, obovate, pointed, entire, veiny, of a bright pleafant green. Flowers from the bofoms of the leaves, 2 or 3 together, on fimple flower-ftalks, greenifh, fmall. Calyx cup-fhaped, with 5 reflexed fegments, between which ftand the little petals, and oppofite to them the very minute ftamina, with dark purple antheræ. Germen fuperior, with a very fhort ftyle. Berry dark purple, with 2 hemifpherical feeds.

According to the Difpenfatory thefe berries are fometimes mixed with thofe of Buckthorn (*Rhamnus catharticus*), or fubftituted for them, as are even thofe of the Cornel-tree figured on the laft plate. In the latter inftance the deception would probably be greater than in the former, for both thefe *Rhamni* are nearly alike purgative. The work juft quoted adds very properly, that thefe fruits are eafily diftinguifhed, by the Buckthorn having 4 feeds, *R. Frangula* 2, and the *Cornus* but 1, or rather 1 nut enclofing 2 kernels.

May 1st 1793 Published by J. Sowerby London

EUONYMUS europæus.

Spindle-tree.

PENTANDRIA Monogynia.

GEN. CHAR. *Petals* 5. *Capsule* with 5 angles, 5 cells, and 5 valves, coloured. *Seeds* in a pulpy covering.

SPEC. CHAR. Petals mostly 4, acute. Leaves on short footstalks. Branches smooth.

SYN. Euonymus europæus. *Linn. Sp. Pl.* 286. *Huds. Fl. An.* 98. *With. Bot. Arr.* 241. *Relh. Cant.* 96. *Sibth. Ox.* 82.

E. vulgaris. *Raii Syn.* 468.

HEDGES and thickets in most parts of England produce this shrub not unfrequently, though it rarely occurs in mountainous countries. The flowers appear early in May; the fruit does not ripen till the autumn, when it continues to ornament the hedges, even after the leaves are fallen, and is frequently joined with holly and miseltoe to adorn houses and churches at Christmass.

This is a small shrub, with straight spreading branches, which are angular when young, having four slightly prominent lines running down them; but these are not always visible; their bark is green and smooth. Leaves nearly opposite, on short footstalks, lanceolate, pointed, serrated, the first pair only being entire. Stipulæ none. Flowers in small, axillary, forked, divaricated panicles, whitish and fœtid; the first of them that opens having five stamina, and as many petals, calyx-teeth, and capsules; but all the rest have those parts in fours only. The style is short, simple, and acute. Capsules pink-coloured when ripe, bursting at their outer edges, and each cell containing one whitish seed, enveloped in an orange-coloured pulpy coat. This fruit is reported, even from the days of Theophrastus, to be violently emetic, purgative, and dangerous. That author asserts the leaves to be poisonous to cattle, especially goats, unless they be copiously purged. Dr. Withering says: Cows, goats, and sheep eat this plant. The wood, cut in summer-time, is tough, and used for skewers. Linnæus observes that it makes the best charcoal to draw with.

RIBES rubrum.

Common Currant.

PENTANDRIA Monogynia.

GEN. CHAR. *Cal.* superior, bell-shaped, 5-cleft, bearing the *petals* and *stamina*. *Style* cloven. *Berry* with many seeds.

SPEC. CHAR. No thorns. Clusters smooth, pendulous. Flowers but little concave. Petals obtuse.

SYN. Ribes rubrum. *Linn. Sp. Pl.* 290. *Sm. Fl. Brit.* 263. *Huds.* 99. *With.* 264. *Hull.* 54. *Relh.* 96. *Sibth.* 84. *Lightf.* 146. *Woodv. Med. Bot. t.* 74.

R. vulgaris, fructu rubro. *Raii Syn.* 456.

A NATIVE of the mountainous parts of Durham and the north of Yorkshire, about the banks of rivers. Mr. Robson and Mr. W. Brunton have furnished us with wild specimens of the leaves and flowers, but the berries we could never obtain (except from gardens), the birds feeding on them before they are ripe.

The value of this shrub, when cultivated for its fruit, is sufficiently well known. The white and pale red are preferred for their sweetness, the full red, or wild kind, for its grateful acid. The Currant is quite the fruit of a cold climate, thriving very ill in the south of Europe. The flowers are out in May; the fruit ripens in July.

This is a bushy shrub, with smooth and unarmed branches. Leaves deciduous, on long footstalks, five-lobed, doubly-serrated, most downy beneath. Clusters simple, at all times pendulous. Bracteæ solitary, ovate, concave, small, smooth, very much shorter than the partial flower-stalks. Sometimes there are a pair of other small bracteæ under each flower, but not so constant nor conspicuous as in *R. petræum*, *t.* 705. Flowers cupshaped, nearly flat, yellowish green. Petals obtuse, or inversely heartshaped. Berries globular, smooth, red and shining.

Published by Jas Sowerby, London.

RIBES alpinum.

Taſteleſs Mountain Currants.

PENTANDRIA Monogynia.

GEN. CHAR. *Cal.* ſuperior, bell-ſhaped, 5-cleft, bearing the *petals* and *ſtamina*. *Style* cloven. *Berry* with many ſeeds.

SPEC. CHAR. No thorns. Cluſters erect both in flower and fruit. Bracteæ longer than the flowers. Leaves ſhining beneath.

SYN. Ribes alpinum. *Linn. Sp. Pl.* 291. *Sm. Fl. Brit.* 264. *Hudſ.* 99. *With.* 264. *Hull.* 54. *Dickſ. H. Sicc. faſc.* 15. 13. *Lightf.* 146.
R. alpinus dulcis. *Raii Syn.* 456.

A NATIVE of rocky mountainous woods or thickets in ſome parts of the north of England and Scotland. We received a ſpecimen in flower from Mr. E. Robſon May 29 laſt, and another in fruit from Mr. W. Brunton, jun. of Ripon, June 20.

This cannot be confounded with any other Britiſh *Ribes*. The ſmall leaves, ſo ſmooth and ſhining underneath, the conſtantly upright ſpikes, and the inſipid fruit clearly aſcertain it. The berries, ſo far from having the ſharp acidity of our red currants, are filled with a mucilage as taſteleſs as gum arabic. The ſhrub is about 2 or 3 feet high, much branched, ſmooth, except that the leaf-ſtalks are ciliated. Flowers ſmall, of a dull green, with glandular ſtalks, and brown membranous bracteæ exceeding each flower in length. The bark in winter is covered with ſmall black *Sphæriæ*, or other minute *Fungi*, which Mr. Sowerby propoſes to illuſtrate hereafter in his admirable figures of that curious and intricate tribe.

It is well worth obſerving how truly the inſertion of the ſtamina into the calyx, as in the claſs *Icoſandria*, indicates a wholeſome fruit. The fruits of the *Pentandria Monogynia* are generally dangerous, many of them peculiarly fatal. *Ribes* is an exception, indicated by the inſertion of its ſtamina, in which, though not in their number, it accords with the *Icoſandria*. With this ſimple guide a traveller in the moſt unknown wilderneſs might eat in ſafety, and thus the natural tree of knowledge leads to life.

RIBES spicatum.

Acid Mountain Currant.

PENTANDRIA Monogynia.

GEN. CHAR. *Cal.* superior, bell-shaped, 5-cleft, bearing the *petals* and *stamina*. *Style* cloven. *Berry* with many seeds.

SPEC. CHAR. No thorns. Spikes erect. Flowers nearly sessile. Petals oblong. Bracteæ shorter than the flowers.

SYN. Ribes spicatum. *Robson in Tr. of Linn. Soc. v.* 3. 240. *t.* 21. *Sm. Fl. Brit.* 264. *With.* 265. *Hull.* 54. *Sym. Syn.* 62.

A MORE particular inquiry, since page 705 was written, has convinced me of the distinction between this plant and *R. petræum*, which consists in the clusters being always erect, both in flower and fruit, and in the extreme shortness of the partial flower- and fruit-stalks. Hence the clusters are more properly denominated spikes. Mr. Robson, to whom we are obliged for wild specimens, is the only discoverer of this species. He found it near Richmond in Yorkshire, and between Piersbridge and Gainford in Durham, flowering in May; and his account, with a plate annexed, is published in the Linnean Society's 3d volume of Transactions.

Its leaves resemble *R. rubrum*, see last page, except in being generally more downy beneath, and more sharply serrated. The erect spikes, however, and nearly sessile flowers, are abundantly sufficient to distinguish it from that species. The flowers are of a dull brownish green. Petals oblong. Bracteæ very small and recurved, about as long as the little partial stalks. No other bracteæ are to be found. Berries red and acid, like the foregoing.

We should recommend this for cultivation, as there is no guessing what advantages a new species, or even variety, of Currant might possess.

March 1. 1804. Published by Jos. Sowerby, London.

RIBES petræum.

Rock Currant.

PENTANDRIA Monogynia.

GEN. CHAR. *Calyx* inferior, bell-shaped, 5-cleft, bearing the *petals* and *stamina*. *Style* cleven. *Berry* with many seeds.

SPEC. CHAR. No thorns. Clusters in flower erect; in fruit pendent. Petals blunt-tooth. Bracteæ shorter than the flowers.

SYN. Ribes petræum. *Sm. Fl. Brit.* 265. *Wulfen. in Jacq. Misc.* v. 2. 32. *Jacq. Ic. Rar.* v. 1. *t.* 49. *Willd. Sp. Pl.* v. 1. 1353.

GATHERED in the mountainous country near Eggleston, Durham, and sent us by the Rev. Mr. Harriman, F.L.S., as well as from Cumberland by Mr. E. Robson. It flowers in May or June, and ripens its berries a month or six weeks later.

This is a hardy branched shrub, with leaves not unlike those of R. rubrum, except that they are rather more downy in general on the under surface, particularly about the veins. Clusters of flowers erect, but as the fruit ripens they become pendulous. Calyx greenish, often tinged with red, and the petals, which vary in shape and breadth, but are generally blunt, are brown-but reddish. Berries globose, bright red, acid. The bracteæ are short, roundish, very blunt, recurved, ciliated, not so long as even the tube of the flower.

I have some doubt whether the R. nivatum, described by Mr. Robson in the Linn. Society's Transactions v. 3. *t.* 21, be really a distinct species from this. The chief difference seems to consist in the fruit being erect or pendulous. This point however cannot be left to a more faithful observer than himself to determine on the spot.

I find myself farther obliged to observe that the Abbé Wulfen's figure, published by Jacquin, has the flowers of much too high a rose-colour, from whence Lamarck has incautiously defined the species "*calyce ruberrimo.*" This figure is still more faulty in having linear sharp long bracteæ. Our specimens agree precisely with one sent by Prof. Jacquin himself, so there can be no fallacy in that respect. I make this remark merely for the sake of truth, and with the highest esteem for his venerable correspondent, whatever may have been said to the contrary by a german writer* of no authority, equally deficient in liberality and fidelity, whose name I scarcely know, and will not help to preserve.

* In a review of Tr. of Linn. Soc. v. 2. p. 10.

15.

RIBES nigrum.

Black Currant.

PENTANDRIA Monogynia.

GEN. CHAR. *Cal.* superior, bell-shaped, 5-cleft, bearing the *petals* and *stamina*. *Style* cloven. *Berry* with many seeds.

SPEC. CHAR. No thorns. Clusters hairy, pendulous, with a simple flower-stalk at their base. Flowers oblong.

SYN. Ribes nigrum. *Linn. Sp. Pl.* 291. *Sm. Fl. Brit.* 265. *Huds.* 99. *With.* 265. *Hull.* 54. *Lightf.* 146. *Relh.* 96. *Abbot.* 53. *Woodv. Med. Bot. t.* 75. *Fl. Dan. t.* 556.

R. nigrum vulgò dictum, folio olente. *Raii Syn.* 456.

BLACK CURRANTS, scarcely less commonly, though less copiously, cultivated than the red or white, are most decidedly wild in many parts of Britain. They naturally grow in swamps, and about the banks of rivers. In unfrequented marshy spots about the Norwich river we have several times met with them, or at least with the shrub, for the fruit is speedily devoured by birds. Our specimen of the flowers was sent by Mr. Robson. The fruit came from a garden.

This species flowers in May, like the others, and ripens its berries in July. It is easily known by its more humble growth, and softer, somewhat larger, leaves, remarkable for their strong smell, approaching the scent of Savine, *Juniperus Sabina*. Many persons are fond of this smell, of which flavour the fruit so much partakes, as to be, to some people, disagreeable. In a preserved state it is highly grateful, and generally approved, being a popular and efficacious remedy for sore throats, or any irritation about the mouth. The odoriferous matter exudes from glandular hairs, scattered over the leaves and flower-stalks. The calyx is more tubular than in the species we have already described; the fruit larger, and black. Each cluster is remarkable for having a solitary simple flower-stalk at its base.

Dr. Withering has observed a very curious change of the petals of this plant into stamina.

April 1 1804 Published by Jas Sowerby London

16.

RIBES Grossularia.

Rough Gooseberry.

PENTANDRIA Monogynia.

GEN. CHAR. *Cal.* superior, bell-shaped, 5-cleft, bearing the *petals* and *stamina*. *Style* cloven. *Berry* with many seeds.

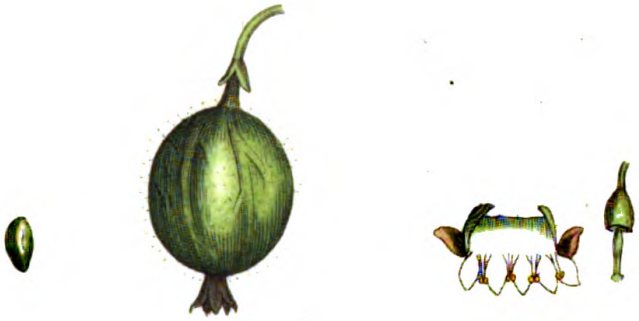
SPEC. CHAR. Branches prickly. Footstalks hairy. Flower-stalks single-flowered. Bracteæ distinct. Fruit hairy.

SYN. Ribes Grossularia. *Linn. Sp. Pl.* 291. *Sm. Fl. Brit.* 266. *With.* 266. *Hull.* 54. *Sym. Syn.* 62.

NOTHING can be more difficult than to say whether this plant be truly an original native of Britain. It is however so far naturalized as to be common in hedges and waste ground, and on old buildings. Mr. Robson finds it plentifully in woods and hedges about Darlington, which may be its native country. It flowers in April, and ripens its fruit in July.

It forms a low bushy shrub, whose branches are armed with one, two, or three strong spreading prickles under each bud. Leaves smaller, rounder, and more smooth and shining than in the currant, each three-lobed and cut, standing on hairy footstalks, various in length. Flower-stalks simple, drooping, bearing one flower, and a pair of separate, opposite, ovate, fringed bracteæ a little below it. Germen downy. Calyx tubular. Petals elliptical or ovate, brownish or pale green. Berry rather elliptical, hairy, generally green or yellowish. In a garden, as every body knows, it is liable to many variations of colour, size and flavour. It is one of the most wholesome of fruits, which the inhabitants of tropical countries would gladly purchase with some of their more luscious productions. It is observable of the cultivated varieties, that what is gained in size is lost in flavour.

The Smooth Gooseberry, *R. Uva crispa*, is as frequent as the above, and perhaps only a variety of it.



RIBES Uva-crispa.

Smooth Gooseberry.

PENTANDRIA Monogynia.

GEN. CHAR. *Cal.* superior, bell-shaped, 5-cleft, bearing the *petals* and *stamens*. *Style* cloven. *Berry* with many seeds.

SPEC. CHAR. Branches prickly. Footstalks hairy. Flower-stalks single-flowered. Bracteas united. Fruit smooth.

SYN. Ribes Uva-crispa. *Linn. Sp. Pl.* 292. *Sm. Fl. Brit.* 266. *With.* 266. *Hull.* 54. *Relh.* 97. *Sibth.* 84. *Cullum.* 88. *Schmidel. Ic.* 5. *t.* 1.

Uva crispa. *Fuchs. Hist.* 187. *Ger. em.* 1324.

As we have been led, by great authorities, into an error, though not without repeatedly offering our protest against it, we deem it right to show what is meant by the plant in question, which indeed is necessary to the plan of this work. At the same time we demonstrate that some of the reputed characters, by which this has been supposed distinct from *R. Grossularia*, *t.* 1292, the glandular footstalks and united bracteas, are evanescent and futile, as Mr. Robson, by sowing the seeds, has proved the roughness or smoothness of the fruit to be. The germen indeed is hairy in the present plant, sent by Mr. W. Borrer from Sussex, though the fruit is smooth. The bracteas are scarcely at all united at the base, but this is a very variable circumstance. The footstalks of all wild gooseberry-bushes are generally hairy, but in some the hairs are more glandular than in others, as they likewise are on the germen of the Rough Gooseberry, while in that before us they are simple soft pointed hairs.

Sep. 1 1809 published by J.T. Sowerby Lond.

v

18.

HEDERA Helix.

Common Ivy.

PENTANDRIA Monogynia.

GEN. CHAR. *Cal.* of 5 teeth. *Petals* 5, broadest at the base. *Berry* encompassed with the calyx, containing 5 *seeds.*

SPEC. CHAR. Leaves some ovate, some lobed.

SYN. Hedera Helix. *Linn. Sp. Pl.* 292. *Sm. Fl. Brit.* 267. *Huds.* 100. *With.* 267. *Hull.* 54. *Relh.* 97. *Sibth.* 85. *Abbot.* 53. *Curt. Lond. fasc.* 1. *t.* 16. H. communis major et minor. *Raii Syn.* 459.

EVERY one is acquainted with the Ivy, so common and so picturesque upon old walls, and the trunks of aged trees, whose heads it frequently overtops, finally overwhelming its supporters altogether. Nor does it less commonly creep on the ground in dark woods, forming an evergreen carpet. It is the latest of all our flowering plants, blossoming in October and November, and ripening its berries in the spring.

The stem and branches are long and flexible, a little compressed, creeping, and closely attached to the tree or wall, which supports them, by innumerable short fibres, which, however, do not afford them any nourishment; for every day's experience shows that Ivy is easily killed by cutting the stem above the root. The upper branches spread in every direction, and are round and smooth. The leaves are evergreen, of a dark hue, beautifully veined with white, and somewhat shining: the lowermost five-lobed, the uppermost ovate; all entire and supported by footstalks. Flowers numerous, in umbels, several of which together form a corymbus. Stalks slightly clothed with starry down. Germen urn-shaped, encompassed by the 5 teeth of the calyx. Petals green, reflexed. Stamina erect. Style very short, with a simple stigma. Berry globular, black, mealy within.

The whole plant partakes of a peculiar aromatic flavour. From the old stems, when bruised, a very fragrant resin exudes. Mr. Curtis recommends this plant to be trained into a head as a standard ever-green; he also mentions that sheep are very fond of the leaves.

Feby 1 1804 Published by Jas Sowerby, London.

19.

ILLECEBRUM verticillatum.
Whorled Knotgrass.

PENTANDRIA Monogynia.

GEN. CHAR. *Cal.* of 5 leaves, cartilaginous, inferior. *Cor.* none. *Capsule* of 5 valves with 1 cell. *Seed* 1.

SPEC. CHAR. Flowers whorled, without bracteæ. Stems procumbent.

SYN. Illecebrum verticillatum. *Linn. Sp. Pl.* 298. *Sm. Fl. Brit.* 268. *Hudſ.* 100. *With.* 267. *Hull.* 54. *Dickſ. Dr. Pl.* 57. *H. Sicc. faſc.* 12. 13.
Corrigiola. *Raii Syn.* 160.

NO part of Britain except Cornwall and Devonſhire has been hitherto known to produce this plant. It grows in moiſt boggy places, flowering in July, and was gathered by Mr. D. Turner and Mr. Sowerby in their weſtern excurſion two years ſince.

Root creeping and perennial. Herb ſmooth. Stems procumbent, a little branched, clothed with numerous pairs of oppoſite, nearly ſeſſile, ovate, entire, rather fleſhy leaves, which are accompanied above their inſertion by membranous lacerated ſtipulæ. Tufts of flowers forming a ſmall whorl grow out of the *axillæ* of almoſt every pair of leaves. The calyx conſiſts of 5 white oblong leaves, thick and fleſhy, hollowed out on the inſide, and each tipped with a curved briſtle. The ſtamina are ſhorter than the calyx, and ſtand on a kind of ring, with 5 reddiſh awl-ſhaped rays, ranged alternately with them on the ſame baſis, which look like petals; but their inſertion, and the analogy of other plants in this Natural Order, rather indicate them to be of the nature of barren filaments. We know not whether they are found in every ſpecies of *Illecebrum*. The germen is ovate, ſtyle very ſhort, ſtigma red, with 5 ſmall notches. Capſule of one cell, but formed of 5 valves, the moſt certain mark of the genus. Seed ſolitary, elliptical, tapering, round, not compreſſed.

20.

GLAUX maritima.

Black Salt-wort.

PENTANDRIA Monogynia.

GEN. CHAR. *Cal.* one-leaved, campanulate. *Cor.* none. *Capſule* ſuperior, one-celled, five-valved, and five-ſeeded.

SPEC. CHAR. Only one ſpecies known.

SYN. Glaux maritima. *Linn. Sp. Pl.* 301. *Hudſ. Fl. An.* 101. *With. Bot. Arr.* 246. *Raii Syn.* 285.

NOTHING can be more common than this pretty little plant in ſalt marſhes. It enlivens large tracts of the dreary and wretched ſituations where it is found, with its purpliſh fleſh-coloured or whitiſh flowers, which are produced in great abundance in the ſummer, ſtanding ſolitary, and with ſcarcely any foot-ſtalks, in the boſoms of the leaves.

The root is perennial and creeping.

The whole plant is ſucculent and ſalt to the taſte. Dr. Withering remarks that cows eat it.

J. Sowerby delin.t Apr.l 1.1791.

21.

THESIUM linophyllum.

Baſtard Toad-flax.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* none. *Cal.* of one leaf, bearing the ſtamina. *Seed* one.

SPEC. CHAR. Spike branched. Bracteæ ternate. Leaves linear-lanceolate. Tube of the calyx very ſhort.

SYN. Theſium Linophyllum. *Linn. Sp. Pl.* 301. *Hudſ. Fl. An.* 101. *With. Bot. Arr.* 247. *Relh. Cant.* 99. *tab.* *Sibth. Oxon.* 414.
Linaria adulterina. *Raii Syn.* 202.

WE have received this plant from Sir Thomas Cullum, and the Rev. Mr. Hemſted, gathered near Bury and Newmarket, and alſo from the Lime-kiln hill, near Shouldham in Norfolk, where (for the firſt time, to our knowledge, in that county) it was found by the Rev. Mr. Forby. It grows on a chalk ſoil, flowering in July.

Root woody, branched, crooked, whitiſh, perennial. Stems ſeveral, reclining, 5 or 6 inches high, but little branched, angular and ſtriated, clothed with numerous alternate linear leaves, all pointing one way, ſomewhat glaucous and ſucculent, entire. The whole herb is deſtitute of pubeſcence, but the edges of the leaves, bracteæ, and angles of the ſtem appear rough under a microſcope. Flowers in ſpikes (moſtly branched, and ſometimes ſo compound as to form a panicle), ſolitary, on alternate flower-ſtalks, with 3 bracteæ cloſe to each flower ſhaped like the leaves, but in the lower part of the ſpike one is much larger than the other two. Calyx funnel-ſhaped, the tube very ſhort and open, margin ſpreading, 5-lobed; lobes triangular, with a tooth on each ſide near the baſe, very white above, and at the margin beneath. Stamina 5, oppoſite to the calyx-lobes. Style erect, equal to the ſtamina. Stigma with 2 knobs. Seed oval, 5-angled, ſtriated, hard, inveſted with the permanent calyx. The herb is ſcarcely bitter, a little ſaltiſh.

This without doubt is *T. Linophyllum*; but when cultivated, as Linnæus had it, the whole herb becomes luxuriant, the ſpike panicled and leafy, according to his definition. *T. alpinum* differs from this in having a long tubular calyx; otherwiſe they are much alike. The intermediate kind, mentioned in Withering, we believe to be the proper wild appearance of *Linophyllum*.

Published by J. Sowerby May 1st 1797.

VINCA minor.

Lesser Periwinkle.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* twisted, salver-shaped. *Pouches* 2, erect. *Seeds* without beard or wing.

SPEC. CHAR. Stems procumbent. Leaves elliptic-lanceolate, smooth at the edge. Flowers on stalks. Calyx-teeth lanceolate.

SYN. Vinca minor. *Linn. Sp. Pl.* 304. *Sm. Fl. Brit.* 270. *Hudf.* 91. *With.* 268. *Hull.* 51. *Relh.* 89. *Sibth.* 79. *Abbot.* 53. *Curt. Lond. fasc.* 3. *t.* 16.

V. pervinca minor. *Raii Syn.* 268.

WE have never seen the Lesser Periwinkle (far rarer than the Greater, *t.* 514) more truly wild than about Honingham church, 6 miles west of Norwich. Our specimen was gathered near Rippon, Yorkshire, by the Rev. Mr. Dalton, and sent by Mr. W. Brunton, being in the opinion of those gentlemen perfectly wild there. It is very generally cultivated in shady places under trees, its evergreen leaves and early flowers conducing greatly to the ornament of such places. The wild plant blossoms earlier than *V. major*; and the garden varieties, one of which is double and reddish, and another white with variegated leaves, are found in bloom even in March or April.

The root is perennial and creeping. Whole plant smooth and shining. Stems round, slender, leafy; erect when in flower, afterwards prostrate, elongated, taking root at their joints. Leaves opposite, on short stalks, lanceolate inclining to elliptic, entire, of a full shining green, destitute of the fringed edge observable in *V. major*. The flowers are also smaller than in that species, of a rather darker blue, with a much shorter, smooth, and less tapering calyx. The fruit of this species we have never seen.

Aug.t 1 1808 Published by Jas Sowerby London.

VINCA major.

Greater Periwinkle.

PENTANDRIA Monogynia.

GEN. CHAR. *Corolla* twifted, ſalver-ſhaped. *Pouches* 2, erect. *Seeds* without beard or wing.

SPEC. CHAR. Stems erect. Leaves ovate, finely fringed. Flowers on ſtalks.

SYN. Vinca major. *Linn. Sp. Pl.* 304. *Hudſ.* 91. *With.* 269. *Relh.* 89. *Sibth.* 79. *Curt. Lond. faſc.* 4. *t.* 19.

Clematis daphnoides major. *Raii Syn.* 268.

IN hedges and groves not very unfrequent in a truly wild ſtate; though it is ſo generally cultivated in every ornamented ſhrubbery, and grows ſo readily, that we cannot always depend upon its being really of native growth. It flowers in May, and is one of the greateſt ornaments of that favourite ſeaſon.

The roots are perennial, creeping; the ſtems alſo, which are roundiſh and leafy, ſome of them trail and throw out roots, others grow erect and bear flowers, but even theſe afterwards take root from near their extremities. Leaves oppoſite, on footſtalks, ovate, entire, finely fringed on their edges with ſhort rigid hairs, otherwiſe ſmooth and ſhining. Flowers ſolitary, axillary, alternate, on ſtalks about half the length of the leaves. Calyx in five awl-ſhaped fringed ſegments, as long as the tube of the flower. Corolla of a fine purpliſh blue, ſalver-ſhaped, twiſted (as in all this natural order of *Contortæ*); its tube inflated, and five-ſided in the upper part. Stamina inſerted about its middle, bowed, ciliated and compreſſed. Antheræ hooded. Germen double, with 2 glands at its baſe. Style ſimple. Stigma ſhaped like a pulley, orange-coloured, its top five-lobed and downy. The fruit, which Mr. Curtis has not even mentioned, and which few botaniſts have ſeen, is produced every year in Mr. Kett's grounds at Seething, Norfolk, and conſiſts of two awl-ſhaped, ſmooth, ſhining pouches, or *folliculi*, each containing one or two oblong ſeeds, with a groove down their upper ſide. Theſe ſeeds are roughiſh, but naked, or deſtitute of beard, down, or wing.

Published by J. Sowerby

HERNIARIA glabra.

Smooth Rupture-Wort.

PENTANDRIA Digynia.

GEN. CHAR. *Cal.* in 5 ſegments. *Cor.* none. Five barren *ſtamina*. *Capſule* with one *ſeed*.

SPEC. CHAR. Herbaceous and ſmooth.

SYN. Herniaria glabra. *Linn. Sp. Pl.* 317. *Hudſ. Fl. An.* 108. *With. Bot. Arr.* 250.
Herniaria. *Raii Syn.* 160.

THIS was found in Ray's time in gravelly ſoil about the Lizard point, Cornwall, where it ſtill grows abundantly. The Rev. Mr. Hemſted gathered this wild ſpecimen near Newmarket.

Root taper, annual. Stems ſeveral, various in length, ſpreading flat on the ground in the form of a ſtar, alternately branched, round, ſometimes minutely pubeſcent. Leaves oppoſite about the lower part of the ſtem, one often ſmaller than the other, elliptical, entire, ſmooth. Stipulæ membranous. Flowers in leafy cluſtered racemi, oppoſite to the ſolitary leaves, ſmall, green, ſhort-lived, very numerous. The calyx is cloſed after flowering, and embraces the ripening capſule. It flowers about July and Auguſt.

Whence this plant obtained its abſurd name, and credit for curing ruptures, is hardly worth enquiring.

The variety β of Mr. Hudſon is manifeſtly (from Plukenet's figure copied by Petiver) nothing but Glaux maritima. What H. lenticulata of Linnæus may be, it is not our purpoſe now to determine, but there is much reaſon to ſuppoſe it Creſſa cretica.

J. Sowerby del. Oct. 1 1794

HERNIARIA hirsuta.

Hairy Rupture-wort.

PENTANDRIA Digynia.

GEN. CHAR. *Cal.* in 5 segments, inferior. *Cor.* none. *Stamina* with 5 thread-shaped scales between them. *Caps.* with 1 *seed*, covered with the calyx.

SPEC. CHAR. Herbaceous and hairy.

SYN. Herniaria hirsuta. *Linn. Sp. Pl.* 317. *Sm. Fl. Brit.* 272. *Huds.* 109. *With.* 270. *Hull.* 57. *Dill. in Raii Syn.* 161.

HUDSON mentions Colney-Hatch near Barnet as the place of growth of this *Herniaria*. We have no authority to confirm or to contradict his assertion; but we are certain that the plant is wild in Cornwall, from whence we have received specimens. It is in general of rare occurrence, and is probably, according to the opinion of Mr. Stackhouse, who has studied it in its native soil, merely a variety of *H. glabra, v.* 3. *t.* 206. We are also obliged to that gentleman for the information of both plants being perennial, not annual. They grow in a sandy soil, flowering copiously in July and August.

We can discover no difference between the two, except the present being clothed all over the stem, calyx, bracteæ, and one or both sides of the leaves, with short rigid minute bristles or hairs, with which also the leaves are strongly fringed. We have a Swiss specimen of *H. glabra* which has acquired this pubescence, of a minute size, on its stem only, but which evidently betrays an approach to the more hairy plant now before us.

Nov.1.1804. Published by J. Sowerby, London

CHENOPODIUM Bonus Henricus.

Perennial Goosefoot.

PENTANDRIA Digynia.

GNE. CHAR. *Cal.* 5-cleft, inferior. *Cor.* none. *Seed* 1, lenticular, invested with the closed five-sided calyx.

SPEC. CHAR. Leaves triangular-arrowshaped, entire. Spikes compound, leafless.

SYN. Chenopodium Bonus Henricus. *Linn. Sp. Pl.* 318. *Sm. Fl. Brit.* 272. *Hudf.* 104. *With.* 270. *Hull.* 56. *Relh.* 102. *Sibth.* 87. *Abbot.* 54. *Curt. Lond. fasc.* 3. *t.* 17.

Blitum perenne, Bonus Henricus dictum. *Raii Syn.* 156.

PERENNIAL, flowering from May to the end of summer, by which it is distinguished from other British plants of its genus, which are all annuals, flowering for the most part late in the autumn. *Perenne* would surely have been a much better specific name than the old *Bonus Henricus*, for the retaining which we can offer no other excuse than its extreme foolishness, which renders it impossible to be ever forgotten.

This plant frequently occurs in waste ground about villages, farm-yards and cottages. Its root is fleshy and branched. Stems spreading from the base, then erect, a foot high, branched below, leafy, striated. Leaves alternate, on stalks, gradually smaller upwards, triangular-hastate, or somewhat arrow-shaped, acute, entire, clothed with unctuous mealiness, especially beneath. Spikes numerous, axillary and terminal, erect, dense, compound, destitute of the small leaves which in some species grow among their lobes. Flowers mealy, green, some of them frequently wanting the stamina. Calyx bordered with an abrupt membrane. Styles often 3. Seed kidney-shaped.

The young herb boiled is a good substitute for Spinach, and is in some places cultivated for the table.

27.

CHENOPODIUM urbicum.

Upright Goosefoot.

PENTANDRIA Digynia.

GEN. CHAR. *Cal.* 5-cleft, inferior. *Cor.* none. *Seed* 1, lenticular, invested with the closed five-sided calyx.

SPEC. CHAR. Leaves triangular, toothed. Clusters dense, very straight, long, approaching the stem, and almost leafless.

SYN. Chenopodium urbicum. *Linn. Sp. Pl.* 318. *Sm. Fl. Brit.* 273. *Hudſ.* 104. *With.* 270. *Hull.* 56. *Sibth.* 87. *Abbot.* 54.

C. erectum, foliis triangularibus dentatis, ſpicis e foliorum alis plurimis longis erectis tenuibus. *Dill. in Raii Syn.* 155.

THIS is one of the moſt difficult to aſcertain of all our Britiſh ſpecies of *Chenopodium*, and I confeſs myſelf entirely obliged to Mr. Curtis in his *Fl. Lond. faſc.* 6. *t.* 21, for a deciſive mark to diſtinguiſh it from the *rubrum*, which conſiſts in the ripe ſeeds of the latter being no larger than grains of writing ſand, whereas thoſe of the plant now before us are at leaſt five times that ſize, or about as big as Rape ſeed. In the red or green colour of the ſtem and flowers both plants vary. C. *urbicum* however has the leaves in general more truly triangular, leſs lengthened out at the baſe, and not ſo deeply ſinuated as the other; cluſters more ſtraight and erect, at length cloſe-preſſed to the ſtem, and almoſt deſtitute of the little leaves ſo copiouſly interſperſed among the flowers of C. *rubrum*. The flowers in both are occaſionally polygamous; but the calyx being univerſally regular, five-cleft, and not much enlarged after flowering, clearly ſeparates *Chenopodium* from *Atriplex*.

C. *urbicum* is common in St. George's fields, flowering in Auguſt and September. It is annual, and thrives on dunghills and waſte places about towns or villages. We have ſpecimens from Norfolk, Oxfordſhire, and Bedfordſhire.

CHENOPODIUM rubrum.

Red Goosefoot.

PENTANDRIA Digynia.

GEN. CHAR. *Cal.* 5-cleft, inferior. *Cor.* none. *Seed* 1, lenticular, invested with the closed five-sided calyx.

SPEC. CHAR. Leaves triangular approaching to rhomboid, deeply toothed and somewhat sinuated. Clusters upright, compound, leafy.

SYN. Chenopodium rubrum. *Linn. Sp. Pl.* 318. *Sm. Fl. Brit.* 274. *Huds.* 105. *With.* 271. *Hull.* 56. *Relh.* 100. *Sibth.* 88. *Abbot.* 54. *Curt. Lond. fasc.* 6. *t.* 21.

Blitum Pes anserinus dictum. *Raii Syn.* 154.

COMMON in waste ground among rubbish, especially in situations that are low and muddy, and in a rich soil, flowering from August to October.

Root annual. Herb smooth, varying much in luxuriance, as well as in colour, being often tinged with red, and in exposed situations very much so. When bruised it has a faint fœtid odour. Stem generally erect, from 1 to 3 feet high, branched, somewhat pyramidal, leafy, round, furrowed. Leaves alternate, on stalks, triangular but lengthened out at the base so as to be almost rhomboid, deeply toothed and more or less sinuated, scarcely shining. Clusters of flowers axillary, rather spreading, compound, interspersed with numerous little leaves, often red. Calyx mostly smooth. Seeds blackish, shining, smooth, smaller than in most others of the genus, being about the size of common sand, whereas those of *C. urbicum* are, as Mr. Curtis observed, much larger. Ray mentions a plant resembling this, *Syn.* 154. *n.* 4, whose seeds he says are extremely minute; which induces us to consider it as a variety of what is here described.

