A

SUPPLEMENT

TO

MEDICAL BOTANY,

OR,

PART THE SECOND:

CONTAINING

PLATES WITH DESCRIPTIONS

OF MOST OF THE

PRINCIPAL MEDICINAL PLANTS

NOT INCLUDED IN THE MATERIA MEDICA

OF THE

COLLEGIATE PHARMACOPŒIAS OF LONDON AND EDINBURGH:

ACCOMPANIED WITH

A

CIRCUMSTANTIAL DETAIL OF THEIR MEDICINAL EEFECTS,

AND OF THE

DISEASES IN WHICH THEY HAVE BEEN SUCCESSFULLY EMPLOYED.

By WILLIAM WOODVILLE, M.D. F.L.S.

Physician to the Small Pox and Inoculation Hospitals.

Scire potestates herbarum usumque medendi
Maluit, et mutas agitare inglorius artes.

VIRG. ÆN. l. XII.

LONDON:

PRINTED AND SOLD FOR THE AUTHOR,

BY

James Phillips,

GEORGE YARD, LOMBARD STREET.

M.DCC.XCIV.

It will be readily perceived that the plan, upon which this volume was begun, has been considerably contracted. To illustrate all the natural orders with an adequate number of medicinal plants, which was my original intention, would, as I found upon more fully investigating the subject, lead to the introduction of a great many vegetables, which, in a medical point of view, might be thought unimportant, or entirely useless;—Influenced by this consideration, and at the same time finding that the more immediate duties of my profession afforded me but little leisure for prosecuting a work of this kind, I did not hesitate to reduce this part to the narrow compass in which it is here presented.—This volume is therefore rather to be regarded as a Supplement to the three former, than as a Second Part; and more especially as containing an appendix to the Materia Medica, and the following articles admitted into one or both of the collegiate pharmacopæias, viz. agaricus, angelica sylvestris, aristolochia tenuis, cajeputa, cascarilla, cursuta, lactuca virosa, santalum rubrum, & citrinum, scolopendrium, and winteranus cortex.

On taking a final leave of Medical Botany, *which owes much of the merit it may possess rather to the execution of the artist than to the compiler, I am happy in the opportunity of acknowledging, with gratitude, the favourable manner in which it has been received by the public in general, and by medical gentlemen in particular.*

A QUESTION has been aſked, to which it may be neceſſary here briefly to reply, viz. Why we have not figured all the Plants enumerated in the Catalogues of the Firſt Part of MEDICAL BOTANY, but have omitted Hordium *diſtichon*, Triticum *hybernum*, Avena *ſativa*, Piper *Cubeba*, Santalum *album*, Amyris *Elemifera*, Myroxylon *peruiferum*, Stalagmitis *Cambogioides*, Boletus *igniarius*, Cocos *butyracea*.

THE three firſt, barley, wheat, and oat, are ſo well known, and have ſo little claim to a place in Medical Botany, that it was ſuppoſed a majority of our readers would deem their figures ſuperfluous. Beſides, their ſeeds are unqueſtionably to be conſidered as articles of food rather than of medicine. Of Piper *Cubeba*, Santalum *album*, Myroxylon *peruiferum*, Stalagmitis *Cambogioides*, and Cocos *butyracea*, we have not been able to procure proper ſpecimens, nor are there any perfect figures of them publiihed; ſo that the plates of theſe were unavoidably omitted. Reſpecting the Amyris *Elemifera* Lin. we have to obſerve, that after fully inveſtigating the authorities for admitting this to be the tree which produces the officinal drug Elemi, we are convinced of their inſufficiency, and that the name Elemifera is here erroneouſly applied; and therefore, though we obtained a good ſpecimen of this ſpecies, we had no plate of it engraved.

BOLETUS igniarius, or agaricus chirurgorum, is not properly a medicinal article, nor is it of much importance in ſurgery; and

 it

it may be further obſerved, that it is a fungous ſubſtance, varying in its appearance, and not eaſily admitting of being characteriſtically repreſented by a drawing; it is preſumed therefore that our work ſuſtains no diſadvantage by its omiſſion.

THE Author takes this opportunity of obſerving, that all the figures which he has publiſhed, were taken either from dried or recent ſpecimens, excepting in very few inſtances, where he was under the neceſſity of reſorting to the plates of others; this, however, was never done but upon unqueſtionably good authorities.—And whenever future diſcoveries ſhall ſhew that he has been miſled, he will not fail to acknowledge it: the only inſtance that has yet occurred to him is the following of Caſcarilla.

CLUTIA ELUTERIA. CASCARILLA CLUTIA.

SYNONYMA. Caſcarilla. *Pharm. Lond. & Edinb.* Elutheria et Eluteria, Auctorum. Clutia *(Elutheria)* foliis cordato-lanceolatis. *Mill. Dict. Amæn. Acad. vol.* 5. *p.* 411. *Hort. Cliff.* 486. *Flor. Zeyl.* 366.

Claſs Dioecia. *Ord.* Pentandria. *Lin. Gen. Plant.* 1140.

Gen. Ch. *MASC.* *Cal.* 5-phyllus. *Cor.* 5-petala.
FEM. *Cal.* 5-phyllus. *Cor.* 5-petala. *Styli* 3. *Caps.* 3-locularis. *Sem.* 1.

Sp. Ch. C. foliis cordato-lanceolatis.

THIS

Clutia Eluteria s. Cascarilla.

Published by D. Wendrich, June 1. 1794.

THIS ſmall tree grows ſeveral feet in height, and ſends off numerous branches, eſpecially towards the top: the bark which covers the branches is brown and ſmooth, but that of the trunk is externally more white and rough: the leaves are entire, lanceolate, ſomewhat cordate, and elongated towards the apex, which is blunt, on the upper ſide of a bright green, on the under ſide paler, and placed alternately upon long footſtalks. Both the male and female flowers ſtand in ſpikes, and are compoſed of a calyx divided into five ovate leafits, encloſing an equal number of ſmall whitiſh petals, and within theſe the nectaria are placed. The female flower produces a roundiſh germen, ſupporting three bifid ſpreading ſtyles, terminated by obtuſe ſtigmata: the capſule is globular, rough, marked with ſix furrows, and divided into three cells, containing a ſolitary oval ſhining ſeed.

We have been deſirous of introducing the annexed plate into early notice, in order to determine what was left doubtful in the former part of this work, where the Croton Caſcarilla is figured, on the authority of Linnæus;[a] though at the ſame time we obſerved that it did not appear "ſufficiently aſcertained" whether or no it furniſhed the officinal Caſcarilla. This point however we can now confidently decide in the negative.

Among other circumſtances, which tended to involve the parental ſource of Caſcarilla long in uncertainty, was the aſſertion of ſome authors,[b] that it was a native of the Spaniſh Main, and was thence imported into Europe; thus founding a preſumption, that the Caſcarilla and Elutheria Barks were different, and that the latter only was the produce of the Bahama Iſlands. But this aſſertion we have diſcovered to be contrary to fact; for, upon inquiry, we do not find that this drug was ever exported from Spaniſh America, but that the Bahamas have conſtantly ſupplied the European markets with Caſcarilla bark, a parcel of which was ſent here from one of thoſe Iſlands, along with ſpecimens of the tree producing it; of which the figure here given is a faithful repreſentation, as may be ſeen by comparing it with the original in the herbarium of Sir Joſeph Banks.

[a] The bark of this plant, according to Dr. Wright, has none of the ſenſible qualities of Caſcarilla.

[b] See Boulduc. *Hiſt. de l'Ac. des Sc.* 1719. *p.* 14. Spielmann *M. M. p.* 249.

But

But it will be neceſſary to obſerve here, that Dr. Wright, in his account of the medicinal plants growing in Jamaica,[c] gives the name Croton Elutheria to a tree, the bark of which he ſays " is the ſame as the Caſcarilla or Elutheria of the ſhops:" it ſeems therefore probable, that different ſpecies of Clutia may produce bark of the ſame, or of ſimilar qualities to that of Caſcarilla,as we find ſeveral inſtances in which the ſame drug is produced by various ſpecies of plants.

That the tree here called by Dr. Wright Croton does not belong to this genus, but it is evidently a Clutia, appears by the dioicous ſpecimens of it ſent by him to the Preſident of the Royal Society; a part of which, with the male flowers, is delineated in the preſent plate, in order that the Jamaica and Bahama Caſcarilla may be compared together; the former being diſtinguiſhed by figure I.

The Clutia Eluteria ſeems to have been firſt introduced into Britain by Mr. P. Miller; but it is not to be found in the King's garden at Kew, nor have we ſeen it cultivated any where near the Metropolis. According to a late German author,[d] it grows abundantly in the Bahama Iſlands, where the bark, which forms a principal export, is ſold at the very low rate of 10*s.* 6*d.* ℔ ⊕.

Reſpecting the medical hiſtory, qualities, and uſes of Caſcarilla bark, we have nothing to add to what is given in the firſt volume of Medical Botany.

[c] *Med. Journ. vol.* 8. *p.* 3.

[d] Vide J. D. Schæpf. *Reiſe durch einige der mittlern und ſudlichen vereinigten nordameritaniſchen ſtaaten nac oſt-Florida undden Bahama Inſeln.*

MEDICAL BOTANY,

Pulmonaria officinalis.

Published by D.r Woodville Jan.y 1. 1794.

MEDICAL BOTANY—PART SECOND.

ASPERIFOLIÆ.

[*The following ſix Plants, as belonging to this natural order, are publiſhed together; an arrangement which we ſhall conſtantly adopt in future, as far as the limited number of plants coming within our province will conveniently admit.*]

PULMONARIA OFFICINALIS. COMMON LUNGWORT.

SYNONYMA. Pulmonaria, ſeu Pulmonaria maculoſa. *Pharm. Geoff. M. M. Dale*, 135. *Lewis*, 525. *Edinb. New Diſp.* 261. *Bergius*, 83. *Murray, vol.* 2. *p.* 97. *Gerard, Emac.* 808. *Raii Syn.* 226. *Park. Parad.* 448. Symphytum maculoſum ſive pulmonaria latifolia. *Bauh. Pin.* 259. Pulmonaria officinalis. *Hudſ. Flor. Ang.* 81. *With. Bot. Arr.* 193. *Sowerby, Eng. Bot.* 118. *t.* 118. *Flor. Dan.* 482.

Pentandria Monogynia. *Lin. Gen. Plant.* 184.

Gen. Ch. *Cor.* infundibulif. fauce pervia, *Cal.* priſmatico 5-gonus.

Sp. Ch. P. foliis radicalibus ovato-cordatis ſcabris.

THE root is perennial: the ſtems ſimple, erect, angular, rough, and frequently riſe above a foot in height: the ſtem leaves are ſome-

 what

what ovate, or rather lanceolate, broad pointed, hairy, alternate, and on the upper ſide ſpeckled with whitiſh maculæ: the radical leaves are broader, and more elongated towards the baſe: the flowers appear in terminal faſciculi, and are reddiſh and purple: the calyx is a priſm of five ſides, rough, and divided at the mouth into five ſhort pointed ſegments: the corolla is funnel-ſhaped, conſiſting of a cylindrical tube, open at the mouth, and a ſpreading limb, cut at the margin into five obtuſe ſegments: the five filaments are very ſhort, placed at the mouth of the tube, and furniſhed with ſimple yellow antheræ: the germen is quadrifid, ſupporting a tapering ſtyle of the length of the calyx, and crowned with a blunt notched ſtigma: the ſeeds are four, roundiſh, and lodged at the baſe of the calyx.

This plant is rarely found to grow wild in England, but is very commonly cultivated in gardens, where its leaves become broader, and approach more to a cordate ſhape, as appears by the detached leaves repreſented in the plate. The figure itſelf, however, exhibits a ſpecimen of the ſpontaneous growth of this country.