Mar. 1. 1807. Published by Ja.s Sowerby, London.

V

CHENOPODIUM botryodes.

Many-clustered Goosefoot.

PENTANDRIA Digynia.

GEN. CHAR. *Cal.* 5-cleft, inferior. *Cor.* none. *Seed* 1, lenticular, invested with the closed five-sided calyx.

SPEC. CHAR. Leaves triangular, somewhat toothed; the upper ones bluntish. Clusters upright, compound, rounded, leafy.

WE are obliged to the accurate Mr. Wigg for pointing out this plant to us, in waste ground where the soil is moist and sandy, near Yarmouth, and we have gathered the same between the cliff and the sea at Lowestoft, flowering in autumn.

The root is annual. Herb most akin to *C. rubrum*, *t.* 1721, but the leaves are very much smaller, and not rhomboid, or very slightly so, neither are they so much toothed; the upper ones are most blunt, their edges somewhat revolute or reflexed; all of a fleshy texture, smooth, frequently red. The clusters of flowers and seed are peculiarly abundant and rounded, often red, growing on upright leafy branches. Calyx tumid and blunt. Seed small, black and shining.

The *Blito Pes anserinus dicto similis*, Raii Syn. 154, *n.* 4, being found in Oxfordshire, can scarcely agree with this, which is a maritime species, and we would rather let that remain as a variety of *C. rubrum*, at least till an authentic specimen comes in our way.

Pub. as published by Jas. Sowerby London

CHENOPODIUM murale.

Nettle-leaved Goosefoot.

PENTANDRIA Digynia.

GEN. CHAR. *Cal.* 5-cleft, inferior. *Cor.* none. *Seed* 1, lenticular, invested with the closed five-sided calyx.

SPEC. CHAR. Leaves ovate, acute, toothed, shining. Clusters very much branched, cymose, leafless.

SYN. Chenopodium murale. *Linn. Sp. Pl.* 318. *Sm. Fl. Brit.* 274. *Huds.* 105. *With.* 272. *Hull.* 56. *Relh.* 100. *Sibth.* 88. *Abbot.* 54. *Curt. Lond. fasc.* 6. *t.* 20.

Blitum Pes anserinus dictum, acutiore folio. *Raii Syn.* 154.

VERY abundant on banks and under walls about towns and villages in the autumn, flowering in August and September, and ripening abundance of seed in the following months. The whole plant is fœtid, known by its branched spreading stem, its dark shining leaves, which are ovate and sharply toothed, but especially by its cymose and very compound clusters or panicles, destitute of small leaves, springing from the stem a little above the insertion of each footstalk, being therefore not truly axillary. The clusters are most crowded about the summit of the stem, and one of them is terminal. The root is annual. Calyx more or less frosted or glandular. Seed larger than in *C. rubrum*, black, very minutely dotted. The stem is often tinged with dark purple rather than red.

The seeds of the various species of *Chenopodium* afford a large supply of food to small birds.

Mar. 1807 Publish'd by Ja.s Sowerby, London.

CHENOPODIUM hybridum.
Maple-leaved Goosefoot.

PENTANDRIA Digynia.

GEN. CHAR. *Cal.* 5-cleft, inferior. *Cor.* none. *Seed* 1, lenticular, invested with the closed five-sided calyx.

SPEC. CHAR. Leaves heartshaped, pointed, with broad angular teeth. Clusters very much branched, somewhat cymose, divaricated, leafless.

SYN. Chenopodium hybridum. *Linn. Sp. Pl.* 319. *Sm. Fl. Brit.* 275. *Huds.* 105. *With.* 272. *Hull.* 56. *Relh.* 100. *Sibth.* 89. *Abbot.* 55. *Curt. Lond. fasc.* 4. *t.* 23.

C. stramonii folio. *Dill. in Raii Syn.* 154.

THIS is perhaps the most uncommon of its genus in Britain. It grows in moist, fertile spots, as about Battersea. We have seen it near Ipswich and Colchester. It is an annual of rank growth, a branching spreading smooth habit, and fœtid scent, flowering in August.

The stems are more slender than in most other species, the leaves larger, of a full bright green, heartshaped, or at least not lengthened out at the base, pointed, with about 3 large angle-like teeth on each side. Clusters axillary, almost entirely destitute of small leaves, slender, spreading, much branched in a cymose form. Seeds, when stripped of their pellicle, black, marked with irregular, large wrinkles or dots.

Aug. 1. 1808. Published by Ja.s Sowerby, London.

CHENOPODIUM album.

White Goosefoot.

PENTANDRIA Digynia.

GEN. CHAR. *Cal.* 5-cleft, inferior. *Cor.* none. *Seed* 1, lenticular, invested with the closed five-sided calyx.

SPEC. CHAR. Leaves ovate, inclining to rhomboid, jagged, entire towards the base; upper ones oblong and perfectly entire. Seeds smooth.

SYN. Chenopodium album. *Linn. Sp. Pl.* 319. *Sm. Fl. Brit.* 275. *Huds.* 106. *With.* 271. *Hull.* 56. *Relh.* 101. *Sibth.* 88. *Abbot.* 55. *Curt. Lond. fasc.* 2. *t.* 15.

Blitum Atriplex sylvestris dictum. *Raii Syn.* 154.

β. Chenopodium viride. *Linn. Sp. Pl.* 319. *With.* 272. *Hull.* 56.

C. album β. *Huds.* 106.

γ. C. foliis integris racemosum. *Dill. in Raii Syn.* 155.

THE most common of its genus in all kinds of cultivated ground, as well as about dunghills and waste places, flowering throughout the summer and autumn. It is known by its peculiar hoary or silvery aspect, which is caused, not by any hair or down, but by a mealiness, greasy to the touch, and becoming at length dry and chaffy.

Root annual. Stem branched, angular, rarely reddish. Leaves on longish stalks; the principal ones ovate inclining to deltoid, coarsely toothed, entire towards the base: the upper ones, about the flowering portion of the stem, more or less oblong, and perfectly entire. Bunches of flowers oblong, blunt, erect, compound, accompanied by small leaves, but those leaves are not intermixed with the flowers. Calyx frosted. Seeds brown, very smooth, not dotted.

Dillenius in Ray's *Synopsis*, 155, 156. *n.* 10 and 13, mentions what seem to us trivial varieties of this plant, which is a very variable species. Its most remarkable and frequent variety is *C. viride* of Linnæus, known by its greener hue, narrower and more entire leaves (sometimes quite entire), and more elongated clusters of flowers.

C. album is generally esteemed an useless weed, though cattle will feed upon it. We believe it is eatable when boiled, like *C. Bonus Henricus.*

Apr. 1. 1807. Published by Ja.s Sowerby London.

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CHENOPODIUM ficifolium.

Fig-leaved Goosefoot.

PENTANDRIA Digynia.

GEN. CHAR. *Cal.* 5-cleft, inferior. *Cor.* none. *Seed* 1, lenticular, invested with the closed five-sided calyx.

SPEC. CHAR. Leaves sinuated, somewhat hastate, jagged, entire towards the base; upper ones oblong and perfectly entire. Seeds dotted.

SYN. Chenopodium ficifolium. *Sm. Fl. Brit.* 276. *Relh.* 101.

C. viride. *Curt. Lond. fasc.* 2. *t.* 16.

C. serotinum. *Huds.* 106. *Sibth.* 88. *Abbot.* 55.

Blitum ficûs folio. *Dill. in Raii Syn.* 155.

FOUND, like others of its genus, about dunghills and waste places, but much more rarely than the generality of them. It occurs in several spots near London. Our specimen was sent by Mr. Turner from Yarmouth.

This species is annual, flowering in August. Mr. Curtis first clearly ascertained its specific difference from *C. album* in the seeds being dotted or reticulated, which difference is confirmed by its much greener hue, the purple stain at the base of the foot-stalks, and the hastate, or fig-like, form of the leaves, their lobes being more round-pointed, and the middle one more elongated, than in *C. album*. Mr. Curtis erred only in taking it for the *viride* of Linnæus, which is a variety of *album t.* 1723; whereas Hudson mistook it for the *serotinum* of the same author, a species not yet found in Britain. The plant before us, allied to *C. album* on the one hand, approaches on the other to *C. glaucum* in some respects, and is a sort of intermediate species, though very distinct from both.

Apr. 2. 1807. Published by Jas. Sowerby London.

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CHENOPODIUM glaucum.

Oak-leaved Goosefoot.

PENTANDRIA Digynia.

GEN. CHAR. *Cal.* 5-cleft, inferior. *Cor.* none. *Seed* 1, lenticular, invested with the closed five-sided calyx.

SPEC. CHAR. Leaves all oblong, with a deeply-waved edge; glaucous beneath. Clusters compound and dense, without leaves.

SYN. Chenopodium glaucum. *Linn. Sp. Pl.* 320. *Sm. Fl. Brit.* 277. *Huds.* 106. *With.* 272. *Hull.* 56.

C. angustifolium laciniatum minus. *Dill. in Raii Syn.* 155.

FOUND on sandy or gravelly ground in several parts of the neighbourhood of London, but not in many other places in England. It is annual, flowering in August, and varies greatly in size, from 2 inches to almost 2 feet, according to the moisture of the soil. In rich ground it grows extremely rank, losing its delicacy of colour, and much of those contrasted hues of green, red, and glaucous white, which in a poor soil render it more elegant in appearance than most of its family.

The stems are thickish, branched and spreading, often prostrate. Leaves alternate, stalked, oblong, uniform, bluntish, waved, almost sinuated; green and smooth above; mealy and white beneath. Clusters terminal and axillary, short, compound, dense, with a small leaf or two at their base, but none interspersed between their lobes. Calyx-lobes obtuse, smooth and entire. Seed blackish, very minutely dotted.

May 1 1808 Published by Jas Sowerby London.

35.

CHENOPODIUM olidum.

Stinking Goosefoot.

PENTANDRIA Digynia.

GEN. CHAR. *Cal.* 5-cleft, inferior. *Cor.* none. *Seed* 1, lenticular, invested with the closed five-sided calyx.

SPEC. CHAR. Leaves ovate, somewhat rhomboid, entire. Flowers in dense clustered spikes.

SYN. Chenopodium olidum. *Curt. Lond. fasc.* 5. *t.* 20. *Sm. Fl. Brit.* 277. *With.* 273.

C. Vulvaria. *Linn. Sp. Pl.* 321. *Hudf.* 107. *Hull.* 56. *Relh.* 105. *Sibth.* 89. *Woodv. Med. Bot. t.* 145.

Blitum fœtidum, Vulvaria dictum. *Raii Syn.* 156.

GATHERED in St. George's fields, where, as well as in other waste places about London, it frequently occurs. In general it is most plentiful near the sea-coast among sand or rubbish, and flowers in August.

Root annual, small. Stems many, spreading or prostrate, branched, leafy. Leaves alternate, on footstalks, spreading, smaller than in most of the same genus, of a squareish ovate figure, entire. Clusters interrupted, axillary and terminal, short and dense. Seed depressed, dotted.

The whole plant is of a dull glaucous or greyish green, invested with a greasy mealiness, which when touched exhales a most odious and lasting smell, like that of stale salt-fish, which Lobel tells us is peculiarly attractive to dogs.

Mar. 1. 1802. Published by J. Sowerby

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36.

CHENOPODIUM polyspermum.

Round-leaved Goosefoot.

PENTANDRIA Digynia.

GEN. CHAR. *Cal.* 5-cleft, inferior. *Cor.* none. *Seed* 1, lenticular, invested with the closed five-sided calyx.

SPEC. CHAR. Leaves ovate, obtuse, entire. Stem prostrate. Clusters cymose, divaricated, leafless.

SYN. Chenopodium polyspermum. *Linn. Sp. Pl.* 321. *Sm. Fl. Brit.* 278. *Huds.* 107.
C. Betæ folio. *Raii Syn.* 157.
Allseed Blite. *Pet. H. Brit. t.* 7. *f.* 10.

OUR specimens of this *Chenopodium* were gathered on waste ground in Cornwall in the latter part of summer. It is certainly what Linnæus intended by the above denomination, as his definition and specimen prove; but another plant has been confounded with this, which we have now for the first time distinguished from it, see *t.* 1481.

The root of *C. polyspermum* is annual and branched. Stems all prostrate and widely spreading, mostly simple, roundish, striated, leafy from the base to the extremity. Leaves alternate, on footstalks, ovate or roundish, generally very obtuse, quite entire and undivided, though sometimes a little waved or irregular in their outline; their colour is a deep grass green. Clusters of flowers very large, axillary, sessile, cymose, spreading, repeatedly subdivided, without any small leaves at their divarications. Flowers green. Seed black, kidney-shaped, minutely dotted. Our figure shows it magnified, as well as a flower.

July 1. 1805. Published by Jas. Sowerby, London.

37.

CHENOPODIUM acutifolium.

Sharp Entire-leaved Goosefoot.

PENTANDRIA Digynia.

GEN. CHAR. *Cal.* 5-cleft, inferior. *Cor.* none. *Seed* 1, lenticular, invested with the closed five-sided calyx.

SPEC. CHAR. Leaves ovate, acute, entire. Stem erect. Clusters somewhat cymose, elongated, leafless.

SYN. Chenopodium polyspermum. *Curt. Lond. fasc.* 2. *t.* 17. *With.* 273. *Hull.* 57. *Relh.* 102. *Sibth.* 89. Atriplex sylvestris, sive Polyspermon. *Ger. em.* 325.

THIS is what Mr. Curtis, in general so intelligent and correct with regard to the species of this difficult genus, has published as *C. polyspermum;* but finding the Linnæan specific character did not well apply to it, and yet never dreaming of there being more than one species in question, he very properly gave it a character of his own. This plant occurs in fields and waste ground about Battersea, Lambeth, and, as it should seem, many other parts of England. It is annual, and flowers in July and August.

The stem is nearly upright, much-branched throughout, leafy, square. Leaves ovate, acute, entire, rather paler than in the true *polyspermum*. Clusters numerous, axillary, the larger ones imperfectly cymose and spreading; the rest rather spiked and elongated; all destitute of small leaves. Seed orbicular, blackish, scarcely dotted.

We trust we have distributed the synonyms of these two species justly. It appears from Mr. Davall's herbarium that they both grow in Switzerland, and he seems to have suspected their being distinct.

July 1. 1805. Published by Jas Sowerby, London.

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CHENOPODIUM maritimum.

Sea Goosefoot.

PENTANDRIA Digynia.

GEN. CHAR. *Cal.* 5-cleft, inferior. *Cor.* none. *Seed* 1, lenticular, invested with the closed five-sided calyx.

SPEC. CHAR. Leaves awlshaped, semicylindrical. Flowers axillary, sessile.

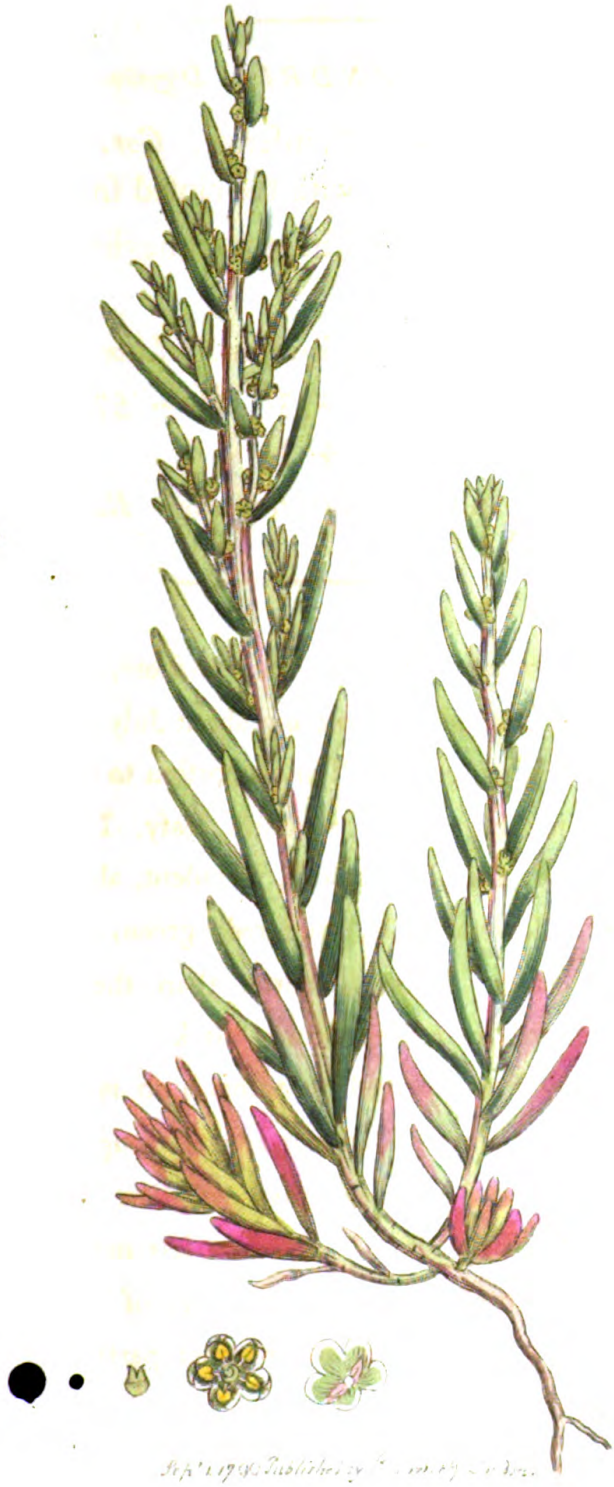
SYN. Chenopodium maritimum. *Linn. Sp. Pl.* 321. *Hudſ.* 107. *With.* 273. *Hull.* 57. *Relh.* 106. *Dickſ. H. Sicc. faſc.* 4. 7.

Blitum Kali minus album dictum. *Raii Syn.* 156.

A VERY frequent plant on the sea-shore, more especially where the soil is muddy, flowering about July and August.

Root fibrous, annual, small in proportion to the whole herb. Stem erect, much branched, roundish, leafy. Leaves alternate, semicylindrical, sharpish, smooth, succulent, abounding with a salt juice. Flowers sessile, clustered, green, with a pair of bracteæ to each. Stamina shorter than the calyx. Seeds minutely striated, of a deep shining black.

Mr. Doody has observed that this herb is an "excellent boiled sallad," a term we are not adepts enough in cookery to understand. The experiment may easily be made by those who reside near the coast. It abounds, like many other maritime plants, with alkaline salt, and is one of those which are indiscriminately collected in the warmer parts of Europe for the manufactory of glass.



39.

BETA maritima.

Sea Beet.

PENTANDRIA Digynia.

GEN. CHAR. *Calyx* 5-leaved. *Cor.* none. *Seed* kidney-shaped, within the substance of the base of the calyx.

SPEC. CHAR. Stems procumbent. Flowers in pairs. Calyx entire.

SYN. Beta maritima. *Linn. Sp. Pl.* 322. *Huds. Fl. An.* 108. *With. Bot. Arr.* 257.

B. sylvestris maritima. *Raii Syn.* 157.

A NATIVE of the sea shore in several parts of England, more especially in muddy places. Dr. Smith found it by the river side just below Lynn, with *Atriplex pedunculata* and other rarities. The specimen here delineated was gathered near Scarborough by Mr. William Travis, and we are the more obliged to this gentleman for his communication, as there is no figure of *B. maritima* extant.

Root, according to Ray, perennial, by which he says it differs from the garden Beets; its substance thick and fleshy. Stems several, prostrate, a circumstance which the form of our page would not allow of being duly expressed in the plate. Leaves succulent, the edge waved but entire, decurrent into the footstalk; the radical ones numerous and larger; those on the stem all turned upwards from the ground, and bearing in their *axillæ* clusters of small leaves and flowers. The stem terminates in a more or less compound leafy spike, bearing the flowers either in pairs or solitary, never many together, by which circumstance, added to its prostrate stem and consequently vertical stem-leaves, and the keel of the calyx-leaves being entire, not toothed as in *B. vulgaris*, this species is with certainty distinguished, according to Linnæus, who cultivated it in his garden, and remarks that it flowered the first year. He thought it an annual. With us it appears to be perennial, flowering in August and September. The stigmas are very frequently three in number.


Nov 1795 Published by J. Sowerby London

SALSOLA Kali.

Prickly Saltwort.

PENTANDRIA Digynia.

GEN. CHAR. *Cal.* 5-cleft; its base capsular. *Cor.* none. *Seed* 1, with spiral cotyledons.

SPEC. CHAR. Herbaceous, procumbent. Leaves awl-shaped, spinous, rough. Flowers axillary. Calyx margined.

SYN. Salsola Kali. *Linn. Sp. Pl.* 322. *Hudſ.* 107. *With.* 278. *Hull.* 57. *Dickſ. H. Sicc. faſc.* 12. 14. *Woodv. Med. Bot. t.* 143.

Kali ſpinoſum cochleatum. *Raii Syn.* 107.

VERY abundant on all ſandy ſea-ſhores, flowering copiouſly in July.

Root annual, fibrous. Stem very much branched, ſpreading in all directions, and forming a large round buſh, almoſt inacceſſible on account of the numerous prickly leaves, which are alternate, ſpreading, awlſhaped, channelled, dilated at the baſe, rough, each tipped with a very ſharp ſpine. Flowers axillary, ſolitary, ſeſſile, with three bracteæ, reſembling the leaves at the baſe of each. Leaves of the calyx externally dilated into a broad reddiſh waved margin; internally cloſely approaching each other, and covering the ſeed like a capſule. The ſeed is top-ſhaped, and its cotyledons curiouſly twiſted into a ſpiral form; by which character this genus is eſſentially diſtinguiſhed from *Chenopodium*, and all others of the ſame natural order.

Salſola Kali contributes more generally to the manufacture of Soda, for making glaſs, than *Chenopodium maritimum*, but is not reckoned equal to ſome other ſpecies of *Salſola*.

Septiphyllum [illegible]

41.

SALSOLA fruticosa.

Shrubby Saltwort.

PENTANDRIA Digynia.

GEN. CHAR. *Cal.* 5-cleft; its base capsular. *Cor.* none. *Seed* 1, with spiral cotyledons.

SPEC. CHAR. Erect, shrubby. Leaves semicylindrical, bluntish, without spines.

SYN. Salsola fruticosa. *Linn. Sp. Pl.* 324. *Hudf.* 108. *With.* 278. *Hull.* 57.

Blitum fruticosum maritimum, Vermicularis frutex dictum. *Raii Syn.* 156.

THE first person mentioned as the discoverer of this plant in England is the famous Sir Thomas Brown, M. D. of Norwich, so well known by his *Religio Medici* and other learned productions. He found it on the Norfolk coast, where it still grows, about Wells and Cley, as well as in Suffolk. Mr. Lambert favoured us with wild specimens from Weymouth.

This forms an elegant evergreen shrub, flowering in July and August, not unworthy of a place in gardens. It is propagated by layers, scarcely, if at all, by cuttings. The stem is about 2 feet high or more, erect, branched, woody; the branches also erect, and thickly clothed with alternate, sessile, semicylindrical, bluntish, succulent, rather glaucous leaves. Flowers inconspicuous, sessile, solitary, green, with 3 small bracteæ. Seed top-shaped, its cotyledons less convoluted than those of the last described species.

The leaves have an herbaceous flavour, with a slight degree of salt and some acrimony.

J

ULMUS campestris.
Common Elm.

PENTANDRIA Digynia.

GEN. CHAR. *Cal.* 4 or 5-cleft, inferior, permanent. *Cor.* none. *Capsule* membranous, compressed, nearly flat, with 1 *seed.*

SPEC. CHAR. Leaves doubly serrated, rough, unequal at the base. Flowers nearly sessile, four-cleft, with four stamens. Fruit oblong, naked.

SYN. Ulmus campestris. *Linn. Sp. Pl.* 327. *Sm. Fl. Brit.* 281. *Huds.* 109. *With.* 278. *Hull.* 57. *Relh.* 103. *Sibth.* 86. *Abbot.* 55.

U. suberosa. *Willd. Sp. Pl. v.* 1. 1324? *Ehrh. Arb.* 142?

U. vulgatissima, folio lato scabro. *Goodyer in Ger. em.* 1480. *Raii Syn.* 468.

COMMON in scattered woods and hedges in the southern parts of England principally, flowering in April, and ripening seed in June. It grows to a considerable height before it blossoms, with a rugged crooked trunk and branches. The wood is hard and tough, particularly durable in wet situations. Hence it is preferred for coffins, administering to that folly and vanity in humble life, which in higher ranks uses lead or masonry, for the purpose of keeping the dead as long as possible in odious noxious corruption, instead of mixing with their pure parent earth.

The leaves come forth as the fruit ripens, and are alternate, on short stalks, ovate inclining to rhomboid, unequal at the base, doubly serrated, rough on both sides, from 1 to 3 inches long. Flowers from distinct buds, in numerous dense round clusters, almost sessile, with fringed bracteas. Calyx 4-cleft, fringed, light red or brownish. Stamens 4, equal, smooth, with large, roundish, purple, 2-lobed anthers. Stigmas fringed on the upper edge, at length dilated at the other, and united with the membranous smooth wings of the oblong capsule.

Perhaps the *U. suberosa* of Ehrhart and Willdenow is the cultivated Dutch elm, with corky bark, which seems to be distinct from this, and has not been thought wild in England: yet I suspect it may be the *U. minor, folio angusto scabro,* of Goodyer and Ray, which I hope some Hampshire botanist will ascertain, that we may know whether it ought to find a place in our Flora.

May 1808. Publish'd by Jo.ª Sowerby London.

ULMUS suberosa.
Cork-barked Elm.

PENTANDRIA Digynia.

GEN. CHAR. *Cal.* 4- or 5-cleft, inferior, permanent. *Cor.* none. *Capsule* membranous, compressed, nearly flat, with 1 *seed.*

SPEC. CHAR. Leaves doubly and sharply serrated, pointed, rough, unequal at the base. Flowers on short stalks, four- or five-cleft, with four or five stamens. Fruit roundish, naked, cloven. Branches spreading; their bark corky.

SYN. Ulmus suberosa. *Ehrh. Arb.* 142. *Willd. Sp. Pl. v.* 1. 1324. *Baumz.* 391.

U. campestris β. *Sm. Fl. Brit.* 281. *Huds.* 109. *With.* 279. *Hull. ed.* 2. 75.

U. minor, folio angusto scabro. *Ger. em.* 1480. *Raii Syn.* 469.

OUR conjecture at *p.* 1886 is so far confirmed, by the accurate observations and kind communications of our friend Mr. Borrer, that we can now with certainty publish this, the most common Sussex elm, as the *U. suberosa* of Ehrhart (whose specimen precisely accords with ours), and consequently of other German writers. The late Mr. Crowe was always of opinion that this was the origin of all the cultivated varieties of Dutch Elm, &c., but he was not aware of its being a native of Britain.

The branches spread widely, and their bark of a year old is covered with a very dense fine sort of cork, with deep fissures. The leaves are larger than in *U. campestris, t.* 1886, more pointed, and more sharply and finely serrated. Bunches of flowers, which come forth in March, more hairy, and each flower on a rather longer stalk; its segments erect, varying in number from 4 to 5, as well as the stamens. Fruit rounder than in *campestris*, much more deeply cloven than in *montana, t.* 1887, to which latter our *U. suberosa* appears in most respects more akin than to *campestris*, yet they are surely all three distinct. We have now only to request some Scottish botanist to search out *U. ciliata* of Ehrhart by its fringed capsule. See *p.* 1887.

We ought at *U. montana, t.* 1887, to have quoted *Sm. Fl. Brit.* 282, after *Bauh. Pin.* 427.

June 1 1810 published by Jas Sowerby London.

ULMUS glabra.
Smooth-leaved, or Wych Elm.

PENTANDRIA Digynia.

GEN. CHAR. *Cal.* 4- or 5-cleft, inferior, permanent. *Cor.* none. *Capsule* membranous, compressed, nearly flat, with 1 *seed.*

SPEC. CHAR. Leaves doubly serrated, unequal at the base, smooth. Flowers nearly sessile, five-cleft. Fruit obovate, naked, cloven.

SYN. Ulmus glabra. *Mill. Dict. ed.* 8. *n.* 4. *Cullum. Angl. Fl.* 97.

U. montana β. *Sm. Fl. Brit.* 282. *var.* 2. *Hull. ed.* 2. 75.

U. folio glabro. *Ger. em.* 1481. *Raii Syn.* 469.

U. campestris var. 3. *With.* 279. *Hull.* 57.

MR. EDWARD FORSTER, so accurately attentive to the botany of his own country, has procured us specimens of this Elm, which he says is the most abundant species in some parts of Essex. We had the flowers in March, the fruit in May, and the leaves in the end of June.

This is an elegant tree, with spreading drooping branches, whose bark is smooth and blackish. The leaves are more oblong and more rigid than in *U. suberosa*, *t.* 2161, very unequal at the base, quite smooth to the touch above, and nearly so beneath, except that the rib and veins are there more or less downy, like other species. The flowers are nearly sessile, fringed, 5-cleft, and the fruit small, obovate, cloven at the top, often reddish. Goodyer in Gerarde's Herbal says the wood is preferred for the naves of cart-wheels.—Mr. Forster is of opinion that our *campestris*, *t.* 1886, is the *U. minor, folio angusto scabro*, of Goodyer and Ray, and very little known out of Norfolk, our *suberosa*, *t.* 2161, being *U. vulgatissima, folio lato scabro*, of those writers. If so, our Norfolk Elm is well worthy of cultivation in other counties for its hard and durable wood.

Feb. 1 1811 published by Jas. Sowerby London

ULMUS montana.

Broad-leaved Elm. Wych Hasel.

PENTANDRIA Digynia.

GEN. CHAR. *Cal.* 4 or 5-cleft, inferior, permanent. *Cor.* none. *Capsule* membranous, compressed, nearly flat, with 1 *seed.*

SPEC. CHAR. Leaves doubly serrated, pointed, rough, unequal at the base. Flowers on short stalks, five- or six-cleft, with five or six stamens. Fruit roundish, naked.

SYN. Ulmus montana. *Bauh. Pin.* 427. *With.* 279. *Hull.* 57. *Relh.* 103.

U. campestris. *Fl. Dan. t.* 632. *Huds.* 109, γ. *Willd. Sp. Pl. v.* 1. 1324.

U. glabra. *Huds. ed.* 1. 95.

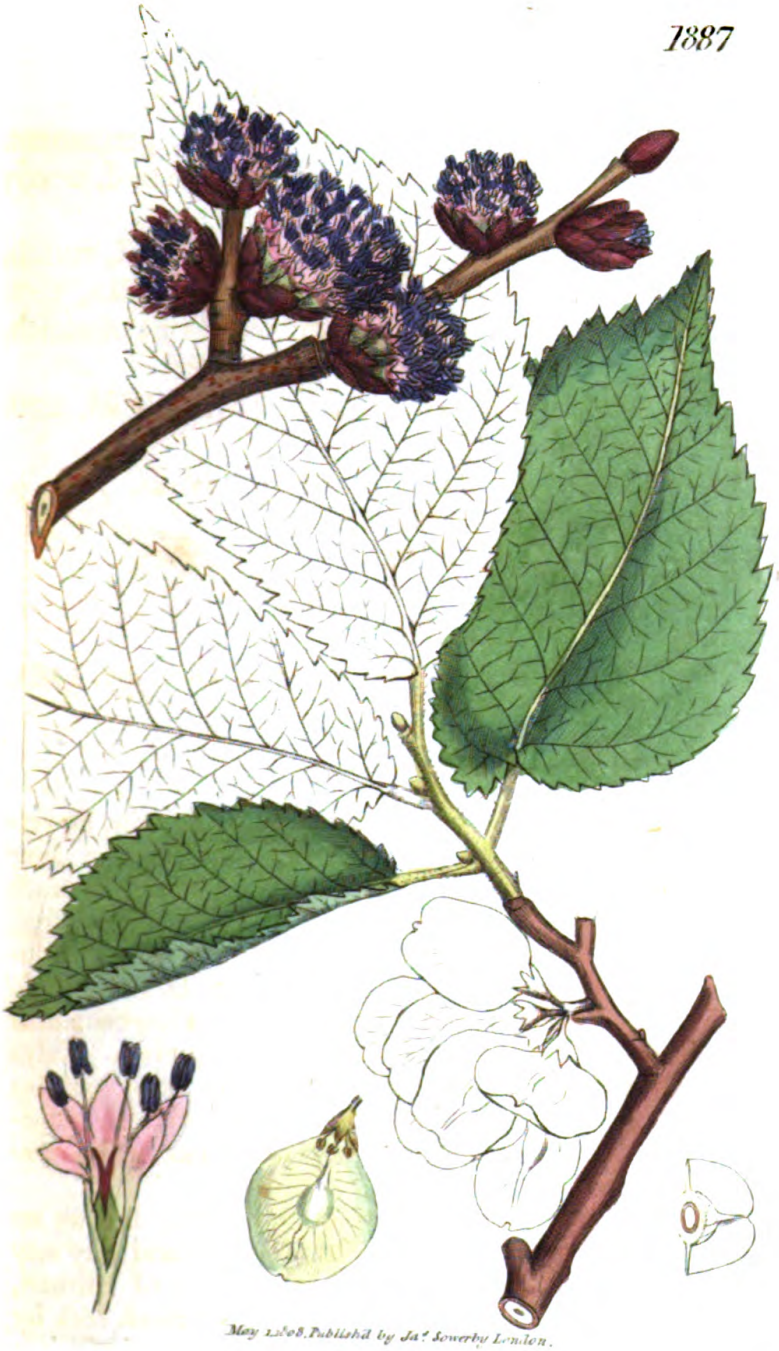
U. effusa. *Sibth.* 87. *Abbot.* 55.

U. nuda. *Ehrh. Arb.* 62.

U. folio latissimo scabro. *Goodyer in Ger. em.* 1481. *Raii Syn.* 469.

COMMON in woods and hedges throughout Britain, flowering in March or early in April, and ripening seed in June when the leaves are full-grown. The wood of this is much less hard and valuable than the preceding. The tree is large, with spreading, often drooping, and sometimes quite pendulous branches. Leaves much larger than in *U. campestris*, and somewhat less rough, with longer points. Flowers a little larger, and on rather longer stalks, blush-coloured. Calyx fringed, in 5, 6 or even 7 segments, with the same number of stamens. Fruit larger, round rather than oblong, sometimes obovate, more scariose and hop-like than in the *campestris*.

We trust the above synonyms are quite correct, but we are inclined to think the *U. folio glabro* of Goodyer and Ray may be a distinct species, and that it is the *ciliata* of Ehrhart, *effusa* of Willdenow. To settle this point we must seek for indubitably wild British specimens. In the mean while it is of use to ascertain two species, as the genus has long been a reproach to botanists. If Lightfoot be correct, this *U. folio glabro* is common in Scotland. Goodyer says it grows in Essex between Rumford and Stubbers.



May 1808. Published by Jas. Sowerby London.

46.

ULMUS major.

Dutch Elm.

PENTANDRIA Digynia.

GEN. CHAR. *Cal.* 4- or 5-cleft, inferior, permanent. *Cor.* none. *Capsule* membranous, compressed, nearly flat, with 1 *seed.*

SPEC. CHAR. Leaves unequally, rather bluntly, serrated, rough, unequal at the base. Flowers nearly sessile, four-cleft, with four stamens. Fruit obovate, naked, slightly cloven.

SYN. Ulmus hollandicus. *Mill. Dict. ed.* 8. *n.* 5.
U. major hollandica, angustis et magis acuminatis samaris, folio latissimo scabro. *Pluk. Alm.* 393.

WHETHER this Elm ought to be considered as a British native, may be doubtful. It occurs sometimes in hedges, though Miller says it was brought from Holland in King William's reign, and, being recommended for its quick growth, was a fashionable tree for hedges in gardens, but afterwards fell into disuse. He adds that "the wood is good for nothing, so it is almost banished this country."

We had confounded this species with our *suberosa*, *t.* 2161; but Mr. E. Forster, to whom we are obliged for specimens, is convinced of its being very distinct, though intermediate between that and *montana*, *t.* 1887. The broad rough bluntly serrated leaves, and the fruit, are most like the latter; but the branches spread widely in a drooping manner, and their bark is extremely rugged and corky, much more so than in our *suberosa*. The latter however is certainly Ehrhart's plant, and consequently, we presume, Willdenow's. The flowers in the present are nearly sessile, with four blunt segments, and as many stamens, at least in all we have seen.