The leaves, which are the part medicinally uſed, have no peculiar ſmell, but in their recent ſtate manifeſt a ſlightly aſtringent and mucilaginous taſte; hence it ſeems not wholly without foundation, that they have been ſuppoſed to be demulcent and pectoral.

They have been recommended in hemoptoës, tickling coughs, and catarrhal defluctions upon the lungs. The name Pulmonaria, however, ſeems to have ariſen rather from the ſpeckled appearance of theſe leaves, reſembling that of the lungs, than from any intrinſic quality which experience diſcovered to be uſeful in pulmonary complaints.

LITHOSPERMUM

Lithospermum officinale

Published by W. Woodville, June 1, 1794.

LITHOSPERMUM OFFICINALE. COMMON GROMWELL.

SYNONYMA. Lithoſpermum, ſeu Milium Solis. *Pharm.* Vide *Geoffroy. Tract. de M. M. vol.* 3. *p.* 742. *Dale. Pharmacol.* 139. *Alſton. M. M. vol. ii.* 361. *Lewis, M. M.* 399. *Edinb. New Diſpenſ.* 223. *Murray, App. Med. vol. ii. p.* 98. *Ray, Synop.* 228. Lithoſpermum majus erectum. *Bauh. Pin.* 258. L. minus. *Gerard, Emac.* 609. L. vulgare minus. *Park. Theat.* 432. L. officinale. *Hudſon Flor. Ang.* 79. *With. Bot. Arr.* 189. *Relh. Fl. Cant.* 76. *Sowerby. Eng. Bot.* 134. *t.* 134.

Pentandria Monogynia. *Lin. Gen. Plant.* 181.

Gen. Ch. *Cor.* infundib. fauce perforata, nuda. *Cal.* 5-partitus.

Sp. Ch. L. ſeminibus lævibus, corollis vix calycem ſuperantibus, foliis lanceolatis.

THE root is perennial, ſending forth a long ſtalk, which is erect, ſtrong, round, branched, and beſet with ſhort briſtly hairs: the leaves are alternate, ſeſſile, lanceolate, entire, pointed, hairy beneath, above cloſely ſtudded with minute cartilaginous tubercles, which render them rough to the touch: the flowers are ſmall, of a pale yellow colour, and are placed irregularly near the ends of the branches, which are recurved, but become ſtraight on the maturation of the ſeeds: the calyx is divided into five ſegments, which are tapering, narrow, pointed, and permanent: the corolla is monopetalous, funnel-ſhaped, mouth naked and nearly cloſed; the tube is ſhort, cylindrical; the limb is divided at the border into five blunt teeth: the filaments are ſhort, and furniſhed with oblong antheræ: the germen is quadrifid: ſtyle filiform, of the length of the tube, terminated by a blunt cloven ſtigma: the ſeeds are four, but ſeldom more than two arrive at perfection, when they are egg-ſhaped, ſhining, extremely hard, and of a grey or yellowiſh hue.

It

It is found in various parts of England, affecting a dry gravelly ſoil. Its flowers appear in May and June.

This plant, according to Haller,[a] poſſeſſes narcotic powers; but its ſeeds only have been employed for medical purpoſes. Theſe ſeeds, which we have deſcribed above, by their exquiſitely poliſhed ſurface, and ſtony hardneſs, (from which latter circumſtance the name Lithoſpermum is taken,) have long excited the attention of naturaliſts. Pliny conſidered them as the greateſt curioſity in the vegetable world: "Nec quicquam inter herbas majore quidem miraculo aſpexi. Tantus eſt decor, velut aurificum arte alternis inter folia candicantibus margaritis: tam exquiſita difficultas lapidis ex herba naſcentis."[b]

Grew relates, that the hard cruſtaceous part effervefces with acids;[c] but the experiment has been ſince tried by others without effect: the internal ſubſtance of the ſeed is ſofter, and ſeems to conſiſt of a farinaceous, ſweet, and oily matter, becoming rancid on being long kept.

Formerly, when medicine was under the dominion of ſuperſtition and abſurd conceits, a notion prevailed, that nature pointed out remedies for different complaints, by bearing a certain reſemblance and ſign of the diſeaſe or part affected: hence the ſtony appearance of theſe ſeeds was deemed a certain indication of their efficacy in calculous and gravelly diſorders. And though modern writers on the Materia Medica give no credit to the lithontriptic character of ſem. milii ſolis, yet they generally aſcribe to them a diuretic quality, a power of cleanſing the urinary paſſages, and of obviating ſtranguary, eſpecially when employed in the form of an emulſion;[d] but probably the free uſe of any bland diluent would anſwer theſe purpoſes equally well.

The abſorbent virtue attributed to theſe ſeeds is wholly without foundation, being irreconcileable to the principles of chemiſtry.

[a] *Hiſt. Stirp. Helv. n.* 595.

[b] *Plin. lib.* 27. *c.* 11. [c] *Grew. Mixt. corp. p.* 22.

[d] Lotum movere hiſce quidem credo, et in ſtranguria efficere aliquid poſſe, quum ob nucleum emulſivæ naturæ ſit. *Murray, l. c.* See others alſo of this opinion.

ANCHUSA

Anchusa officinalis

Published by W. Woodville, June 1, 1794.

ANCHUSA OFFICINALIS. OFFICINAL BUGLOSS, Or ALKANET.

SYNONYMA. Bugloſſum. *Pharm. Park. Parad.* 249. *Geoff. v. iii.* 226. *Dale.* 136. *Alſton. vol. ii.* 91. *Lewis.* 167. *Bergius.* 79. *Murray. vol. ii.* 98. *New Edinb. Diſpenſ.* 152. Bugloſſum anguſtifolium majus. *Bauh. Pin.* 256. Bugloſſa vulgaris. *Ger. Emac.* 798. *Flor. Dan. t.* 572.

Pentandria Monogynia. *Lin. Gen. Plant.* 182.

Gen. Ch. *Cor.* infundibulif. fauce clauſa fornicibus. *Sem.* baſi inſculpta.

Sp. Ch. A. foliis lanceolatis ſtrigoſis, ſpicis ſecundis imbricatis, calycibus quinquepartitis. *Hort. Kew.*

ROOT perennial, large, tapering. Stem about two feet high, erect, angular, ſtrong, rough, hairy branched towards the top. Leaves alternate, narrow, lanceolate, pointed, rough, hairy, edges eroded, and ſomewhat undulated. Flowers purple, produced in corymbi, both lateral and terminal. Calyx rough, cut into five acute erect ſegments. Corolla funnel-ſhaped, tube long, cylindrical: limb divided into five obtuſe ſegments: mouth of the tube cloſed by five nectarious ſcales. Filaments five, ſhort, placed in the upper part of the tube, and furniſhed with ſimple browniſh antheræ. Germen quadrifid: ſtyle nearly as long as the tube, tapering, and terminated by an emarginated ſtigma. Seeds four, hollowed out at the baſe.—The flowers appear in ſucceſſion from June till October.

It is a native of the Continent of Europe, but not indigenous to this Iſland. Mr. P. Miller cultivated it here in 1748, and we now find it in moſt gardens where variety of herbaceous ornamental plants is an object of attention.

The root, leaves, and flowers of this plant have all been admitted of the Materia Medica, though it would ſeem without any juſt claim to that diſtinction. To the taſte they diſcover no other quality than that of being ſweetiſh and glutinous, excepting only a ſlight bitterneſs of the flowers.

Bergius aſcribes an aperient and refrigerant virtue to this plant, and ſtates its uſe to be in "ardor viſcerum," and alſo in hypochondriaſis. However, as all the common oloraceous plants are cooling and laxative, theſe properties are no peculiar recommendation of Bugloſs.

The utility of this herb in melancholic and hypochondriacal diſorders has been aſſerted ever ſince the time of Dioſcorides;* and when it is conſidered that wine was generally the vehicle in which the plant was adminiſtered, we are not ſurpriſed that it ſo long mantained the character of exhilerating the ſpirits. In this way likewiſe may be explained why the flowers of Bugloſs have been reckoned one of the *four cordial flowers.*

* ——— "quo vino inditum animi voluptatis augere, hilaritatemque offerre creditur," &c. *Dioſ. l. iv. c.* 128.

SYMPHYTUM OFFICINALE. COMMON COMFREY.

SYNONYMA. Conſolida. Pharm. Geoff. vol. iii. 353. *Dale.* 138. *Alſton. vol. i.* 525. *Lewis.* 248. *Edin. New Diſp.* 176. *Bergius.* 85. *Murray. vol. ii.* 92. *Cullen. v. ii.* 413. Symphytum. *Hall. Stirp. Helv. No.* 600. *Scop. Flor. Carn. No.* 195. Symphytum Conſolida major. *Bauh. Pin.* 259. *Gerard. Emac.* 806. Symphytum majus vulgare. *Park. Theat.* 523. *Raii. Synop.* 230. S. officinale. *Hudſ. Ang. p.* 81. *With. Bot. Arr.* 195. *Curt. Flor. Lond. Flor. Dan.* 664.

Pentandria

Symphytum officinale.

Published by D. Wendelle Junr. 1. 1794.

Pentandria Monogynia. *Lin. Gen. Plant.* 185.

Gen. Ch. Cor. limbus tubulato-ventricosus: fauce clausa radiis subulatis.

Sp. Ch. S. foliis ovato-lanceolatis decurrentibus.

ROOT perennial, large, branched, on the outside blackish, within whitish. Stalk about two feet high, erect, branched, somewhat angular, covered with short rigid hairs. Leaves large alternate, those below standing on footstalks; those above sessile, decurrent, ovate, pointed, entire, rough, and fringed with short hairs. Flowers tubular, of a yellowish white, placed in spikes, which turn inwards in a spiral manner. Calyx divided into five segments, which are rough, erect, and pointed. Corolla funnel-shaped, consisting of a short thick tube, and a limb slightly cut at the edges into five short obtuse reflexed segments; the mouth of the tube closed by five narrow pointed nectarious teeth. Filaments five, short, terminated by yellow erect bifid antheræ. Germen divided into four parts. Style tapering, longer than the corolla, and furnished with a small blunt stigma. Seeds four, angular, blackish, shining, and lodged in the bottom of the calyx. It is a common British plant about ditches, flowering from June till September.

A supposed vulnerary efficacy, for which this plant was formerly in great repute, and to which it seems to owe its name, will now be considered as nothing in its recommendation.

However, the root of Comfrey, though rarely used, promises all the advantages to be derived from that of marshmallow; for according to Lewis "the dried root, boiled in water, renders a large proportion of the fluid slimy; and the decoctions inspissated, yield a strong flavourless mucilage, similar to that obtained from althæa, but somewhat stronger-bodied, or more tenacious, and in somewhat larger quantity, amounting to about three-fourths the weight of the Comfrey." Hence it is inferred, that the consolida is rather superior to the althæa in the several intentions for which that root is employed; the mucilaginous matter being in both roots the only medicinal principle. Therefore, as the root of this plant is easily obtained, it

may

may be conveniently ſubſtituted for that of althæa in all the compoſitions in which the latter is officinally directed, or extemporaneouſly, for the general purpoſes of an emollient and demulcent. This opinion ſeems alſo to have the authority of Dr. Cullen, who ſays, " while mucilaginous matters are retained in our lifts, I do not perceive why both the Britiſh Colleges have entirely omitted the Symphytum. It may be of ſervice as alleged in diarrhoeas and dyſenteries."

CYNOGLOSSUM OFFICINALE. COMMON HOUNDS-TONGUE.

SYNONYMA. Cynogloſſum. *Pharm. Geoff. v.* 3. 394. *Dale.* 135. *Alſton. v.* 1. 428. *Lewis.* 268. *Ed. New Diſpenſ.* 181. *Bergius.* 82. *Murray. V.* 2. 102. *Cullen. v. ii.* 413. Cynogloſſum majus vulgare. *Bauh. Pin.* 257. *Ger. Emac.* 804. *Park. Theat.* 511. *Raii. Hiſt.* 489. *Synop.* 226. Cynogloſſum foliis ellipticis lanceolatis, ſericeis, caule folioſo. *Hall. Hiſt. Stirp. Helv. n.* 587. C. officinale. *Scop. Flor. Carn.* 191. *Hudſon. Fl. Ang.* 80. *With. Bot. Arr.* 192. *Curt. Fl. Lond.*

Pentandria Monogynia. *Lin. Gen. Pl.* 183.

Gen. Ch. Cor. infundibuliformis, fauce clauſa fornicibus. *Semina* depreſſa, interiore tantum latere ſtylo affixa.

Sp. Ch. C. ſtaminibus corolla brevioribus, foliis lato-lanceolatis baſi attenuatis tormentoſis ſeſſilibus, laciniis calycinis oblongis. *Hort. Kew.*

ROOT perennial, long, tapering, blackiſh on the outſide, whitiſh within. Stalk two or three feet in height, erect, grooved, villous, leafy, branched. Radical leaves large, on long footſtalks, exceeding a foot

Cynoglossum officinale.

Published by W. Mandale, Feb. 1. 1791.

a foot in length, ovate, pointed, covered with a ſhort ſhining greyiſh down; cauline leaves ſeſſile, numerous, lanceolate, broad towards the baſe. Flowers of a dull red, changing to a bluiſh colour, and placed on ſlender peduncles, in ſpikes. Segments of the calyx five, deeply divided. Corolla monopetalous, funnel-ſhaped: tube cylindrical, thick, half the length of the calyx: limb concave, cut into five roundiſh ſegments: nectary conſiſting of five purple ſcales, cloſing together, and inſerted at the mouth of the tube. Filaments five, very ſhort. Antheræ oblong, green. Germens four, ſmooth, of a yellowiſh green colour, ſupporting a tapering ſtyle, terminated by a blunt emarginated ſtigma. Capſules four, roundiſh, rough. Seeds ſolitary, ovate, gibbous, pointed, ſmooth.

It is common in this country, and uſually found in waſte grounds, or ſides of roads, and flowers in June and July.

Hounds-tongue, thus named from the ſhape of the leaves, like moſt of the other plants of this natural order, is ſucculent, and ſomewhat mucilaginous, eſpecially its root, which, for medicinal purpoſes, has been generally prefered to the leaves. The taſte of the plant is bitteriſh, and its ſmell is diſagreeable, reſembling that of mice. Cynogloſſum is reported to be deleterious, and the dingy lurid appearance of its leaves, peculiar to poiſonous herbs of the narcotic kind, ſeems to favour the opinion; nor are facts wanting to confirm it. A relation is given of a whole family at Oxford, who, by miſtake, ate the boiled leaves of this plant for thoſe of comfrey: ſoon afterwards they were all ſeized with vomiting, ſtupor, ſleepineſs, &c. which ſymptoms continued alternately for almoſt forty hours, and with ſuch ſeverity, that one perſon died.[a] But what degree of narcotic power Hounds-tongue poſſeſſes, or to what quantity it may be ſafely employed as a medicine, experience has not yet determined. The pil. de cynogloſſo of the Wirtemburg and Daniſh Pharmacopœias contain ſo ſmall a proportion of this root, that their common uſe cannot be conſidered as affording ſufficient proof of its innocence. Ray however informs us, that Dr. Hulſe frequently

[a] Vide Moriſon *Hiſt. Oxon. iii. p.* 450. Haller alſo, (*Hiſt. Stirp. Helv. n.* 587.) cites a ſimilar inſtance, mentioned by Dr. Blair; but the plant uſed does not appear to have been the cynogloſſum. See Blair's *Miſcellaneous Obſervations, p.* 55.

 prefcribed

prescribed a decoction of the roots of Hounds-tongue for internal use, and at the same time applied the roots as a poultice to scrophulous tumours with safety and advantage.[b] Hence it appears that this part of the plant at least cannot be considered as an active poison.

The leaves and roots of Cynoglossum have been employed with the same intention, and principally with a view to their mucilaginous, astringent, and sedative qualities, as in coughs, hæmoptysis, diarrhœas, dysenteries, &c.[c] Their external use is also recommended in ill-conditioned ulcers and tumours.

[b] Vide *l. c.*
[c] Vide Schreckius *Diss. de Cynoglosso.*

BORAGO OFFICINALIS. COMMON BORAGE.

SYNONYMA. Borago. *Pharm. Geoff. v.* 3. 201. *Dale.* 136. *Alston. v. ii.* 91. *Lewis.* 158. *Ed. New Dispens.* 150. *Bergius.* 86. *Murray. v. ii.* 95. Buglossum latifolium, Borrago. *Bauh. Pin.* 256. Borrago hortensis. *Gerard. Emac.* 797. Borago floribus cæruleis & albis. *Raii. Hist.* 493. *Synop.* 228. B. officinalis. *Hudson. Flor. Ang.* 82. *With. Bot. Arr.* 196. *Ic. Hort. Roman. T.* 2. *t.* 20. 21. *Eng. Bot.* 36.

Pentandria Monogynia. *Lin. Gen. Pl.* 188.

Gen. Ch. *Cor.* rotata: fauce radiis clausa.

Sp. Ch. B. foliis omnibus alternis, calycibus patentibus.

ROOT divided, fibrous, and in Britain scarcely more than biennial. Stalks branched, round, succulent, hairy, erect, rising to the height of two feet. Leaves ovate, alternate, undulated, hairy, ciliated, irregularly defined at the edges, and at their bases embracing the stem. Flowers

Borago officinalis

Published by Dr Woodville. Feb.y 1. 1794.

Flowers large, blue, placed in loose panicles, upon rough peduncles turning downwards. Calyx divided into five narrow ovate rough permanent segments. Corolla monopetalous, wheel-shaped: tube short: limb deeply cut into five spreading pointed divisions, which are longer than the calyx; faux or mouth of the tube closed by five prominences, which are blunt, and notched at the end. Filaments five, tapering, converging: antheræ oblong, approaching, and fixed to the middle and inner side of the filaments. Germens four: style filiform, longer than the stamina, and furnished with a simple stigma: the calyx supplies the office of capsule, containing the seeds, which are four, of an irregular roundish shape.

The Borage, although commonly found growing about rubbish, and in waste grounds, is however not originally a native of this Island, but has now been long enough naturalized here to be considered as a British plant. Its flowers, which appear from June till September, are of a beautiful blue colour: hence this plant, in many gardens, is cultivated for ornament, as well as for its popular use as an ingredient in that grateful summer-beverage, known by the name of Cool Tankard.

This plant appears to be the buglossum of the ancients;[a] and its reputed medicinal character seems also to correspond most exactly with that of our common buglos, or anchusa officinalis L. The flowers of both have been termed cordial, and hence, formerly, much recommended in melancholia, and other affections of the nervous system;[b] and as these flowers were found to possess neither warmth, pungency, nor fragrance, their cordial efficacy has been ascribed to a saline quality, which, by abating inordinate heat, was said to be peculiarly grateful and refreshing. But though the herbaceous substance of Borage has been discovered to contain a saline matter, there is no evidence of its existence in the flowers; so that the advantages supposed to be derived by a vinous infusion of these, like those of buglos, can only be imputed to the menstruum.

[a] The following lines therefore apply to this plant:

Vinum potatum quo fit macerata bugloſſa,
Mærorem cerebri dicunt auferre periti.
Fertur convivas decoctio reddere lætos.——*Schol Salern. c.* 21.

[b] Hence the trite remark, "Borago, gaudia semper ago."

The

The leaves of Borage manifeſt nothing remarkable either to the ſmell or to the taſte; but they abound with a juice, which, in its expreſſed ſtate, is ſaid to be ſaltiſh, and which, on being boiled a ſufficient time, forms cryſtals of nitre:[c] ſimilar cryſtals have alſo been obtained from a decoction of the leaves;[d] and hence it may be inferred, that this plant has a peculiar claim to the poſſeſſion of refrigerating and aperient virtues. Dr. Withering obſerves, that the young and tender leaves are good in ſallads, or as a pot-herb.

Cordia Myxa, whoſe fruit is of the drupaceous or plumb kind, and was formerly known in the ſhops by the name *ſebeſten*, is the only remaining medicinal plant placed by botaniſts in this natural order which we have not figured. The leaves of the Myxa, however, unlike thoſe of the other ſpecies of Cordia, are ſmooth and naked; it therefore cannot properly belong to the aſperifoliæ; and as ſebeſtens ſeem to have no medical advantages over many other dried fruits, we ſhall, without further apology, proceed to the order Perſonatæ.

[c] Marcgraf *in Mem. de L'Acad. des Sc. de Berlin.* 1747. *p.* 79.
[d] Boulduc *Mem. de L'Acad. des Sc. de Paris*, 1734. *p.* 101.

PERSONATÆ.

Verbena officinalis

Published by D. Wendelle. Feb. 1. 1791.

PERSONATÆ.

VERBENA OFFICINALIS. COMMON VERVAIN.

SYNONYMA. Verbena. *Pharm. Dale.* 148. *Alſton. vol. ii.* 242. *Lewis.* 660. *Murray. ii.* 209. Verbena communis cæruleo flore. *Bauh. Pin.* 269. V. mas ſeu recta et vulgaris. *Park. Theat.* 674. V. communis. *Gerard. Emac.* 718. *Raii. Hiſt.* 535. *Synop.* 236. V. officinalis. *Hudſ. Flor. Ang.* 505. *With. Bot. Arr.* 595. *Flor. Dan.* 628. *Flor. Lond. i.* 5.

Didynamia Gymnoſpermia.*

Gen. Ch. *Cor.* infundib. ſubæqualis, curva. *Calycis* unico dente truncato. *Semina* 2. s. 4. nuda. *Stam.* 2. s. 4.

Sp. Ch. V. tetrandra, ſpicis filiformibus paniculatis, foliis multifido-laciniatis, caule ſolitario.

ROOT perennial, tapering, fibrous, of a yellowiſh colour. Stalks above a foot high, erect, tapering, obtuſely quadrangular, beſet with ſhort prickles: the branches are oppoſite, ſlender, and ſimple. Leaves oppoſite, ſeſſile, pinnatifid, or deeply and irregularly indented. Flowers numerous, purpliſh, placed in long ſlender ſpikes. Calyx

* Linnæus places the Verbena in the claſs diandria, dividing the different ſpecies into the *diandrous* and *tetrandrous*; but our Engliſh ſpecies, included among the latter, has alſo the characters of the fourteenth claſs, and is arranged accordingly by Britiſh botaniſts.

ſmall, tubular, five-toothed, angular, permanent. Corolla monopetalous, unequal: tube cylindrical, towards the top bent inward; limb expanding, divided into five ſegments, which are rounded, and nearly equal. Filaments extremely ſhort: antheræ commonly four, two of which are placed above the others. Germen ſquare: ſtyle thread-ſhaped, terminated by an obtuſe ſtigma. Seeds uſually four, oblong, obtuſe, on the inſide flattiſh, and white, and on the outſide brown, convex, grooved, and reticulated.

Mr. Curtis obſerves that "the Vervain may be conſidered as a kind of domeſtic plant, not confined to any particular ſoil, but growing by the road ſides, pretty univerſally at the entrance into towns and villages"; and Miller declares that it is never found more than a quarter of a mile from a houſe: hence it has been alſo called Simpler's Joy.

Ancient writers have diſtinguiſhed this plant by the names Verbena, Verbenaca, and Periſterium.[a] It is deſtitute of odour, and to the taſte manifeſts but a ſlight degree of bitterneſs and aſtringency.