May 1, 1819 Published by J. & F. Rivington, London

CUSCUTA europæa.
Greater Dodder.

TETRANDRIA Digynia.

GEN. CHAR. *Cal.* 4-cleft. *Corolla* of one petal. *Capsule* 2-celled.

SPEC. CHAR. Flowers nearly sessile. Corolla without scales. Stigmas simple.

SYN. Cuscuta europæa. *Linn. Sp. Pl.* 180. *With. Bot. Arr.* 165. *Fl. Dan. t.* 199. inaccurate.

WE have been led into an error in the first volume of this work, p. 55, concerning the most common British *Cuscuta*, which, from trusting too much to the Linnæan specific character, we there published as the *europæa*, notwithstanding Dr. Stokes's just remarks in the *Bot. Arr.* which ought certainly to have warned us. We however take the first opportunity of correcting this error, Mr. Sowerby having last autumn received wild specimens of the real *europæa* from Mr. Alexander Smith of Aberdeen, and others from the Rev. Mr. Hemsted, which have at the same time verified the plant as a native of Britain, and helped us to fix an essential character between that and the other. This character consists in the total want of the nectary, or more properly scales, at the base of the stamina. The true *europæa* is also larger in all its parts, except that the styles are rather shorter, and generally more divaricated. The simple stigmas of both these species distinguish them from *C. americana*, which has capitate stigmas. The number of stamina, and segments of the corolla, varies from 4 to 5 in all the species; the latter we have found the most prevailing, at least in the *Epithymum*, *americana*, and a new East Indian species; so that perhaps the genus ought to be removed to the 5th class. *C. europæa* grows parasitically upon nettles, flax, thistles, &c. flowering in August and September. The corolla is very thin, pellucid, reticulated, and permanent.

We beg leave to substitute the following synonyms and characters for those already given to our *Tab.* 55.

CUSCUTA Epithymum.
Lesser Dodder.

SPEC. CHAR. Flowers sessile. A fringed scale close at the base of each stamen. Stigmas simple.

SYN. Cuscuta Epithymum. *Linn. Syst. Veg. ed.* 13. 140. *With. Bot. Arr.* 166. *Fl. Dan. t.* 427. bad.

THE synonym of Ray probably belongs to this, being by far the most common, but the *C. major* of Bauhin must be the other. British authors in general have either confounded the two, or taken, as we did, the *Epithymum* for the *europæa*.

Jan. 1, 1803. Published by J. Sowerby, London.

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48.

CUSCUTA Europæa.

Greater Dodder.

TETRANDRIA Digynia.

GEN. CHAR. *Calyx* four-cleft. *Corolla* of one petal. *Capsule* two-celled.

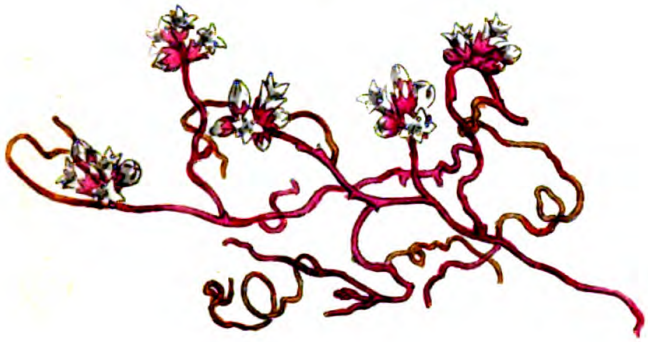
SPEC. CHAR. Flowers sessile, mostly four-cleft.

SYN. Cuscuta Europæa. *Linn. Sp. Pl.* 180. *With. Bot. Arr.* 165.

C. major. *Raii Syn.* 281.

OF all parasitical plants, the Dodder tribe are the most singular, trusting for their nourishment entirely to those vegetables about which they twine, and into whose tender barks they insert small villous tubercles serving as roots, the original root of the Dodder withering away entirely as soon as the young stem has fixed itself to any other plant, so that its connexion with the earth is cut off.

The species of Cuscuta are very ill understood. Notwithstanding the doubts of Dr. Stokes in the *Bot. Arr.* whether the true Linnæan C. *Europæa* was ever found in England (the C. *Epithymum*, which has five-cleft flowers, being the most frequent), we think there can be no doubt of its being our plant. This specimen was gathered on the common heath, *Erica vulgaris*, on One-tree-hill at Greenwich. The flowers are generally found with 4 divisions, rarely occurring with 5. It may be met with plentifully in flower in July and August.



49.

SWERTIA perennis.

Marsh Swertia.

PENTANDRIA Digynia.

GEN. CHAR. *Cor.* wheel-shaped, with a pair of honey-bearing pores at the base of each segment. *Caps.* superior, of 1 cell, with 2 valves.

SPEC. CHAR. Corolla in five segments. Radical leaves ovate.

SYN. Swertia perennis. *Linn. Sp. Pl.* 328. *Sm. Fl. Brit.* 284. *Huds.* 102. *With.* 280. *Hull.* 55. *Jacq. Fl. Austr. t.* 243.

As a native of Britain this fine plant rests on the word of Hudson only, who asserts that Richardson found it in Wales, but does not mention his authority, nor has any other person confirmed the report. It is very rare even on the Alps, growing in watery meadows, and flowering in August. Having gathered it wild, and finding it very little altered in colour by drying, we have, after consulting Jacquin's figure, which is too pale, caused a very faithful representation to be made, which we trust will be the more acceptable as the plant can scarcely be cultivated in a garden. To be kept alive it must be planted in black bog earth, and constantly inundated to the height of 5 or 6 inches, so that it is hardly possible to transport the roots, though perennial, from their native mountains.

The long fibres of the root are intensely bitter. The herb is quite smooth. Stem a foot high, square. Leaves chiefly radical, on stalks, ovate, entire. Panicle of many greyish-blue flowers on purplish stalks. Corolla with many fine ribs, the nectaries fringed and greenish. Germen often abortive. The genus is next akin to *Gentiana*, and agrees with it in qualities.

April 1 1805. Published by Jas. Sowerby, London.

50.

GENTIANA Pneumonanthe.

Marſh Gentian, or *Calathian Violet.*

PENTANDRIA Digynia.

GEN. CHAR. *Cor.* of one petal. *Capſule* ſuperior, one-celled, two-valved, with two longitudinal receptacles.

SPEC. CHAR. Corolla bell-ſhaped, five-cleft. Flowers on foot-ſtalks. Leaves linear.

SYN. Gentiana Pneumonanthe. *Linn. Sp. Pl.* 330. *Hudſ. Fl. An.* 102. *With. Bot. Arr.* 261.
G. paluſtris anguſtifolia. *Raii Syn.* 274.

WE are indebted for the wild ſpecimen here figured of this rare and beautiful Gentian to the Rev. Mr. Charles Sutton, B. D. of Norwich, who gathered it on Stratton Strawleſs Heath, a few miles from that city, the very place in which it was found by the amiable Stillingfleet many years ago. It uſually prefers a wet turfy ſoil, and flowers in Auguſt.

Mr. Sutton remarks that the leaf varies in figure from *linear* to almoſt *ſpatulate;* that the antheræ are united till the capſule ſwells, and forcibly ſeparates them; and that after a wet ſpring the plant is found much more luxuriant, bearing five, ſix, or ſeven flowers, inſtead of one or two.

Such a gigantic ſpecimen appears to have occaſioned Linnæus to define it *corollis oppoſitis*, having *oppoſite corollas*, or rather *flowers;* but we have omitted this in our ſpecific character, as tending to miſlead. The connection of the antheræ is full as remarkable as that of Lobelia, and more ſo than in Viola; both which, on account of ſuch an adheſion, are placed in the claſs Syngeneſia: but the inconſtancy of this character, except in *compound flowers*, ſeems to authoriſe the abolition of the order Syngeneſia Monogamia altogether.

J. Sowerby del. June 1 1791

GENTIANA acaulis.

Dwarf Gentian.

PENTANDRIA Digynia.

GEN. CHAR. *Cor.* of 1 petal, tubular at the base, destitute of honey-bearing pores. *Caps.* superior, one-celled, two-valved, with 2 longitudinal receptacles. *Seeds* many.

SPEC. CHAR. Flower solitary, five-cleft, bell-shaped, about as long as the quadrangular stalk.

SYN. Gentiana acaulis. *Linn. Sp. Pl.* 330. *Sims and Konig, Annals of Bot. v.* 2. 196. *Turn. and Dillw. Bot. Guide*, 504. *Curt. Mag. v.* 2. *t.* 52. *Jacq. Austr. t.* 135.

G. alpina. *Schleich. Cat.* 56.

Gentianella verna major. *Ger. em.* 436.

DRAWN from the original specimen gathered near Haverford West in South Wales, and sent to Mr. Konig, by M. de St. Amans, as mentioned in the Annals of Botany, a work which by its great merit and utility has deserved much more patronage from the public than it has experienced, and which, we are sorry to hear, is likely to be discontinued. Its loss to the science of botany in England can scarcely be compensated.

We are nevertheless not at all satisfied of this beautiful *Gentiana* being really a British native. It is common in gardens; and in favourable situations, in the choice of which it is, as Curtis well observes, rather capricious, it will easily run wild. It has been shown us as a wild plant even in Middlesex; which no botanist could assent to. Its natural station is very high on the Alps, where it flowers in June and July.

This cannot be confounded with any other species. The root is perennial, branching, bearing many tufts of sessile, ovate, broad leaves. Stalks or stems very various in length, solitary, square, single-flowered, bearing 1 or 2 pair of leaves. Flower generally longer than the stem, remarkable for its size and beauty.

May 1. 1806. Published by Jas. Sowerby London.

GENTIANA verna.

Spring Gentian.

PENTANDRIA Digynia.

GEN. CHAR. *Cor.* of one petal. *Capsule* superior, one-celled, two-valved, with 2 longitudinal receptacles.

SPEC. CHAR. Corolla five cleft, salver-shaped, crenate; segments toothed at their base. Leaves clustered, ovate.

SYN. Gentiana verna. *Linn. Sp. Pl.* 331.
G. n. 641. *Hall. Hist. V.* 1. 280. Davall.
Gentianella alpina verna. *Ger. em.* 436. *f.* 2. *How. Phytolog.* 46. *Merr. Pin.* 45.

THIS very elegant plant was gathered, in April 1797, in Teesdale forest, Durham, by Mr. John Binks, and sent us by the Rev. Mr. Harriman, the first botanist who has ascertained it in England, though the inhabitants of the forest know it well by the name of Spring Violet, as it copiously enamels that country at a time when no other flower enlivens the dreary scene. Dr. How in his *Phytologia*, printed in 1650, mentions this Gentian as having been found abundantly in the mountains betwixt Gort and Galloway, Ireland, by Mr. Heaton; yet Ray has only reckoned it among the doubtful natives of these kingdoms. We have been favoured with fine recent specimens by the Hon. Mrs. Barrington. Mr. Oliver of Middleton has communicated a number of dried ones, which have been carefully compared with the Linnæan Herbarium, and prove this the real G. *verna*; though it is by no means clear that G. *Bavarica*, differing only in having a taller stem, and spatulate blunt leaves, is a distinct species, for some of Mr. Oliver's specimens have very blunt though still ovate leaves. Linnæus did not well understand the species of *Gentiana*, *Amarella*, and some others of Alpine growth.

The root of G. *verna* is perennial, thread-shaped, and creeping. Stems about an inch high, simple, single-flowered, thickly clothed with leaves which are more especially clustered in the lower part, and are of an ovate form, entire, generally pointed. Flower solitary, terminal, erect, large. Calyx with 5 waved carinated angles, and 5 equal sharp teeth. Corolla with a plaited cylindrical tube, twice as long as the calyx, and a flat limb in 5 equal obovate crenated lobes, of a most vivid blue, with a tooth on each side at their base. Stamina shorter than the tube. Germen cylindrical. Style really simple, with a flat, feathery, 2-lobed stigma. The whole herb is smooth, less bitter than most Gentians. Sometimes the flowers are of a paler blue.

✓

53.

GENTIANA nivalis.

Small Alpine Gentian.

PENTANDRIA Digynia.

GEN. CHAR. *Cor.* of 1 petal, tubular at the base, destitute of honey-bearing pores. *Caps.* superior, one-celled, two-valved, with 2 longitudinal receptacles. *Seeds* many.

SPEC. CHAR. Corolla five-cleft, funnel-shaped. Angles of the calyx even, acute. Stem many-flowered.

SYN. Gentiana nivalis. *Linn. Sp. Pl.* 322. *Dicks. Tr. of Linn. Soc. v.* 2. 290. *Sm. Fl. Brit.* 286. *With.* 280. *Hull.* 55. *Fl. Dan. t.* 17.

TRULY does this hardy little plant deserve the name of *nivalis*, for on the Alps it is only to be found about the limits of perpetual frost, and in our own country it has been observed no where but on the summits of one or two of the highest mountains of Scotland, which are seldom three months in the year without snow. It is annual, flowers in July or August, and quickly ripens its seed. We are obliged to Mr. G. Don for wild specimens.

The root is slender, tapering, and branching into a few fibres. Stem 2 or 3 inches high, erect, more or less branched, square, leafy, bearing from 2 to 6 or 7 flowers; our British specimens are generally less luxuriant than those of Switzerland. Leaves elliptical, entire, the lower ones most acute. Flowers solitary at the end of each branch, erect, slender; their tube green, the limb of a beautiful ultramarine colour, in 5 larger lobes with small cloven segments between them. The calyx is tubular, with 5 sharp, plain, (not waved,) equal angles, and as many teeth. Stamina 5, enclosed within the tube of the corolla. Styles united at their base.—The whole herb is smooth, as we believe is the case with every Gentian.

v. 1. 1801. Published by Jas. Sowerby, London.

GENTIANA Amarella.

Autumnal Gentian.

PENTANDRIA Digynia.

GEN. CHAR. *Cor.* of one petal. *Capsule* superior, one-celled, two-valved, with two longitudinal receptacles.

SPEC. CHAR. Corolla five cleft, salver-shaped, bearded at the orifice. Segments of the calyx equal.

SYN. Gentiana Amarella. *Linn. Sp. Pl.* 334. *Hudf. Fl. Ang.* 103. *With. Bot. Arr.* 262. *Relh. Cant.* 100. *Sibth. Oxon.* 85.

Gentiana fugax autumnalis elatior, Centaurii minoris folio. *Raii Syn.* 275 ?

β G. fugax verna seu præcox. *Raii Syn.* 275.

FOUND on grassy pastures above lime-stone rocks, varying in size according to the degree of moisture, and flowering in August and September—The variety β flowers from April to June.

Root annual, tufted, yellowish. Stem square, erect, bearing opposite, sessile, ovate, 3-nerved, dark-green leaves and branches from top to bottom with flowers, on short, axillary, opposite branches, one being terminal. Calyx pale, with green veins, and divided half way down into 5 lanceolate, nearly equal segments. Tube of the corolla twice as long as the calyx; limb of 5 segments, rarely but 3 or 4, horizontal when the sun shines, the orifice crowned with a purple upright fringe, which embraces the stamina. Germen oblong; styles very short; stigmas dilated. The whole herb is intensely bitter, and possesses the medicinal virtues of its congeners.

It is difficult to ascertain the 3 Gentians mentioned in Raii Synopsis, 275. Neither he, nor his editor Dillenius, seem to have been aware of the real difference between G. amarella and G. campestris, and their Synonyms are almost all confounded together. We can therefore only guess, from what Raii has before us, what they intended.—As to the β G. verna, we quote it as a variety, having been [illegible] specimen gathered by the late accurate Sir John [illegible] on the heath between Grantham and Ancaster, in [illegible], which he therefore reasonably presumed [illegible] of Ray. But it differs in no respect from [illegible] except in time of flowering. As we are on the [illegible] may not such early-flowering specimens [illegible] to spring up in the preceding autumn, [illegible]

√

55.

GENTIANA campeſtris.

Field Gentian.

PENTANDRIA Digynia.

GEN. CHAR. *Cor.* of one petal. *Capſule* ſuperior, one-celled, two-valved, with two longitudinal receptacles.

SPEC. CHAR. Corolla four-cleft, bearded in the orifice. Two outer ſegments of the calyx very large.

SYN. Gentiana campeſtris. *Linn. Sp. Pl.* 334. *Hudſ. Fl. An.* 103. *With. Bot. Arr.* 262. *Sibth. Oxon.* 86.

G. pratenſis flore lanuginoſo. *Raii Syn.* 275 ?

WE received this from near Bury, along with the preceding. It grows in paſtures, more particularly towards the ſea; nor is it ſo much confined to a lime-ſtone ſoil as that ſpecies. It is annual, flowering in September and October.

This in habit is much like the laſt, though rather paler in colour altogether, and never ſo tall: the ſtem being leſs drawn up, the flowers fewer, and on longer flower-ſtalks, they appear more corymboſe. But the eſſential and all-ſufficient mark of diſtinction is in the calyx being deeply divided into 4 unequal ſegments, 2 of which are external, oppoſite, oval, very large, completely enfolding and concealing the 2 others, which are lanceolate and not a fifth part ſo broad. This character was noted by Linnæus in *Flo. Lapponica*, and is adopted by Haller. Surely it ought to have been mentioned in *Sp. Pl.* But it is ſtill more wonderful that Linnæus ſhould have doubted whether this were a ſufficient diſtinction.

When we preſume ours to be the above plant of Ray, we by no means believe it to be alſo that of Bauhin, which is moſt probably (as all authors ſuppoſe) *G. Amarella.*


Published by T. Sowerby Feb. 1. 1793

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56.

ERYNGIUM maritimum.

Sea Eryngo.

PENTANDRIA Digynia.

GEN. CHAR. *Involucrum* of many leaves. *Flowers* in little denſe heads. *Receptacle* conical, ſcaly. *Seeds* briſtly.

SPEC. CHAR. Radical leaves roundiſh, plaited, ſpinous. Heads of flowers on ſtalks. Scales three-cleft.

SYN. Eryngium maritimum. *Linn. Sp. Pl.* 337. *Sm. Fl. Brit.* 288. *Hudſ.* 109. *With.* 283. *Hull.* 58. *Woodv. Med. Bot. t.* 102. *Dickſ. H. Sicc. faſc.* 10. 3.
E. marinum. *Raii Syn.* 222.

COMMON in the looſe ſand of the ſea ſhore, flowering in July and Auguſt.

Root long, creeping, perennial. Herb very rigid, all over glaucous, which renders it ſtrikingly conſpicuous, and every part is ſmooth. Stem round, furrowed, branched and buſhy, about a foot high. Leaves of a roundiſh kidney-ſhape, plaited, lobed, ribbed, with ſpinous teeth; the radical ones are more rounded, and ſtand on foot-ſtalks. Flowers in denſe blue terminal heads, each ſurrounded by an involucrum like the leaves. Scales of the receptacle three-cleft, whereas thoſe of E. *campeſtre*, *t.* 57, are ſimple. Petals hooked.

"Eryngo roots and Bohea tea" have been celebrated by our moſt witty poet Prior for their reſtorative or ſtimulating qualities. Under this idea, perhaps not ill-founded with reſpect to the Eryngo, theſe roots have been much uſed in domeſtic medicine, and are ſometimes ſold candied; a very elegant mode of preparing them. A ſhop at Colcheſter, Mr. Great's, has been famous for them for ſeveral generations.

ERYNGIUM campeſtre.

Field Eryngo.

PENTANDRIA Digynia.

GEN. CHAR. *Flowers* in little denſe heads. *Receptacle* ſcaly.

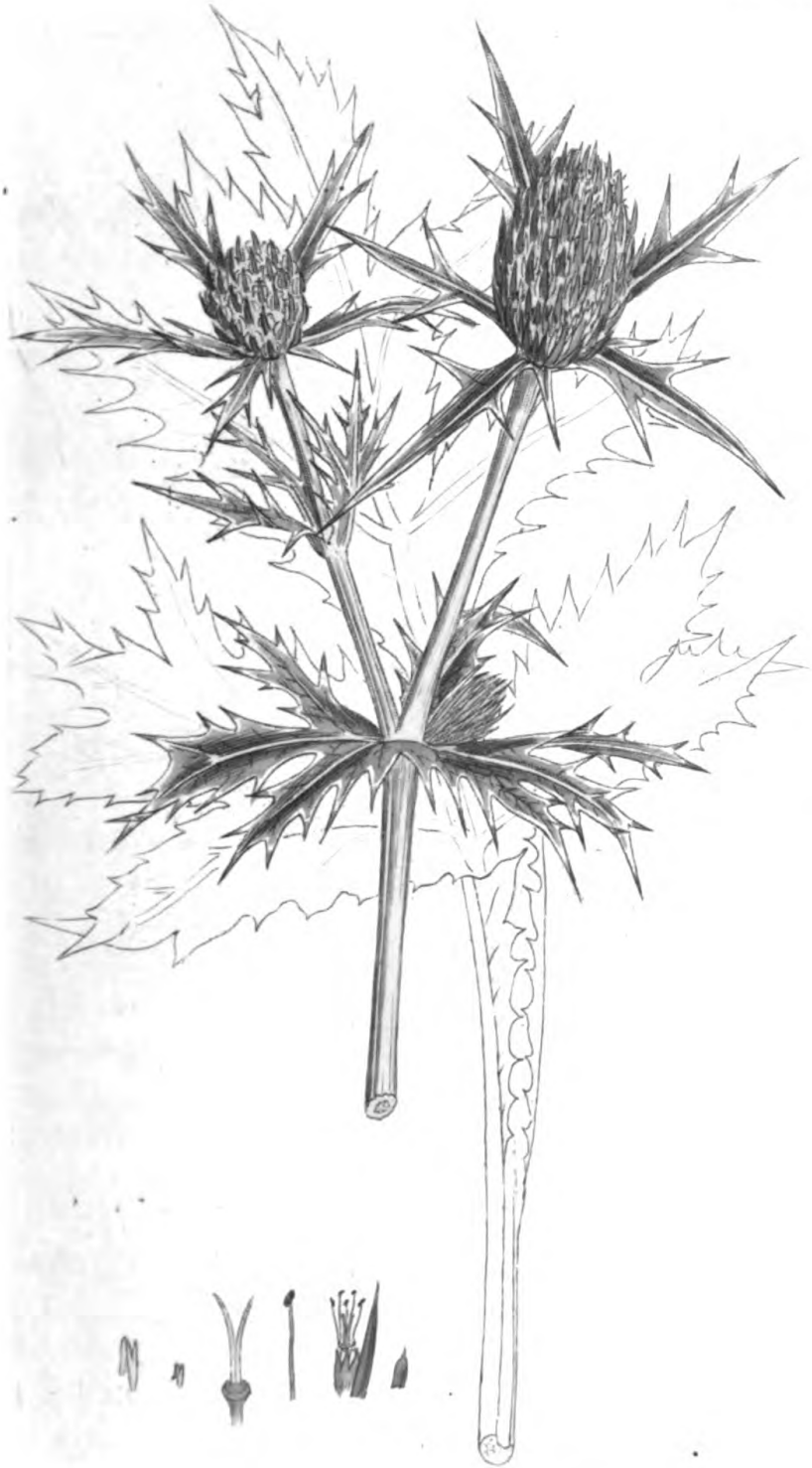
SPEC. CHAR. Leaves embracing the ſtem, divided in a pinnated manner.

SYN. Eryngium campeſtre. *Linn. Sp. Pl.* 337. *Hudſ. Fl. An.* 110. *With. Bot. Arr.* 264.

E. vulgare. *Raii Syn.* 222.

ALTHOUGH very common on the continent, and therefore denominated *vulgare* by Bauhin, Camerarius, &c. this ſpecies is ſo very rare in England, that we cannot follow thoſe Britiſh authors, however reſpectable, who name it *common Eryngo*. We are aſſured by the Rev. Mr. Wood, of Leeds, that it ſtill grows by the Watling-ſtreet road, oppoſite Brookhall, near Daventry, as mentioned by Ray. Our figure was drawn from a garden ſpecimen compared with a wild one, with which it perfectly agreed.

The root is perennial and ſtrong. Stem a foot high, much branched. The whole plant very rigid, and of a pale green. It flowers in July and Auguſt. The petals are white or purpliſh.



HYDROCOTYLE vulgaris.

Marſh Penny-wort. White-rot.

PENTANDRIA Digynia.

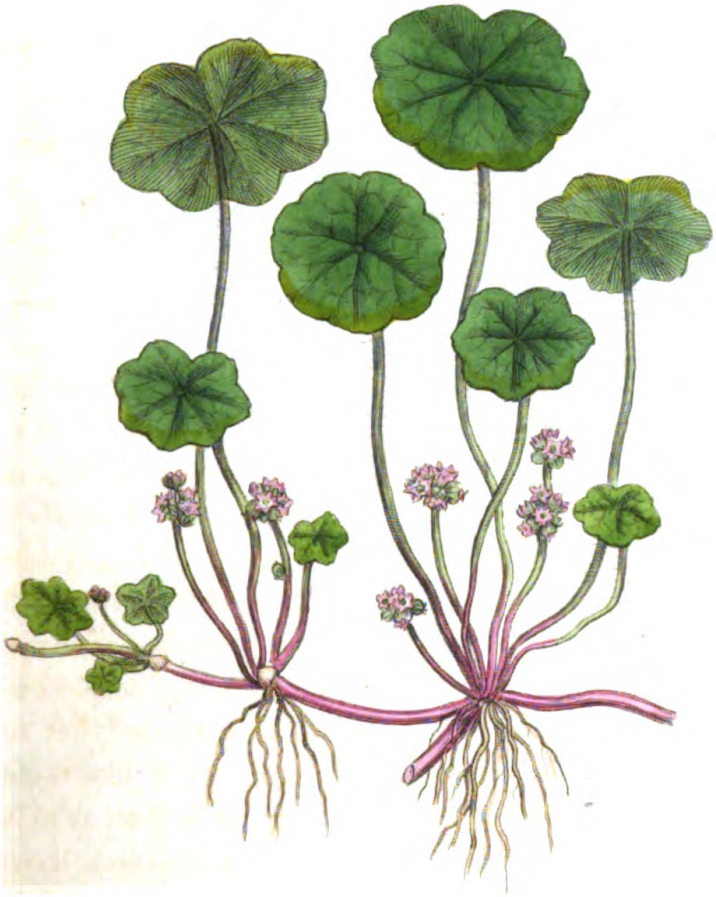
GEN. CHAR. *Umbel* ſimple. *Involucrum* of about 4 leaves. *Petals* undivided. *Fruit* circular, compreſſed.

SPEC. CHAR. Leaves peltate. Umbels of five flowers.

SYN. Hydrocotyle vulgaris. *Linn. Sp. Pl.* 338. *Sm. Fl. Brit.* 290. *Hudſ.* 110. *With.* 284. *Hull.* 58. *Relh.* 107. *Sibth.* 91. *Abbot.* 57. *Curt. Lond. faſc.* 6. *t.* 19. *Raii Syn.* 222.

ON boggy commons, moiſt heaths, and all watery places in general that are not ſtagnant, the *Hydrocotyle vulgaris* abounds, and may be found in flower from May to the end of June. The herb is perennial, and the proſtrate ſtems ſpread very far, taking root at every joint, and alſo producing from the ſame point ſeveral upright, ſimple, ſmooth or hairy, footſtalks, each of which ſupports a horizontal, peltate, roundiſh, crenate, ſmooth and ſhining leaf, as well as one or more flower-ſtalks not ſo high as the leaves, having a pair of bracteæ at their baſe, and bearing an umbel of 5 flowers, which is often proliferous, producing another ſuch umbel from its centre; but the partial ſtalks are never branched or compounded like thoſe of moſt umbelliferous plants; indeed they are ſo ſhort as to be ſcarcely diſcernible. Involucrum of 4 or 5 membranous leaves. Calyx very minute. Petals ovate, ſpreading, undivided, white or reddiſh. Fruit orbicular, furrowed, compreſſed.

The name of White-rot was given from a ſuppoſition that this plant cauſed the diſeaſe in ſheep called the rot; but it is doubtful if they will ever taſte it, and moſt people now attribute that diſeaſe to the animals inhabiting wet paſtures, where indeed the *Hydrocotyle* grows, but which are in ſome other way noxious to their conſtitution.



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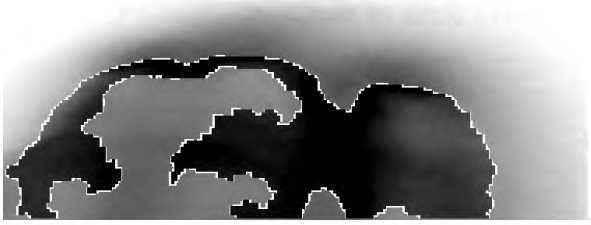


59.

SISON inundatum.

Water Honewort.

PENTANDRIA Digynia.

GEN. CHAR. *Fruit* oval, ſtriated. *Involucra* both general and partial, each of about four leaves.

SPEC. CHAR. Creeping. General umbel of only two rays, and wanting a general involucrum.

SYN. Siſon inundatum. *Linn. Sp. Pl.* 363. *Hudſ. Fl. An.* 120. *With. Bot. Arr.* 295. *Relh. Cant.* 117. *Sibth. Oxon.* 98.

Sium puſillum, foliis variis. *Raii Syn.* 212.

THIS we believe is not a very unfrequent inhabitant of wet places that are overflowed in winter, as well as of ditches and pools among other aquatics. Moſt authors, except Ray, make it annual. Others, as Linnæus, do not pretend to decide upon its duration, in which claſs we muſt humbly rank ourſelves, only obſerving that, from its flowering ſo early as May, it is probably at leaſt biennial.

The round, partly floating, ſtem throws out a few long ſimple fibres from the bottom, and is furniſhed with alternate pinnated leaves, whoſe membranous ſheathing ſtipulæ embrace the ſtem. Such leaflets as are above the water are commonly wedge-ſhaped, and three-cleft, ſometimes elliptical and undivided; thoſe that are under water, eſpecially at any depth, are finely divided into capillary ſegments, as in Ranunculus aquatilis. See a good remark on this ſubject in Ray's Synopſis, 212. The umbels are placed oppoſite to each leaf, juſt within the ſtipula, on longiſh footſtalks, and conſiſt of only two partial umbels, without any general involucrum. Each partial umbel has about five white, ſlightly radiant, flowers, with oval, entire, ſpreading petals. Fruit compreſſed and ſtriated.

We cannot help thinking this plant belongs rather to Hydrocotyle than to any other genus.

✓

60.

SANICULA europæa.

Wood Sanicle.

PENTANDRIA Digynia.

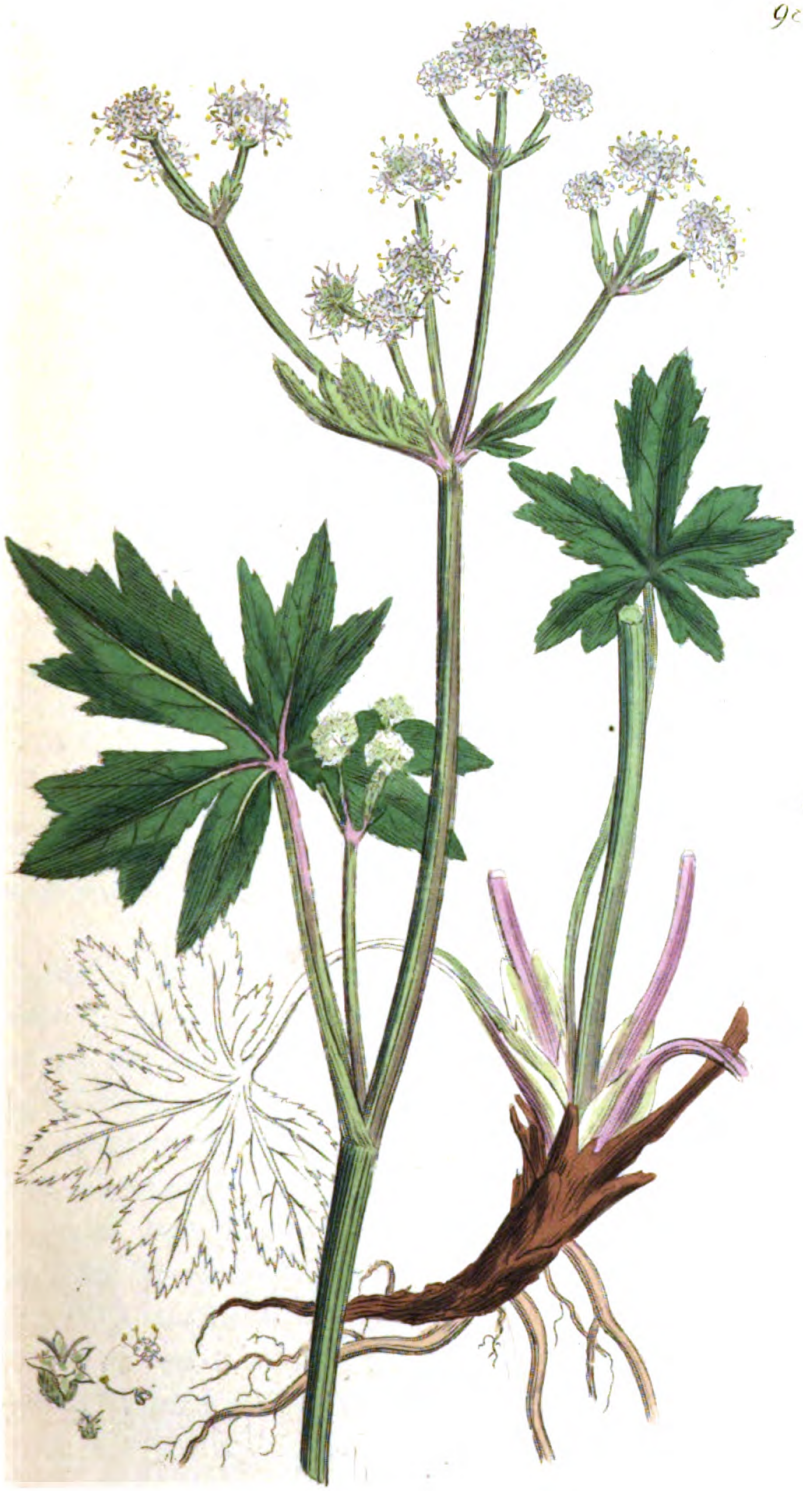
GEN. CHAR. *Umbels* cluſtered in little heads. *Fruit* rough. Central *flowers* abortive.

SPEC. CHAR. Radical leaves ſimple. Flowers all ſeſſile.

SYN. Sanicula europæa. *Linn. Sp. Pl.* 339. *Hudſ. Fl. An.* 110. *With. Bot. Arr.* 266. *Relh. Cant.* 108. Sanicula ſive Diapenſia. *Raii Syn.* 221.

COMMON enough in woods, growing among dead leaves of trees, and flowering with the firſt heralds of ſummer in May. Gerarde ſays "it joyeth in a fat and fruitfull moiſt ſoile." He alſo remarks that "it is uſed in potions which are called Vulnerarie potions, or wound drinkes, which make whole and ſound all inward wounds and outward hurts." Unhappily the experience of mankind ſince good Gerarde wrote has rather impaired the credit of ſuch ſovereign medicines. Ignorance is ever prone to confidence and wonder. The herb is bitter and pungently aromatic, but ſeems to partake of that viroſe acrimony uſual in umbelliferous plants which "joy in a fat and moiſt ſoile," and which is improved to a wholeſome aromatic flavour in dry elevated ſituations.

The root is perennial, with long branched fleſhy fibres. Leaves moſtly radical, elegantly lobed and ciliated, deep green above, paler and more ſhining beneath. Stem twelve or eighteen inches high, but little branched, furrowed. Flowers often reddiſh. The central flowers of each little head or umbel have no ſtyles, but in their place a glandular nectary *(Withering)*. The petals are all nearly equal; they are wanting in the ſeed-bearing flowers, as Scopoli remarks.



61.

BUPLEURUM rotundifolium.

Thorow-wax.

PENTANDRIA Digynia.

GEN. CHAR. *Involucrum* longer than the umbels, five-leaved. *Petals* curled in. *Fruit* roundiſh, compreſſed, ſtriated.

SPEC. CHAR. No general involucrum. Leaves perfoliate.

SYN. Bupleurum rotundifolium. *Linn. Sp. Pl.* 340. *Hudſ. Fl. An.* 111. *With. Bot. Arr.* 267. *Relh. Cant.* 108.

B. perfoliatum rotundifolium annuum. *Raii Syn.* 221.

A SOMEWHAT unfrequent annual in corn-fields, generally preferring a dry and chalky ſoil. Mr. Lewin communicated it from the neighbourhood of Dartford in Kent.

This herb like the Sanicle has the reputation of being a vulnerary, a quality which no medicine can have, any otherwiſe than as a tonic ſtrengthening the conſtitution, nor can any external application be ſpecifically healing or conſolidating, nor be uſeful in any other way, than as a defence from the air.

The root is ſmall and fibrous. Stem alternately branched, a little zigzag, clothed with ſingularly perfoliate leaves, which have occaſioned the Engliſh name, from the old word *wax*, to grow. Both leaves and involucra are entire and ſharp-pointed. The flowers are yellowiſh and inconſpicuous, coming out in June and July. Every part of the herb is remarkably hard and rigid, and has a ſlight aromatic ſmell.

62.

BUPLEURUM odontites.

Narrow-leaved Hare's-ear.

PENTANDRIA Digynia.

GEN. CHAR. *Partial Involucrum* of five leaves, longer than the umbels. *Petals* inflexed. *Calyx* obsolete. *Fruit* roundish, compressed, striated.

SPEC. CHAR. Partial involucrum of five ovate, awned, three-ribbed leaves; general of three or four. Branches widely spreading. Umbels all stalked. Leaves lanceolate.

SYN. Bupleurum odontites. *Linn. Sp. Pl.* 342. *Sm. Prod. Fl. Græc. Sibth. v.* 1. 177. *Ait. Hort. Kew. ed.* 2. *v.* 2. 121. *Jacq. Hort. Vind. v.* 3. *t.* 91.

Perfoliata minima, bupleuri folio. *Column. Ecphr. v.* 1. 84. *t.* 247. *f.* 1, (Perfoliatum angustifolium montanum.)

THIS new addition to the *Flora* of Britain was gathered by the Rev. H. Beeke, D.D. early in July last, on the marble rocks about Torquay, Devonshire, where it is unquestionably wild. We indeed received a very diminutive specimen ten years ago from Devonshire, by favour of the Rev. Aaron Neck, which is subjoined to our principal figure. This last represents the usual wild appearance of the plant. Jacquin's plate gives, with equal exactness, the different habit it assumes in a garden. The Linnæan herbarium contains both on one sheet of paper.

This species is annual, flowering in July. It may easily be distinguished from the other two of British growth, *t.* 99 and *t.* 478. The stem is branched and much divaricated. Leaves lanceolate, acute; the lower ones rather spatulate. The leaves of the general involucrum have five ribs, of which the lateral ones are close together; those of the partial involucrum have usually three, sometimes attended by two more, near the margin. The petals are cream-coloured, with a tinge of red. Anthers yellow, large and conspicuous. The herb is astringent and bitter, rigid and smooth.

Otsuwa delineavit by J. C. Loudon London

63.

BUPLEURUM tenuiſſimum.

Slender Thorough-wax, or Hare's-ear.

PENTANDRIA Digynia.

GEN. CHAR. *Involucrum* longer than the umbels, five-leaved. *Petals* curled in. *Fruit* roundiſh, compreſſed, ſtriated.

SPEC. CHAR. Umbels ſimple, alternate, of about 3 flowers, with an involucrum of 5 awl-ſhaped leaves.

SYN. Bupleurum tenuiſſimum. *Linn. Sp. Pl.* 343. *Hudſ.* 111. *With.* 285. *Relh.* 109.

B. minimum. *Raii Syn.* 221.

GATHERED in plenty by Mr. T. F. Forſter on the ſhore near Worthing, Suſſex. It prefers a muddy ſoil, overflowed by ſalt water, and is found at Lynn, Cley, and Holkham, Norfolk, flowering in Auguſt and September.

Root annual, tapering, but little branched. Herb ſlender, rigid, ſmooth, branched, erect. Stems zigzag, leafy. Leaves lanceolate, narrow, pointed, entire, alternate, tapering at the baſe. Umbels axillary, ſimple, ſometimes arranged in a ſpike; each of them of about 3 ſmall greeniſh yellow flowers, ſurrounded by an involucrum, much longer than themſelves, of five lanceolate, pointed, ribbed, nearly equal leaves. The ſeeds are hemiſphærical, compreſſed, angular, and rugged.

The whole plant has a pungent diſagreeable taſte and ſmell, and is of an acrid quality. We do not know of its being applied to any uſe.

July 1 1798. Published by J. Sowerby, London

ECHINOPHORA spinosa.

Prickly Sampire.

PENTANDRIA Digynia.

GEN. CHAR. *Partial Involucrum* turbinate, of one leaf, in six segments. Marginal *flowers* radiant, male, stalked; central one female. *Seeds* imbedded in the partial involucrum.

SPEC. CHAR. Leaflets awlshaped, spinous, three-cleft or undivided, entire.

SYN. Echinophora spinosa. *Linn. Sp. Pl.* 344. *Sm. Fl. Brit.* 293. *Rees's Cyclop. v.* 12. *Huds.* 112. *With.* 285. *Hull. ed.* 2. 78. *Cavan. Ic. t.* 127.
E. maritima spinosa. *Dill. in Raii Syn.* 220.
Crithmum spinosum. *Ger. em.* 533. *Raii Syn. ed.* 2. 114.

OUR plan requires that every plant admitted into the *Flora Britannica* should find a place in this work. The present is one of those of which we have been obliged to recur to an exotic specimen; for though there are numerous authorities for its having been formerly found, on various and remote parts of the English sea coast, nobody can meet with it now. Yet as the *Ligusticum cornubiense* was, for a longer space of time, supposed to be lost, we do not despair of the *Echinophora*. Its aspect and characters are too distinct to admit a possibility of any other plant having been mistaken for this. It flowers in July.

The root is perennial, long, tapering, fleshy, said to have the taste of a parsnep, with some saltness, and a stimulating quality. Stem bushy, furrowed, excessively branched, and so beset with spinous pinnate opposite leaves, as to be nearly inaccessible. Umbels terminal, with lanceolate, spinous involucral leaves, both general and partial. Flowers white, occasionally with a reddish tinge. Petals of the marginal ones unequal, with an inflexed fringed tip. Calyx spinous. Rudiments of the seeds two, one of which only comes to perfection, lodged in the fleshy centre of the partial umbel.

May 1 1812 published by Jas Sowerby London

65.

TORDYLIUM officinale.

Small Hart-wort.

PENTANDRIA Digynia.

GEN. CHAR. *Invol.* long and undivided. *Corolla* radiant. *Flowers* all hermaphrodite. *Fruit* nearly orbicular, flattened, notched in the margin.

SPEC. CHAR. Partial involucrum about as long as the flowers. Leaflets ovate, cut, crenate. Stem downy.

SYN. Tordylium officinale. *Linn. Sp. Pl.* 345. *Sm. Fl. Brit.* 294. *Huds.* 112? *With.* 286? *Hull ed.* 2. 78.

T. sive Seseli Creticumminus. *Raii Syn. ed.* 2. 102.

T. Narbonense minus. *Dill. in Raii Syn.* 206, with an erroneous place of growth.

Seseli creticum minus. *Ger. em.* 1050.

ALTHOUGH this plant be no longer found about Isleworth, where Mr. Doody observed it in Ray's time, the latter was too accurate a botanist to leave us in any doubt as to its identity, though Dillenius, in his edition of the *Synopsis*, transposed the places of growth of this and *T. maximum*, *t.* 1173. The latter is the Oxford plant, and was found by the late Mr. Gotobed, a few years ago, near Eton.

The present is an annual of more humble growth, whose stem is clothed with fine, dense, soft, deflexed hairs, not rigid bristles. The leaflets are, as Ray says, roundish, not lanceolate, except the uppermost, and grow on long stalks. Flowers white or flesh-coloured; their two outer petals remarkably radiant, one lobe of each being disproportionately large, very different from those of *T. maximum*. The seed moreover has a very elegant, thick, crenate border.

We have of course been obliged to describe an exotic specimen.

V

66.

TORDYLIUM maximum.

Great Hart-wort.

PENTANDRIA Digynia.

GEN. CHAR. *Invol.* long and undivided. *Corolla* radiant. *Flowers* all hermaphrodite. *Fruit* nearly orbicular, flattened, notched in the margin.

SPEC. CHAR. Umbels dense. Leaflets lanceolate, deeply serrated. Stem rough with bristles bent downwards.

SYN. Tordylium maximum. *Linn. Sp. Pl.* 345. *Sm. Fl. Brit.* 295. *With.* 286. *Hull.* 60. *Sibth.* 94. *Dill. in Raii Syn.* 206.

OUR wild specimen of this rare plant was gathered on the north side of Oxford, the only spot in Britain known to produce it; but having been observed there for above a century past, it cannot but be considered as a native. Morison clearly mentions its growing about London; but if Petiver's authority be of any weight, the Isleworth plant must be *T. officinale.* The botanists of his time appear to have found both species; and though it is wonderful any one could confound them, yet Dillenius, in his edition of Ray's *Synopsis*, either has done so, or at least has strangely obscured their history. Trusting to the faithful Ray in his 2d edition for *T. officinale*, I could not but admit both species into the *Flora Britannica.*

T. maximum has a tapering annual root, and flowers from June to August. Stem erect, 3 or 4 feet high, branched, leafy, furrowed, rough with minute rigid bristles pointing downwards. Leaves pinnate, rough; the leaflets of the lowermost broad, lobed and notched; of the rest lanceolate, narrow, coarsely but regularly serrated. Umbels on long solitary rough stalks, opposite to the leaves. General and partial involucra bristle-shaped, rough. Central partial umbels nearly sessile. Flowers white or rose-coloured. Outer petals largest. Seed all over bristly, with a circular thick pale or reddish edge, rugged, but not so beautifully notched as in some other species.

June 1. 1803. Published by Ja.s Sowerby, London

J

67.

CAUCALIS daucoides.

Small Caucalis or Baſtard Parſley.

PENTANDRIA Digynia.

GEN. CHAR. *Corollæ* radiate. *Fruit* nearly oval, ſtriated, rough with rigid briſtles. Some flowers abortive.

SPEC. CHAR. General umbels three-cleft, without involucra: partial ones ripening about three ſeeds, and furniſhed with a three-leaved involucrum.

SYN. Caucalis daucoides. *Linn. Syſt. Veg. ed.* 14. 276. *Hudſ. Fl. An.* 112. *With. Bot. Arr.* 271. *Relh. Cant.* 109. *Sibth. Oxon.* 92.

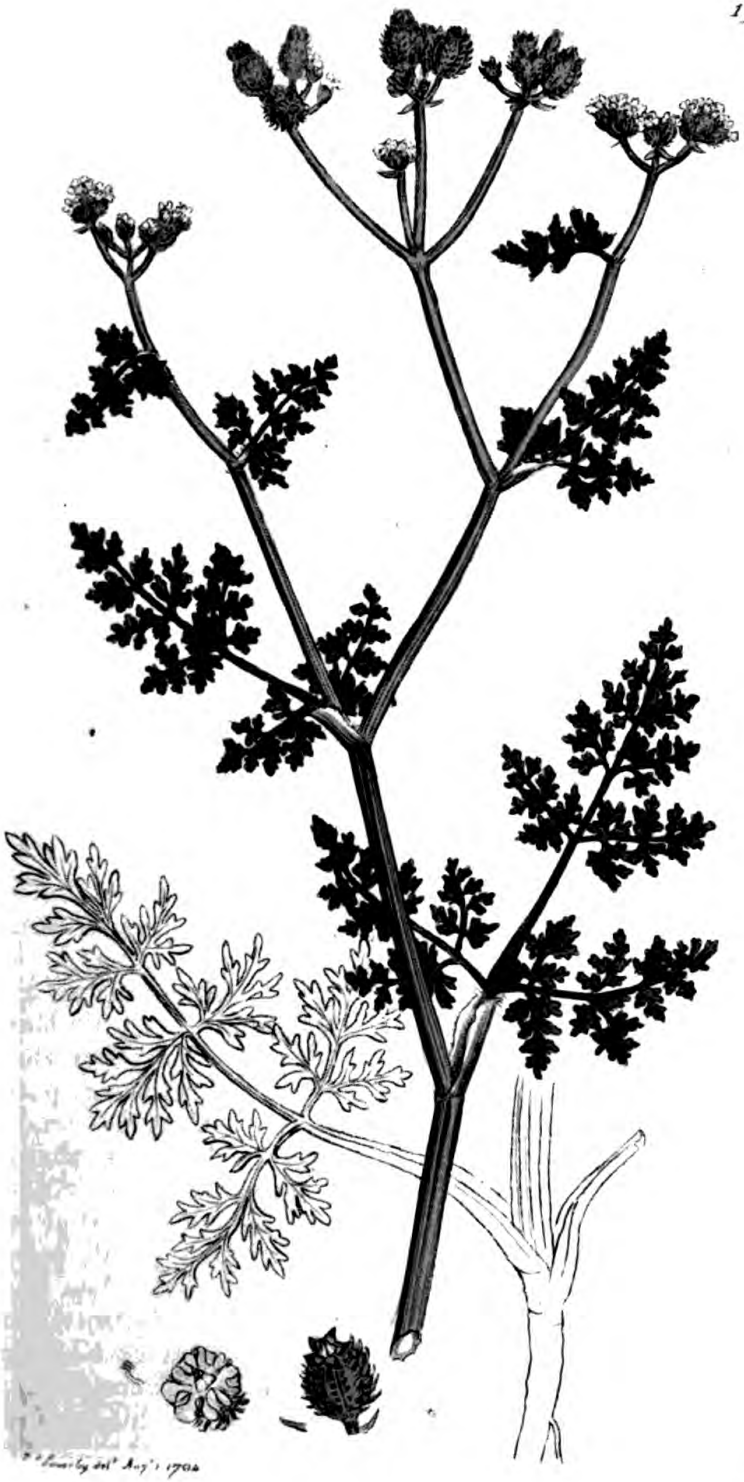
C. leptophylla. *Hudſ. Fl. An. ed.* 1. 99. *Linn. Sp. Pl. ed.* 1. 242? *ed.* 2. 347.

C. tenuifolia, floſculis ſubrubentibus. *Raii Syn.* 219.

C. albis floribus. *Ger. em.* 1021.

FOUND, though rarely, in cornfields where the ſoil is dry and chalky, moſt plentifully in Cambridgeſhire, flowering in the early part of ſummer.

The root is annual and tapering. Stem branched and divaricated, ſomewhat zigzag, deeply grooved, a little hairy at the joints only. Leaves three-cleft at their baſe, then thrice compounded, their ſegments very narrow, divaricated, pointed, decurrent and ſmooth, of a pale green. Umbels lateral and terminal, on long footſtalks, of ſcarcely more than 3 rays, though thoſe are ſometimes accompanied by 1 or 2 weak and barren ones. General involucrum none. Partial umbels of about 5 almoſt ſeſſile flowers, of which 3 only perfect their ſeeds, and are accompanied by 3 ſmall lanceolate involucella. Petals nearly equal, generally reddiſh. Germen and ſeeds clothed with rigid hooked briſtles, intermixed with hairs, but we do not perceive thoſe hairs to be, as Linnæus ſays, verticillated. That author is ſingularly confuſed in his accounts of this genus, nor are we quite ſure of what he meant at firſt by C. leptophylla. It is however certain, that the long deſcription of C. daucoides in both editions of *Sp. Pl.* belongs to C. grandiflora, and not (as erroneouſly mentioned in *Syſt. Veg.*) to C. platicarpos, whatever Linnæus might at any time intend by the latter.



J. Sowerby del.t Aug.t 1792

68.

CAUCALIS latifolia.

Broad-leaved Caucalis.

PENTANDRIA Digynia.

GEN. CHAR. *Corollæ* radiate. *Fruit* nearly oval, ſtriated, rough with rigid briſtles. Some flowers abortive.

SPEC. CHAR. General umbels three-cleft, with membranous involucra: partial ones ripening about 5 ſeeds. Leaves pinnated, ſerrated.

SYN. Caucalis latifolia. *Linn. Syſt. Veg. ed.* 14. 276. *Hudſ. Fl. An.* 113. *With. Bot. Arr.* 271. *Relh. Cant.* 110.

C. arvenſis echinata latifolia. *Raii Syn.* 219.

Tordylium latifolium. *Linn. Sp. Pl.* 345. *Hudſ. Fl. An. ed.* 1. 98.

THIS is rather leſs frequent than the laſt, but thrives in the ſame kind of ſoils and ſituations. It is one of the moſt beautiful of umbelliferous plants, and makes a conſpicuous appearance in the dry fields of Cambridgeſhire in July.

Root annual. Stem taller and leſs ſpreading than in C. daucoides, but as deeply furrowed, and more rough. Leaves rather glaucous, rough, ſimply pinnated, ſerrated; the lower pair of leaflets ſometimes compound at the baſe. Umbels of rarely more than 3 rays, with a general involucrum of 3 or 4 ſhort ovate leaves, ribbed in the middle, with a membranous border. Partial umbels of ſeveral nearly ſeſſile flowers, of which about 5 come to perfection. Partial involucra like the general ones. Flowers red, a little radiate. Seeds very rough, with reddiſh upright ſtraight rough briſtles.

[illegible] Anthriscus.

[illegible] Parsley.

[illegible] Sigma.

[illegible] general and partial, undivided. [illegible] flower of the centre male. [illegible] ovate, rough with rigid [illegible]

[illegible] many close rays. General [illegible] many leaves. Leaflets pinnatifid. [illegible]

[illegible] *Trail.* 114. *Sm. Fl.* [illegible] *Hall.* 504. *Relb.* 111. [illegible] *Lond. Bijt.* 6. *t.* 22. [illegible] *Raii Syn.* 219. [illegible] *Pl.* 346.

[illegible] referring this plant to the [illegible] genus, inactive flowers, whole [illegible] *Gen. v.* 3. *t.* 197—199. [illegible] hedges and the borders of fields. [illegible] of Scotlith, are most abun- [illegible] in August and September. [illegible] flowering. Stem erect, 2 or 3 feet high, [illegible] striated, dividing into several nearly [illegible] alternate, bipinnate, rough; the [illegible] ovate, the terminal one longest. [illegible] numerous rays, but little spreading, [illegible] involucrum of several sharp rough [illegible] involucrum is similarly formed. [illegible] Flowers radiant (or irregular), [illegible] Fruit small, rough, with simple [illegible] margined with purple.

[illegible] perennial, not remarkable for any [illegible]

70.

CAUCALIS infesta.

Spreading Hedge Parsley.

PENTANDRIA Digynia.

GEN. CHAR. *Involucra* general and partial, undivided. *Corollæ* radiate. *Flowers* of the centre male. *Fruit* nearly oval, striated, rough with rigid bristles.

SPEC. CHAR. Umbels of many close rays. General involucrum little or none. Leaflets pinnatifid. Branches spreading.

SYN. Caucalis infesta. *Curt. Lond. fasc.* 6. *t.* 23. *Sm. Fl. Brit.* 299. *Relh.* 108.

C. arvensis. *Huds.* 113. *With.* 288. *Hull.* 59. *Sibth.* 92. *Abbot.* 58.

C. segetum minor, Anthrisco hispido similis. *Raii Syn.* 220.

Scandix infesta. *Linn. Syst. Nat. ed.* 12. *v.* 2. 732.

THIS is closely allied to the *Caucalis Anthriscus*, *t.* 987, and, like that, is most unquestionably a *Caucalis*. It is very common in fields and by way sides, flowering in July, and the seeds are widely dispersed by adhering to the coats of animals, or any thing else that comes in their way.

Root annual, tapering. Stem a foot or two in height, erect, leafy, round, furrowed, rough, dividing into numerous alternate divaricating branches. Leaves alternate, pinnate, deeply cut and sometimes almost bipinnate, rough; the terminal leaflet elongated. Umbels terminal, erect, of numerous close rays. General involucrum either of 1 simple leaf, or entirely wanting; partial of several sharp rough leaves. Flowers somewhat radiant, white, cream-coloured, or rarely flesh-coloured. *Antheræ* yellowish or purple. Fruit larger than in *C. Anthriscus*, ovate, rough, green or reddish, but not tipped with purple. The most certain distinction of this species is the want of a many-leaved involucrum, and also the divaricated branches.

May 1 1804. Published by Jos. Sowerby, London

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71.

CAUCALIS nodosa.
Knotted Caucalis.

PENTANDRIA Digynia.

GEN. CHAR. *Corollæ* radiate. *Fruit* nearly oval, ſtriated, rough with rigid briſtles. Some flowers abortive.

SPEC. CHAR. Umbels lateral, ſimple, nearly ſeſſile.

SYN. Caucalis nodoſa. *Hudſ. Fl. An.* 114. *With. Bot. Arr.* 273. *Relh. Cant.* 111. *Sibth. Oxon.* 93.
C. nodoſa echinato ſemine. *Raii Syn.* 220.
Tordylium nodoſum. *Linn. Sp. Pl.* 346.

COMMON on banks and about the borders of fields, eſpecially on a gravelly or calcareous ſoil, flowering from May to July, after which its dry ſtalks and heads of ſeeds remain for a conſiderable time, and become bleached at length by the weather.

Root annual. Stems proſtrate, branched, leafy, ſtriated, roughiſh with reflexed hairs. Leaves bipinnate, and ſharply cut; oppoſite to each of which, and often partly embraced by its ſheathing footſtalk, ſtands a ſmall ſimple umbel of ſeveral minute, white or reddiſh, ſcarcely radiating, flowers, each on a very ſhort flowerſtalk, and ſurrounded by linear hairy involucra. The germens and ſeeds, both in the Linnæan ſpecimens and in ours, are all rough, the inner ones with warty points, the outermoſt, and eſpecially on their outſide, with longiſh, ſtraight, rough, rigid hairs, as in other ſpecies of Caucalis, to which genus (and not to Tordylium) this plant is ſurely to be referred upon that account, whether it has any abortive flowers or not. Future obſervations muſt decide whether the ſmoother ſeeds of the centre are ever really abortive, or deſtitute of a vegetative principle. Practical obſervers of nature in the country have it in their power to clear up many points of this kind, relative to the moſt common plants, which, if communicated from time to time to thoſe who have the means of making them public, would materially advance the intereſts of ſcience.

J. Sowerby del. Sept. 1, 1794.

DAUCUS Carota.

Wild Carrot.

PENTANDRIA Digynia.

GEN. CHAR. *Invol.* pinnatifid. *Corolla* somewhat radiant. *Fruit* rough.

SPEC. CHAR. Fruit bristly. Footstalks ribbed on the under side. Segments of the leaves acute.

SYN. Daucus Carota. *Linn. Sp. Pl.* 348. *Sm. Fl. Brit.* 300. *With.* 289. *Hull.* 59. *Relh.* 109. *Sibth.* 93. *Abbot.* 59. *Woodv. Med. Bot. t.* 161. *Mart. Rust. t.* 82.

D. vulgaris. *Raii Syn.* 218.

Caucalis Carota. *Huds.* 114.

COMMON in pastures, and especially about the borders of fields, flowering in June and July.

Root biennial, tapering, yellow, remarkable for a peculiar sweetish aromatic flavour, of which the whole herb partakes. Stem upright, solitary, branched and spreading, round, furrowed, more or less bristly. Leaves twice or thrice pinnate; their segments sharply cut, narrow and hairy; their common footstalks ribbed beneath. The umbels grow on long naked stalks, and consist of a great number of roughish rays, the outermost of which spread very much, and are a great deal longer than the inner ones, so that the upper surface of the whole umbel, when in blossom, is flat, but afterwards by contraction of the rays it becomes concave like a bird's nest. The general involucra are deeply pinnatifid and linear; the partial ones either simple or three-cleft. Flowers radiant, cream-coloured, but the central abortive floret is remarkable for its, more or less deep, blood-red hue. The angles of the seeds are fringed with small divaricated bristles.

This is the origin of the Garden Carrot. We are now almost persuaded that the *Daucus maritimus*, the segments of whose leaves are broad, obtuse and fleshy, may be a distinct species.

June 1. 1803 Published by Jas. Sowerby, London.

DAUCUS maritimus.

Sea-coast Carrot.

PENTANDRIA Digynia.

Gen. Char. *Invol.* pinnatifid. *Corolla* somewhat radiant. *Fruit* rough.

Spec. Char. Fruit armed with compressed teeth. Leaflets dilated, succulent, hairy, with rounded segments. Umbels convex when in seed.

Syn. Daucus maritimus. *With.* 290.

D. Carota γ. *Sm. Fl. Brit.* 300. *Hull. ed.* 2. 79.

NATIVE of the coast of Cornwall, where Dr. Withering first observed it; and his friend the Rev. Mr. Thompson of Penzance, by many subsequent remarks, confirmed him in the idea, in which we now concur, of its being a species distinct from *D. Carota*, *t.* 1174.

The root is of a dirty white, we presume biennial. Stem scarcely above 18 inches high, woolly rather than hairy, branched, leafy. Leaves also rather woolly; their leaflets broad and succulent, with rounded segments. Umbels white, sometimes slightly reddish, convex and often globose when in flower, nor are they flat, much less concave, when in seed. The fruit is armed with flattened teeth, dilated at the base, approaching to the nature of what are found in the exotic *D. mauritanicus* and *muricatus*, not like the bristles of *D. Carota*. The central, abortive, red or purple flower is not found in *D. maritimus*. This species flowers in July and August.

Sept. 1. 1813 published by Jos. Trimmer London.

BUNIUM flexuosum.

Bunium Earth-nut.

Class and Order. *Digynia.*

Gen. Char. Involucrum general and partial. *Corolla* uniform. Petals bifid. *Fruit* ovate.

Spec. Char. General involucrum of scarcely three leaves. Stem at the base tapering, zigzag, and smooth.

Syn. Bunium flexuosum. *With.* 291. *Sm. Fl. Brit.* [illegible] *Lam.* [illegible] *Hall.* 60. *Sibth.* 94. [illegible]

B. Bulbocastanum. *Hall.* [illegible] *Relb.* 118. *Curt.* [illegible]

Bulbocastanum. *Ray Syn.* 209.

A TELL-KNOWN inhabitant of gravelly pastures, whose white flowers are conspicuous throughout the month of June, and whose roundish bulbous roots are eagerly sought by boys; less certainly for the sake of their sweetish pungent flavour, than for the amusement of tracing them to their deep situation by means of the slender tapering and tender basis of the stem. If it is once lost, it is not easily recovered.

These roots are perennial. Stem about a foot high, smooth, branched and leafy upward. Leaves tripinnate, with narrow linear uniform segments, smooth, bright green; the radical ones on long taper zigzag stalks. Umbels terminal, erect, of many rays. General involucrum of one to three small linear leaves, often altogether wanting; partial of several such leaves. Petals regular. Fruit ovate, smooth, tipped with purple.

Although Linnæus confounded this with the *Bulbocastanum major* of old authors, the latter appears to be what he had before him when describing his *Bunium Bulbocastanum*, and is a very rare plant with us. Dillenius in Ray's *Synopsis*, 209, has mentioned both, and Dr. Stokes has well distinguished them in the 2d edition of Withering.

Feb. 1. 1802. Published by Jos. Sowerby, London

CONIUM maculatum.

Common Hemlock.

PENTANDRIA Digynia.

GEN. CHAR. *Partial involucra* of about 3 leaves, all on one side. *Fruit* ovate, swelling, with 5 ribs on each side, which are waved before the seed is ripe. *Petals* uniform.

SPEC. CHAR. Seeds without prickles. Stem much branched, polished and spotted.

SYN. Conium maculatum. *Linn. Sp. Pl.* 349. *Sm. Fl. Brit.* 302. *Huds.* 115. *With.* 292. *Hull.* 60. *Relh.* 110. *Stokes.* 94. *Abbot.* 60. *Curt. Lond. Fasc.* 2. t. 17. *Woodv. Med. Bot. t.* 22.

Cicuta. *Rail Syn.* 215.

HEMLOCK grows very generally on banks, dunghills and waste grounds, and every body is supposed to know it; yet various things are often mistaken for it, and such mistakes are not unimportant when they regard medicinal plants. The smooth shining spotted stem should be particularly attended to, as well as the shape of the fruit. It is also worthy the notice of herb-gatherers in general, that, with respect to *umbelliferous plants*, the most fatal are such as grow in watery places. Hemlock is one of the most active of those found on dry ground; yet it is not dangerous to be swallowed in any dangerous quantity. Its virtues in a proper dose are narcotic and sedative.

The root is fleshy, biennial. The flowers appear in June and July, and the tall upright hollow stem, with its spreading branches laden with umbels of seeds, is conspicuous about hedges in autumn. Leaves repeatedly pinnate and sharply incised, of a deep shining green, fœtid when bruised. Flowers white. General involucrum of several short ovate leaves; partial of 3 or 4 narrower ones all placed on one side of the partial umbel. Petals curved inwards, all nearly of equal size. Fruit ovate, furrowed, smooth.

July 1 1803 Published by Jas Sowerby London

16.

SELINUM paluſtre.

Marſh Milky Parſley.

PENTANDRIA Digynia.

GEN. CHAR. *Fruit* oval-oblong, compreſſed, ſtriated down the middle. *Involucra* general and partial, reflexed. *Petals* heart-ſhaped, uniform.

SPEC. CHAR. Milky. Root generally ſingle. Stem ſolitary. Styles much divaricated after flowering. Petals involute.

SYN. Selinum paluſtre. *Linn. Sp. Pl.* 350. *Hudſ. Fl. An.* 115. *With. Bot. Arr.* 281.

GATHERED by Dr. Smith July 28, 1794, in the ditches of a very wet reedy meadow between Norwich and Heigham, where it was firſt obſerved by Mr. Pitchford. Ray ſeems not to have known this plant to be a native of England.

Root ſomewhat ſpindle-ſhaped, with ſeveral fibres from the top. Stem ſolitary, erect, four or five feet high, hollow, deeply furrowed, not hairy, bright purple at the baſe, bearing five or ſix remote alternate leaves; the lowermoſt on long furrowed footſtalks, with ſheathing reddiſh ſtipulæ, and all twice or thrice oppoſitely pinnated, and cut into narrow, pointed, oppoſite or alternate, ſmooth ſegments, of which the terminal ones are longeſt. The upper part of the ſtem is alternately branched, in a corymboſe manner, bearing many large, horizontal, compound umbels of white flowers, on pale purpliſh footſtalks. Involucra of ſeveral ſhortiſh, dependent, lanceolate, pointed leaves, with membranous edges. Petals uniform, inflexed. Fruit elliptical, ſharp edged.

The whole plant abounds with a white, bitter, fœtid juice, of the conſiſtence of cream, which ſoon dries to a browniſh reſin. The Ruſſians are ſaid to uſe the root inſtead of ginger.

Dr. Stokes juſtly remarks (*Bot. Arr.*) that Jacquin's *Selinum [illegible]*, figured in *Fl. Austriaca*, is this plant, and not the [illegible] of Linnæus. This we have verified by comparing original ſpecimens. In both however the ſtem is furrowed. The difference of one having a ſolitary ſtem, the other a great number, ſeems more certain than the difference of the roots.

ATHAMANTA Libanotis.
Mountain Stone-Parſley.

PENTANDRIA Digynia.

GEN. CHAR. *Fruit* ovato-oblong, convex, ſtriated. *Petals* uniform, inflexed, ſo as to ſeem notched. *Involucrum* both general and partial.

SPEC. CHAR. Leaves bipinnated, flat. Umbels hemiſpherical. Seeds hairy.

SYN. Athamanta Libanotis. *Linn. Sp. Pl.* 351. *Relh. Cant.* 113 *fig.* *With. Bot. Arr.* 283. *Hudſ. Fl. An. ed.* 1. 100.

A. Oreoſelinum. *Hudſ. Fl. An.* 115. *With. Bot. Arr.* 283.

Apium petræum ſeu montanum album. *Raii Syn.* 218.

IN the time of Ray, this plant was known to grow wild on Gogmagog hills, Cambridgeſhire; but from that period no botaniſt has met with it there till the year 1783, when it was detected by the Rev. Mr. Relhan, to whom we are obliged for the wild ſpecimen here repreſented. Whether the plant Mr. Hudſon gathered between St. Albans and Stoney Stratford be the ſame, we have no means of determining: probably it might. That gentleman rightly referred Ray's plant to the A. Libanotis in his firſt edition; but in the ſecond, miſled as it ſhould ſeem by Linnæus in Sp. Pl. he calls it A. Oreoſelinum, a very different ſpecies, as appears from the Linn. Herb. Hence aroſe the miſtake of Dr. Withering, who has both plants in his Bot. Arr.

The root is perennial, running perpendicularly down, ſomewhat woody, bitteriſh, and pungent, bearded at the top with the fibrous remains of old leaf-ſtalks. Stem one or two feet high, erect, little branched, ſmooth, angular, and (as Ray obſerves) often very deeply furrowed. Leaves bipinnate: leaflets ſeſſile, pinnatifid, with pointed entire lobes, firm, veiny, paler beneath, ſmooth, except a ſlight hairineſs on the veins and margin. Footſtalks dilated at the baſe, with a membranous border. Umbels terminal, erect, whitiſh. Involucra numerous, ſubulate, with a membranous margin, hairy. Flower-ſtalks, calyx, and germen, hairy, as is likewiſe the fruit. After flowering, the ſtyles and top of the germen become purple, as Linnæus remarks. The umbels are ſometimes proliferous. This plant blooms copiouſly in Auguſt. We have repreſented a magnified flower to ſhew the inflexion of the petals, and the half-ripe fruit with its purple divaricated ſtyles.

PEUCEDANUM officinale.

Sea Sulphur-wort.

PENTANDRIA Digynia.

GEN. CHAR. *Fruit* ovate, compressed, striated on both sides, encompassed with a border. *Cal.* of 5 teeth. *General Involucrum* very short. *Flowers* of the disk abortive.

SPEC. CHAR. Leaves five times deeply three-cleft; leaflets linear, undivided.

SYN. Peucedanum officinale. *Linn. Sp. Pl.* 353. *Sm. F. Brit.* 304. *Huds.* 116. *With.* 294. *Hull.* 60. Peucedanum. *Ruth. Syn.* 206.

ONE of our rarest umbelliferous plants, found in salt marshes and ditches, chiefly in the south-east quarter of the kingdom. Our specimen was obligingly communicated by Mr. Crow of Feversham, who gathered it at Hearn, 6 miles from Whitstable, on a cliff by the sea-side, in full flower September 22d 1806, when it was already out of flower by the river side below Feversham: in which last place it grew in Sherard's time, and was also observed by Mr. Lightfoot in 1775.

The whole plant is smooth, and has a strong sulphureous smell, especially the root, which is perennial, tap-shaped, very resinous and fœtid, and reported to be useful in coughs, in obstructions of the viscera, and in nervous disorders. Its powers, whatever they may be, are certainly of no feeble kind; but they should be cautiously explored. Stem near a yard high, erect, round, striated, branched, leafy, tough. Leaves narrow and rigid, divided 5 or 6 times successively into 3 deep divisions, the ultimate lobes flattish, linear, acute, entire. Umbels large, of a great number of rays, concave. General involucrum of a few short bristle-shaped leaves; partial of several still narrower ones, about half as long as the partial rays, which are quite capillary, but rigid. Petals yellow, equal, incurved. Calyx-teeth acute, inflexed. Styles recurved. Fruit tawny, broad, flat, furrowed on each side.

July 1.1807 Published by Jas. Sowerby London.

PEUCEDANUM Silaus.

Meadow Sulphur-wort.

PENTANDRIA Digynia.

GEN. CHAR. *Fruit* ovate, compressed, striated on both sides, encompassed with a border. *Cal.* of 5 teeth. *General Involucrum* very short. *Flowers* of the disk abortive.