In former times the Verbena ſeems to have been held ſacred, and was employed in celebrating the ſacrificial rites;[b] and with a view to this more than the natural power of the plant, it was worn ſuſpended about the neck as an amulet. This practice, thus founded in ſuperſtition, was, however, in proceſs of time, adopted in medicine; and therefore to obtain its virtues more effectually, the Vervain was directed to be bruiſed before it was appended to the neck; and of its good effects thus uſed for inveterate headaches, Foreſtus relates a remarkable inſtance.[c] In ſtill later times it has been employed in the way of cataplaſm, by which we are told the moſt ſevere and obſtinate caſes

[a] Vide *Plin. l.* 25. *c.* 9.

[b] It appears to be the ἱερὰ βοτάνη, or περιστερεωνα of Dioſcorides. Alſton ſays, Verbena quaſi herbena, becauſe all herbs uſed in ſacred rites were ſo called. Hence Virgil, Verbenaſque adole pingues & maſcula thura. *Ecl. viii. v.* 65. And Terence in Andria, Ex ara hac ſume Verbenas tibi. But Virgil alſo uſes the word to denote a particular plant. Vide *Georg. iv.* 131.

[c] *Oper. Omn. L.* 9. *Obſ.* 52.

of

Veronica officinalis

Published by Dr. Woodville Feb. 1. 1794.

of cephalalgia have been cured; for which we have the authorities of Etmuller, Hartmann, and more especially De Haen.[d]

Notwithstanding these testimonies in favour of Vervain, it has deservedly fallen into disuse in Britain; nor has the pamphlet of Mr. Morley,[e] written professedly to recommend its use in scrophulous affections, had the effect of restoring its medical character. This gentleman directs the root of Vervain to be tied with a *yard of white sattin ribband* round the neck,[e] where it is to remain till the patient recovers. He also has recourse to infusions and ointments prepared from the leaves of the plant; and occasionally calls in aid the most active medicines of the Materia Medica.

[d] *De Haen Rat. Med. P.* 6. *p.* 304.

[e] See his Essay on Schrophula.

VERONICA OFFICINALIS. OFFICINAL VERONICA; Or, MALE SPEEDWELL.

SYNONYMA. Veronica. *Pharm. Dale.* 186. *Alston. ii.* 244. *Bergius.* 17. *Murray. ii.* 205. *Rutty.* 535. *Lewis.* 660. *Edinb. New Dispens.* 301. Veronica mas supina et vulgatissima. *Bauh. Pin.* 246. V. vera et major. *Gerard. Emac.* 626. V. mas vulgaris supina. *Park. Theat.* 550. *Raii. Hist.* 851. *Synop.* 281. *Hall. n.* 540. V. officinalis. *Hudson. Ang.* 4. *Lightf. Scot.* 27. *Withering. Bot. Arr.* 9. *Flor. Dan.* 248. *Flor. Lond. n.* 33.

Diandria Monogynia. *Lin. Gen. Plant.* 25.

Gen. Ch. *Cor.* Limbo 4-partito: lacinia infima angustiore. *Capsula* bilocularis.

Sp. Ch.

Sp. Ch. V. ſpicis lateralibus pedunculatis, foliis oppoſitis, caule procumbente.

ROOT perennial, ſmall, fibrous. Stalks about ſix inches in length, procumbent, creeping, firm, hairy, or woolly. Leaves oblong, obtuſe, ſlightly ſerrated, or toothed, rough, placed in pairs, ſeſſile, or on very ſhort footſtalks. Flowers purpliſh, in ſpikes, either terminal or axillary, each flower ſtanding upon a ſhort peduncle, ſupported by a linear bracteal leaf. Calyx divided into four ſegments, which are ovate, obtuſe, and beſet with glandular hairs. Corolla monopetalous, wheel-ſhaped, conſiſting of a ſhort tube, terminated by a ſpreading limb, of a pale blue colour, and divided into four unequal portions. Filaments two, white, furniſhed with blue heart-ſhaped antheræ. Germen roundiſh, depreſſed, viſcous, and at the baſe glandular. Style filiform, purpliſh, and furniſhed with a ſtigma, of a truncated appearance. Capſule irregularly heart-ſhaped, divided into two valves, containing numerous ſmall brown compreſſed ſeeds.

It is not unfrequent on dry barren grounds, and heaths, as that of Hampſtead, flowering in June and July.

" The leaves of Veronica have a weak not diſagreeable ſmell, which in drying is diſſipated, and which they give over in diſtillation with water, but without yielding any ſeparable oil. To the taſte they are bitteriſh, and roughiſh: an extract made from them by rectified ſpirit is moderately bitter and aſtringent." [a]

This plant, a century ago, was much recommended, eſpecially in Germany, as a ſubſtitute for tea; and the French ſtill diſtinguiſh it by the name of *Thé d'Europe*. But though this European tea has a roughneſs and a ſlight bitterneſs, which is not ungrateful to the taſte, yet theſe qualities are ſo unlike thoſe which we diſcover in the foreign tea, that the extremely high price of the latter, at that time, muſt have been the chief reaſon for cauſing a contrary opinion, and of reconciling Europeans to a ſubſtitute ſo imperfect as the leaves of Veronica.

[a] *Lewis. l. c.*

Euphrasia officinalis.

Published by Dr Woodville. Feb 1. 1791.

As a medicine alſo this plant has had a conſiderable ſhare of fame. Francus[b] and Hoffmann[c] aſcribe to it numerous virtues, the former calling it *Polychreſta herba Veronica*. The diſorders in which it has been eſteemed moſt uſeful are thoſe of the lungs, as coughs, aſthmas, conſumptions, &c. in which it is ſaid not only to prove expectorant, but by its extraordinary vulnerary power to heal internal ulcers.

Its uſe has likewiſe been recommended by ſeveral authors in various other complaints requiring medicines of very different characters; but if we judge of the utility of the Veronica by its ſenſible qualities, it is only to be recognized as an aſtringent; and not ſufficiently powerful as ſuch to produce any conſiderable effect, and is therefore now diſregarded by medical practitioners.

[b] Vide *Polychreſta herba Veronica*, publiſhed in 1690.

[c] Vide Fr. Hoffmann in *Diſſ. de infuſi Veronicæ efficacia præferenda herbæ Theæ.*— Alſo *Haller. l. c.*

EUPHRASIA OFFICINALIS. COMMON EYEBRIGHT.

SYNONYMA. Euphraſia. *Pharm. Geoff. iii.* 454. *Dale.* 196. *Alſton. ii.* 138. *Rutty.* 189. *Bergius.* 543. *Murray. ii.* 186. *Lewis.* 292. *Cullen. i.* 42. *Edinb. New Diſp.* 187. Euphraſia officinarum. *Bauh. Pin.* 233. *Ger. Emac.* 663. *Park. Theat.* 1329. *Raii Hiſt.* 771. *Synop.* 284. Euphraſia officinalis. *Hudſ. Ang.* 268. *With. Bot. Arr.* 635. *Curt. Flor. Lond.* 335.

Didynamia Angioſpermia. *Lin. Gen. Plant.* 741.

Gen. Ch. *Cor.* 4-fidus cylindricus. *Caps.* 2-locularis, ovato-oblonga. *Antheræ* inferiores altero lobo baſi ſpinoſæ.

Sp. Ch. E. foliis ovatis lineatis argute dentatis,

ROOT annual, ſlender, divided, furniſhed with numerous minute fibres: ſtalk about three or four inches high, branched, round, ſomewhat hoary, reddiſh. Leaves ſeſſile, oppoſite, ovate, deeply ſerrated, concave, rather hairy, and on the upper ſide marked with linear impreſſions. Flowers without peduncles, in racemi, ariſing at the alæ of the leaves. Calyx pentagonal, permanent, divided at the brim into four ſegments, which are unequal, of a dingy purpliſh colour, and beſet with ſmall glands. Corolla monopetalous, bilabiated, white: tube cylindrical, crooked, ſomewhat hairy, at the mouth yellowiſh: limb ſeparated into two lips: upper lip erect, bifid, toothed, ſtreaked with three purple lines: lower lip largeſt, divided into three emarginated lobes, of which thoſe placed laterally are painted with purple ſtreaks, and that in the middle tinged with yellow. Filaments four, tapering, purpliſh. Antheræ brown, bilobed, bearded with a few white hairs at the bottom. Germen egg-ſhaped, hairy. Style filiform, downy. Stigma blunt, fringed with minute glands. Capſule egg-ſhaped, notched at the end, divided into two cells, containing ſeveral whitiſh ſtriated ſeeds.

It is common on barren meadows, heaths, and paſtures, producing its flowers from July till September.

Eyebright, without any ſenſible odour, is ſomewhat bitteriſh and aſtringent, communicating a black colour to a ſolution of ferrum vitriolatum. It derives its name from its reputed efficacy in various diſorders of the eyes, for which it was uſed both externally[a] and internally, and has long[b] been ſo much celebrated as to be conſidered almoſt in the character of a ſpecific, the "*verum oculorum ſolamen.*"— But as there cannot poſſibly be a general remedy for all diſeaſes of the eyes, the abſurd and indiſcriminate recommendation of Euphraſia as ſuch, muſt receive but little credit from thoſe who practice medicine on rational principles. It muſt be acknowledged however, that ſome authors have ſtated peculiar complaints of the eyes, in which the uſe

[a] The uſual way of employing it as an external application was by mixing its juice with wine, and then adding a ſmall quantity of honey.

[b] It is mentioned in this character by Gordon, (*Lilium Medicinæ. Fol.* 146. *ed.* 1305) Alſo by Arnoldus de Villa Nova, Sylvaticus, and others.

of

of this plant was thought more remarkably evident; and, judging by these, we should say, that eyes weakened by a long continued exertion, and those that are dim and watery, as in a senile state, are the cases in which Euphrasia promises most advantage; nor are old people to despair, for according to Hildanus[c] and Lanzonus[d] several, at the age of seventy and eighty years, were recovered almost from entire blindness.

But though the great reputation which Eyebright formerly supported for several ages, must have induced some practitioners of later days to have tried its opthalmic power; yet we do not find a single instance of its efficacy recorded in modern times. How far this remark ought to invalidate the positive testimonies in its favour, we leave others to determine.[e]

The Icelanders are said to be in the constant habit of using the juice of Euphrasia in all affections of the eyes.[f]

In common with many other plants, the Euphrasia has also been recommended in the jaundice.

[c] *V. cent. epist. n.* 59.

[d] *Oper. Omn. ed.* 1738. *Tom.* 2. *p.* 394.

The character of Euphrasia was not unknown to Milton:

——— " then purged with euphrasy and rue,
The visual nerve, for he had much to see."

[e] Bergius says, " Ego ex propria experientia nihil certi de hac herba adhuc scio, sed tamen non spernenda arbitror testimonia priscorum."

[f] *Eggert Olafsen. Reise, &c. vol. i. p.* 433.

ANTIRRHINUM

ANTIRRHINUM LINARIA. COMMON TOAD-FLAX.

SYNONYMA. Linaria. *Pharm. Geoff. iii.* 730. *Dale.* 193. *Rutty.* 289. *Bergius.* 545. *Murray. ii.* 183. *Lewis.* 395. *Ed. New Dispens.* 222. Linaria vulgaris lutea, flore majore. *Bauh. Pin.* 212. Linaria lutea vulgaris. *Gerard, Emac.* 550. L. vulgaris nostras. *Park.* 458. *Raii. Hist.* 752. *Synop.* 281. Antirrhinum Linaria. *Hudf. Ang.* 238. *Withering. Bot. Arr.* 648. *Curt. Flor. Lond. i.* 5.

Didynamia Angiospermia. *Lin. Gen. Plant.* 750.

Gen. Ch. Cal. 5-phyllus. *Cor.* basis deorsum prominens, nectarifera. *Caps.* 2-locularis.

Sp. Ch. A. foliis lanceolato-linearibus confertis, caule erecto, spicis terminalibus sessilibus, floribus imbricatis.

ROOT perennial, woody, crooked, creeping, white, fibrous. Stalks round, erect, simple, tapering, smooth, from one to two feet in height. Leaves nearly linear, pointed, smooth, entire, thickly scattered over the stalk. Flowers large, yellow, and partly orange, crouded over each other in a terminal spike. Calyx divided into five small oval segments, of which the uppermost is the largest. Corolla monopetalous, bilabiated, or ringent, yellow, consisting of a short tube, and a limb composed of two lips; upper lip bifid, having its segments bending down, afterwards turned back, and closing together; lower lip divided into three segments, of which that in the middle is the least; the mouth is closed by a palate, which is bifid, prominent, villous at the bottom, and of a saffron colour. Filaments four, white, two long and two short, glandular at the base: antheræ yellow, bifid, joined in pairs. Germen round. Style filiform. Stigma clubbed. Capsule of a cylindrical form, opening by several divisions at the top,

Antirrhinum Linaria

Published by B.T. Woodville, March 1, 1790.

top, divided into two cells, containing numerous black irregularly ſhaped ſeeds.

It is frequent in barren paſtures, hedges, and ſides of roads, flowering from July till September.

The leaves of Linaria have a bitteriſh and ſomewhat ſaline taſte, and when rubbed betwixt the fingers yield a faint ſmell, reſembling that of elder. They are reported to be diuretic and cathartic, and in both characters to act ſo powerfully as to give names to this plant expreſſive of theſe qualities.[a] Hence they have been recommended internally in dropſies, and other diſorders requiring copious evacuations. The Linaria has alſo been uſed as a reſolvent in jaundice, and in ſuch diſeaſes as have been ſuppoſed to proceed from viſceral obſtructions. But the plant has been chiefly valued for its effects when externally applied, eſpecially in hemorrhoidal affections;[b] for which both the leaves and flowers have been employed in the various forms of ointment, fomentation, and cataplaſm.*

An infuſion of the flowers is ſaid to be very efficacious in cutaneous diſorders; and Hammerin[c] gives an inſtance in which theſe flowers, with thoſe of verbaſcum, uſed as tea, cured an exanthematous diſorder, which had reſiſted various other remedies tried during the courſe of three years.

An Unguentum de linaria is to be found in the Wirtemburg, Brandenburg, and Daniſh Pharmacopœias.[d]

[a] Viz. *Urinalis*, *Harnkraut*, *Kreutterbuch*.

[b] Vide *Horſt. Obſ. et epiſt. med. lib.* 4. *obſ.* 50. *Sim. Paulli. Bot.* 415. *Cheſnau. Obſ.* 360.

* See *Chomel. Pl. Uſuell. Tom.* 3. 34. *Geaff. l. c.*

[c] Cited by *Murr. l. c.*

[d] The inventor of this ointment, for the piles, was a Dr. Wolph, who at that time was phyſician to the Landgrave of Heſſe, by whom the doctor was continually interrogated to diſcover the compoſition of this ointment; but Wolph obſtinately refuſed, till the prince promiſed to give him a fat ox annually for the diſcovery. Hence to the following verſe, which was made to diſtinguiſh the Linaria from the Eſula, viz.

"Eſula lacteſcit, ſine lacte Linaria creſcit,"

The Hereditary Marſhal of Heſſe, added:

"Eſula nil nobis, ſed dat Linaria taurum." *Horſt. l. c. a Murr. cit.*

Linnæus (Flor. Suec.) ſays this plant is uſed as a poiſon for flies.

VITEX AGNUS CASTUS. CHASTE-TREE.

SYNONYMA. Agnus caſtus. *Pharm. Geoff. iii.* 44. *Dale.* 297. *Alſton. ii.* 321. *Bergius.* 550. *Murray. ii.* 195. *Lewis.* 27. *Edinb. New Diſpenſ.* 119. Vitex foliis anguſtioribus cannabis modo diſpoſitis. *Bauh. Pin.* 475. Vitex ſive Agnus caſtus. *Ger. Emac.* 1387. Vitex folio anguſto. *Park. Theat.* 1437. Agnus folio non ſerrato. *Raii. Hiſt.* 1696.

Didynamia Angioſpermia. *Lin. Gen. Plant.* 790.

Gen. Ch. *Cal.* 5-dentatus. *Cor.* limbus 6-fidus. *Bacca* 4-ſperma.

Sp. Ch. V. foliis digitatis ſerratis, ſpicis verticillatis.

THIS ſmall tree or ſhrub divides into numerous branches; is covered with a greyiſh bark, and the young ſhoots are clothed with a downy ſubſtance. Leaves digitated, oppoſite, on long footſtalks, ſeparating into five or ſeven portions, which are long, narrow, elliptical, entire, pointed, on the upper ſide ſmooth, under ſide downy. Flowers purpliſh, on ſhort peduncles, in whorled ſpikes. Calyx ſhort, tubular, downy: margin irregular, toothed. Corolla monopetalous, ringent: tube ſhort, cylindrical: limb divided into four ſegments, of which the undermoſt is the largeſt. Filaments four, two long, and two ſhort, of the length of the tube, capillary. Antheræ veſatile. Germen roundiſh. Style filiform, about the length of the tube. Stigmata two, tapering, ſpreading. Capſule a roundiſh berry, divided into four parts, each containing a ſolitary ovate ſeed, of a blackiſh grey colour.

The

Vitex. Agnus castus

Published by Dr. Woodville March 1 1791.

The Chaste-tree is a native of Sicily, affecting humid and shady places. It has long been introduced into the gardens of this country,* where it is found to brave the cold of winter in the open ground.

Miller says that he has seen it in full flower in October, when it made a beautiful appearance; but we have not been fortunate enough to meet with it in that state, and therefore had the annexed figure taken from a dried specimen in the Herbarium of Sir Joseph Banks.

The seeds, which have long been medicinally used, and were formerly received as an article of the Materia Medica, have a pungent acrid taste, and an unpleasant aromatic odour. These, from the days of Dioscorides, have been highly celebrated for possessing a power of subduing the inclination natural between the sexes. Hence the name Agnus castus;[a] and from being therefore thought more especially useful to those leading a monastic life, these seeds have been called Piper monachorum, or Monk's pepper. The seeds of the Chaste-tree are, however, so far from being thought antiaphrodisiac, that writers of later times have ascribed to them an opposite quality; and their aromatic pungency seems to favour this opinion, and also that of Bergius, who states them to be carminative and emmenagogue. We are aware that Lewis says, "the seeds in substance, as met with in the shops, have little taste, and scarcely any smell;" but Dr. J. E. Smith, who examined them in their recent state, observes, that "they have an unpleasant aromatic smell:"[b] it is therefore probable that on being long kept they lose much of their sensible qualities, nor is this to be regretted from any medical advantage they seem to promise in our Island; and the plant has been figured here rather with a view to illustrate this natural order, by its variety, than to serve the purposes of medicine.

* It was cultivated here in 1570. *Lobel. Adverf.* 423.

[a] Agnos, (i. e. castus) nominatur, quod, in Thosmophoriis (i. e. sacris Cereris) matronæ castitatem custodientes, eo ad strata uterentur: Lygos vero (quasi vimen) propter virgarum ipsius firmitatem. *Dioscor. l.* 1. *c.* 135. *Gal. Sim. vi. p.* 40. *and cited by Alston. l. c.*

[b] Sketch of a tour on the Continent. *vol. i. p.* 223.

Having,

Having, in the firſt part of Medical Botany, publiſhed a plate of Gratiola and Beccabunga, we have now figured all the medicinal plants claſſed by Profeſſor Murray in the order Perſonatæ, except Scrophularia nodoſa and aquatica, Avicennia tomentoſa, or Anacardium orientale, and Acanthus mollis. The two firſt are both natives of this country, and known by the names of Great or knobby-rooted Figwort, and Water Figwort. They have an ungrateful ſmell, reſembling that of the Linaria, and like it alſo have been chiefly employed, with a view to their ſedative and antiphlogiſtic effects, as an application to hemorrhoidal tumours. The ſynonyma of the Avicennia tomentoſa *Syſt. Veg.* are Bontia germinans *Sp. pl.* Bontia foliis ſubtus tomentoſis. *Jacq. Sel. Stirp. Amer.* Anacardium orientale *off.* The Malacca Bean.

Jacquin, however, contrary to the opinion of Linnæus, thinks that this tree, which is a native of both Indies, does not produce the Malacca bean, but that the parent of this fruit is ſtill undeſcribed. It may alſo be added, that the medicinal qualities of Anacardium orientale are not yet ſufficiently aſcertained.

Acanthus mollis, Smooth Acanthus, or Bear's-breech, or Branca urſina, of the foreign pharmacopœias, is a native of Italy and Sicily; and, as containing a mucilaginous matter, has been recommended in the character of an emollient and demulcent; but we do not find any inſtances of its efficacy recorded.

SOLANACEÆ.

Strychnos Nux vomica

Published by Dr. Woodville, March 1, 1791.

SOLANACEÆ,
SEU LURIDÆ.

STRYCHNOS NUX VOMICA. VOMIC NUT, Or, POISON-NUT.

SYNONYMA. Nux vomica. *Pharm. Dale.* 327. *Alſton. ii.* 37. *Lewis.* 453. *Bergius.* 144. *Murray. i.* 477. *Edinb. New Diſ.* 239. Nux vomica officinarum. *Bauh. Pin.* 511. *Ger. Emac.* 1546. *Park. Theat.* 1601. *Raii. Hiſt.* 1661. & 1814. Caniram. *Hort. Malab. T. i. t.* 37. *p.* 67. *Burm. Theſ. Zeyl.* 171.

Pentandria Monogynia. *Lin. Gen. Plant.* 253.

Gen. Ch. *Cor.* 5-fida. *Bacca* 1-locularis, cortice lignoſo.

Sp. Ch. S. foliis ovatis, caule inermi.

THIS large tree ſends off numerous ſtrong branches, covered with dark grey ſmooth bark. The young branches have ſwelled articulations, or a knotty jointed appearance, ſcandent, and covered with bark of a dark green colour. The leaves ariſe at the joints in pairs, upon ſhort footſtalks, and are ovate, broad, pointed, entire, with three or five ribs, and on the upper ſide of a ſhining green colour. The flowers terminate the branches in a kind of faſciculated umbel. Calyx ſmall, tubular, five toothed. Corolla monopetalous: tube cylindrical, or rather inflated at the middle, very long, and at the limb cut into five ſmall ovate ſegments. Filaments five, ſhort, fixed at the mouth of the tube, and furniſhed with ſimple antheræ. Germen roundiſh, ſupporting a ſimple ſtyle, terminated by a blunt ſtigma. Fruit a round ſmooth large pulpy berry, externally yellow, and containing round depreſſed ſeeds, covered with downy radiated hairs.

It is a native of the Eaſt Indies, and, according to the Hortus Kewenſis was introduced into England in 1778, by Dr. Patrick Ruſſell; but it has not yet been cultivated with ſucceſs in this country. The plate prefixed is taken from a very perfect ſpecimen in the poſſeſſion of Sir Joſeph Banks, to whoſe liberality every branch of natural knowledge is much indebted, and this work for ſome of its moſt valuable figures.

The *nux vomica*, *lignum colubrinum*, and *faba ſancti Ignatii*, have been long known in the Materia Medica as narcotic poiſons, brought from the Eaſt Indies, while the vegetables which produced them were unknown, or at leaſt not botanically aſcertained.

By the judicious diſcrimination of Linnæus, the Nux vomica was found to be the fruit of the tree deſcribed and figured in the Hortus Malabaricus under the name Caniram, now called Strychnos. To this genus alſo, but upon evidence leſs concluſive, he likewiſe juſtly referred the colubrinum.[a] But the faba ſancti Ignatii he merely conjectured might belong to this family, as appears by the query *an Strychni ſpecies?*[b] which ſubſequent diſcoveries have enabled us to decide in the negative; for in the Supp. plant. it conſtitutes the new genus Ignatia, which Loureiro has lately confirmed, changing the ſpecific name amara to that of philippinica.[c] The Strychnos and Ignatia are however nearly allied, and both rank under the order Solanaceæ.