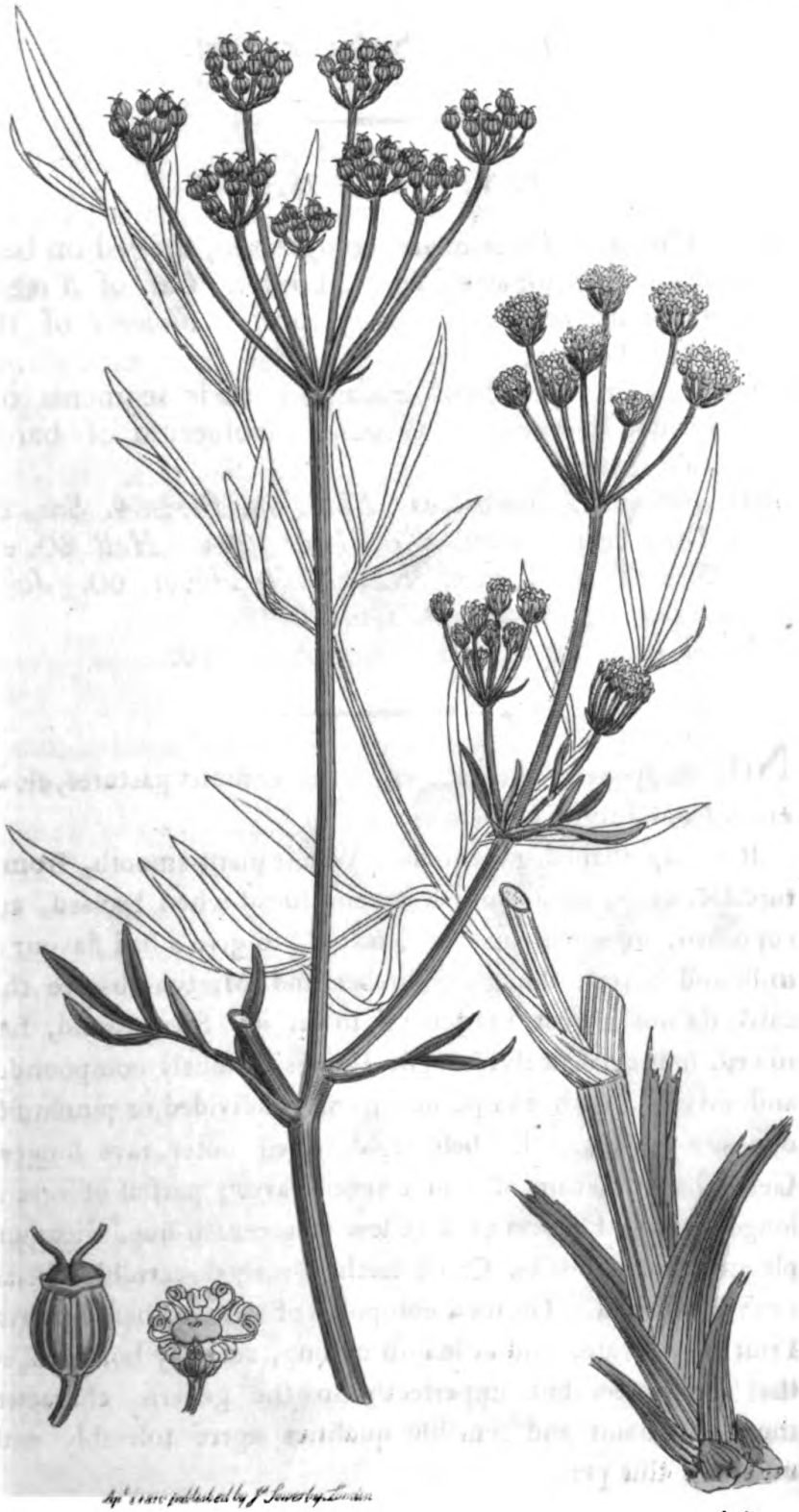
SPEC. CHAR. Leaflets pinnatifid; their segments opposite, decurrent. General involucrum of barely two leaves.

SYN. Peucedanum Silaus. *Linn. Sp. Pl.* 354. *Sm. Fl. Brit.* 305. *Huds.* 116. *With.* 294. *Hull.* 60. *ed.* 2. 80. *Relh.* 111. *Sibth.* 95. *Abbot.* 60. *Jacq. Austr. t.* 15. *Mart. Rust. t.* 128.

Seseli pratense nostras. *Raii Syn.* 216.

NOT unfrequent in meadows, or rather moist pastures, flowering from July to September.

Root tap-shaped, perennial. Whole plant smooth, from 1 to 2 feet high, of a darkish green, fœtid when bruised, and supposed, in some parts of Norfolk, to give a bad flavour to milk and butter, though Schreber and Martyn observe that cattle do not appear in general to eat it. Stem round, furrowed, branched, leafy, tough. Leaves variously compounded and divided, with sharp, decurrent, undivided or pinnatifid, opposite leaflets. Umbels rigid, their outer rays longest. General involucrum of 1 or 2 short leaves; partial of several longer ones. Flowers of a yellow or greenish hue, with purple anthers and pistils. Calyx-teeth scarcely discernible. Petals keeled, inflexed. Germen composed of 2 ribbed hemispheres. Fruit more ovate, and at length oblong, scarcely bordered, so that it answers but imperfectly to the generic character, though its habit and sensible qualities agree tolerably with others of this genus.



Apr 1 1810 published by J. Sowerby Lond.

80.

CRITHMUM maritimum.

Sea Sampire.

PENTANDRIA Digynia.

GEN. CHAR. *Involucra* general and partial. *Fruit* oval, compreſſed, ſtriated. *Flowers* regular. *Cal.* entire.

SPEC. CHAR. Leaflets lanceolate, fleſhy.

SYN. Crithmum maritimum. *Linn. Sp. Pl.* 354. *Sm. Fl. Brit.* 306. *Hudſ.* 117. *With.* 295. *Hull.* 62. *Dickſ. H. Sicc. faſc.* 12. 16.

C. marinum. *Raii Syn.* 217.

FOR this claſſical ſpecimen of an Engliſh plant by no means generally known, we are obliged to L. W. Dillwyn, Eſq. F. L. S. who gathered it on the very cliff at Dover ſo finely deſcribed by Shakſpeare in his King Lear :

——" Half way down
Hangs one that gathers Sampire ; dreadful trade !"

It is not uncommon in ſimilar ſituations ; but the more univerſal *Salicornia* has not only uſurped its Engliſh name Samphire, (or rather Sampire, as it is a corruption of the French *Saint Pierre*), but almoſt ſupplanted it at our tables as a pickle, though totally deficient in the aromatic flavour which is the recommendation of the *Crithmum*.

The long perennial branching roots run deep into fiſſures of rocks. The herb is buſhy and ſucculent, particularly its leaves, which are twice or thrice ternate, entire and almoſt linear, very unlike thoſe of any other Britiſh umbelliferous plant ; their colour a little glaucous. Umbels denſe, hemiſpherical. General and partial involucra ſmall, ovate, undivided. Flowers greeniſh-white, all regular and fertile. Their petals incurved, broad at the baſe ; whereas in moſt of this tribe the petals are furniſhed with claws. Fruit elliptical, furrowed, fleſhy, ſmooth.

81.

HERACLEUM Sphondylium.

Common Cow Parſnep.

PENTANDRIA Digynia.

GEN. CHAR. *Fruit* elliptical, notched, compreſſed, ſtriated, dilated in the margin. *Flowers* radiant. *Petals* notched, with an inflexed point. *General Involucrum* deciduous.

SPEC. CHAR. Leaves pinnate: leaflets pinnatifid, cut and ſerrated.

SYN. Heracleum Sphondylium. *Linn. Sp. Pl.* 358. *Sm. Fl. Brit.* 307. *Hudſ.* 117. *With.* 295. *Hull.* 58. *Relh.* 114. *Sibth.* 95. *Abbot.* 61.

Sphondylium. *Raii Syn.* 205.

EVERY one knows the Cow Parſnep, the largeſt and moſt conſpicuous of our common umbelliferous plants, whoſe tall ſtems and great white or reddiſh umbels are to be ſeen throughout the month of July by road-ſides, in thickets, groves, borders of fields, and even meadows.

The root is biennial, tap-ſhaped. Stem erect, branched, leafy, ſtout, hollow, furrowed and rough, moſtly 4 feet high. Leaves large, ternate or pinnate, variouſly pinnatifid, cut and ſerrated, downy beneath; their common ſtalk furniſhed with one large inflated ribbed ſtipula. Umbels flattiſh, of many rays. General and partial involucra of ſeveral lanceolate ſharp leaves, the former in particular ſoon falling off. Petals unequal, inverſely heart-ſhaped with an inflexed tooth between the lobes, a circumſtance common to many flowers of this natural order, but in none more conſpicuous than in the outermoſt petals of the preſent plant. Fruit elliptical, broad and flat, ſmooth, with 3 ribs on each ſide.

We are authorized to ſay that the *H. anguſtifolium* of all Britiſh writers is merely a narrow-leaved variety of this, ſometimes growing from the ſame root, as Mr. Woodward firſt remarked. It has been ſuſpected that Profeſſor Jacquin has made too many ſpecies in this genus; and it is neceſſary here to add that even the *H. anguſtifolium* of *Fl. Brit.* proves on examination to be different from the Linnæan plant to which it was, on the faith of two moſt excellent botaniſts, referred, and to which the deſcription in *Fl. Brit.* belongs.

V

MEUM athamanticum.

Spignel, Meu, or Bald-money.

PENTANDRIA Digynia.

GEN. CHAR. *Fruit* elliptic-oblong, with 3 ribs on each side. *Invol.* somewhat cut; the general one often abortive; the partial halved. *Petals* inflexed, entire. *Calyx* obsolete.

SPEC. CHAR. Leaflets all in numerous, deep, bristle-like segments.

SYN. Meum athamanticum. *Jacq. Austr. v.* 4. 2. *t.* 303. *Sm. Fl. Brit.* 308. *Hull. ed.* 2. 81.
Meum. *Raii Syn.* 207. *Ger. em.* 1052.
Athamanta Meum. *Linn. Sp. Pl.* 353. *Huds.* 116. *Dicks. H. Sicc. fasc.* 11. 7.
Æthusa Meum. *Linn. Syst. Veg. ed.* 14. 287. *With.* 305.

NATIVE of mountainous pastures in Westmoreland, Lancashire, the north of Yorkshire, and Merionethshire, as well as in Scotland, from which last country Lady Wilson favoured us with this specimen. It flowers in May.

The root is perennial, thick and woody, very aromatic, crowned with the fibrous remains of old leafstalks. Stem but little branched, about a span high when in blossom, but twice as tall in seed. Leaves dark green, doubly pinnate, their segments numerous and singularly delicate, smooth. Footstalks dilated into a broad, concave, ribbed stipula. Flowers numerous, uniform, cream-coloured, or reddish. General involucrum of a few linear or lanceolate leaves, mostly 3-cleft, often wanting; partial of rather more, either entire or cut. Calyx scarcely discernible. Fruit slightly compressed, with 3 acute ribs to each side. Possibly this plant, about whose genus there have been such various opinions, might without violence be referred to *Ligusticum*.

Miss Watson, of Delvine house, Angusshire, has informed Mr. Sowerby that where this herb abounds in the Highlands, the milk and butter partake of its peculiar melilot-like taste in the spring; and that a pretty strong infusion of it gives cheese the flavour of the Swiss *Chapziegar*, so as hardly to be distinguished from that brought from abroad. As the *Meum* disappears wherever the land has been ploughed, it daily grows more scarce in Scotland.

LIGUSTICUM scoticum.

Scottish Lovage.

PENTANDRIA Digynia.

GEN. CHAR. *Invol.* general and partial. *Fruit* oblong, with 3 ribs on each side. *Corolla* uniform. *Petals* rolled in, entire. *Cal.* of 5 teeth.

SPEC. CHAR. Leaves twice ternate.

SYN. Ligusticum scoticum. *Linn. Sp. Pl.* 359. *Sm. Fl. Brit.* 309. *Huds.* 117. *With.* 296. *Hull.* 62. *Lightf.* 159. *Fl. Dan. t.* 207.

L. Scoticum, apii folio. *Raii Syn.* 214.

FOR wild specimens of this rare plant we are obliged to our worthy friend Alexander M'Leay, Esq. Secretary to the Linnean Society, who gathered them among rocks on the shore near Wick in Caithness, the northern extremity of Britain, in August last. We have formerly observed the same about the Frith of Forth, and Lightfoot mentions it as frequent on the shores of the Western Islands. In Skye it is called *Shunis*, and is eaten both in a crude and boiled state. We suspect our southern epicures would not thank us for its introduction among them, the whole plant, though aromatic, being highly acrid, and to our taste nauseous in a great degree.

The root is tap-shaped, very warm and pungent. Stem upright, leafy, a little branched at the top, striated, smooth. Leaves alternate, doubly ternate, the uppermost only simply so; the leaflets broad, somewhat rhomboid, acute, fleshy, smooth, dark-green; entire at the base, deeply serrated in the upper part. Common footstalk winged at the base, mostly purplish. Umbels terminal, large, erect, smooth. General involucrum of 4 or 5 lanceolate leaves; partial of several smaller ones. Petals regular, slightly reddish. Fruit longer and more distinctly winged than in *L. cornubiense, t.* 683.

Sept.r 1 1803 Published by Ja.s Sowerby, London.

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84.

LIGUSTICUM cornubiense.

Cornish Lovage.

PENTANDRIA Digynia.

GEN. CHAR. *Invol.* general and partial. *Fruit* oblong, with 3 ribs on each side. *Corollæ* uniform. *Petals* rolled in, entire. *Cal.* of 5 teeth.

SPEC. CHAR. Radical leaves twice compound, cut; stem leaves ternate, lanceolate, entire. Furrows of the seeds obsolete.

SYN. Ligusticum cornubiense. *Linn. Sp. Pl.* 359. *Sm. Ic. pict. t.* 11. *Fl. Brit.* 310. *Hudf.* 118. *With.* 297. *Hull.* 62.

Smyrnium tenuifolium nostras. *Dill. in Raii Syn.* 202. *t.* 8.

It is remarkable that this plant has never been found in any part of the world except Cornwall, where a Mr. Steevens dis[illegible] in the present century. From that time till [illegible] years ago it was supposed to be lost, or that some[illegible] taken for it; but Mr. Pennington fortunately [illegible] about Fowmin, where Mr. D. Turner and Mr. [illegible] specimen. It is perennial, flower[illegible] grows in bad fields, owing its preservation [illegible] according to Dr. Withering's observation, [illegible] surrounding thorns and briars.

[illegible] abounding a yellow resinous juice. Stem [illegible] branched, round, striated, roughish, [illegible] at the base. Leaves deep green, the [illegible] twice or thrice ternate, broader [illegible] wedge-shaped and cut, rough [illegible] the stem (which [illegible] look for the lowest ra[illegible] leaflets; and the [illegible] of many rays, smooth. [illegible] leaves; the partial ones [illegible] Flowers white, uniform, [illegible] their petals rolled in. [illegible] each side, the ribs not very [illegible]

ANGELICA Archangelica.

Garden Angelica.

PENTANDRIA Digynia.

Gen. Char. *Involucra* general and partial. *Fruit* roundish, solid, with 3 wings on each side. *Cal.* with 5 teeth. *Flowers* regular. *Petals* incurved. *Styles* reflexed.

Spec. Char. Terminal leaflet lobed.

Syn. Angelica Archangelica. *Linn. Sp. Pl.* 360. *Sm. Fl. Brit.* 311. *With.* 297. *Hull. ed.* 2. 81. *Woodv. Med. Bot. t.* 50.

A. sativa. *Ger. em.* 999. *Dill. in Raii Syn.* 208.

THE present species of *Angelica* was admitted into the *Flora Britannica* on the authority of Dr. Withering, who found it at Broadmoore, about seven miles north-west from Birmingham. Its natural station we believe to be alpine, and, like some other truly alpine plants, it thrives luxuriantly in the closest parts of London. Being commonly cultivated for the sake of the stalks, which when candied make an agreeable sweetmeat, no wonder that it is in some degree naturalized about Battersea, and similar places. It flowers at various seasons; most naturally early in summer, the large, white, resinous root being biennial.

The stem is upright, four or five feet high, round, smooth, leafy, hollow, striated, somewhat glaucous. Leaves ternate, then pinnate; leaflets ovato-lanceolate, acute, smooth, cut and serrated, the odd one three-lobed. Their common footstalk is remarkably dilated and tumid, clasping the stem. Umbels globose, green, of many rays. General involucrum of a few linear deciduous leaves, often wanting; partial of about eight short linear-lanceolate ones, which occasionally become very large, and serrated. Calyx minute. Petals ovate, inflexed, pale green. Fruit somewhat elliptical, compressed, sharply ribbed. The whole herb has a pungent aromatic flavour, too strong to be pleasant, except when modified by culinary art.

Curtis's Magazine published by Jas. Sowerby London.

ANGELICA ſylveſtris.

Wild Angelica.

PENTANDRIA Digynia.

GEN. CHAR. *Involucra* general and partial. *Fruit* roundiſh, ſolid, with 3 wings on each ſide. *Cal.* 5 teeth. *Flowers* regular. *Pet.* incurved. *Styles* reflexed.

SPEC. CHAR. Leaflets equal, ovate, ſerrated.

SYN. Angelica ſylveſtris. *Linn. Sp. Pl.* 361. *Sm. Fl. Brit.* 311. *Hudſ.* 118. *With.* 298. *Hull.* 62. *Relh.* 112. *Sibth.* 96. *Abbot.* 61. *Woodv. Suppl. t.* 265. *Raii Syn.* 208.

COMMON in watery places about the banks of rivers and ditches, oſier grounds, alder groves, &c. flowering in July, when its tall purpliſh-glaucous ſtem, bearing large denſe umbels on its divaricated branches, is ſeen riſing above the ſurrounding coarſe graſſes, willow-herbs and water-mints, among which the broad ſpreading leaves of the Angelica are no leſs conſpicuous.

The root is perennial, large and fleſhy. Stem round, ſmooth, branched, leafy. Leaves bipinnate, rather glaucous, compoſed of diſtinct, ovate or elliptical, ſharply ſerrated leaflets, of which the lowermoſt lateral ones are often lobed or auricled. Umbels of many rays, denſe, hemiſphærical. Involucrum of 1 or 2 very narrow ſharp leaves; partial involucra of many ſimilar ones; all of them downy as well as the ſtalks. Flowers regular, ſmall, white or purpliſh. Styles purple, ſhort till after the flowers are faded, when they become reflexed. Fruit ſmall, ſmooth. The general involucrum is often wanting.

This whole plant is aromatic, bitter and pungent; but the garden Angelica is now generally preferred for medical purpoſes, and always for culinary ones. Both plants are eminently ſtomachic and carminative.

Feb.ʸ 1. 1803. Published by Ja.ˢ Sowerby. London.

87.

SIUM latifolium.

Broad-leaved Water Parſnep.

PENTANDRIA Digynia.

GEN. CHAR. *Fruit* nearly oval, compreſſed, ſtriated. *Involucrum* general and partial, of many leaves. *Petals* heart-ſhaped, uniform.

SPEC. CHAR. Leaves pinnated; leaflets oblong-lanceolate, equally ſerrated. Umbels terminal.

SYN. Sium latifolium. *Linn. Sp. Pl.* 361. *Hudſ. Fl. An.* 118. *With. Bot. Arr.* 291. *Relh. Cant.* 115. *Sibth. Oxon.* 96.

S. latifolium foliis variis. *Raii Syn.* 211.

SENT by Mr. Woodward from Norfolk, where it is not uncommon, nor is it of very rare occurrence in rivers and fens throughout England; but the umbelliferous tribe has been more overlooked than moſt others, except Cryptogamia. This is one of the largeſt Britiſh plants of that tribe. Its perennial root, creeping among mud and gravel, throws up round, hollow, deeply furrowed ſtems 4 or 5 feet in height, clothed with alternate leaves, compoſed of 7 or 9 leaflets, which vary much in breadth, but are always very equally and neatly ſerrated, in which reſpect they differ materially from S. anguſtifolium, as well as in being much longer. Mr. Hudſon well remarks, that ſuch as grow under water are often laciniated. The umbels are terminal, large, and many-flowered. Involucra various in ſize and figure, ſometimes lobed and often ſerrated. Seeds ſmall.

It is a plant of an acrid poiſonous quality, particularly the roots.

88.

SIUM angustifolium.

Narrow-leaved Water Parsnep.

PENTANDRIA Digynia.

GEN. CHAR. *Fruit* nearly oval, compressed, striated. *Involucrum* general and partial, of many leaves. *Petals* heart-shaped, uniform.

SPEC. CHAR. Leaves pinnated; leaflets irregularly lobed and serrated. Umbels on foot-stalks opposite to the leaves. Stem erect.

SYN. Sium angustifolium. *Linn. Sp. Pl.* 1672. *Hudf. Fl. An.* 119. *With. Bot. Arr.* 292. *Relh. Cant.* 116.

S. erectum. *Hudf. Fl. An. ed.* 1. 103.

S. sive Apium palustre, foliis oblongis. *Raii Syn.* 211.

THIS is frequently found in ditches and rivulets, and, having been originally considered by Linnæus as a variety of S. latifolium, was first established as a distinct species by Mr. Hudson. The Rev. Mr. Relhan sent this specimen from near Cambridge. It flowers in July and August.

Root perennial, creeping, so as to occupy much space. Stem upright, with whorls of radical fibres in its lower part under water, round, striated, smooth, much branched above. Leaves alternate, simply pinnated; leaflets sessile, the lowermost pair remote from the rest, and smaller, at least in the lower leaves, in which also the leaflets are obliquely heart-shaped at the base; otherwise they are lanceolate, often so deeply lobed as to become hastate, pointed, very irregularly and sharply serrated, and very smooth. The umbels stand solitary, opposite to each leaf, on divaricated footstalks somewhat shorter than the adjoining leaf. General involucrum of many drooping leaves, which are occasionally entire, serrated or pinnatifid; the partial ones are oval and more entire. Calyx of five minute teeth. Petals heart-shaped, with an inflexed claw from the sinus, all uniform. Stamina twice as long as the corolla, spreading. Fruit smooth, slightly ribbed, oval.

89.

SIUM nodiflorum.

Procumbent Water Parſneſs.

PENTANDRIA Digynia.

GEN. CHAR. *Fruit* nearly oval, compreſſed, ſtriated. *Involucrum* general and partial, of many leaves. *Petals* heart-ſhaped, uniform.

SPEC. CHAR. Leaves pinnated; leaflets ovate, equally ſerrated. Umbels ſeſſile, oppoſite to the leaves. Stem procumbent.

SYN. Sium nodiflorum. *Linn. Sp. Pl.* 361. *Hudſ.* 119. *With.* 299. *Hull.* 61. *Relh.* 116. *Sibth.* 96. *Abbot.* 62. *Woodv. Med. Bot. t.* 182.
S. umbellatum repens. *Raii Syn.* 211.

FREQUENT in ditches and rivulets, as in St. George's Fields and ſimilar ſituations, flowering about July and Auguſt.

Root perennial, creeping. Stems procumbent or floating, often creeping, various in length, branched, round, hollow, ſlightly ſtriated, ſmooth, leafy. Leaves pinnate, of from five to nine ſeſſile ovate leaflets, which are all neatly and equally ſerrated, the odd one largeſt, and ſometimes united with the neighbouring pair. Umbels lateral, oppoſite to the leaves, ſolitary, nearly ſeſſile, each of about 5 or 7 divaricated rays bearing little umbels of 12 or more flowers. General involucrum of but one leaf, and often entirely wanting. Partial of ſeveral ovate concave leaves as long as the partial flower-ſtalks. Flowers ſmall, greeniſh-white, with ſlight traces of a calyx. Fruit ovate.

This plant has been recommended in cutaneous diſorders, and on that account has been admitted into the London Pharmacopœia and Dr. Woodville's valuable work. Dr. Withering preſcribes 3 large ſpoonfuls of the juice twice a day in milk. It cannot be confounded with S. *anguſtifolium* (ſee *t.* 139), as in that the ſtem is erect, leaves unequally cut, umbels on long flower-ſtalks, with a general involucrum of many leaves.

Fl. Dan. t. 247. is certainly S. *anguſtifolium*, not *nodiflorum*.

Sept. 1799 Published by J. Sowerby London.

90.

SIUM repens.

Creeping Water Parsnep.

PENTANDRIA Digynia.

GEN. CHAR. *Fruit* nearly oval, compressed, striated. *Involucrum* general and partial, of many leaves. *Petals* heart-shaped, uniform.

SPEC. CHAR. Leaves pinnated; leaflets roundish, deeply toothed. Umbels on stalks, opposite to the leaves. Stem creeping.

SYN. Sium repens. *Linn. Suppl.* 181. *Sm. Fl. Brit.* 314. *With.* 300. *Hull.* 61. *Relh.* 114. *Sibth.* 97. *Abbot.* 63. *Jacq. Fl. Austr. t.* 260.

PROBABLY this species may have been overlooked by former botanists as a small variety of *Sium nodiflorum*, see *v.* 9. *t.* 639, till Jacquin described it in his valuable *Flora Austriaca*. Since he observed it, many others have recognized it in various places. Our specimens were sent from near Edinburgh by the late Mr. Mackay. It flowers in July and August, and is perennial, growing in moist boggy meadows, but not in ditches.

The stems are quite prostrate, creeping by means of several radicles. Leaves formed of a few roundish or wedge-shaped leaflets, the odd one generally three-lobed; all coarsely and bluntly toothed, not regularly serrated as in other species. Umbels on considerable stalks opposite to each leaf, and formed of a few divaricated partial umbels, composed of numerous white flowers. General and partial involucrum of several ovate, ribbed, spreading leaves. Calyx scarcely perceptible. Fruit small, roundish. Antheræ yellow.

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91.

SISON verticillatum.

Whorled Honewort.

PENTANDRIA Digynia.

GEN. CHAR. *Fruit* oval, striated. *Involucra* both general and partial, each of about 4 leaves.

SPEC. CHAR. Leaflets in capillary, whorled segments.

SYN. Sison verticillatum. *Linn. Sp. Pl.* 363. *Huds. Fl. An.* 120. *With. Bot. Arr.* 295. *Lightf. Scot.* 1096. *t.* 35.

A STILL more uncommon plant than the last. Mr. Mackay, nurseryman, near Edinburgh, sent a young root of it from Scotland, which flowered the following year, and from thence our figure was taken. It grows in moist meadows in the lowlands of North Britain, and has also been observed in considerable plenty in the flat parts of Wales. It is perennial, flowering about July and August.

The root consists of oblong fleshy radicles, tapering to a point. Stem 12 or 18 inches high, erect, round, striated, but little branched, and almost naked. Leaves mostly radical and very remarkable, consisting of a simple rib, along which are arranged pairs of deeply cloven leaflets, whose numerous segments are linear, acute, extremely narrow, pointing in all directions, so as to form whorls, and that as truly as the flowers do in the *Menthæ* and other whorled plants, properly so called, for those grow only on two sides of the stem, though they seem to embrace it all round. Umbels erect, of about 8 or 10 rays, with a general involucrum of 3 or 4 short ovate pointed leaves. Partial umbels more dense, and nearly flat, with similar, but more numerous, involucra. Petals nearly equal, inflexed, white. Antheræ purplish. Germen ovate, striated. Fruit slightly compressed, deeply furrowed, crowned with the short recurved permanent styles. The seeds are slightly, but not pleasantly, aromatic.

92.

SISON Amomum.

Hedge Honewort.

PENTANDRIA, Digynia.

GEN. CHAR. *Fruit* ovate, ſtriated. *Involucra* both general and partial, each of about 4 leaves. *Petals* lanceolate, inflexed.

SPEC. CHAR. Leaves pinnated. Umbels erect, of about four rays.

SYN. Siſon Amomum. *Linn. Sp. Pl.* 362. *Sm. Fl. Brit.* 315. *Hudſ.* 119. *With.* 300. *Hull.* 62. *Relh.* 116. *Sibth.* 97. *Abbot.* 63.

Sium aromaticum, Siſon Off. *Raii Syn.* 211.

ONE ſpecies of *Siſon*, and that the more rare, has appeared in our 4th volume, *t.* 228; the only remaining Britiſh plant of this genus is *S. Amomum*, which not very unfrequently occurs in rather moiſt ſpots under hedges, where the ſoil is marly or chalky, flowering in the latter part of ſummer.

Root annual or biennial, ſpindle-ſhaped, with lateral branches. Stem erect, 2 or 3 feet high (except in dry places), much branched and ſpreading, rather zigzag, round, furrowed, ſmooth, leafy. Leaves pinnate with a terminal lobed leaflet, unequally ſerrated; the upper ones more compound or divided. Umbels numerous, terminal, ſolitary, erect when in flower, compoſed of about 4, ſeldom more, unequal rays, with a ſmall four-leaved general involucrum. Partial umbels likewiſe of but few and unequal rays, with a minute four-leaved partial involucrum. Flowers of 5 white inflexed petals, broader than thoſe of *S. ſegetum*. Calyx ſcarcely perceptible. Fruit ovate, ſhort, compreſſed, ribbed.

The ſeeds are aromatic and pungent when ripe and dry; but in an early ſtate they, like the whole herb, have a peculiarly nauſeous ſmell.

Nov 1 1801 Published by Jas Sowerby, London.

SISON segetum.

Corn Honewort.

PENTANDRIA Digynia.

GEN. CHAR. *Fruit* oval, ſtriated. *Involucra* both general and partial, each of about four leaves.

SPEC. CHAR. Leaves pinnated; leaflets roundiſh. Umbels drooping.

SYN. Sifon ſegetum. *Linn. Sp. Pl.* 362. *Hudſ. Fl. Ang.* 122. *With. Bot. Arr.* 294. *Relh. Cant.* 117. *Smith. Linn.* 97.

Sium arvenſe five ſegetum. *Raii Syn.* 211.

Sellinum Sifolius. *Gerarde* 1018.

COMMUNICATED from fields near Kelmarſh, in Northamptonſhire, by William Hanbury, Eſq. It has been obſerved in ſeveral parts of England in a chalk or clay ſoil, but not very frequently. Meſſrs. Forſters find it at Walthamſtow. It flowers in June, and is annual in general, though often biennial, as we find remarked by that accurate obſerver Mr. John Goodyer, in Gerarde's Herbal. His whole account of this herb, with the origin of its name *Honewort* from its curing a ſwelling in the cheek, called a Hone, with all the hiſtory of "Miſtris Urſula Leigh," and "Miſtris Charitie Leigh," is a model of accurate inquiry and preciſe information.

Root ſmall, but ſtrong. Stems ſeveral, ſpreading in every direction, ſlender and ruſh-like, but branched, and furniſhed with ſeveral alternate pinnated leaves. The radical leaves are the largeſt, conſiſting of from ſeven to fifteen neat little roundiſh leaflets, ſharply ſerrated, and ſcarcely lobed. The general umbels are of very few and unequal rays; the partial ones are drooping, and, as Goodyer ſays, "uneven or unorderly," their flower-ſtalks being very various in length. Flowers very ſmall. Petals regular, incurved. Antheræ purple. Fruit ſtriated, pungent and aromatic, as is the whole plant in ſome degree.

94.

OENANTHE fistulosa.
Common Water-dropwort.

PENTANDRIA Digynia.

GEN. CHAR. *Florets* irregular: those of the disk sessile and barren. *Fruit* crowned with the calyx.

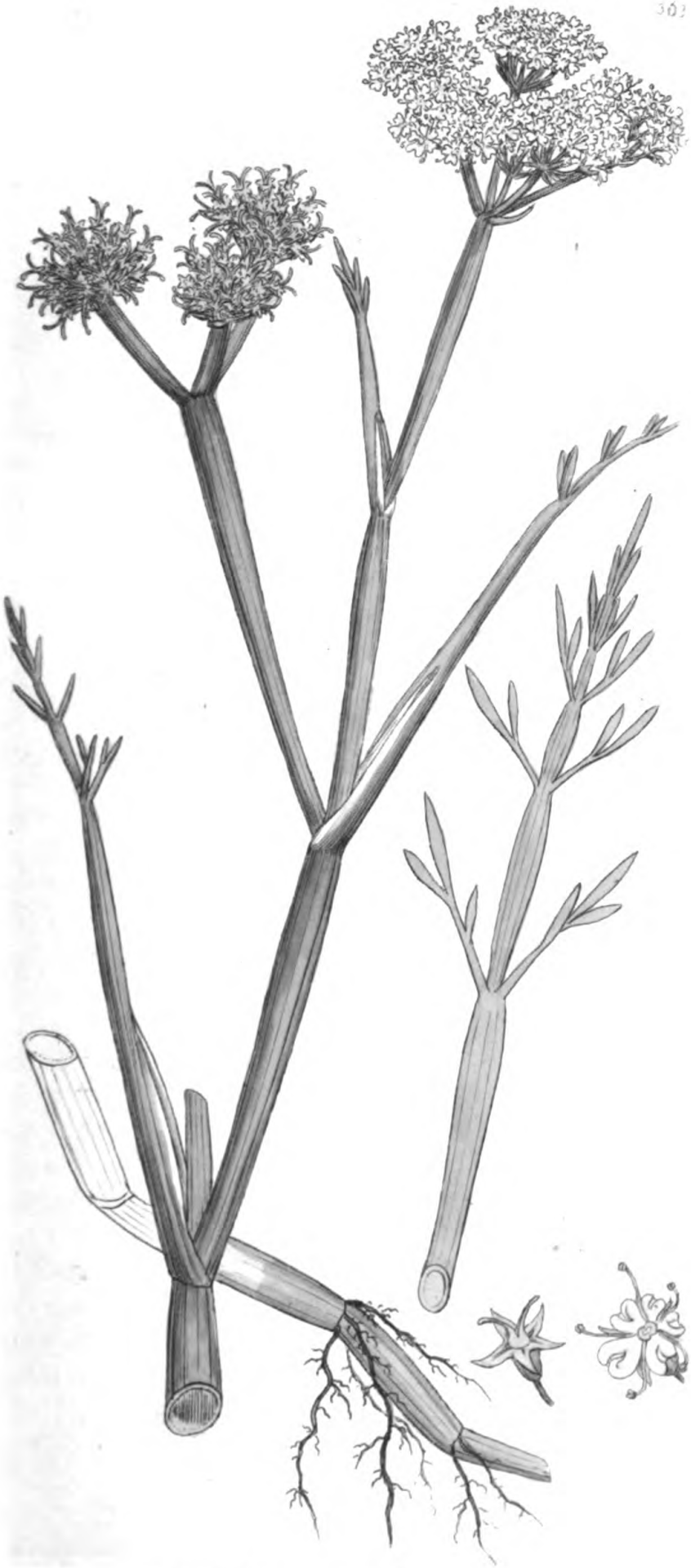
SPEC. CHAR. Root sending forth runners. Stem-leaves pinnated, cylindrical, tubular. General involucrum, for the most part, wanting.

SYN. Oenanthe fistulosa. *Linn. Sp. Pl.* 365. *Huds. Fl. An.* 121. *With. Bot. Arr.* 296. *Relh. Cant.* 117. *Sibth. Ox.* 98.

O. aquatica. *Raii Syn.* 210.

EXCEEDINGLY common in wet ditches, ponds and rivers, flowering in July. The root is fibrous and perennial, sending forth under water several creeping runners, by which it is increased, and throwing up tall branching stems to a considerable height above the surface. These stems are tubular, contracted at the joints, striated, of a glaucous hue. Radical leaves bipinnate; the leaflets flat, wedge-shaped and lobed: stem-leaves alternate, pinnate; their leaflets and common footstalks cylindrical and hollow. Umbels on long, strong, alternate stalks, lateral and terminal: general rays from 3 to 7 or 8, mostly naked, but sometimes furnished with one linear leaf of an involucrum: partial umbels with many rays, and a partial involucrum of several membranous leaves. Calyx-teeth sharp and always spreading. Petals very unequal, with incurved points. Stamina long. Styles after impregnation much elongated, and erect, giving the ripening umbels a bur-like appearance. Stigmas capitate.

The variety β of Hudson is a very trifling one. Dr. Stokes observes that in some situations this species acquires the habit of *O. pimpinelloides*, but may be readily known by the want of a general involucrum. We presume this remark alludes to our *O. peucedanifolia*, see *t.* 348.



Bot. Mag. 1796 Pubd.

95

OENANTHE pimpinelloides.

Parsley Water-dropwort.

PENTANDRIA Digynia.

GEN. CHAR. *Florets* irregular: those of the disk sessile and barren. *Fruit* crowned with the calyx.

SPEC. CHAR. Leaflets of the radical leaves wedge-shaped, cloven; those on the stem entire, linear, very long. General involucrum of several linear leaves.

SYN. Oenanthe pimpinelloides. *Linn. Sp. Pl.* 366. *Huds. Fl. An.* 121. *With. Bot. Arr.* 297.

O. Staphylini folio aliquatenus accedens. *Raii Syn.* 210.

WE have received this from the Rev. Mr. Hemsted, and from the Rev. Mr. Hugh Davies. The latter gathered it in salt marshes near Aber, North Wales.

Root perennial, consisting of several slender fusiform fleshy tubercles, intermixed with fibres. Stem erect, or ascending, with so many angles as to be almost cylindrical, striated, smooth, leafy, not much branched. Radical leaves bipinnate; the leaflets either elliptical and entire, or wedge-shaped, and more or less cloven: Stem-leaves pinnate, scarcely bipinnate; leaflets long, linear and acute. Umbels terminal. Involucra of several linear leaves, the partial ones most numerous. Calyx of 5 unequal, sharp, spreading, considerable leaves. Petals unequal, with a point so inflexed as to render them inversely heart-shaped, as in many of this tribe, sometimes reddish on the back. The flowers appear in July, and perfect but few seeds.

This species is not esteemed poisonous, but the whole genus is certainly to be suspected, on account of the very dangerous *Oenanthe crocata.*

Sept. 1 1798 Publ. by J. Sowerby

OENANTHE peucedanifolia.

Sulphur-wort Water-dropwort.

PENTANDRIA Digynia.

GEN. CHAR. *Florets* irregular: those of the disk sessile and barren. *Fruit* crowned with the calyx.

SPEC. CHAR. Leaflets all linear. General involucrum none. Knobs of the root sessile, elliptical.

SYN. Oenanthe peucedanifolia. *Pollich Plant. Palat. vol. 1. 289. t. 3. Sibth. Ox. 98.*

SENT by W. Mathew, Esq. from near Bury, and by the Rev. Mr. Abbot from the neighbourhood of Bedford. Professor Sibthorp also found it in several places about Oxford, as mentioned in his Flora. No other British author has noticed this species, probably having confounded it with *O. pimpinelloides*, which is rather a maritime plant, while *peucedanifolia* grows in fresh inland waters.

The root of this consists of thick oval or elliptical knobs, which taste something like parsnep, but are probably dangerous food. Stem thicker than in the preceding, as well as taller and more erect. Radical leaves bipinnate; stem-leaves scarcely more than ternate: leaflets all linear and acute, by which it is at once distinguished from the preceding, as well as by the want of a general involucrum, of which there are scarcely ever any signs. The rays of the general umbel are also fewer and much thicker than in *O. pimpinelloides*, and the calyx is more erect. The flowers appear in June, and are often reddish, the marginal ones frequently female only, being impregnated by those of the centre.

OENANTHE crocata.

Hemlock Water Dropwort.

PENTANDRIA Digynia.

GEN. CHAR. *Flowers* irregular: those of the disk sessile and abortive. *Fruit* crowned with the calyx and styles; its bark corky.

SPEC. CHAR. All the leaflets wedge-shaped, cut, nearly equal.

SYN. Oenanthe crocata. *Linn. Sp. Pl.* 365. *Sm. Fl. Brit.* 319. *Huds.* 121. *With.* 302. *Hull. ed.* 2. 83. *Sibth.* 99. *Jacq. Hort. Vind. v.* 3. 32. *t.* 55. *Woodv. Suppl. t.* 267.

Oe. cicutæ facie Lobelii. *Raii Syn.* 210.

HAPPILY this very noxious plant is of rare occurrence. We received specimens from Mr. W. Borrer. It grows in watery situations about the brinks of great rivers, as the Thames, and others, flowering in July.

The root is perennial, composed of numerous ovate fleshy knobs, whose juice is peculiarly virulent. The stems are from two to five feet high, erect, branched, leafy, round, furrowed. Leaves dark green, bipinnate; their leaflets all nearly similar, mostly opposite, sessile, wedge-shaped or somewhat deltoid, more or less cut, veiny, smooth. Umbels terminal, large, convex, of many general and partial rays. General and partial involucrum various in form; sometimes linear and undivided; often dilated and leafy. Flowers white, often with purplish styles and anthers, slightly radiant. Calyx incurved. Fruit oblong, crowned with the erect permanent styles.

The whole herb contains a fetid yellow juice, and is very poisonous. Ehret found a giddiness affect him while drawing it. Sir Thomas Frankland has known brood mares sometimes to eat the root, and to die in consequence.

Aug: 1st published by Jas Sowerby London.

CORIANDRUM ſativum.

Coriander.

PENTANDRIA Digynia.

GEN. CHAR. *Corolla* radiate; *petals* inflexed, cloven. *General Involucrum* of one leaf; *partial ones* going but half way round. *Fruit* ſphærical.

SPEC. CHAR. The two ſeeds combining to make one uniform globe.

SYN. Coriandrum ſativum. *Linn. Sp. Pl.* 367. *Hudſ. Fl. An.* 123. *With. Bot. Arr.* 302.

Coriandrum. *Raii Syn.* 221.

CORIANDER is ſuppoſed to be a native of the ſouth of Europe, and, from having been cultivated in England as a medicinal plant, to have become naturalized in ſome parts of the kingdom, particularly in fields about Ipſwich.

The root is annual; lower leaves lobed and cut; upper ones in very fine linear alternate ſegments; flowers white or reddiſh, appearing in June; and the ſeeds are ripe in July and Auguſt. The aromatic flavour of the latter is agreeable to moſt palates; and we are obliged to Dr. Withering, for reſcuing them from the charge of unwholeſomeneſs *(Bot. Arr.)*. All the reſt of the plant is, when bruiſed, abominably fœtid.

[illegible]

PHELLANDRIUM aquaticum.

[illegible]

PHELLANDRIA Digyna.

Gen. Char. General involucrum none. *Florets* all fertile, the partial ones smallest. *Fruit* ovate, minutely crowned with the calyx and styles.

Spec. Char. Segments of the leaves divaricated.

Syn. Phellandrium aquaticum. *Linn. Sp. Pl.* 366. *Fl. Suec.* [illegible] *Hall.* 122. *With.* 303. *Hull.* [illegible] *Sowerb.* 99. *Abbot.* 65. *Woodv.* [illegible]

P. vel Cicutaria aquatica quorundam. *Raii Syn.* 215.

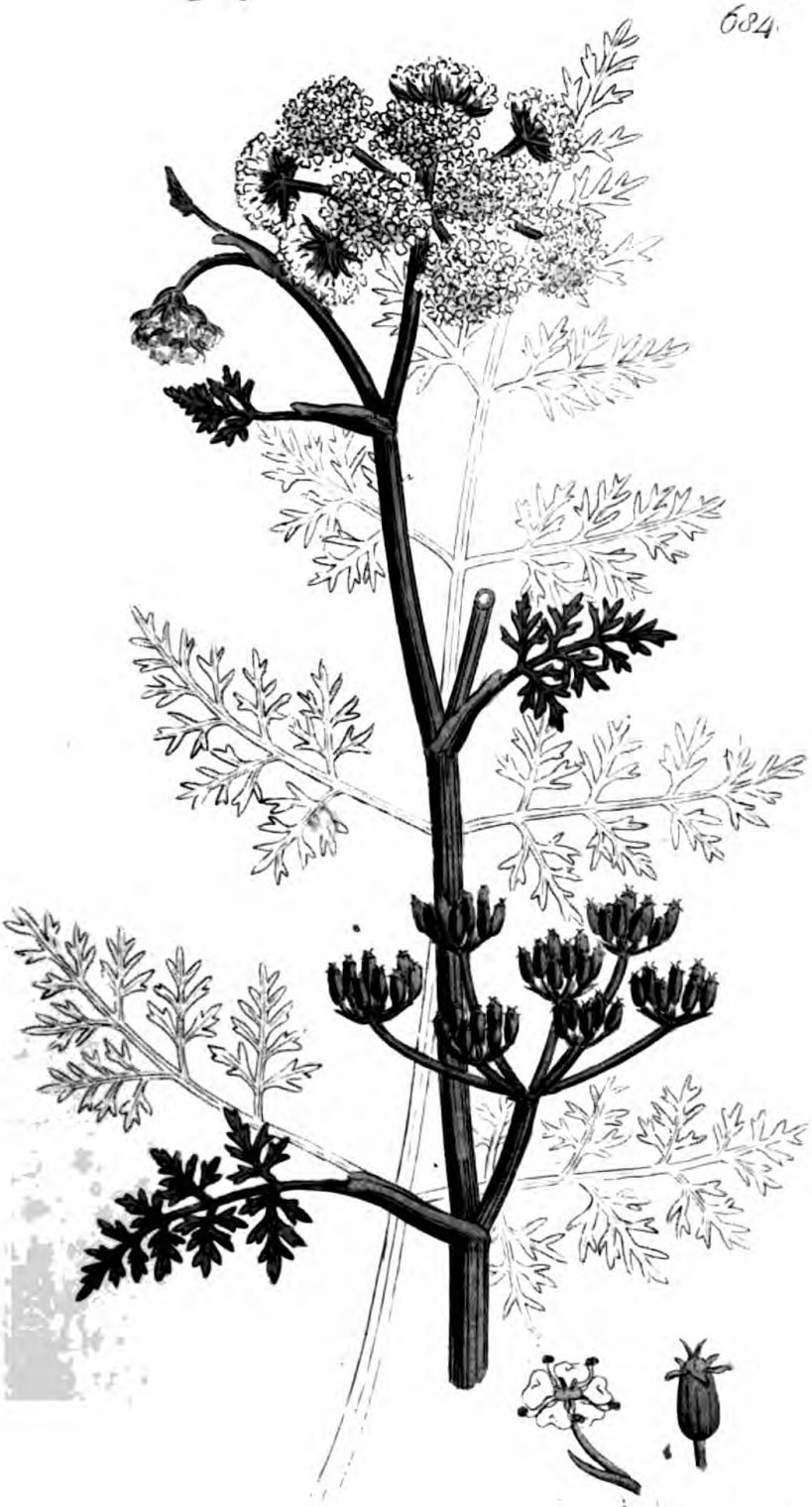
FREQUENT in running streams as well as ſtagnant ditches, flowering in June and July.

Root ſpindle-ſhaped, thick, with whorled fibres. Stem 2 or 3 feet high, thick, round, hollow, furrowed, much branched and very bushy, the branches being greatly divaricated and mostly horizontal. Leaves ſpreading, thrice pinnate, cut, all the ſegments divaricated, ſmooth, of a dark ſhining green. Umbels oppoſite to the leaves, ſpreading, many-rayed; the partial ones very denſe. Partial involucra of many narrow leaves. Flowers white, the outermoſt larger and irregular. Calyx of 5 ſpreading leaves. Fruit ovate, a little compreſſed, ſmooth, crowned with the erect calyx and ſtyles.

This genus is next akin to *Oenanthe*, differing from it in the want of a general involucrum, in having all the flowers for the moſt part fertile, and in the want of a ſpongy coat to the ſeeds.

The fibres of the ſtem diſſected by the action of water in the courſe of the winter, and then bleached in the air, form an elegant tube of net-work, often found on the banks of marſh-land ditches.

In running ſtreams, as Dillenius obſerves, *Raii Syn.* 216, the leaves are lengthened out, and the flowers are rarely produced. Mr. Crowe has obſerved a remarkable variety, if not a ſpecies, which grows upon dry land.



CICUTA virosa.

Water Hemlock. Water Cow-bane.

PENTANDRIA Digynia.

GEN. CHAR. No general *Involucrum*. *Fruit* nearly ovate, furrowed. *Corolla* almost regular.

SPEC. CHAR. Umbels opposite to the leaves. Stipulæ running up the leaf-stalks, blunt.

SYN. Cicuta virosa. *Linn. Sp. Pl.* 366. *Hudſ.* 122. *With.* 304. *Relh.* 119.

Sium alterum, Olusatri facie. *Raii Syn.* 212.

HAPPILY this dangerous plant is not very common. We received it from Tuddenham-heath, where it was gathered by the Rev. Mr. Hemsted in August last. It grows in ditches, and the margins of rivers, always under water when young, in which situation cows and bullocks, to which animals it is a deadly poison, sometimes by mistake eat it. By what Haller has collected it appears to be poisonous also to mankind, by quickly inflaming the stomach, as well as to the canine genus. Horses, hogs, and goats eat it with impunity. Linnæus in his Flora Lapponica gives a most exquisite detail of the reasons which led him to conclude this plant to be the cause of a terrible disease among the cattle at Tornoa in Lapland, by which he rendered an invaluable service to that country.

The root is perennial, tuberous, separated internally into several cavities by transverse partitions. Stem branched, furrowed, 3 or 4 feet high. Leaves twice ternate, the larger pinnate; their common stalk bordered a great way up by a membranous blunt stipula; leaflets lanceolate, serrated, smooth, bright green. Umbels on footstalks various in length, opposite to each leaf, consisting of several principal rays (without any general involucrum), and still more numerous short partial rays, encompassed by an involucrum of many narrow lanceolate leaves. Calyx somewhat campanulate. Petals nearly all of a size, rolled in, white. Fruit swelled, of a short ovate figure, ribbed.

The *Cicuta virosa* can hardly be confounded with any other British plant, if the form of the leaves and situation of the flowers be attended to. Its flavour is fœtid and pungent. If it should unfortunately be taken into the stomach, a speedy emetic is the best remedy, or a dose of oil.

ÆTHUSA Cynapium.

Fool's Parsley.

PENTANDRIA Digynia.

GEN. CHAR. *General involucrum* none: *partial* of 3 leaves, all on one side, pendulous. *Fruit* striated.

SPEC. CHAR. Leaves all uniform.

SYN. Æthusa Cynapium. *Linn. Sp. Pl.* 367. *Sm. Fl. Brit.* 323. *Huds.* 123. *With.* 304. *Hull.* 62. *Relh.* 118. *Sibth.* 99. *Abbot.* 65. *Curt. Lond. fasc.* 1. *t.* 18.

Cicutaria tenuifolia. *Raii Syn.* 215.

FOOL'S PARSLEY, or Lesser Hemlock, has many botanical characters in common with the *Conium* described in our last plate, but its much smaller size, broader leaves, unspotted stem, and the want of a general involucrum preclude all possibility of mistake between them. The plant now before us is much more likely to be mistaken for Garden Parsley, as being a common weed in the gardens and fields, and bearing a great resemblance to that useful herb. To distinguish them, the dark dull green of the Fool's Parsley must be observed, and its nauseous garlick scent, instead of the pleasant aromatic flavour of the other. When the umbels appear, the long pendulous leaves of the partial involucrum at once distinguish the *Æthusa*. We are not sure of the very poisonous qualities attributed by some to this plant, but it is at least unwholesome, as well as unpleasant, and by no means eligible for food or medicine.

It is annual, flowering in July and August. The stem round, slender, about a foot high, slightly striated, branched and leafy. Leaves smooth, doubly pinnate; leaflets oblong, decurrent and cut. Umbels on long stalks, flattish. Flowers white. Petals a little unequal or radiant. Fruit ovate, swelling, striated. The stem has often a violet tinge, but is not spotted.

July 1 1803 Published by Jas Sowerby. London

SCANDIX odorata.

Sweet Cicely. Great Chervil.

PENTANDRIA Digynia.

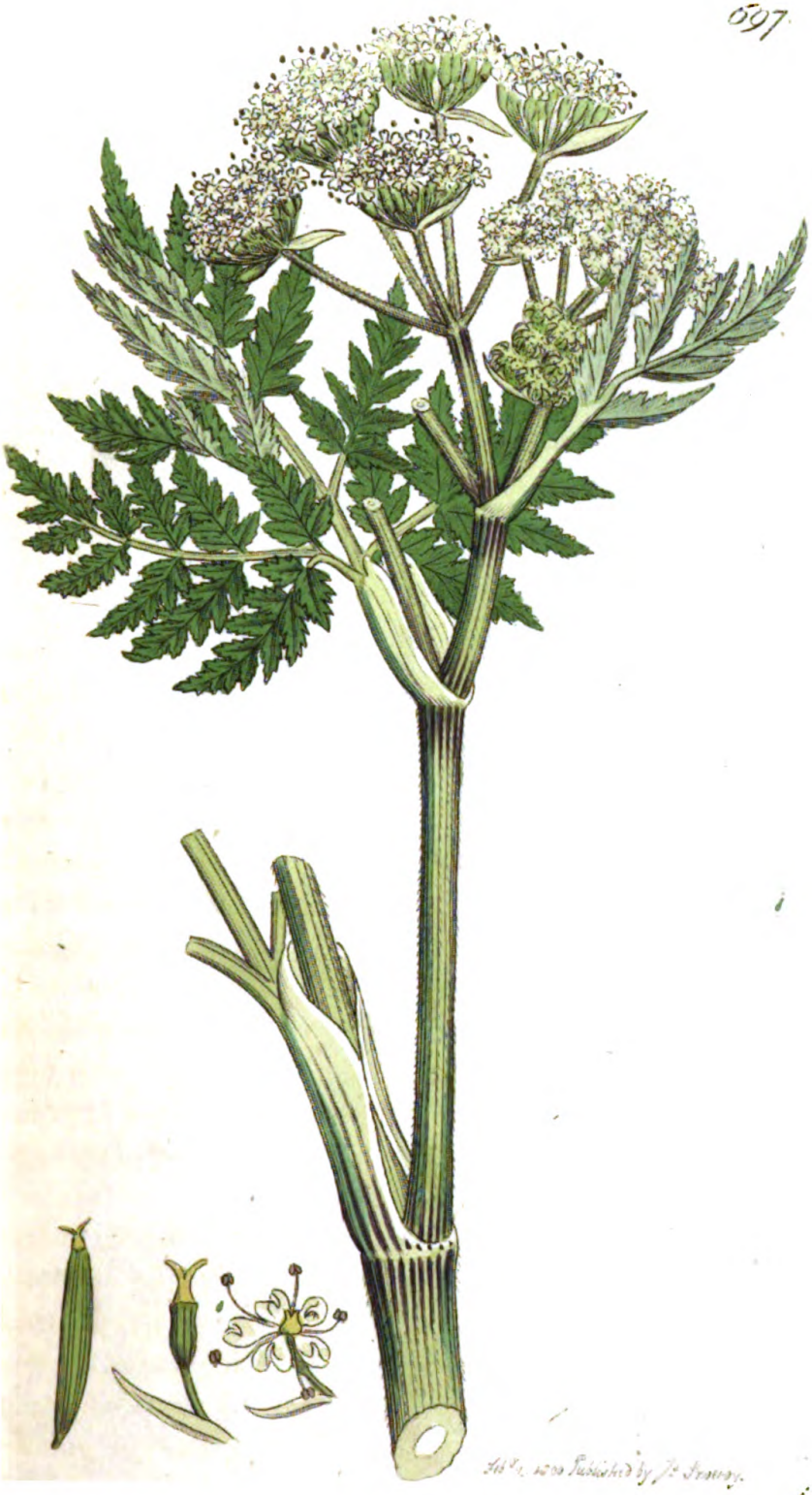
GEN. CHAR. *Gen. Involucrum* none. *Flowers* radiant. *Petals* notched. *Fruit* awl-ſhaped. Central *flowers* often male.

SPEC. CHAR. Seeds furrowed, angular, ſmooth.

SYN. Scandix odorata. *Linn. Sp. Pl.* 368. *Sm. Fl. Brit.* 323. *Hudſ.* 124. *With.* 306. *Hull.* 63. *Sibth.* 100. *Lightf.* 166.

SENT from the North of England by Mr. Robſon, flowering in May. There has been much controverſy whether this plant ſhould be reckoned a native or not. It is found abundantly in Weſtmoreland, Cumberland, &c. as well as in the Lowlands of Scotland, and in ſome parts of Wales, but always in orchards or paſtures near houſes, its aromatic ſeeds making a part of the humble luxuries and ſimple medicines of the mountain cottager. The Rev. Mr. Wood thinks it certainly wild near Leeds; but the moſt ancient and therefore beſt authority on this ſubject is Dr. Richardſon, the friend of Ray, a ſpecimen from whom is in Buddle's herbarium, with an inſcription aſſerting the Sweet Cicely to be truly wild in meadows betwixt Morton and Ruſhforth in the Weſt Riding of Yorkſhire.

The root we believe is perennial, ſpindle-ſhaped, and aromatic. Stems a foot and half high, branched, furrowed. Leaves ſeſſile, pale-green, hairy, triply winged, and pinnatifid. Umbels terminal, erect, of many rays. The partial involucra lanceolate, deflexed, membranous, pale. Flowers white; the central ones moſt numerous, and having abortive germens. Seeds large, about an inch long, erect, lanceolate, acute, not beaked, furrowed, ſmooth, of a ſhining brown, with a ſweet aromatic flavour, and crowned by the ſpreading ſtyles.



Sold by, 1800 Published by J. Stoney.

SCANDIX Pecten-Veneris.

Needle Chervil.

PENTANDRIA Digynia.

GEN. CHAR. *Gen. involucrum* none. *Flowers* radiant. *Petals* notched. *Fruit* awl-shaped. *Central flowers* often male.

SPEC. CHAR. Seeds roughish, with very long beaks. Leaflets cut into many linear segments.

SYN. Scandix Pecten-Veneris. *Linn. Sp. Pl.* 368. *Sm. Fl. Brit.* 324. *Huds.* 123. *With.* 307. *Hull.* 63. *Relh.* 118. *Sibth.* 100. *Abbot.* 66. *Curt. Lond. fasc.* 5. *t.* 21. *Mart. Rust. t.* 38. *Dicks. H. Sicc. fasc.* 15. 4.

S. semine rostrato vulgaris. *Raii Syn.* 207.

THREE British species of *Scandix* have been described in this work already. The only remaining one, as far as has been yet observed, is the most common of all in cultivated ground, and is known by the name of Venus's Comb, or Shepherd's Needle, in allusion to the remarkably long beaks of the seeds, resembling needles, or the teeth of a comb. It begins flowering in June and lasts till September, being not very conspicuous till the seeds are fully grown.

Root annual. Stems branched, spreading, leafy, furrowed and rough, various in height and luxuriance. Leaves light green, alternate, triply pinnatifid, their segments linear, acute, smoothish; their common footstalks dilated and clasping the stem. Umbels of 2 or 3 long rays; the partial ones of several short rays. Partial involucrum of many membranous leaves, variously jagged, and rough-edged. Flowers small and white. Seeds rough, as well as their long angular beaks. The petals can scarcely be called notched, but are curled in, which gives them that appearance, though less than in many other umbelliferous flowers.

SCANDIX Cerefolium.

Garden Chervil.

PENTANDRIA Digynia.

GEN. CHAR. *Gen. involucrum* none. *Flowers* radiant. *Petals* notched. *Fruit* awl-shaped. *Central flowers* often male.

SPEC. CHAR. Seeds polished, a little swelling. Umbels sessile, lateral.

SYN. Scandix Cerefolium. *Linn. Sp. Pl.* 368. *With.* 307. *Hull.* 63. *Jacq. Fl. Austr. v.* 4. 47. *t.* 390.

Cerefolium vulgare sativum. *Ger. em.* 1038.

THIS plant is in the same predicament with *Avena strigosa*, *t.* 1266. Dr. Withering mentioned it in his work, from Dr. Stokes's having found it about Worcester. It appeared too probably to have escaped from gardens, where it is sometimes cultivated for sallads and soups, to find a place in the *Flora Britannica*. Mr. Wigg and Mr. Turner having observed it, to all appearance wild, and in great plenty, on a bank near Halesworth, Suffolk, in June 1803, and sent us the specimen in the annexed plate; we have determined to publish it. Future observers may decide whether it be truly indigenous or not. The umbelliferous tribe are so often but casually inspected, and many of them are so much alike, that this *Scandix* may possibly have been overlooked for the *Anthriscus*, *t.* 818, which grows in similar situations.

The root is annual. Herbage pale green, shining, delicate and tender, with an aromatic sweetish flavour. Stem branched, round, hollow, striated, a little hairy about the joints only. Leaves spreading, bipinnate and cut, with hairy stalks. Umbels sessile, opposite to the leaves, of about 4 general rays, the partial ones of about 10 or 12, all more or less woolly. Partial involucrum of a few sharp lateral leaflets. Flowers perfectly white. Fruit tapering, furrowed, smooth and polished.

In France this plant often makes a principal ingredient in sallads, and is of much more general use than with us.

Feb.y 1. 1804 Published by Jas Sowerby London

SCANDIX Anthriſcus.

Rough Chervil.

PENTANDRIA Digynia.

GEN. CHAR. *Gen. Involucrum* none. *Flowers* radiant. *Petals* notched. *Fruit* awl-ſhaped. *Central flowers* often male.

SPEC. CHAR. Seeds ovate, briſtly, beaked. Corolla uniform. Stem ſmooth.

SYN. Scandix Anthriſcus. *Linn. Sp. Pl.* 368. *Sm. Fl. Brit.* 325. *Hudſ.* 124. *Relh.* 121. *Sibth.* 100. *Abbot.* 66. *Curt. Lond. faſc.* 1. *t.* 19. *Mart. Fl. Ruſt. t.* 75. *Dickſ. H. Sicc. faſc.* 15. 3.
Caucalis ſcandicina. *With.* 289. *Hull.* 59.
Myrrhis ſylveſtris ſeminibus aſperis. *Raii Syn.* 220.

THE plant now before us is remarkable for growing almoſt excluſively in the neighbourhood of large towns, and its rough ſeeds perhaps afford another inſtance of that proviſion of nature we have remarked in *Galium Aparine*, *t.* 816. The banks of hedges, and other dry duſty much-frequented places, abound with it in the ſpring; nor does the whole vegetable kingdom afford a more exquiſite green, nor ſcarcely a more rich and elaborate foliage, than the young plants of this *Scandix* diſplay in the earlieſt months of the year. Its beauty in that ſtate readily diſtinguiſhes it from all its neighbours. In May the flowers are in perfection, and the herb ſoon ſows its ſeeds and withers away.

The ſtem is 2 or 3 feet high, round, very ſmooth, a little ſwelling under each joint. Leaves triply winged, finely cut, a little hairy. Umbels lateral and terminal, of 5 or more general rays, without an involucrum; and as many partial ones, with ſmall partial involucra. Flowers ſmall, white, all uniform and hermaphrodite. Seeds ovate, rough, crowned with a ſhort ſmooth beak, which ſo perfectly evinces its affinity to *Scandix*, and is ſo peculiar to the genus, that we cannot ſufficiently wonder at thoſe who firſt removed this plant to *Caucalis*.

106.

CHÆROPHYLLUM ſylveſtre.

Smooth Cow-parſley.

PENTANDRIA Digynia.

GEN. CHAR. *General Involl.* none; *partial* reflexed, concave. *Petals* heart-ſhaped. *Fruit* oblong, ſmoothiſh.

SPEC. CHAR. Stem ſtriated, ſmooth; ſlightly ſwelling below the joints.

SYN. Chærophyllum ſylveſtre. *Linn. Sp. Pl.* 369. *Sm. Fl. Brit.* 326. *Hudſ.* 124. *With.* 308. *Hull.* 63. *Relh.* 121. *Sibth.* 100. *Abbot.* 66. *Curt. Lond. faſc.* 4. *t.* 25. *Mart. Fl. Ruſt. t.* 96.
Cicutaria vulgaris. *Raii Syn.* 207.

FREQUENT about hedges in the borders of rather fertile paſtures, flowering about the end of April or early in May, being one of our earlieſt umbelliferous plants.

Root perennial, ſpindleſhaped, ſlightly milky, but little branched. Stem about 3 feet high, erect, branched, leafy, round, ſtriated, a little ſwelled below the joints, more eſpecially as the plant advances in age; it is for the moſt part downy towards the bottom, but the upper part is ſleek, and in general (though not always) devoid of pubeſcence. Leaves triply pinnate, the leaflets deeply cut, almoſt ſeſſile, rough at the edge. Umbels when young more or leſs drooping, though commonly leſs ſo than in C. *temulentum*; as the flowers expand they become quite erect. *Involucella* ovate, membranous, fringed with thick-ſet white hairs. Flowers whitiſh; their ſtalks ſmooth. Petals more or leſs notched, rarely entire, a little irregular. Fruit oblong, ſomewhat elliptical, compoſed of 2 nearly cylindrical ſeeds, externally very ſlightly ribbed, and deſtitute of all roughneſs.

The whole herb has a ſweetiſh carrot-like ſmell and taſte, and is eaten by domeſtic cattle. Rabbits are ſaid to be peculiarly fond of it.

The almoſt equally common C. *temulentum* is diſtinguiſhed by its more ſwelling, ſpotted, and very rough ſtem, and briſtly flower-ſtalks.


152.

CHÆROPHYLLUM temulentum.
Rough Cow Parsley.

PENTANDRIA Digynia.

GEN. CHAR. *General invol.* none; *partial* reflexed, concave. *Petals* heart-shaped. *Fruit* oblong, smoothish.

SPEC. CHAR. Stem rough, swelled under each joint.

SYN. Chærophyllum temulentum. *Linn. Sp. Pl.* 370. *Sm. Fl. Brit.* 326. *Huds.* 125. *With.* 308. *Hull.* 63. *Relh.* 119. *Sibth.* 101. *Abbot.* 66. *Curt. Lond. fasc.* 6. *t.* 24.

Cerefolium sylvestre. *Raii Syn.* 207.

COMMON in shady places and under hedges, where its flowers are seen in abundance throughout the months of June and July. The rough stem, swelled below the insertion of every leaf, and speckled with purple, and the young drooping umbels, are its distinguishing characters.

The root is biennial, tap-shaped, often divided. Stem about 3 feet high, branched, leafy, round, slightly striated, rough with spreading hairs. Leaves alternate, doubly pinnate, pinnatifid and lobed, hairy, pale or rather glaucous beneath. Umbels rough, spreading. Partial involucra lanceolate, slightly confluent at their base, rough at the margin and keel. Petals pure white, irregular, deeply cloven. Fruit oblong, very smooth and polished, scarcely striated.

The whole plant has a sweetish aromatic flavour, and is eaten by cattle. It is often subject to a blight or mildew.

Nov. 1. 1805. Published by Jas Sowerby, London.

CHÆROPHYLLUM aureum.

Tawny-seeded Cow Parsley.

PENTANDRIA Digynia.

GEN. CHAR. *General invol.* none; *partial* reflexed, concave. *Petals* heart-shaped. *Fruit* oblong, smoothish.

SPEC. CHAR. Stem somewhat swelling, angular, more or less hairy. Leaflets pinnatifid, acute, cut. Seeds coloured, ribbed.

SYN. Chærophyllum aureum. *Linn. Sp. Pl.* 370; but not *Mant.* 356. *Jacq. Austr. v.* 1. 40. *t.* 64.
Cerefolium n. 749. *Hall. Hist. v.* 1. 328.
Myrrhis perennis alba minor, foliis hirsutis, semine aureo. *Rupp. Jen. ed. Hall.* 282. *t.* 5.

THIS is one of those rare plants discovered by Mr. G. Don, with which few botanists are at all acquainted. He found it in the borders of fields, between Arbraath and Montrose, and at Corstorphine near Edinburgh. It is perennial, flowering in June.

The stem is about three feet high, branched, solid, angular, striated, slightly tumid below each joint, clothed more or less with short, soft, deflexed hairs, among which a few coarse bristles are occasionally interspersed, like those of the exotic Ch. *hirsutum*, but more deflexed. In Switzerland it is often nearly or quite smooth, as described by Jacquin. The common leaf-stalk surrounds the stem by a ring at its base, but its edges upwards are linear and but little dilated. The leaves and leaflets have sharp and rather elongated points, and are acutely pinnatifid, and roughish. Umbels flattish, cream-coloured, often having the rudiments of a general involucrum. The seeds when young are rather tumid upwards; as they ripen they grow more lanceolate, of a tawny or yellowish hue, marked with three broad smooth ribs at each side, and crowned with the divaricated styles.

Jas. Sowerby published by J. Sowerby London.

109.

IMPERATORIA Ostruthium.

Masterwort.

PENTANDRIA Digynia.

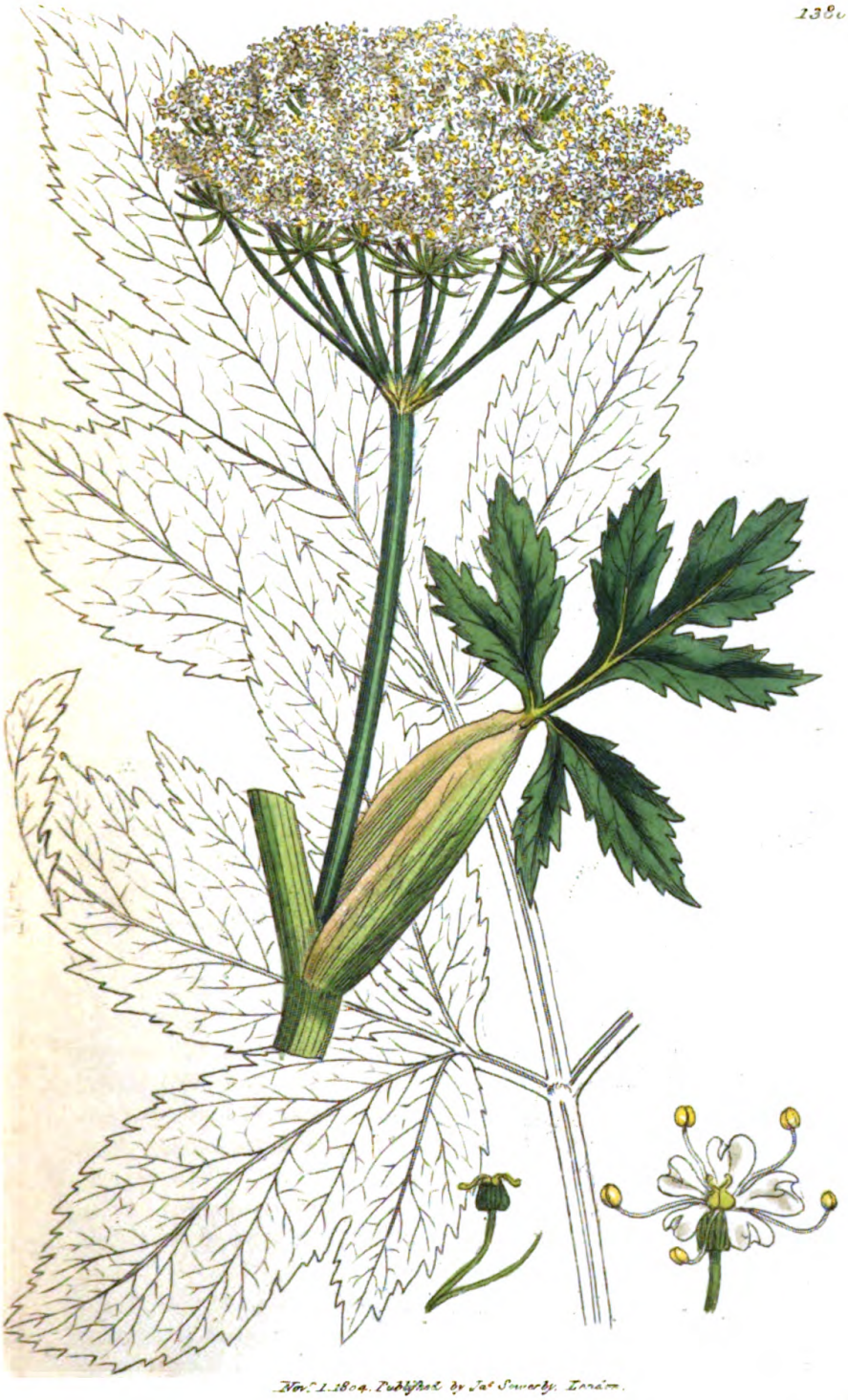
GEN. CHAR. *General Invol.* none. *Flowers* all fertile. *Pet.* inflexed, notched, nearly equal. *Fruit* roundish, compressed, bordered, swelling in the middle, with 3 ribs. *Umbels* flat.

SPEC. CHAR. . . . .

SYN. Imperatoria Ostruthium. *Linn. Sp. Pl.* 371. *Sm. Fl. Brit.* 327. *Lightf.* 168. *Huds.* 649. *With.* 308. *Hull.* 68. *Woodv. Med. Bot. t.* 35.
Imperatoria. *Ger. em.* 1001.