We have thought it neceſſary to inquire thus far into the botanical origin of theſe productions, from finding that by medical writers they are generally treated of under the ſame head, and in a very confuſed and indiſcriminate manner.

The ſeed of the fruit or berry of this tree is the officinal nux vomica: it is flat, round, about an inch broad, and near a quarter of an inch thick, with a prominence in the middle on both ſides, of a grey colour, covered with a kind of woolly matter, and internally hard and tough like horn; to the taſte it is extremely bitter, but has no remarkable ſmell. It conſiſts chiefly of a gummy matter, which is moderately bitter; the reſinous part is very inconſiderable in quan-

[a] Contendunt Indiæ Botanici hanc a S. Nuce vomica non eſſe diverſam. *Supp. Plant.* 149. [b] Vide *Mat. Med. Lin.* [c] *Flor. Cochin.* 125.

tity,

tity, but intenſely bitter; hence rectified ſpirit has been conſidered its beſt menſtruum.[d]

Nux vomica is reckoned amongſt the moſt powerful poiſons of the narcotic kind, eſpecially to brute animals, nor are inſtances wanting of its deleterious effects upon the human ſpecies. It proves fatal to dogs in a very ſhort time, as appears by various authorities.[e] Hillefeld and others found that it alſo poiſoned hares, foxes, wolves, cats, rabbits, and even ſome birds, as crows and ducks;[f] and Loureiro relates that a horſe died in four hours after taking a dram of the ſeed in an half-roaſted ſtate. The effects of this baneful drug upon different animals, and even upon thoſe of the ſame ſpecies, appear to be rather uncertain, and not always in proportion to the quantity of the poiſon given.[g] With ſome animals it produces its effects almoſt inſtantaneouſly; with others not till after ſeveral hours, when laborious reſpiration, followed by torpor, tremblings, coma, and convulſions, uſually precede the fatal ſpaſms, or tetanus, with which this drug commonly extinguiſhes life.

From four caſes related of its mortal effects upon human ſubjects,* we find the ſymptoms correſponded nearly with thoſe which we have here mentioned of brutes; and theſe, as well as the diſſections of dogs, killed by this poiſon, not ſhewing any injury done to the ſtomach, or inteſtines, prove that the Nux vomica acts immediately upon the nervous ſyſtem, and deſtroys life by the virulence of its narcotic influence.

The quantity of the ſeed neceſſary to produce this effect upon a ſtrong dog, as appears by experiments, need not be more than a ſcruple:[h] a rabbit was killed by five and a cat by four grains: and of the four perſons to whom we have alluded, and who unfortunately periſhed by this deleterious drug, one was a girl ten years of age, to whom 15 grains were exhibited at twice for the cure of an ague. Loſs,

[d] Junghanns *diſſ. de Nuce vom. &c.*

* Heyde. *Obſerv.* 50. *p.* 116. Seutter. *Diſſ. de Nuce vomica.* Courten. *Phil. Tranſ.* Wepfer. *De Cicuta.* 194. Brunner. ibd. Loſs. *Diſſ. de Nuce vomica.* Hillefeld. *Diſſ. Experim. circa venena.* Geſner. *Epiſt.* 33.—[f] *Hillef. l. c. Loſs. l. c. Brunner. l. c.*

[g] It was given in a large quantity to a ſwine without producing any effect. *Loſs. l. c.*

* Vide *Matthiol. in Dioſcor. Lib.* 4. *Fred. Hoffman. Phil. corp. human. morbos. P. ii. c. viii.* §. 8. *Seutter. l. c. Linn. & Tillæus de feb. intermit. cur. p.* 40. [h] Hillef.

however,

however, tells us that he took one or two grains of it in ſubſtance without diſcovering any bad effect; and that a friend of his ſwallowed a whole ſeed without injury.

In Britain, where phyſicians ſeem to obſerve the rule *ſaltem non nocere*, more ſtrictly than in many other countries, the Nux vomica has been rarely if ever employed as a medicine. On the Continent, however, and eſpecially in Germany, they have certainly been guided more by the axiom "what is incapable of doing much harm, is equally unable to do much good." The truth of this remark was lately very fully exemplified by the practice of Baron Stoerck; and is farther illuſtrated by the medicinal character given of Nux vomica, which, from the time of Geſner till that of a modern date, has been recommended by a ſucceſſion of authors, as an antidote to the plague,[i] as a febrifuge,[k] as a vermifuge,[l] and as a remedy in mania,[m] hypochondriaſis,[n] hyſteria,[o] rheumatiſm,[p] gout,[q] and canine madneſs.[r]

In Sweden it has of late years been ſucceſsfully uſed in dyſentery;[s] but Bergius,[t] who tried its effects in this diſeaſe, ſays, that it ſuppreſſed the flux for twelve hours, which afterwards returned again. A woman, who took a ſcruple of this drug night and morning, two ſucceſſive days, is ſaid to have been ſeized with convulſions and vertigo, notwithſtanding which the dyſenteric ſymptoms returned, and the diſorder was cured by other medicines; but a pain in the ſtomach, the effect of the Nux vomica, continued afterwards for a long time. Bergius therefore thinks it ſhould only be adminiſtered in the character of a tonic and anodyne in ſmall doſes, (from 5 to 10 grains) and not till after proper laxatives have been employed.

Loureiro recommends it as a valuable internal medicine in fluor albus, for which purpoſe he roaſts it till it becomes perfectly black and friable, which renders its medicinal uſe ſafe without impairing its efficacy.

[i] *Geſner. Epiſt. p.* 144. [k] *Wedel. Amœn. Mat. Med. p.* 337. *Buchner. Ph. Brand.* 61. *Hartman. De Cicuta. &c. p.* 17. [l] *Schulz. M. M.* 404. [m] *Albinus, cited by Alſton. l. c.* [n] *Buchner. l. c.* [o] *Ibid.* [p] *Wiel. Diſſ. de uſu Nuce vom. et vitr. alb. p.* 17. [q] *Ibib.* [r] *Schultz. l. c.* [s] By Hagſtrom, Odhelius, Dahlberg. [t] *L. c.*

Physalis Alkekengi

Published by Dr Woodville March 1. 1794.

PHYSALIS ALKEKENGI. COMMON WINTER CHERRY.

SYNONYMA. Alkekengi ſeu Halicacabum. *Pharm. Geoff. iii.* 55. *Dale.* 172. *Alſton. ii.* 254. *Rutty.* 13. *Cullen. ii.* 553. *Bergius.* 130. *Murray. i.* 463. *Lewis.* 30. *Ed. New Diſpenſ.* 120. *Gerard. Emac.* 342. *Ray. Hiſt.* 681. *Hall. Stirp. Helv. n.* 597. Solanum veſicarium. *Bauh. Pin.* 166. *Park. Theat.* 462.

Pentandria Monogynia. *Lin. Gen. Pl.* 250.

Gen. Ch. Cor. rotata. *Stam.* conniventia. *Bacca* intra calycem inflatum, bilocularis.

Sp. Ch. P. foliis geminis integris acutis, caule herbaceo inferne ſubramoſo.

THE root is perennial, long, creeping, fibrous. Stalks annual, round, crooked, ſmooth, ſimple, about a foot high. Leaves in pairs, upon footſtalks, of an irregular ſhape, undulated, pointed, veined, entire. Calyx perſiſtent, becoming a large orbicular inflated pentangular membrane incloſing the fruit; ſegments five, pointed. Corolla monopetalous, wheel-ſhaped; tube very ſhort; limb five-parted; ſegments five, broad, ſhort, pointed. Filaments five, ſmall, tapering, approaching together: antheræ erect: germen roundiſh: ſtyle filiform, longer than the filaments, terminated by a blunt ſtigma. Fruit a red round two-celled berry, incloſed in the calyx, and containing numerous flat kidney-ſhaped ſeeds.

This plant, which is a native of the South of Europe, is not unfrequently found in the gardens of this country, in which it has been cultivated ever ſince the days of Gerard, in 1597. It flowers from July till September, and ripens its fruit in October.

The berries of the Alkekengi, commonly called Winter Cherries, were well known to the ancients, and are characteriſtically deſcribed by Dioſcorides.*

They have an acidulous and not unpleaſant taſte, followed by a ſlight bitterneſs, which they are ſaid to derive in a conſiderable degree from the inveſting calyx, if not gathered with great care.[a]

Winter Cherries, though eſteemed to be detergent and aperient, have been chiefly recommended in the character of a diuretic in ſuppreſſions of urine, and for removing obſtructions occaſioned by gravel or mucous. With this intention, from ſix to twelve cherries, or an ounce of their expreſſed juice, have been the doſe uſually employed: there ſeems, however, to be no danger from a much larger quantity; for in ſome parts of Germany we are told that the country people eat them by handfuls with much benefit:[b] and in Spain and Switzerland[c] they frequently ſupply the place of other eatable fruits. Ray informs us, that a gouty perſon prevented the returns of the diſorder by taking eight of theſe cherries at each change of the moon:[d] we find alſo inſtances related of their good effects in dropſical and calculous complaints,[e] but at preſent they are wholly diſregarded.

* See Στρυχνος αλικακαβος.

[a] *Lewis. l. c.* [b] *C. Hoffman. De Medicam. off. L. 2. c. 217.*

[c] *Quer. Flor. Eſpann. Tom. ii. p. 224. Hall. l. c.*

[d] *L. c.*

[e] See *Löſeke, Arnold. de Villa Nova, & Liſter,* as cited by Murr. l. c.

Atropa Mandragora

Published by Dr Woodville, March 1, 1794.

ATROPA MANDRAGORA. MANDRAKE.

SYNONYMA. Mandragora. *Pharm. Geoff. iii.* 808. *Dale.* 170. *Alſton. i.* 478. *Rutty.* 306. *Bergius.* 126. *Murray. i.* 441. *Edinb. New Diſp.* 225. Mandragora fructu rotundo. *Bauh. Pin.* 169. *Ray. Hiſt.* 668. M. fructu majore. *Hiſt. Oxon. iii.* 531. Mandragoras mas. *Ger. Emac.* 352. *Park. Theat.* 343. Conf. *Miller's Figures, t.* 173.

Pentandria Monogynia. *Lin. Gen. Plant.* 249.

Gen. Ch. *Cor.* campanulata. *Stam.* diſtantia. *Bacca* globoſa, 2-locularis.

Sp. Ch. A. acaulis, ſcapis unifloris.

ROOT perennial, large, fuſiform, three or four feet long, externally brown, internally whitiſh. Leaves radical, ſeſſile, ovate, entire, veined, pointed, waved, ſmooth, at firſt erect, but on attaining their full ſize reſting upon the ground. There is no ſtem. Flowers whitiſh, each ſtanding upon a ſimple ſtalk, or ſcapus, which riſes from the crown of the root. Calyx quinquifid; ſegments pointed, perſiſtent. Corolla bell-ſhaped; tube very ſhort; limb divided into five acute ſpreading ſegments. Filaments five, tapering, hairy, inſerted at the baſe of the corolla, at the top diverging, and furniſhed with erect yellow antheræ. Germen round: ſtyle filiform, of the length of the filaments, and crowned with a round ſtigma. Fruit a large round two-celled berry, of an orange colour, containing many kidney-ſhaped ſeeds.

Its flowers appear in March and April.

This plant is a native of the ſouthern parts of Europe: it is not a ſtranger to our Engliſh gardens, in which it was cultivated by Turner in 1562.[a]

[a] *Hort. Kew.*

The

The ſuperſtitious and abſurd ſtories, formerly told of the Mandrake, would not now for a moment impoſe upon the moſt credulous and ignorant: the great reſemblance of ſome of the roots to the human form, the danger of taking them out of the ground, and their ſurpriſing effects, were all the invention of charlatanical knavery and impoſture.[b]

The roots of Mandrake vary both in form and colour, being either divided or entire, and externally brown or black; hence they have been diſtinguiſhed into male and female: the internal ſubſtance is white, and to the taſte ſomewhat viſcid, bitter, and nauſeous.

All the ancient writers on Mandrake repreſent this root to be an anodyne and ſoporific, but in large doſes it is ſaid to excite maniacal fury.[c] They employed it principally in continued watchings, and in thoſe more painful and obſtinate affections which were found to reſiſt leſs powerful medicines.[d]

It was alſo uſed in melancholia, convulſions, rheumatic pains, ſcrophulous tumours, &c. and to anſwer theſe purpoſes, either the expreſſed juice of the cortical part of the root, inſpiſſated, or a vinous decoction, or infuſion of the root, was directed.[e]

The leaves of Mandrake, boiled in milk, and uſed as a cataplaſm, are, according to Boerhaave, likewiſe to be conſidered as an uſeful application to indurated tumours.[f]

The root alſo, employed externally, from the later and leſs equivocal experience of Hoffberg,[g] was found extremely efficacious in diſcuſſing various glandular tumefactions. And in ſome caſes of gout this author tried its effects internally; from which we find that in a

[b] Ferunt has præſtantiſſimas radices ex urina ſuſpenſi hominis ſub patibulo morientis irrigatas tales efformari, & ideo adeo raras eſſe, eaſdem non ſine vitæ periculo manu effodi, quapropter eas primum circumfodiendas eſſe, ita ut minimum ex radice terra ſit conditum, deinde ab ea religandum canem, a quo poſtea fugiente radix extrahitur & ſequitur, ſed non adeo longe, quandoquidem ſtatim atque effoſſa eſt, canis moritur: nullum poſtea accipientibus amplius metum eſſe, imo ſumme proficuas eſſe, maleficia & infortunia quæcunque avertendo, & felicitates quaſcunque deſiderabiles afferendo. *Geoff. l. c.* See alſo Matthiol. and others.

[c] *Hippocr. de locis in hom. Ed. Foes. p.* 240. *Aretæus. Acut. curat. L. i. cap.* 6. *Cel. Aurel. L. i. c.* 4. [d] *Dioſcord. M. M. l.* 4. *c.* 76. [e] *Dioſ. l. c.*

[f] *Hort. Lugd. Bat. Tom.* 2. 512.

[g] *Vet. Acad. Handl.* 1763. *vol.* 24. *p.* 229. Pallas alſo mentions it as of frequent uſe for chronic diſeaſes in ſome parts of Ruſſia. See *Reiſe d. Ruſſ.* 1. *Th. p.* 49.

doſe

Solanum nigrum

Published by Dr. Woodville April 1. 1794.

dose of three grains it mitigated the pains, which afterwards returned. A similar effect was produced in other cases by a proportionate quantity of the root in the form of a tincture.

These experiments shew that the Mandrake acts as an opiate, which confirms the opinion entertained of it by the ancients; and hence it may be concluded, that, if not administered with great care, it may prove a deleterious and mortal narcotic. This caution is the more necessary, as the berries of Mandrake are said to have been eaten without producing any bad effect.[h]

[h] See *Ray. l. c.*

SOLANUM NIGRUM. GARDEN NIGHTSHADE.

SYNONYMA. Solanum. *Pharm. Dale.* 170. *Rutty.* 489. *Bergius.* 140. *Murray. v. i.* 427. *Lewis.* 608. Solanum officinarum. *Bauh. Pin.* 166. Solanum vulgare. *Park. Theat.* 346. Solanum hortense. *Gerard. Emac.* 339. *Ray. Syn.* 254. *Hist.* 672. Solanum nigrum. *Hall. Helv. n.* 579. *Hudson. Flor. Ang.* 78. *With. Bot. Arr.* 236. *Flor. Dan.* 460. *Curt. Flor. Lond. ii.* 16.

Pentandria Monogynia. *Lin. Gen. Pl.* 251.

Ess. Gen. Ch. *Cor.* rotata. *Antheræ* subcoalitæ, apice poro gemino dehiscentes. *Bacca* 2-locularis.

Sp. Ch. S. caule inermi herbaceo, fol. ovatis dentato-angulatis, racemis distichis nutantibus.

ROOT annual, branched, whitiſh, hung with numerous ſmall fibres. Stalk above a foot in height, alternately branched, formed into angles by a foliaceous membrane, ſwelled at the baſe of each branch, rough, and of a dingy purple colour. Leaves on footſtalks, alternate, irregularly ovate, ſinuated, or indentated, and clothed with ſoft hairs. Flowers in a ſpecies of umbel, upon a common lateral flower ſtalk. Calyx divided into five ſmall ſhort permanent ſegments. Corolla ſeparated into five ſegments, which are oval, pointed, ſpreading, and of a whitiſh colour. Filaments five, ſhort, downy, terminated by yellow oblong contiguous antheræ. Germen roundiſh, ſupporting a tapering downy ſtyle, furniſhed with a round ſtigma. Fruit a round two-celled berry, changing from a green to a black colour, and containing ſeveral kidney-ſhaped yellowiſh ſeeds.

It is common about rubbiſh, dunghills, and in neglected gardens, producing its flowers during all the ſummer months.

The ſmell of this plant is faint and diſagreeable; to the taſte it manifeſts no peculiar flavour, being ſimply herbaceous. It appears to poſſeſs the deleterious qualities of the other Nightſhades in a very conſiderable degree; even the odour of the plant is ſaid to be ſo powerfully narcotic as to cauſe ſleep.[a]

The berries are equally poiſonous with the leaves. Three children, upon eating them, were ſuddenly ſeized with cardialgia and delirium, accompanied with ſpaſms, and remarkable diſtortions of the limbs:[b] and to poultry they proved fatal in a ſhort time.[c]

The plant, or rather the leaves which were boiled and eaten by a mother and four children, produced ſwellings of the face and limbs, followed by inflammation and gangrene; but the huſband, who likewiſe ate of this vegetable at the ſame time, found no conſequent diſorder.[d]

Its deleterious effects appear ſtill more certain from the experiments

[a] *Boccone. Muſeo di fis. p. 284.* [b] Vide *Wepfer De cicut. p. 226.*

[c] *Haller. l. c.*

[d] *Rucker. Commerc. Noric. 1731. p. 372.*

of

of Messrs. Gataker and Bromfield; the latter asserts that in doses of one grain it had a mortal effect upon one of his patients.[e]

As this species of Nightshade is thought to be the Ἐτρυχνον κηπαῖον of Dioscorides,[f] its external use was resorted to in ancient times as a discutient and anodyne in various affections of the skin, tumefactions of the glands, ulcers, and disorders of the eyes; nor does the utility of this practice want the confirmation of later experience.[g]

Of its internal use we find very little evidence in the writings of the ancients; though, according to Cæsalpinus,[h] it appears not to have been wholly neglected.

In the year 1757, Mr. Gataker, surgeon to the Westminster Hospital, called the attention of the faculty to this plant, by a publication[i] recommending its internal use in old sores, scrophulous, and cancerous ulcers, cutaneous eruptions, and even in dropsies; all of which were much relieved, or completely cured, by the Solanum. It appears from his experiments, that one grain of the dried leaves of the plant, infused in an ounce of water, sometimes produced a considerable effect; that in the dose of two or three grains it seldom failed to evacuate the first passages, or to increase very sensibly either the discharge by the skin, or that by the kidneys, and it not unfrequently occasioned head-ach, giddiness, dimness, and drowsiness. Mr. Gataker's pamphlet was soon followed by another, published on the same subject by Mr.

[e] It ought to be remarked, however, that Dioscorides and Theophrastus mention it as an esculent plant; and Guerin (*de vegetat. venen. Alsatiæ.* 1766. *p.* 66.) relates that he drank an infusion of fifteen grains of the Solanum nigrum without suffering any consequent complaint; and that an epileptic patient took from half a dram to two drams of the expressed juice of the plant without perceiving any narcotic symptom to follow; nor with some soldiers, to whom a still larger dose was given, together with two drams of the juice of the berries, was any other effect produced than that of an increased quantity of urine. See *Murray. l. c.*

[f] *Mat. Med. Lib.* 4. *c.* 71.

[g] With the Arabians it is a common application to burns and ulcers. See *Forskal. Descript. plant. c.* 2. *p.* 46. Ray also speaks highly of its effects in indurations of the breast. See *Hist. l. c.*

[h] *De plant.* 213.

[i] *Observations on the internal use of Solanum.*

Bromfield,

Bromfield,[k] who declares that the cases in which he tried the Solanum were much aggravated by it, and therefore he contends that its use is prejudicial and dangerous.

Which of these contradictory accounts may be most worthy of credit it is not for us to determine; but if we judge from the disuse of the Solanum, the opinion of Mr. Bromfield seems to have been tacitly confirmed. However, in the year 1764, Mr. Gataker again renewed his assertion of the efficacy of Nightshade,[l] which he does not attribute to any specific power, but to the evacuation it produces.

[k] See his *Account of the English Nightshades.*

[l] *Essays on Medical Subjects.* See Introduction, and p. 38.

CONTORTÆ.

ASCLEPIAS VINCETOXICUM. OFFICINAL SWALLOW-WORT.

SYNONYMA. Vincetoxicum, Asclepias, Hirundinaria, *Pharm. Dale.* 179. *Alston. v. i.* 536. *Bergius.* 172. *Murray. i.* 543. *Lewis.* 661. *Ed. New Dispens.* 301. Asclepias albo flore. *Bauh. Pin.* 303. *Gerard. Emac.* 898. *Park. Theat.* 387. *Ray. Hist.* 1091. *Flor. Dan.* 849. β Asclepias foliis ovatis acutis, caule infirmo, umbellis simplicibus. *Mill. Dict. Hort. Kew.*

Pentandria Digynia. *Lin. Gen. Plant.* 306.

Gen. Ch. Contorta. *Nectaria* 5, ovata, concava, corniculum exserentia.

Sp. Ch. A. foliis ovatis basi barbatis, caule erecto, umbellis proliferis.

ROOT

Asclepias Vincetoxicum.

Delineated by Dr. Woodville April. 1. 1794.

ROOT perennial, large, knobbed, from which iſſue a number of ſmall, ſlender, yellowiſh fibres. Stalks above a foot in height, erect, round, ſimple, ſomewhat downy, jointed, at the baſe purpliſh, above green. Leaves on ſhort footſtalks, oppoſite, ovate, long, pointed, and bearded with ſhort hairs at the baſe. Flowers white, ariſing in cluſters at the axillæ of the leaves. Calyx downy, divided into five narrow pointed ſegments. Corolla monopetalous, divided into five ovate, obtuſe, ſpreading ſegments. Nectaria five, fleſhy, adhering to the filaments; from the bottom horn-ſhaped, and bent inwards. Filaments five, of a tubular appearance. Antheræ oblong, erect, within the ſcales of the nectary. Germina two, oblong, tapering. Styles two, ſhort, tapering. Stigmata ſimple. Follicles two, large, oblong, pointed, ventricoſe, one-celled, one-valved. Seeds numerous, crowned with pappus.

This plant, which is not uncommon in the northern parts of Europe, has been cultivated in Britain ſince the time of Parkinſon, in 1640. Its root, which is the part medicinally employed, has, "when freſh, a moderately ſtrong not agreeable ſmell, approaching to that of wild valerian, which, in drying, is in great part diſſipated; chewed, it impreſſes firſt a conſiderable ſweetneſs, which is ſoon ſucceeded by an unpleaſant ſubacrid bitteriſhneſs." [a]

Bergius ſtates the virtues of this root to be pullens, diuretica, ſudorifica, emmenagoga, alexipharmica.