LIGHTFOOT is our only authority for admitting this as a British plant. He noticed it "on the banks of the Clyde in "several places, and in the isle of Bute, near Mount-"stewart," but was uncertain whether it were indigenous or not. The places mentioned seem such as are natural to it. Our specimen is necessarily a garden one.

Masterwort is perennial, and flowers in June. The root is tuberous, jointed, acrid, and aromatic, long supposed a sovereign remedy against all poison. Gerarde says it is "also singular against all corrupt and naughty aire and in-"fection of the pestilence—cures pestilential carbuncles and "botches—cold fits of agues—dropsy—dissolves all vento-"sities or windinesse of the stomache and other parts—and "greatly helpeth such as have taken great squats, bruises, or "falls from some high place," &c. &c. Well might it be called Masterwort! It seems the master key of physic and surgery.——Its qualities and habit are certainly nearly akin to those of *Angelica*, though their botanical characters do not agree. The stem is a foot and half high, round, smooth. Leaves twice ternate, smooth, serrated and cut. Umbels of many rays, flattish, with scarcely ever any general involucrum; the partial ones are of a few narrow leaves. Flowers almost uniform. Seeds with a broad border.



Nov.r 1. 1804. Published by Jas Sowerby, Lond.n

PASTINACA sativa.

Wild Parsnep.

PENTANDRIA Digynia.

Gen. Char. *Fruit* elliptical, compressed almost flat. *Petals* involute, entire. *Involucra* neither general nor partial.

Spec. Char. Leaves simply pinnate, downy beneath.

Syn. Pastinaca sativa. *Lam. Syn. P. 376. With. 306. Mart. F. Rust. : 88.*

P. sylvestris. *Hudr. 125. Relh. 122. Sibth. 101. Anno. 67.*

P. sylvestris latifolia. *Ray Syn. 206.*

THE wild Parsnep is found in the borders of fields and by road sides, plentifully enough on a calcareous or chalky soil, but not on any other, flowering in July, and the root is biennial. We received it from Norfolk by favour of the Rev. Mr. Watts.

Root spindle-shaped, white, aromatic, sweet, with a degree of acrimony. Stem 3 feet high, erect, branched, angular, furrowed, roughish. Leaves pinnate, with footstalks dilated at the base; leaflets from 5 to 9, sharply serrated and somewhat cut, downy beneath; the odd one in three lobes. Umbels terminal, solitary, erect, of several roughish rays. Involucrum in general altogether wanting, but sometimes a small solitary leaf occurs at the base of the general, as well as partial flower-stalks; for it is well known to practical botanists, that this part affords by no means such certain generic characters in umbelliferous plants as Linnæus and Artedi thought, the seeds being more to be trusted. The flowers are small, with deep-yellow petals rolled inwards. Fruit large, elliptical, flat, ribbed, smooth, of a very light brown when ripe.

The garden parsnep is a cultivated variety of this, with larger smoother leaves, and a mild eatable root. There is no reason to change the Linnæan name *sativa*, which expresses, that this is the species which is cultivated.

SMYRNIUM Olusatrum.

Alexanders.

PENTANDRIA Digynia.

GEN. CHAR. *Fruit* oblong, angular. *Petals* pointed, carinated. Many *flowers* abortive. *Involucra* none.

SPEC. CHAR. Stem-leaves in threes, on footſtalks, ſerrated.

SYN. Smyrnium Olusatrum. *Linn. Sp. Pl.* 376. *Hudſ. Fl. An.* 126. *With. Bot. Arr.* 310. *Relh. Cant.* 123. *Sibth. Oxon.* 101.

Smyrnium. *Raii Syn.* 208.

THIS is rather a maritime plant, and is found near the coaſt in many places; but whether from having been formerly cultivated as a pot-herb, or the ſeeds diſperſed by any other means, it now occurs about many inland towns, as Nottingham, York, Bury, Newmarket, and about Mackerell's tower Norwich. The root is biennial, and the flowers appear in May. By the middle of July the ſtalks are dried up, but remain laden with large black ſeeds.

The ſtem is ſtrong, deeply furrowed. Leaves large, twice or thrice ternate, cut and ſerrated. Flowers ſmall, numerous and irregular. The whole herb is of a pale bright green, ſmooth, ſucculent, in flavour ſomething like celery, but more ſtrong and bitter. It is now out of uſe, though formerly eaten in various parts of Europe, either as a ſallad or pot-herb, whence the name *Olus atrum*. Ray thinks it was called Alexanders becauſe in Italy and Germany it had long been denominated *herba Alexandrina*, having been ſuppoſed to be brought from Alexandria.

Fl.Lond.1795. Published by J.Sowerby Lond.

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ANETHUM Foeniculum.

Common Fennel.

PENTANDRIA Digynia.

GEN. CHAR. *Invol.* none. *Fruit* ovate, slightly compressed, striated. *Petals* rolled in, entire.

SPEC. CHAR. Fruit swelling. Stem-leaves numerous, curved downwards.

SYN. Anethum Foeniculum. *Linn. Sp. Pl.* 377. *Sm. Fl. Brit.* 329. *Huds.* 126. *With.* 310. *Hull.* 64. *Relh.* 121. *Abbot.* 67. *Woodv. Med. Bot. t.* 160.
Foeniculum vulgare. *Raii Syn.* 217.

VERY plentiful about the chalk-pits of Kent and other counties, flowering in July and August, when its golden umbels, contrasted with its dark leaves, form a striking object.

The root is biennial, tap-shaped. Herb smooth, of a deep, but glaucous, green. Stem 4 feet high, erect, round, hollow, much branched, striated. Leaves triply pinnate, their leaflets very narrow, awl-shaped, long, and more or less pendulous. Umbels terminal, large, of many even-topped rays. Calyx obsolete. Petals deep-yellow, rolled in, furrowed, entire. Unripe germen obtuse, crowned with a thick yellow glandular substance the base of the styles. Stamina spreading and recurved, yellow. Fruit ovate, swelling, scarcely compressed, furrowed, with 3 ribs on each side.

This is the common garden Fennel, whose leaves are used both for ornament and food, and whose seeds are useful as a carminative medicine, particularly for young children. Their flavour is sweet, and to most people gratefully aromatic.

Sept.r 1 1803 Published by Jas. Sowerby, London.

113.

CARUM Carui.

Common Caraway.

PENTANDRIA Digynia.

GEN. CHAR. *Fruit* cylindrical, striated, somewhat elliptical. *Petals* keeled, inflexed, notched, nearly uniform. *General involucrum* of few leaves; *partial* none. *Outer flowers* abortive.

SPEC. CHAR. . . . .

SYN. Carum Carui. *Linn. Sp. Pl.* 378. *Sm. Fl. Brit.* 330. *Huds.* 126. *With.* 311. *Hull.* 64. *Relh.* 121. *Abbot.* 68. *Mart. Rust. t.* 55. *Woodv. Med. Bot. t.* 45. *Jacq. Austr. t.* 393.

C. seu Careum. *Raii Syn.* 213. *Ger. em.* 1034.

CARAWAY seeds are known to every one for their general use among confectioners, and their aromatic pleasant flavour. The plant which bears them is a native of the warm and dry parts of Europe, which has become imperfectly naturalized in England, and is often found in grassy fields and pastures; but being a biennial, and commonly mown with the grass before it ripens seed, it is seldom stationary any where. Dr. Abbot informs us it has remained for more than half a century in a lonely spot called the Park field at Thurleigh, Bedfordshire, where its seeds are annually collected for use.

The root is spindle-shaped, pale brown. Stem about 2 feet high, erect, branched, angular, furrowed, smooth. Leaves smooth, doubly pinnate, cut into linear narrow segments; the lowermost crossing each other. Umbels numerous, terminal, upright. General involucrum of 1, 2 or 3 small narrow entire leaves, often wanting: partial none, unless by a very extraordinary accident to which all this tribe are liable. Petals nearly uniform, white or very pale flesh-coloured, inflexed so as to become heart-shaped. Calyx entire. Central flowers only fertile. Fruit small, oblong, striated; each seed almost cylindrical.

Sept 1 1805. Published by J. & J. Sowerby, London

114.

PIMPINELLA saxifraga.

Common Burnet-Saxifrage.

PENTANDRIA Digynia.

GEN. CHAR. *Involucra* none. *Fruit* ovato-oblong, ribbed. *Petals* inflexed. *Stigmas* somewhat globular.

SPEC. CHAR. Leaves pinnate: leaflets of the radical ones roundish; those of the uppermost linear.

SYN. Pimpinella saxifraga. *Linn. Sp. Pl.* 378. *Huds. Fl. An.* 127. *With. Bot. Arr.* 313. *ed.* 3. 311. *Relh. Cant.* 124. *Sibth. Ox.* 102.

P. saxifraga minor, foliis Sanguisorbæ. *Raii Syn.* 213, *n.* 2 & 3.

A NATIVE of dry gravelly and calcareous soils, flowering in July and August.

Root perennial, strong and woody, highly aromatic and pungent, to some persons not unpleasant, especially when dry. Stems about a foot high, erect, slender, rigid, round, striated and roughish, varying much in luxuriance, generally branched above. Leaves on long footstalks, pinnated, veiny, roughish and rigid; the leaflets of the first radical ones roundish or ovate, acutely serrated and generally deeply notched, especially the terminal leaflet; the other leaves are composed of decurrent, linear, often falcated, sometimes twice pinnatifid leaflets, those which grow high on the stem being the narrowest and most simple, and their common footstalk more membranous and dilated than in the rest. Umbels drooping when young, destitute of general or partial *involucra*. Flowers small, nearly regular, white, with long stamina. Top of the germen very tumid, and reddish. Styles short. Seeds small.

From repeated observations made on this plant wild in many different places, we entirely agree with Dr. Withering, that all the varieties enumerated in his 3d edition (except P. *orientalis* of Gouan, which we have never seen in England) really constitute but one species. Our figure is taken from a good intermediate wild specimen. The characters of almost all the varieties may be found in it. The botanist will in vain attempt to meet with the exclusive characters of any one of them in many different individuals. Such a kind of variety is like the ghost in Hamlet, or Mrs. Radcliffe's mysterious monk of Paluzzi; we can no sooner say "'tis here," than the next moment "'tis gone."

July 1st 1797 Published by J. Sowerby London

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115.

PIMPINELLA magna.

Great Burnet-Saxifrage.

PENTANDRIA Digynia.

GEN. CHAR. *Involucra* none. *Fruit* ovato-oblong, ribbed. *Petals* inflexed. *Stigmas* somewhat globular.

SPEC. CHAR. Leaves pinnate; leaflets ovate, the terminal one three-lobed.

SYN. Pimpinella magna. *Linn. Mant.* 219. *With. Bot. Arr.* 314. *ed.* 3. 313. *Relh. Cant.* 125. *Sibth. Ox.* 102.

P. major. *Huds. Fl. An.* 127.

P. saxifraga. *Raii Syn.* 213.

THIS species is less common than the preceding, and grows chiefly in woods and hedges in a calcareous soil, flowering in August or later. We received it from Mr. Robson. Dr. Smith observed it under the walls of York.

Root perennial, woody, like that of P. *saxifraga* in flavour, but rather weaker. Stem 2 feet or more in height, round, striated. Leaves on rather shorter footstalks than in the last described, pinnated, but of fewer leaflets (scarcely more than 3 pair), and those larger, ovate, or ovato-lanceolate, the terminal one more or less deeply three-cleft, and all strongly serrated. Sometimes, as it is reported, the upper leaves are deeply pinnatifid, but that is not generally the case. Flowers commonly white, about the size of the last, and like them in structure; but in alpine situations they often become rose-coloured.

Linnæus originally confounded this with the last, but was afterwards convinced of his mistake; it being very different in habit and size, and essentially distinguished by the form, as well as greater smoothness, of the leaves. Hudson always made them distinct.

(1479.) Published by J. Sowerby London.

116.

PIMPINELLA dioica.

Dwarf Burnet-Saxifrage.

PENTANDRIA Digynia.

GEN. CHAR. *Invol.* none. *Fruit* ovate-oblong, striated. *Petals* inflexed. *Stigmas* somewhat globular.

SPEC. CHAR. Leaflets all nearly linear. Umbels panicled. Flowers dioecious.

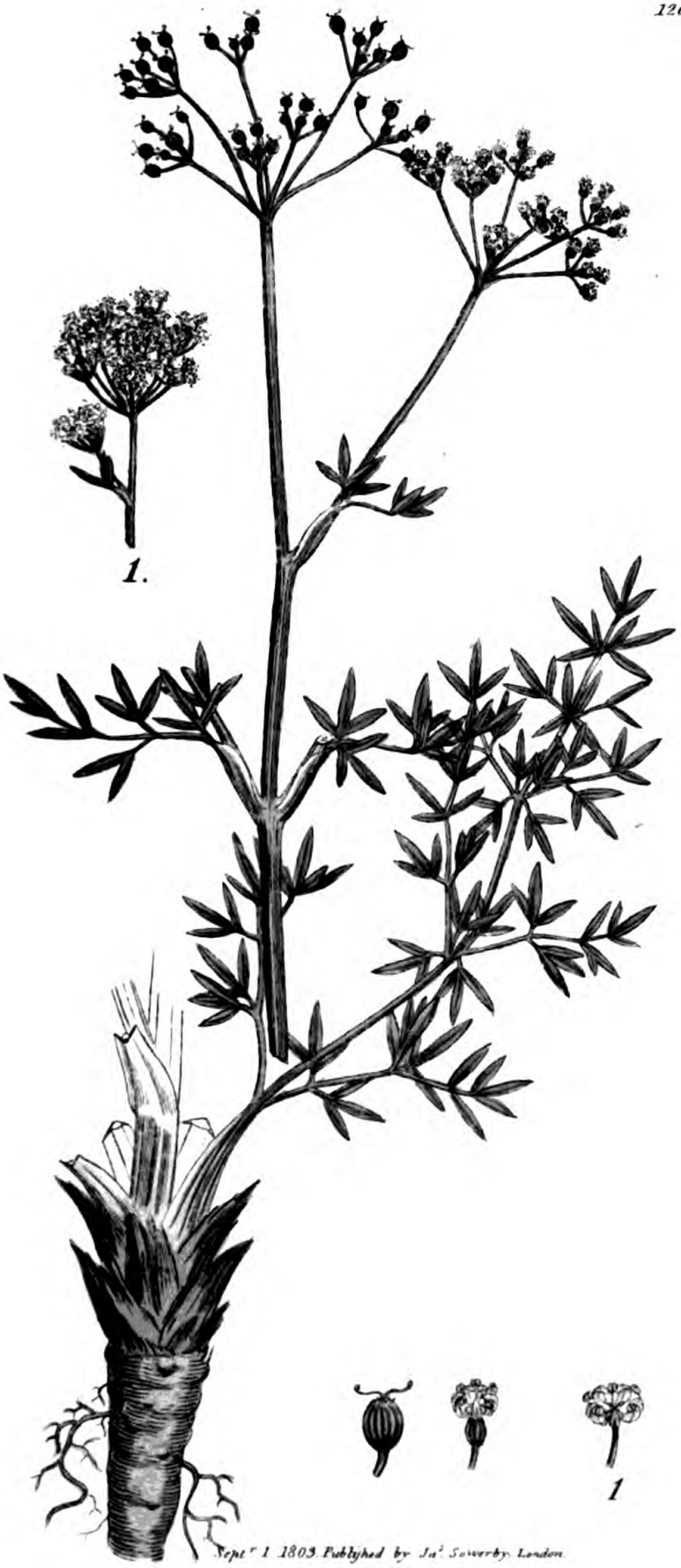
SYN. Pimpinella dioica. *Linn. Syst. Veg. ed.* 13. 241. *Sm. Fl. Brit.* 332. *Huds.* 128. *With.* 313. *Hull.* 65.

Seseli pumilum. *Linn. Sp. Pl.* 373.

Peucedanum minus. *Raii Syn.* 217. *Huds. ed.* 1. 101.

THIS species of *Pimpinella* has, in Britain at least, been found only on the limestone rocks below Bristol, and according to Hudson, near Uphill, Somersetshire. Our specimens were gathered by Mr. Sowerby in the first-mentioned place, where the plant was remarked in Ray's time. It is perennial, flowering in May and June, and is remarkable among the umbelliferous tribe for having male flowers on one root and female on another.

The whole herb is smooth, and of a glaucous hue. Root tap-shaped. Male plant generally most humble in size, and less spreading. Stem in both sexes angular, branched, purplish, leafy. Leaves doubly pinnate, the leaflets nearly linear, uniform, entire, channelled. Umbels numerous, upright, simple or compound. Flowers pale flesh-coloured, or pale buff; the males generally, but not always, without any signs of a germen; but the females are furnished with stamina, though imperfect ones. Fruit ovate, furrowed. Stigmas globular, the invariable generic character, though not sufficiently expressed in our *t.* 407 and 408.



Sept.r 1. 1803. Published by Ja.s Sowerby. London.

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117.

APIUM graveolens.

Smallage, or Wild Celery.

PENTANDRIA Digynia.

GEN. CHAR. *Partial Invol.* none: *general* of 1 leaf. *Fruit* ovate, ribbed. *Petals* inflexed, uniform.

SPEC. CHAR. Leaflets of the stem-leaves wedge-shaped. Stem furrowed.

SYN. Apium graveolens. *Linn. Sp. Pl.* 379. *Sm. Fl. Brit.* 333. *Huds.* 129. *With.* 314. *Hull.* 64. *Relh.* 123. *Sibth.* 103. *Abbot.* 69.

A. palustre et officinarum. *Raii Syn.* 214.

TO bring under one view, as much as possible, a natural order of plants, we here exhibit another of the umbelliferous tribe, which frequently occurs in ditches and marshy places, especially near the sea, flowering in August or later. Though well known by the name of Celery in gardens, where culture renders it luxuriant, mild and wholesome, it would scarcely be recognized at the table in its slender wild form, neither would its acrid, and indeed poisonous, qualities make it welcome.

The root is biennial and tap-shaped. Stems widely spreading or floating, long, furrowed, leafy. The whole plant is smooth, of a pale green. Leaves pinnate or ternate; the leaflets wedge- or fan-shaped, especially in the stem leaves, shining, deeply cut: those of the radical ones are generally rounder. Umbels terminal and lateral, often sessile, irregular, with a single-leaved general involucrum, which however is often wanting. Partial involucra none. Flowers small, uniform, of a pale greenish white. Fruit almost orbicular.

Sept.r 1 1803 Published by Ja.s Sowerby, London

118.

ÆGOPODIUM Podagraria.

Gout-weed.

PENTANDRIA Digynia.

GEN. CHAR. *General or partial Involl.* none. *Fruit* ovate-oblong, ribbed. *Petals* heart-ſhaped, with an inflexed point, unequal.

SPEC. CHAR. . . . . .

SYN. Ægopodium Podagraria. *Linn. Sp. Pl.* 379. *Sm. Fl. Brit.* 334. *Hudſ.* 129. *With.* 314. *Hull.* 64. *Relh.* 126. *Sibth.* 103. *Abbot.* 69. Angelica ſylveſtris minor, ſeu erratica. *Raii Syn.* 208.

A VERY general weed in ſhady waſte places, very troubleſome in gardens whoſe ſoil is rich or moiſt, as the creeping roots ſpread to a wide extent, and are difficult to extirpate. The flowers appear plentifully in May and June, but, except the roots are confined, produce little or no ſeed.

The ſtems are about a foot high, erect, not much branched, leafy, furrowed. Radical leaves on long ſtalks, twice ternate; the reſt ſimply ternate, oppoſite, and on ſhorter dilated ſtalks: all the leaflets are large, pretty uniform, ovate, acute, doubly or unequally ſerrated, ſmooth. Umbels terminal, erect, ſolitary, of many rays, but without any general or partial involucrum. Flowers pure white. Petals a little unequal in ſize, broad, heart-ſhaped from their incurved points. Fruit elliptical, rather compreſſed, ſmooth, with 3 prominent ribs to each ſeed.

The *Ægopodium* has an acrid pungent root, ſuppoſed to agree in qualities with the more active *Imperatoria* or Maſterwort, and formerly uſed as a cataplaſm in the gout, whence the Engliſh name It has alſo been called Herb-Gerard, not, as it ſeems, from our old herbaliſt, for according to Dodonæus that name is of Flemiſh origin; and though our countryman repeats it often in his herbal, with apparent complacency, he does not appropriate it to himſelf.

119.

VIBURNUM Lantana.

Mealy Guelder-rose, or Way-faring Tree.

PENTANDRIA Trigynia.

GEN. CHAR. *Cal.* superior, of five leaves. *Cor.* in five segments. *Berry* with one seed.

SPEC. CHAR. Leaves heart-shaped, serrated, veiny, downy beneath.

SYN. Viburnum Lantana. *Linn. Sp. Pl.* 384. *Huds. Fl. An.* 129. *With. Bot. Arr.* 318. *Relh. Cant.* 126. *Sibth. Ox.* 104.

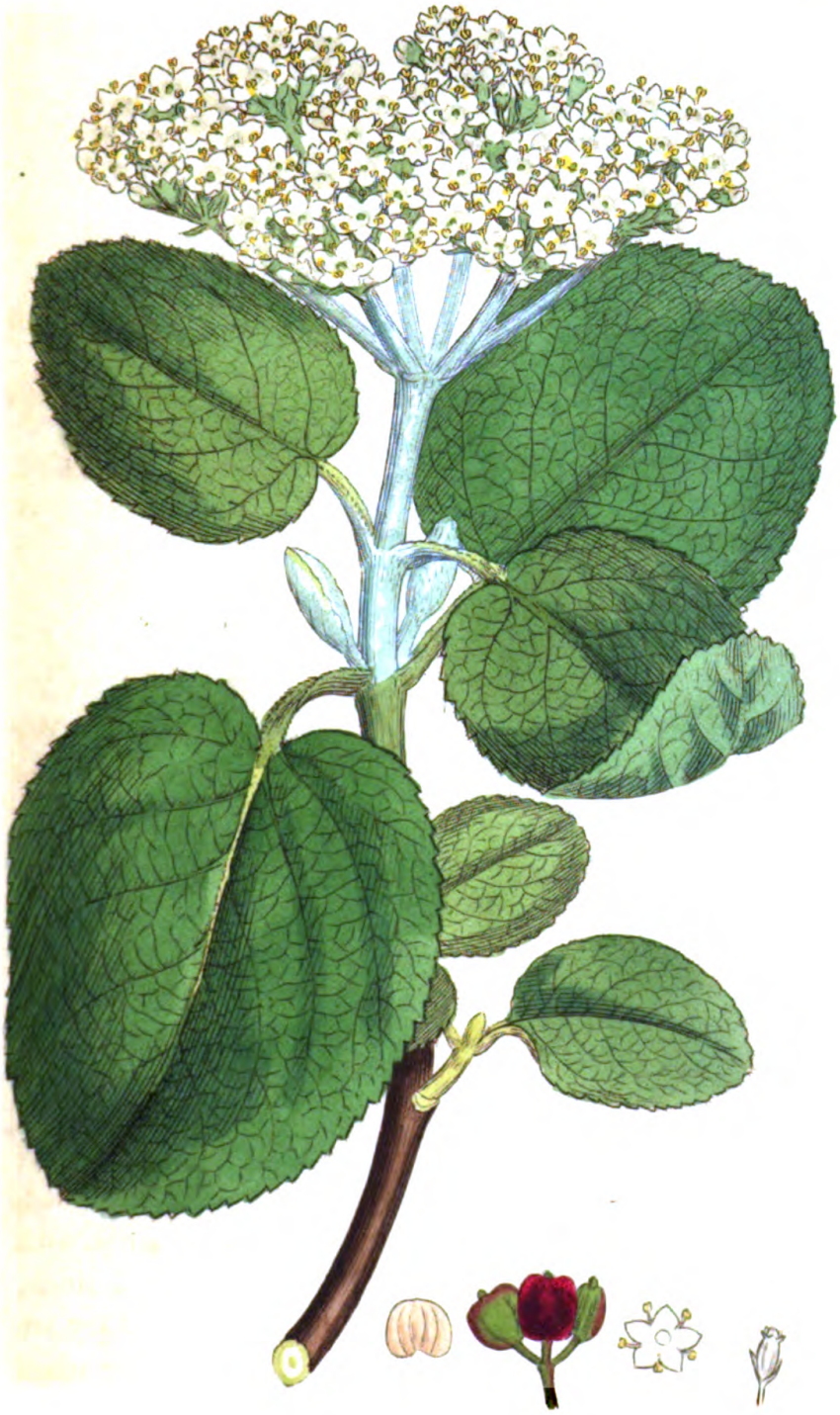
Viburnum. *Raii Syn.* 460.

RAY mentions this shrub as growing in a clay soil. We have observed it most plentifully, and apparently in its true wild situation, in chalky places, as about Henley, Oxfordshire; not but that it occurs also here and there in the woods and hedges of most parts of England, flowering in May.

It is a thickly-branched shrub or small tree, growing to a larger size in the north of England (as Ray also remarks) than in the south; its twigs round, pliant, and mealy, with the same kind of tufted stellated pubescence as is found on the flower-stalks, backs, and even upper sides of the leaves. The leaves are opposite, as in the whole genus, somewhat elliptical, heart-shaped at the base, obtuse, serrated, strongly veined, without stipulæ. Flowers in large terminal cymes, white, with yellowish antheræ. Stigmas sessile, very short and thick. Berries compressed. When young (as in our figure) they are red on the outermost side, yellow on the other; but when quite ripe they turn black. They have a little mealy astringent pulp. Seed large, flat and furrowed.

This is supposed to be the *Viburnum* of Virgil; but the poet says nothing by which it can be ascertained, mentioning it only in his 1st eclogue, ver. 26.

The leaves turn dark red in autumn.



VIBURNUM Opulus.

Common Guelder-rose, or Water Elder.

PENTANDRIA Trigynia.

GEN. CHAR. *Cal.* superior, of five leaves. *Cor.* in five segments. *Berry* with one seed.

SPEC. CHAR. Leaves lobed; their foot-stalks set with glands.

SYN. Viburnum Opulus. *Linn. Sp. Pl.* 384. *Huds. Fl. An.* 130. *With. Bot. Arr.* 318. *Relh. Cant.* 127. *Sibth. Ox.* 104.

Opulus. *Raii Syn.* 460.

THIS shrub is common in woods and hedges in watery places, flowering early in June; the bright-red berries ripen about September, and towards the middle of October the leaves assume a beautiful pink-colour, affording another instance, in addition to that of the Cornel (see tab. 249), of a genus, mostly American, the leaves of which turn red in autumn. In gardens the Guelder-rose, bearing round bunches of abortive flowers only, is very common, elegantly grouping with the Lilac and Laburnum in the early part of summer.

It is a small bushy tree, smooth in all its parts. Leaves with three great, unequally serrated, lobes; their foot-stalks bearing several cup-like glands towards the top, and a pair or two of erect linear appendages, scarcely to be called stipulæ, near the base. Cymes of many white flowers; the perfect ones small, resembling elder; abortive ones in the margin, each consisting merely of a large irregular flat petal, without organs of fructification. Stigmas nearly sessile, close together. Berries drooping, very succulent. Seed flat, heart-shaped.

SAMBUCUS Ebulus.

Dwarf Elder, or Danewort.

PENTANDRIA Trigynia.

GEN. CHAR. *Cal.* in 5 ſegments. *Cor.* 5-cleft. *Berry* with 3 ſeeds.

SPEC. CHAR. Cymes with three principal branches. Stipulæ leafy. Stem herbaceous.

SYN. Sambucus Ebulus. *Linn. Sp. Pl.* 385. *Hudſ.* 130. *With.* 316. *Relh.* 127. *Sibth.* 104. *Curt. Lond. faſc.* 3. *t.* 18.

S. humilis ſeu Ebulus. *Raii Syn.* 461.

THE Dwarf Elder grows here and there in waſte ground throughout Britain, not commonly, though in great plenty wherever it occurs at all, as the creeping roots ſpread very far, and are ſcarcely to be eradicated. It is plentiful at Honingham, Norfolk. Our ſpecimen grew in Lambeth Marſh. It flowers after midſummer, and ripens its berries late in autumn, which however, like the fruit of other creeping-rooted plants, are rarely perfected.

The ſtems are herbaceous, three feet high, erect, roundiſh, furrowed, leafy. Leaves pinnate, dark-green, ſmoothiſh, the leaflets ovato-lanceolate, acute, ſerrated; unequal and generally glandular at their baſe. Stipulæ large, leafy, ſerrated, ſometimes accompanying a pair of the leaflets as well as the whole leaf. Cyme terminal, of three principal branches, and many ſmall ones, which are hairy. All the flowers ſtand on footſtalks. Calyx ſmall, purple. Petals of a dull blood-red. Stamina thick, white, with red antheræ, whoſe lobes are diſtant. Berries globular, of a purpliſh black, with three, ſometimes four, ſeeds.

The whole plant is fœtid, and violently purgative. No cattle will eat it. Moles will not come where the leaves of this ſpecies, or even the common Elder, are laid. A rob of the berries, though actively cathartic, may be uſed with tolerable ſafety as far as the doſe of an ounce; but it has the inconveniences of Senna, and is in no reſpect to be preferred to that drug.

SAMBUCUS nigra.

Common Elder.

PENTANDRIA Trigynia.

Gen. Char. Cal. in five segments. *Cor.* 5-cleft. *Berry* with 3 seeds.

Spec. Char. Cymes with five principal branches. Leaflets ovate. Stem a tree.

Syn. Sambucus nigra. *Linn. Sp. Pl.* 385. *Hudſ.* 130. *With. 3rd. Raii.* 128. *Sibth.* 105. *Woodv. Med. Bot.* 78.

Sambucus. *Raii Syn.* 461.

ABUNDANT every where in hedges and groves, flowering in June, and opening its berries copiously in September.

This species grows to a middle-sized bushy tree, with a smooth grey bark when young. The branches are opposite, leafy, of rapid growth, and full of a light white pith, which is put to various uses for which such a substance is required. The pinnated leaves consist of about 5 oval, pointed, serrated leaflets, nearly equal at their base, and have no stipulæ, or very small ones. Cymes terminal, solitary, of 5 principal branches, and many small ones, and some of the flowers are sessile. Flowers cream-coloured, with a faint smell, especially when dried. Berries globular, purplish black.

This tree is as it were a whole magazine of physic to rustic practitioners, nor is it quite neglected by more regular ones. Ointments are made of the green inner bark, which is also a strong purgative: the dried flowers infused in water are used in fomentations, or as tea, though in the latter capacity they are weakening to the nerves: the berries are boiled into a rob, which is really useful in sore throats and catarrhs, and acts as a gentle laxative in febrile disorders. The leaves laid into the subterraneous paths of the mole drive it away; and an infusion of them is extremely useful for curious gardeners to sprinkle over the buds of such flowers as they wish to preserve from minute caterpillars, as few insects can bear the Elder. The *Phalena Sambucaria*, however, feeds on this plant, and the colouring of its delicate wings seems to imitate the blossoms.

Jany. 1. 1798 Published by J. Sowerby

123.

STAPHYLEA pinnata.

Bladder-nut Tree.

PENTANDRIA Trigynia.

GEN. CHAR. *Cal.* inferior, in 5 segments. *Pet.* 5. *Capsules* inflated, joined together. *Seeds* 2, globose, with a scar on one side.

SPEC. CHAR. Leaves pinnated. Styles and capsules but two.

SYN. Staphylea pinnata. *Linn. Sp. Pl.* 386. *Sm. Fl. Brit.* 337. *Huds.* 131. *With.* 317. *Hull.* 65. *Ehrh. Arb.* 103.

Staphylodendron. *Raii Syn.* 468.

WE have drawn this from garden specimens. Parkinson observed it about Ashford in Kent, and Ray about Pontefract, Yorkshire; but the latter doubted its being really wild. Our accurate friend Mr. Hailstone, however, judges it to be truly indigenous in the last-mentioned county. It blossoms in May or June; and the fruit, for the singular appearance of which it is chiefly remarkable, is perfected rather late in autumn.

The stem is shrubby, branched and divaricated, five or six feet high. Leaves opposite, (not alternate,) pinnate, consisting of two pair, and an odd one, of ovate, smooth, serrated leaflets, accompanied by general and partial membranous stipulæ. Flowers in compound terminal bunches, yellowish, interspersed with narrow bracteæ. Capsules two, rarely 3, together, membranous and inflated, each containing two large, globular seeds, which when ripe are hard, light brown, and look as if varnished.

Feb.y 1. 1806. Published by Jas. Sowerby. London.

TAMARIX gallica.

French Tamarisk.

PENTANDRIA Trigynia.

GEN. CHAR. *Cal.* inferior, in 5 segments. *Petals* 5. *Caps.* of 1 cell, with 3 valves. *Seeds* feathery.

SPEC. CHAR. Stamina five.

SYN. Tamarix gallica. *Linn. Sp. Pl.* 386. *Sm. Fl. Brit.* 338. *With.* 318. *Sym.* 77. *Hull.* 66. *Tr. of Linn. Soc. v.* 3. 333.

Tamariscus Narbonensis. *Ger. em.* 1378.

GATHERED by Mr. Menzies at Hastings. Though not mentioned by the botanists of Ray's time, it seems entitled to a place in our Flora, being plentiful about the coasts of Cornwall, Hampshire and Sussex, growing on rocks and banks, exactly as in Italy and France, where it is undoubtedly wild. We are not deterred from admitting it by vague reports of its having been brought from France in the 17th century. It might nevertheless have been always growing wild in England, as seems to have been the case with Hops; nor was there any occasion to bring from France what had certainly long been common in our own gardens.

It is an elegant, drooping, slender-branched shrub, with red shining twigs. Leaves minute, imbricated, deciduous, rather fleshy, acute, smooth, spurred at the base. The flowers appear about July in long cylindrical clusters, with little awlshaped bracteæ. Calyx small, campanulate, smooth. Petals white or reddish. Stamina 5, smooth, equal. Germen ovate, with 3 styles, and blunt stigmas. Capsule pyramidal. Seeds numerous, with feathery wings.

Sheep are excessively fond of this shrub, perhaps on account of its saltish flavour, and devour it with avidity.

June 1. 1804. Published by Jas Sowerby, London.

125.

CORRIGIOLA littoralis.

Sand Strapwort.

PENTANDRIA Trigynia.

GEN. CHAR. *Cal.* inferior, of 5 leaves. *Petals* 5. *Seed* one, naked, obtufely three-cornered.

SPEC. CHAR. . . . . .

SYN. Corrigiola littoralis. *Linn. Sp. Pl.* 388. *Sm. Fl. Brit.* 339. *With.* 318. *Hull.* 66. *Dickf. Dr. Pl.* 61. *H. Sicc. fafc.* 14. 10.

MR. HUDSON was the original difcoverer of this plant in England, but not till after the publication of the fecond edition of his *Flora*. He found it on Slapham fands near Dartmouth, Devonfhire. The late Francis Borone gathered it on the beach near the tin mine at Helfton, Cornwall; and from feeds communicated by him, the fpecimen here delineated was raifed by Mrs. Kett in her garden at Seething. As it is not at all altered by culture, and Mr. Sowerby with Mr. Turner fought for the wild plant in vain this fummer, we truft our figure will not be unwelcome.

The root is annual, and the flowers appear profufely in July and Auguft. Stems numerous, fpreading proftrate on the ground in every direction, like knot-grafs; they are round, fmooth, but little branched. Leaves alternate, linear-lanceolate, obtufe, entire, tapering at the bafe, glaucous, fmooth, a little fleffy, with a pair of membranous ftipulæ at their infertion. Flowers in terminal and lateral clufters, fmall, of a pearly hue, the leaves of the calyx being bordered with white, and the petals white alfo. Germen and antheræ purplifh. Styles 3, fhort, fpreading. Seed black and fhining.

PARNASSIA paluſtris.

Graſs of Parnaſſus.

PENTANDRIA Tetragynia.

Gen. Char. *Calyx* five-cleft. *Petals* five. *Nectaries* five, heart-shaped, fringed with briſtles terminated by little balls. *Capſule* with four valves.

Spec. Char. . . .

Syn. Parnaſſia paluſtris. *Linn. Sp. Pl.* 391. *Hudſ. Fl. An.* 171. *With. Bot. Arr.* 325. *Relh. Cant.* 129.

P. vulgaris et paluſtris. *Raii Syn.* 355.

PERHAPS the nectary of the Parnaſſia paluſtris is more elaborate in ſtructure than that of any other Britiſh vegetable. We regret that its phyſiology is unknown. What ſhare thoſe capillary protuberances, tipped with pellucid globes, have in the formation of honey, is very doubtful, though that fluid is found about the lower part of the organ which ſupports them. Theſe parts however form an excellent generic character, and there is but one ſpecies of the genus. Theoretical botaniſts are not agreed about its affinities, except that it is allied to Droſera, and we think alſo to Dionæa and Saxifraga, though Mr. De Juſſieu ſeparates them all widely; but he ſeems not decided in his opinion. The Parnaſſia agrees with Saxifraga in the wonderful economy of its impregnation, which is performed by one of the ſtamina at a time coming over the ſtigma, and retiring again as ſoon as it has ſhed its pollen. Its place is then ſupplied by another, till all have preſented themſelves in turn, and then the ſtigma cloſes. Sometimes two come together, or nearly ſo. Rue exhibits the ſame phænomenon.

This plant is common on bogs in the northern counties as well as in Norfolk, and produces its elegant milk-white flowers in Auguſt and September. The petals are curiouſly veined with pellucid lines; they preſerve their whiteneſs when dried. The ſtem is angular and twiſted: root perennial.

127.

STATICE Armeria.

Thrift.

PENTANDRIA Pentagynia.

GEN. CHAR. *Cal.* of one leaf, entire, plaited, filmy. *Petals* five. *Seed* ſingle.

SPEC. CHAR. Stalk ſimple, bearing a round head of flowers. Leaves linear.

SYN. Statice Armeria. *Linn. Sp. Pl.* 394. *Hudſ. Fl. An.* 132. *With. Bot. Arr.* 326. *Relh. Cant.* 129. *Lightf. Scot.* 173.

S. montana minor. *Raii Syn.* 203.

"THE moſt humble and moſt lofty of plants," ſays Mr. Lightfoot; "it grows frequently upon the ſea-ſhores, and upon the ſummits of the higheſt mountains." Neither is it leſs common in England and Wales than in Scotland, in both kinds of ſituations. We have examined it from both, and found no difference between the ſpecimens. Its favourite maritime ſoil is of the muddy kind. The conſtitution of this plant indeed ſeems of a very accommodating nature; for it grows equally well in any garden, even in the ſmoke of London, and is much uſed for edgings. From its readineſs to thrive in any ſituation, the Engliſh name has probably been given. It flowers about July and Auguſt.

Root perennial, woody, bearing many thick tufts of lax, linear, channelled, ſmooth, entire leaves. Stalks varying much in height, round, naked, each terminated by a globular head of ſeveral flowers, encompaſſed with a many-leaved involucrum, whoſe baſe is attached to a ſingular cylindrical membranous ſheath, about an inch long, which inveſts the top of the ſtalk, its lower end being looſe and lacerated, ſo that it ſeems to have been torn off from the root, and carried up with the young growing ſtalk. Calyx ſmall, erect. Petals roſe-coloured. Crown of the ſeed fringed.

128.

STATICE Limonium.

Sea Lavender.

PENTANDRIA Pentagynia.

GEN. CHAR. *Cal.* of one leaf, entire, plaited, filmy. *Petals* five. *Seed* ſingle.

SPEC. CHAR. Stalk panicled, round. Leaves ſmooth, deſtitute of nerves, tipped with a ſmall point.

SYN. Statice Limonium. *Linn. Sp. Pl.* 394. *Hudſ. Fl. An.* 132. *With. Bot. Arr.* 327.
Limonium. *Raii Syn.* 201.

GATHERED laſt Auguſt by Lord Viſcount Lewiſham on Woldham Marſh near Rocheſter. The plant loves a muddy ſoil in ſalt marſhes, or on the ſhores of great rivers waſhed by the tide, and flowers late. Scarcely any vegetable is more various as to luxuriance, being ſometimes found with leaves ſcarcely an inch long, and not more than ſix or eight flowers in the panicle, while at other times it is even much more large and its flowers more abundant than in the ſpecimen before us. The bright blue colour diſtinguiſhes it at a diſtance, and that colour is tolerably permanent. Though leſs magnificent than ſome foreign ſpecies of its genus, this is a very beautiful plant. Its appearance ſcarcely enough reſembles lavender to juſtify the Engliſh name, nor has it any aromatic quality. The root is ſtrong and perennial.

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139.

STATICE reticulata.

Matted Sea Lavender.

PENTANDRIA Pentagynia.

GEN. CHAR. *Cal.* of one leaf, entire, plaited, filmy. *Petals* five. *Seed* single.

SPEC. CHAR. Stalk panicled, prostrate; its branches zigzag, the barren ones bent back. Leaves wedge-shaped, a little pointed.

SYN. Statice reticulata. *Linn. Sp. Pl.* 394. *Huds. Fl. An.* 133. *With. Bot. Arr.* 327.

THIS species of *Statice* is hardly to be found in any other part of Great Britain than on the coast of Norfolk, where it covers many acres of muddy salt marshes with its blue flowers in July and August, especially about Wells, Cley and Holkham. Our specimen was gathered below Wisbeach, by the Rev. Mr. Hemsted.

Root strong, woody and perennial, bearing thick tufts of small, narrow, obovate, or wedge-shaped, leaves, slightly pointed, and entire. Stalks prostrate, destitute of leaves, very much branched, the branches zigzag, matted and entangled with each other, with an ovate, sharp, membranous bractea at each divarication. The bark in our specimens is a little crisped and tuberculated, which we do not observe in the Linnæan ones. Many of the branches are barren, and those often reflexed, but not always. Flowers few together in simple terminal spikes, erect, each enveloped in three or four larger sheathing bracteæ. The ribs of the calyx, and the petals, are of a bright purplish blue, which turns white in drying.

There cannot be said to be a good figure of this plant extant. Plukenet's *t.* 42. *f.* 4. is most like *S. echioides*, and Boccone's *Sic. t.* 44. is too imperfect to be of any service.

Dec. 1795 Published by James Sowerby London

LINUM usitatissimum.

Common Flax.

PENTANDRIA Pentagynia.

GEN. CHAR. *Cal.* 5-leaved. *Petals* 5. *Capsule* superior, with 10 valves and 10 cells. *Seeds* solitary.

SPEC. CHAR. Calyx-leaves ovate, acute, three-nerved. Petals crenate. Leaves lanceolate, alternate. Stem mostly solitary.

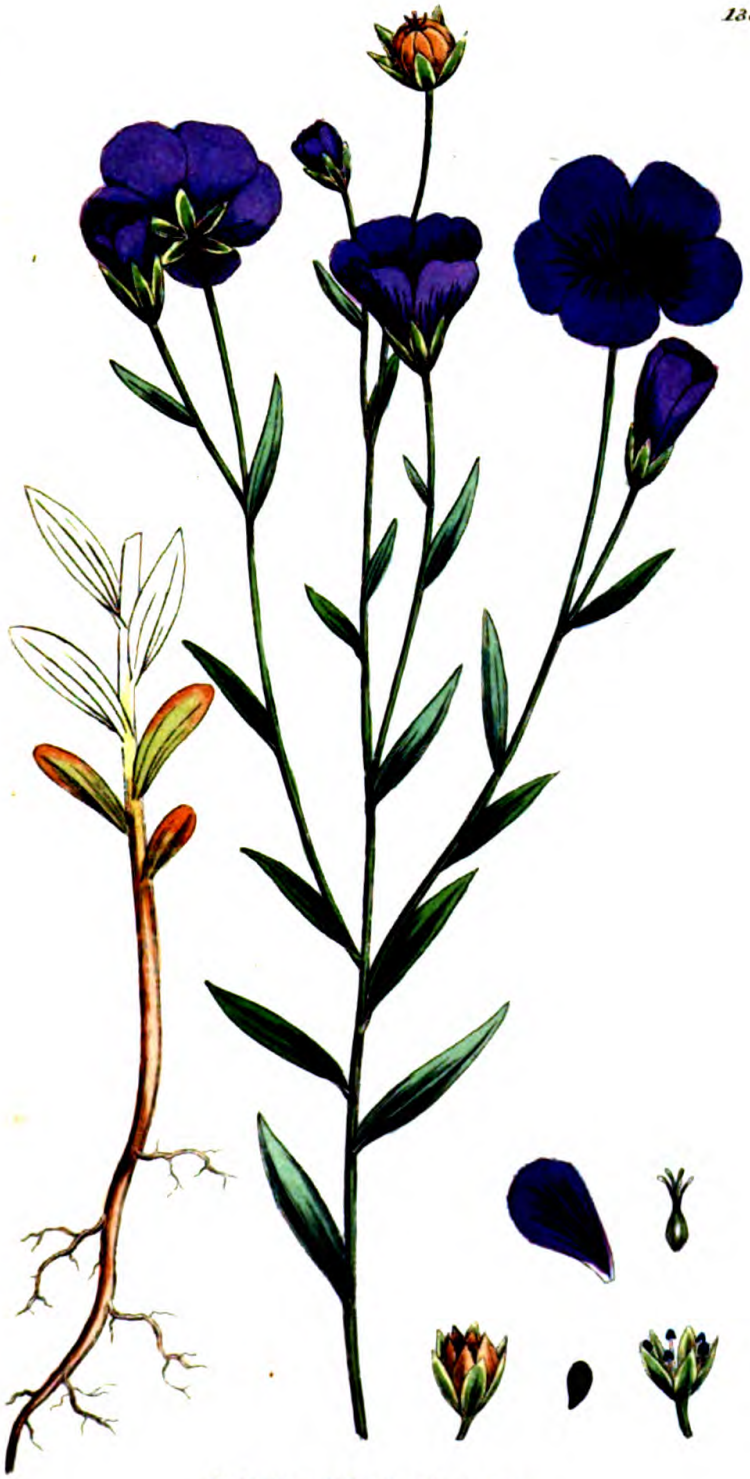
SYN. Linum usitatissimum. *Linn. Sp. Pl.* 397. *Sm. Fl. Brit.* 342. *Huds.* 133. *With.* 321. *Hull.* 66. *Relh.* 127. *Abbot.* 71. *Curt. Lond. fasc.* 5. *t.* 22. *Woodv. Med. Bot. t.* 111. *Mart. Rust. t.* 133.

L. sylvestre, sativum planè referens. *Raii Syn.* 362.

NOT unfrequent in cultivated fields, flowering in July.

Root annual and fibrous. Stem upright, about a foot and half high, generally solitary, round, leafy, smooth; simple below; alternately panicled above. Leaves numerous, alternate, sessile, ovate or lanceolate, entire, 3-ribbed, smooth, rather glaucous; for the most part sharp-pointed, the lower ones only being short, broad and blunt. Flowers upright, panicled, blue with a silky gloss; their petals obovate, veiny and crenate; their calyx-leaves smooth, acute, with 3 prominent ribs, and a membranous irregular margin. Stamina united at their base. Stigmas thicker upwards. Capsule pointed. Seeds elliptical, compressed, brown, highly polished.

The use of this valuable plant for producing the finest thread is well known. Its seeds abound with mucilage, which they impart to water, and afford by expression the common Linseed Oil.



Sept. 1 1804. Published by Jas. Sowerby, London.

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LINUM perenne.

Perennial Flax.

PENTANDRIA Pentagynia.

GEN. CHAR. *Calyx* five-leaved. *Petals* five. *Capſule* with five valves and ten cells. *Seeds* ſolitary.

SPEC. CHAR. Calyx and capſule bluntiſh. Leaves alternate, lanceolate, entire.

SYN. Linum perenne. *Linn. Sp. Pl.* 397. *Hudſ. Fl. An.* 133. *With. Bot. Arr.* 329. *Relh. Cant.* 130.

Linum ſylveſtre cæruleum perenne erectius, flore & capitulo majore, et

Linum ſylveſtre cæruleum perenne procumbens, flore & capitulo minore. *Raii Syn.* 362.

WE truſt to the authority of Mr. Hudſon, and the above-mentioned authors who have copied him, in making theſe two plants of Ray's Synopſis varieties of each other. Ray himſelf hints that he thought them ſuch; and Hudſon aſſerts he has gathered both from the ſame root; adding, that in the procumbent variety the ſtamina are ſhorter than the ſtyles, in the erect one longer.

Linum perenne is found in the dryeſt chalk ſoil of Northamptonſhire, Cambridgeſhire, and Norfolk. Its ſtrong and knobbed woody root produces a multitude of ſlender ſtems, about a foot long, ſpreading in every direction, but more or leſs curved upward. Its flowers appear from June to Auguſt; they are of a delicate texture, and very elegant blue colour. The calyx, as Dr. Stokes obſerves, is quite ſmooth, and each of its leaves marked with five ribs; the middlemoſt of which is the ſtrongeſt.

A Amado del. Ao. 1793

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LINUM anguſtifolium.

Narrow-leaved Flax.

PENTANDRIA Pentagynia.

GEN. CHAR. *Cal.* 5-leaved. *Petals* 5. *Capſ.* with 10 valves and 10 cells. *Seeds* ſolitary.

SPEC. CHAR. Calyx obſoletely three-nerved, ſharp-pointed, as well as the capſule, and linear-lanceolate three-nerved leaves. Stems numerous, a little inclined.

SYN. Linum anguſtifolium. *Hudſ. Fl. An.* 134. *With. Bot. Arr.* 329.

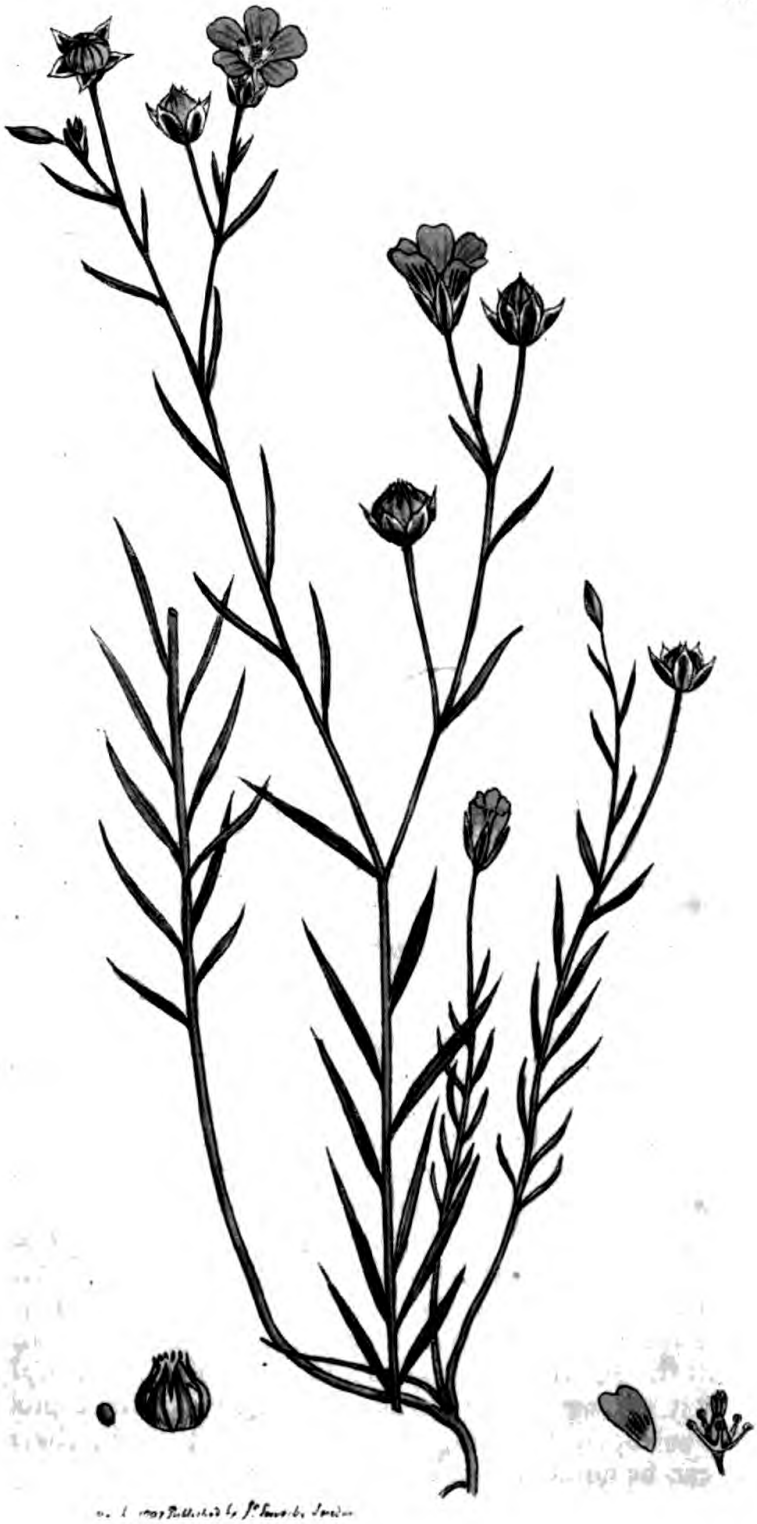
L. tenuifolium ζ. *Linn. Sp. Pl.* 399.

L. ſylveſtre anguſtifolium, floribus dilute purpuraſcentibus vel carneis. *Raii Syn.* 362.

COMMUNICATED by D. E. Davy, Eſq. who found it wild in great plenty at Darſham, Suffolk, flowering in July. It occurs in dry ſandy paſtures, eſpecially near the ſea; and is ſaid to be moſt plentiful in Cornwall and Devonſhire.

Linnæus very improperly confounded this with his L. *tenuifolium*, which has a very long-pointed calyx with glandular ſerratures, and leaves with rough edges and only a central nerve. That is Haller's No. 838, as we learn from Mr. Davall. Ours is moſt nearly allied to L. *uſitatiſſimum* in the ſtructure of all its parts, except in having a woody perennial root producing many ſtems; it differs alſo at firſt ſight in having ſmaller paler flowers. The leaves have 3, ſometimes 5, nerves, their edges entire and ſmooth. Calyx-leaves ſmooth, elliptical, with a ſharp point; in the flowering ſtate ſcarcely more than one nerve is viſible, but as the fruit ripens the calyx becomes diſtinctly 3-nerved. The petals are entire, or ſlightly notched. Valves of the capſule diſtinctly 10, cohering by their inflexed margins, which make the partitions of the 10 cells. We have therefore altered the generic character, as M. de Juſſieu has done, to 10 (not 5) valves. We cannot however agree with that learned botaniſt in referring this genus to his order of *Caryophylleæ*. Surely it belongs to the *Gerania*. The cells of the capſule are cloſely analogous to *arilli*, and about the reſt of the characters there can be no doubt. See *Juſſ. Gen.* 303.

L. *perenne*, *tab.* 40, is ſufficiently diſtinguiſhable from this ſpecies by its more obtuſe 5-nerved calyx, and more capitate ſtigmas.



LINUM catharticum.

Purging Flax.

PENTANDRIA Pentagynia.

GEN. CHAR. *Cal.* 5-leaved. *Petals* 5. *Capſ.* with 10 valves and 10 cells. *Seeds* ſolitary.

SPEC. CHAR. Leaves oppoſite, obovato-lanceolate. Stem forked. Petals pointed.

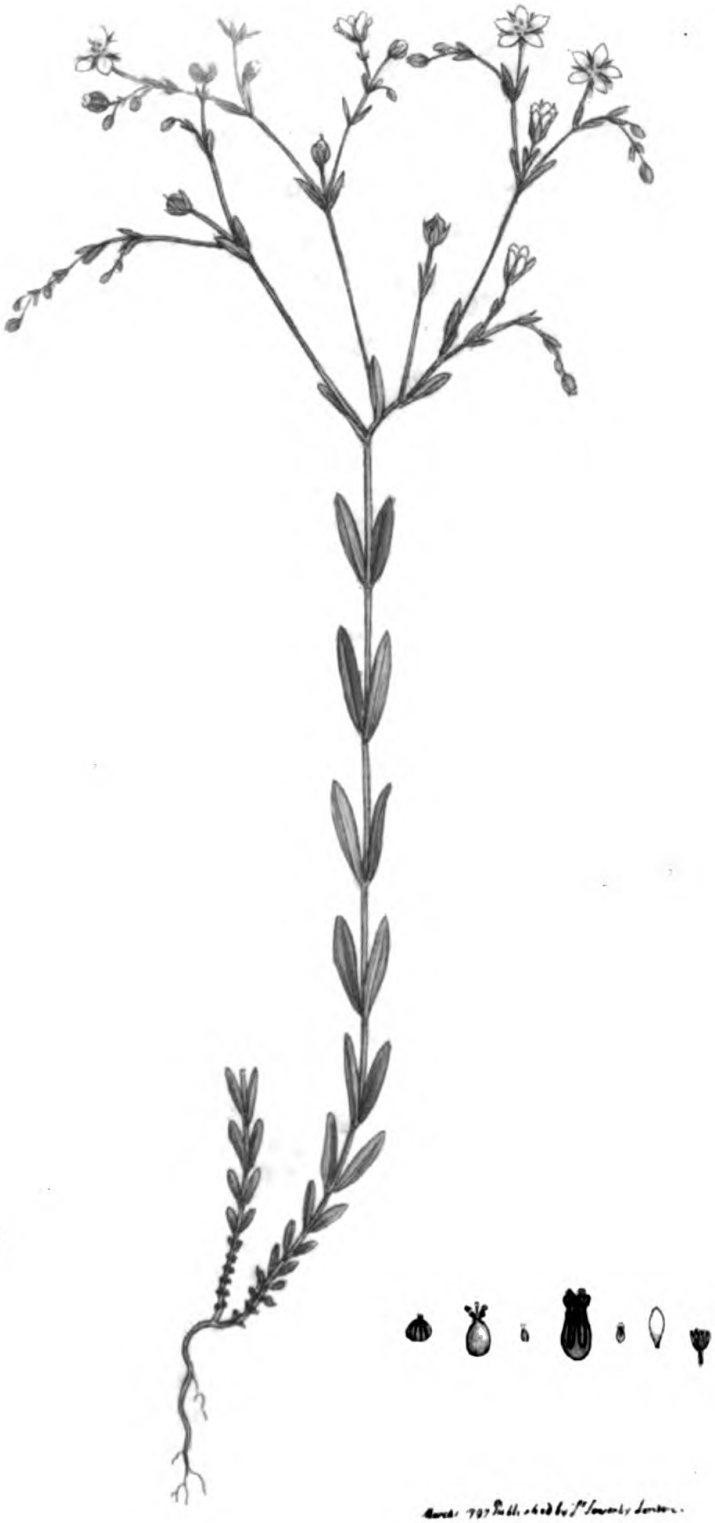
SYN. Linum catharticum. *Linn. Sp. Pl.* 401. *Hudſ. Fl. An.* 134. *With. Bot. Arr.* 330. *Relh. Cant.* 131. *Sibth. Ox.* 106. *Curt. Lond. faſc.* 3. *t.* 19. *Mart. Fl. Roſſ. t.* 135. *Dickſ. H. Sicc. faſc.* 3. 7.

L. ſylveſtre catharticum. *Raii Syn.* 362.

VERY common in dry open hilly paſtures, where it may be found in flower from June to the end of Auguſt.

The root is annual and very ſmall. Stems ſeveral, round, brown at the baſe, then upright and ſimple, till they branch off into a forked, leafy, ſlender-ſtalked panicle. Leaves oppoſite, ſeſſile, upright, inclining to an obovate or elliptical form, obtuſe with a light point, entire, glaucous beneath. The whole herb is ſmooth. When the panicle begins to branch off, its lower branches, as well as the leaves that accompany them, are alternate. Flowers terminal, ſolitary, drooping in the bud, then erect, white, not unlike thoſe of an *Arenaria*. Calyx-leaves ovato-lanceolate, pointed, ſerrated, with a ſolitary nerve. Petals obovate, pointed. Stamina monadelphous. Stigmas ſimple. Capſule with 10 valves, but before they are quite ripe they cohere in pairs by means of the permanent ſtyles.

Gerarde calls this Mill-mountaine, and celebrates it as a purge on the authority of a Biſhop of Bath and Wells, who uſed it commonly for that purpoſe. His receipt is a handful of the herb infuſed in a pint of warm white wine all night, and drunk in the morning. Dr. Withering recommends an infuſion of 2 drams or more of the dried herb, as an excellent cathartic (and ſometimes a diuretic) in many obſtinate rheumatisms.



Aug. 1797 Published by J. Sowerby London.

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SIBBALDIA procumbens.
Procumbent Sibbaldia.

PENTANDRIA Pentagynia.

GEN. CHAR. *Cal.* in 10 ſegments. *Petals* 5, ſtanding on the calyx. *Styles* from the ſide of the germen. *Seeds* 5, in the bottom of the calyx.

SPEC. CHAR. Leaflets wedgeſhaped, three-toothed.

SYN. Sibbaldia procumbens. *Linn. Sp. Pl.* 406. *Sm. Fl. Brit.* 345. *Hudſ.* 136. *With.* 326. *Hull.* 68. *Lightf.* 175. *Dickſ. H. Sicc. faſc.* 10. 12.

Pentaphylloides pumila, foliis ternis ad extremitates trifidis. *Raii Syn.* 256.

THE ſummits of the highland mountains abound with the *Sibbaldia procumbens*, which thrives there in a mouldering micaceous ſoil full as luxuriantly as in any garden, and may be found in flower throughout July. We have gathered it on Ben Lomond. The preſent ſpecimen was ſent by Mr. Mackay.

Roots woody, tufted and perennial. Stems ſhort, ſpreading and procumbent, except ſometimes at their flowering extremities, leafy, round, downy. Leaves on long footſtalks with a pair of oblong acute ſtipulæ, like thoſe of a roſe, united to their baſe; leaflets three, on ſhort partial ſtalks, wedgeſhaped, terminating in 3 large teeth, but otherwiſe entire, a little hairy. Flowers in a ſort of ſmall leafy corymbus, minute and inconſpicuous, with a hairy calyx cut into 10 lobes alternately larger and ſmaller, and bearing 5 little oblong yellow petals and as many ſtamina, placed on a thickened rim, as is proper to the roſaceous order to which this genus belongs. Germen of 5, rarely 10, little round embryos, each bearing a ſmall lateral ſtyle. The ſeeds are dry, ſmall and roundiſh.*

Sir Robert Sibbald firſt deſcribed and figured this plant in his *Scotia Illuſtrata* publiſhed in 1684, and it therefore deſervedly bears his name.

135.

DROSERA rotundifolia.

Round-leaved Sun-dew.

PENTANDRIA Hexagynia.

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Capſ.* ſuperior of 1 cell, with 3 valves. *Seeds* many.

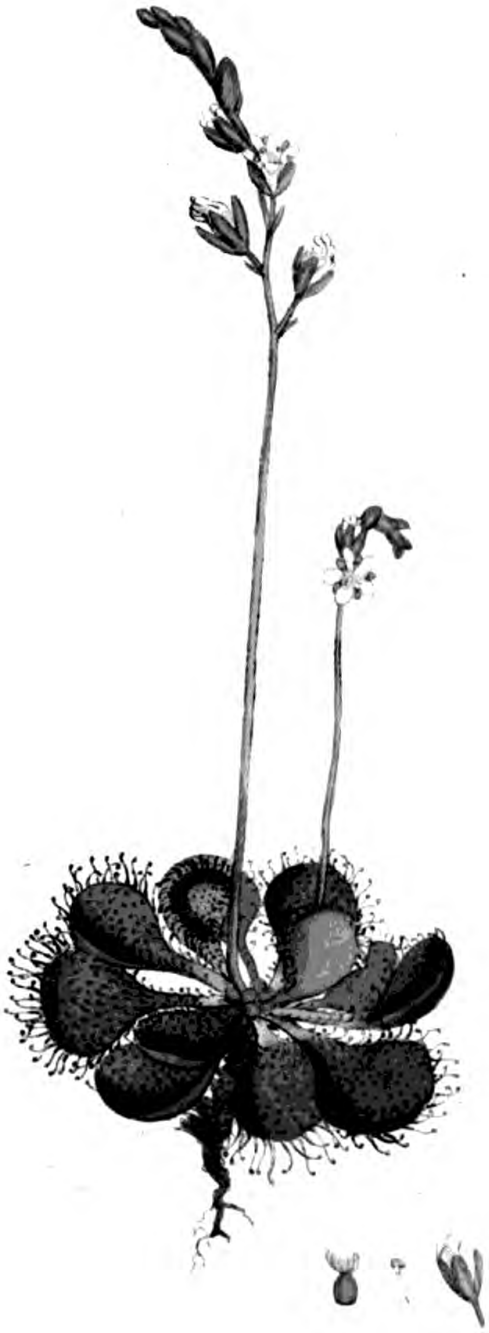
SPEC. CHAR. Leaves orbicular, radical, depreſſed. Footſtalks hairy. Stalk bearing a ſimple racemus.

SYN. Droſera rotundifolia. *Linn. Sp. Pl.* 402. *Sm. Fl. Brit.* 346. *Hudſ.* 135. *With.* 323. *Hull.* 67. *Relh.* 131. *Sibth.* 106. *Abbot.* 71.

Ros ſolis folio rotund *Raii Syn.* 356.

EVERY *Droſera* hitherto diſcovered grows in boggy ſituations. Our Britiſh ſpecies are far from uncommon in very wet black ſpongy bogs, for the moſt part over a gravelly or ſandy ſoil. They flower in July and Auguſt, and are all, we believe, perennial.

The *rotundifolia* is perhaps the moſt common. Its root is black and fibrous. Leaves numerous, on hairy footſtalks, radical, depreſſed, and forming a ſort of ſtar on the ground or ſurrounding moſs, very conſpicuous by their mingled green and red colour, the latter of which chiefly reſides in the numerous glandular briſtles, each tipped with a clear viſcid globule, which ornament the margin and ſurface of the leaves, and which, by a degree of irritability lately obſerved by ſome naturaliſts, are thought to contract, and to impriſon inſects, like the Canadian *Dionæa*, a plant of the ſame Natural Order. This irritability, if it exiſts, is only to be detected in hot ſunny days, nor indeed do the flowers expand in any other weather. A few erect ſimple naked ſtalks riſe from the crown of the root, each bearing a ſimple *racemus*, or rather, perhaps, a ſpike, of white or bluſh-coloured flowers, with always 5 petals and as many ſtamina, and 3 pair of ſpreading recurved ſtyles. The parts of fructification have not been found to vary in number in this ſpecies. Sometimes the ſtalk is reported to be branched.



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DROSERA longifolia.

Long-leaved Sun-dew.

PENTANDRIA Hexagynia.

GEN. CHAR. *Cal.* 5-cleft. *Pet.* 5. *Capſ.* ſuperior, of 1 cell, with 3 valves. *Seeds* many.

SPEC. CHAR. Leaves obovate, radical, upright. Stalk bearing a ſimple racemus.

SYN. Droſera longifolia. *Linn. Sp. Pl.* 403. *Sm. Fl. Brit.* 347. *Hudſ.* 135. *With.* 324. *Hull.* 67. *Relh.* 132. *Abbot.* 72. *Dickſ. H. Sicc. faſc.* 14. 9. Ros ſolis folio oblongo. *Raii Syn.* 356.

THIS ſpecies is found in the ſame ſituations as the *D. rotundifolia*, though ſomewhat leſs frequently, and flowers at the ſame ſeaſon.

In root and general habit it altogether agrees with the former, differing chiefly in its leaves, which are not depreſſed, but nearly erect, ſtanding on long ſtalks, and their form is exactly obovate, not orbicular. For another mark of diſtinction we are obliged to Dr. Hull, (who has enriched his *Flora* with ſeveral good obſervations on the genus,) that the footſtalks of the leaves in the *rotundifolia* are hairy; in this and the *anglica* they are ſmooth, and we find this difference conſtant. The ſtyles of the *longifolia*, according to this author, vary from 6 to 8 full as often as in *D. anglica*. The petals and ſtamina alſo are frequently 6.

Cauleſcent varieties of this and the preceding have been found by the late Dr. Withering, whoſe ſpecimens are now before us, as well as by the preſent worthy botanical Profeſſor of Oxford. Dr. Hull mentions only the *longifolia* in ſuch a ſtate. We are perſuaded theſe are merely varieties, in which we are confirmed by the analogy of *Carduus*, *Carlina* and *Onopordum*, (ſome would add *Primula*,) in which ſpecies that are truly *acaules* become cauleſcent by luxuriant nouriſhment.

DROSERA anglica.

Great Sun-dew.

PENTANDRIA Hexagynia.

GEN. CHAR. *Cal.* 5-cleft. *Pet.* 5. *Capſ.* ſuperior, of 1 cell, with 3 valves. *Seeds* many.

SPEC. CHAR. Leaves oblong, obtuſe, radical, upright. Styles eight. Capſules with four valves.

SYN. Droſera anglica. *Hudſ.* 135. *Sm. Fl. Brit.* 347. *With.* 324. *Hull.* 68. *Abbot.* 72. *Dickſ. H. Sicc. faſc.* 2. 7.

Rorella longifolia maxima. *Raii Syn.* 356.

LINNÆUS has not noticed this ſpecies. It is by far leſs frequently met with than either of the others. We have gathered it in Norfolk, and have received it from the Rev. Mr. Abbot, as well as from Dr. Hull. It is moſt nearly related to the *D. longifolia*, but is generally twice as large. Dr. Hull thinks it not more frequently furniſhed with 8 ſtyles than that ſpecies. We have however found 8 petals and as many ſtamina in ſome plants, a number exceeding any obſerved in the *longifolia*. The more elongated form of the capſule mentioned by Dr. Hull promiſes to be a good diſcriminative mark, but we have not had an opportunity of obſerving it. The baſe of the flower-ſtalk being curved or ſtraight, ſeems to us variable.

The moſt certain character of this ſpecies ſeems to conſiſt in the oblong and almoſt linear form of its leaves, which we have not found to vary. Our opinion is confirmed by the obſervations of the Rev. Mr. Forby, who finds both theſe plants in the ſame ſituation, and even entangled together, but always retaining this difference in their foliage, however the parts of fructification may vary in number.

Some theoretical doctors of old, ſeeing the perpetual moiſture on the Sun-dew even in the greateſt heat, thought it would be a good medicine for conſumptive patients, whoſe moiſture they ſuppoſed to be drying up. But good old Gerarde confeſſes that thoſe who took this new reſtorative died the ſooneſt; which is no wonder, conſidering its acrid nature.

April 1st 1811 Published by Jas Sowerby London.

MYOSURUS minimus.

Mouse-tail.

PENTANDRIA Polygynia.

GEN. CHAR. *Cal.* of 5 leaves, each with a spur at the base. *Petals* 5, with a tubular claw. *Seeds* numerous.

SPEC. CHAR. . . . .

SYN. Myosurus minimus. *Linn. Sp. Pl.* 407. *Huds.* 136. *With.* 326. *Relh.* 132. *Sibth.* 107. *Curt. Lond. fasc.* 4. *t.* 26.

Myosuros. *Raii Syn.* 251.

A NATIVE of gravelly corn-fields, not unfrequent about London. It has also been observed in several parts of Norfolk, always flowering in the early part of summer; after which it soon sheds its seeds, and withers away.

Root annual, fibrous, very small. Herb smooth, varying extremely in size according to the luxuriance of the soil. Stem none. Leaves numerous, nearly upright, a little fleshy, of a linear somewhat spatulate form, entire, pale green. Stalks several, upright, longer than the leaves, simple, round, a little thicker upwards, each bearing a small, erect, pale yellowish flower. Calyx of 5 elliptical concave leaves, spurred at the base below their insertion. Petals 5, scarcely longer than the calyx, pale, slender, consisting of a honey-bearing tubular claw, and a short spreading lanceolate border. Stamina generally about 5, but in luxuriant plants much more numerous, the length of the corolla, with vertical linear antheræ. Pistillum conical, longer than the stamina, composed of a conical receptacle, covered with a great number (even 2 or 3 hundred) of ovate, striated germens, each furnished with its own minute sessile stigma. This plant affords a remarkable and rare instance of a very great disproportion of males to females in the same flower, and yet the latter are generally all prolific. The seeds are justly described by Linnæus as naked; for the part which Jussieu denominates a capsule, is surely nothing more than a thickened inseparable coat, as in *Ranunculus*, to which the *Myosurus* very nearly belongs; there being the closest affinity between the nectariferous pore in the claw of the petals in that genus, and the tubular claw of *Myosurus*.

1797 Published by J. Sowerby London.