By F. Hoffman it was found to poſſeſs an anodyne quality;[b] but we are told by others that it ſometimes excites nauſea and vomiting.[c] It has been chiefly uſed in dropſical diſorders; and ſeveral caſes are related in which it was given with great ſucceſs;[d] but as other medicines were at the ſame time employed, the good effects of the Vincetoxicum may not be yet thought ſufficiently eſtabliſhed. The ſame obſervation will apply to Stahl's pulvis antihydropicus, a compoſition in which the Vincetoxicum is an ingredient.*

[a] *Lewis. l. c.* [b] *Med. Syſt. T.* 4. *P.* 3. *p.* 305.
[c] *Durr. Eph. Nat. Cur. Dec.* 2. *A.* 7. *p.* 105. See alſo *Geoff.*
[d] Vide *Bauh. hiſt. ii. p.* 139. *Durr. l. c.*

* Stahl made alſo other compoſitions of the Vincetoxicum, which were received in the *Pharm. Wurt. & Brand.*

 This

This root has alſo been recommended in malignant fevers, and even in the plague,[e] eſpecially by ſome German authors; hence it has been called *Contrayerva Germanorum.* Other diſorders, in which it is ſaid to be uſeful, are ſmall-pox,[f] ſcrophula, and uterine obſtructions.

The doſe, in powder, is from a ſcruple to a dram, or an infuſion of three or four drams.

Vinca minor, (Vinca peruinca, or Periwinkle) Nerium antidyſentericum, (Profluvii cortex, or Tili-cherry bark) if we except the cinchona already noticed, are the only two remaining medicinal plants belonging to the order Contortæ. The former is a native of Britain, and has been uſed in the character of an aſtringent, eſpecially in hemorrhagic diſorders. The latter is a native of the Eaſt Indies.

Its bark, which poſſeſſes an aromatic bitter aſtringent, and, according to Dr. Brocklesby, an anodyne quality, has been employed in dyſenteries, diarrhœas, and in intermittent fevers, occuring in warm climates.*

[e] *Palmar. de feb. peſt. c.* 18. *Antzer. Antid. peſt. L.* 2.

[f] *Linn. Fl. Suec. p.* 77.

* See *Monro, ſen. Med. Eſſays.* 3. *p.* 32. *Brocklesby. Obſerv. on camp. diſeaſes. p.* 194. *Lind. on diſeaſes in hot climates. p.* 308.

PUTAMINEÆ.

CAPPARIS SPINOSA. COMMON CAPER-BUSH.*

SYNONYMA. Capparis. *Pharm. Geoff. iii.* 250. *Dale.* 324. *Alſton. i.* 370. *Bergius.* 449. *Murray. ii.* 305. *Edinb. New Diſp.* 160. Καππαρις. *Dioſcor.* Capparis ſpinoſa fructu minori, folio rotundo. *Bauh. Pin.* 480. Capparis rotundiore folio. *Ger. Emac.* 895. *Park. Theat.* 1023. *Ray. Hiſt.* 1629. *Ic. Smith. Specileg. Bot. t.* 20.

* The only medicinal plant of this order.

Polyandria

Published by Dr. Woodville April 1, 1794.

Polyandria Monogynia. *Lin. Gen. Plant.* 643.

Gen. Ch. *Cal.* 4-phyllus, coriaceus. *Petala* 4. *Stam.* longa. *Bacca* corticosa, unilocularis, pedunculata.

Sp. Ch. C. pedunculis solitariis unifloris, stipulis spinosis, foliis annuis, capsulis ovalibus.

ROOT woody, crooked. Stem trailing, much branched, round, smooth: branches alternate, spreading, often downy, leafy, many flowered. Leaves alternate, on short footstalks, spreading, oval, or roundish, in the wild plant often terminated by a little sharp point, which disappears by culture, entire, veiny, succulent, bright green, deciduous. Stipulæ none: but in their stead are two spines at the base of the footstalks, acute, somewhat recurved, yellowish, which are nearly obliterated in the cultivated plant. Flowers numerous, axillary, solitary, on footstalks, without bracteæ, large, handsome, inodorous. Flower-stalks round, longer than the leaves. Calyx of four unequal concave leaves, tipped with purple. Petals much larger than the calyx, spreading, obovate, waved, white, with a faint tincture of red. Stamina very numerous, the length of the petals, spreading, slender, in the upper part, pale purple like the antheræ. Germen oval, small, green, standing on a round purplish footstalk, which is longer than the stamina. Stigma small, blunt. Capsule oblong, oval, coriaceous.

It is a native of the south of France, Italy, and the Levant.

Dr. Smith, of whose figure and description of the Caper-bush we have here availed ourselves, says, "it is surprising that this beautiful shrub, which is as common in the south of France as the bramble with us, and which grows luxuriantly in the open air, when trained against a wall, even at Paris, should be almost unknown in the English gardens, where it can scarcely be made to flower, except in a stove, with all possible care." *

* *Specil. Bot. t.* 20.

The

The buds, or unexpanded flowers of this plant, are in common uſe as a pickle; and for this purpoſe the ſmaller or younger buds are moſt eſteemed.

This grateful pickle has the character of an antiſcorbutic, and of removing hepatic and other viſceral obſtructions; but the part of the plant which has been chiefly recommended for medicinal purpoſes, is the bark of the root. This is of conſiderable thickneſs, externally of an aſh colour, and tranſverſely wrinkled; on drying it rolls up into quills of about a third of an inch in diameter; its taſte is ſomewhat aromatic, bitteriſh, and acrid.

By Dioſcorides, and other ancient writers, it was thought of great efficacy as a deobſtruent, and was generally employed in obſtructions of the liver and ſpleen, menſtrual ſuppreſſions, and ſciatica; in this view it has alſo been uſed by Foreſtus[b] and Sennertus;[c] and on the preſumption of its deobſtruent power, it is reckoned one of the five leſs aperient roots: at preſent, however, its uſe is wholly laid aſide.

[b] *Oper. Lib.* 20. *Obſ.* 2. & 3. [c] *Pract. Lib.* 3. *P.* 4. *c.* 2. & 3.

HESPERIDEÆ.

MELALEUCA LEUCADENDRON. CAJEPUT-TREE, Or AROMATIC MELALEUCA.

Cajeput (oleum.) *Pharm. Murray. iii.* 319. *Bergius.* 639. *Ed. New Diſpenſ.* 153.

SYNONYMA. Arbor alba (major) Caju Puti. *Rumph. Herb. Amb. vol.* 2. *p.* 72. *t.* 16. Melaleuca Kajupoetie. *Houttuyn Natuurlyke. Hiſtorie. P.* 2. *Sect.* 3. *p.* 212. *t.* 15. Melal. Leucadendra. *De Loureiro Flor. Cochin. p.* 468.

α M. latifolia, fol. falcatis lanceolatis acutis majoribus.

β M. anguſtifolia, fol. anguſtioribus oblongis vix falcatis brevioribus obtuſis glaucis.

Polyadelphia Polyandria. *Lin. Mant.* 14.

Gen. Ch.

Melaleuca Leucadendron

Published by D.r Woodville April 1. 1790.

Gen. Ch. *Cal.* 5-partitus, ſuperus. *Cor.* 5-petala. *Filam.* multa, connata in 5 corpora. *Stylus* 1. *Caps.* ſemiveſtita calyce baccato, 3-valvis, 3-locularis.

Sp. Ch. M. polyadelphia, foliis alternis lanceolatis ſubfalcatis quinquenerviis, ſpica elongata.

THIS tree riſes with a long flexible trunk, ſending off irregular aſcending branches, covered with a pale thick lamellated tough bark. Leaves linearly-lanceolate, entire, ſmooth, denſe, five-nerved, aſh-coloured, odorous, alternate, on ſhort footſtalks. Flowers white, ſeſſile, in long ſubterminal ſpikes. Bracteæ floral, minute, ovate, pointed. Calyx tubular, five-parted, deciduous, of a browniſh red. Corolla of five petals, roundiſh, concave, much longer than the calyx. Filaments about forty, united at the baſe in five or ſix bundles, long, capillary, unequal, inſerted in the tube of the calyx, and furniſhed with ſmall ovate incumbent antheræ. Germen below, roundiſh. Style filiform, ſomewhat ſwelled at the ſtigma. Capſule roundiſh, three-celled, three-valved, opening at the apex, and half incloſed by the calyx. Seeds numerous, oblong, ſmall, compreſſed, angular.[a]

It is a native of India, where it commonly grows in the woods: the annexed figure was drawn from a very perfect botanical ſpecimen of it in the herbarium of Sir Joſeph Banks. The narrow leaved variety of this ſpecies was introduced into the Royal Garden at Kew, in 1775, from New Caledonia, by J. R. Forſter, L. L. D.[b]

The origin of Cajeput oil, or the vegetable from which it is obtained, was long unknown, and continued a matter of conjecture. As this eſſential oil is ſaid to be ſomewhat ſimilar in flavour and odour to the cardamom, an opinion very generally prevailed, that it was procured from a ſpecies of it. It is now however clearly proved to be derived from the Melaleuca Leucadendron, as obſerved by Linnæus in 1772,[c] and ſince confirmed by his ſon in the ſupp. plant.

That the leaves of this tree have an aromatic odour, reſembling that of cardamom ſeed, and afford, by diſtillation, a fragrant eſſential

[a] This deſcription is given on the authority of De Loureiro. l. c.

[b] *Hort. Kew.* [c] *Diſſ. obſ. in M. M. p.* 5

 oil,

oil, manifesting this aromatic principle still more strongly, is asserted by Valentynus and Rumphius; but as they called the oil by no peculiar name, it was not recognized as the Cajeput oil until some of these leaves were sent to Amsterdam, where, upon being subjected to distillation, an oil was obtained, agreeing, in every respect, with that of the best Cajeput.[d] This essential oil appears to be lodged in the minute glands or vesicles of the leaves, analogously to that noticed of the hypericum perforatum.[e]

Cajeput oil, (called also Oleum Wittnebianum, from Wittneben, who gave an account of the process for obtaining it,) though unknown in Britain, is now admitted into the Materia Medica of all the principal foreign pharmacopœias.

It is imported into Europe from the East Indies, and is distilled chiefly in the Island of Banda. Thunberg[f] says that it has the appearance of an inflammable spirit, of a green colour, and so completely volatile that it evaporates entirely, leaving no residuum; its odour is of the camphoraceous kind, with a terebinthinate admixture: when it is applied to the nostrils copiously, its smell is at first ungrateful, but in a small quantity, or at a distance, its odour is very agreeable. Goetz,[g] on the contrary, says that it is limpid, or rather yellowish, and that on being kept in a vial not closely corked, it diffuses at first a pleasant odour, which gradually changes to one somewhat like that of turpentine, and at length becomes similar to that of savine. Its taste, he says, is aromatic, and approaching to that of the oil of rosemary. A single drop, applied to the temples, produces a peculiar sensation in the interior canthus of the eyes, and excites tears, which he considers as the most certain criterion of the genuineness of the oil. From its exorbitant price it is frequently adulterated, and therefore is seldom found in perfect purity in Europe.

Cajeput oil appears to be a powerful medicine, and is much esteemed in Germany, as well as in India, in the character of a general remedy

[d] Vide *Nieuwe vaderlandsche Letter-Oeffningen. P.* 3. *n.* 3. *bladz.* 104.

[e] The leaves of this melaleuca, according to De Loureiro, are an useful medicine; he says, they are "attenuant, strengthening, stomachic, diuretic, emmenagogue, and of service in obstructions of the liver, dropsy, debility of the stomach, and dyspnœa.

[f] In *Vet. Acad. Handl.* 1782. *p.* 223. [g] *Comm. Nor.* 1731. *p.* 5.

in

in chronic and painful complaints; it is uſed for the ſame purpoſes for which we employ the officinal æthers, to which it ſeems to have a conſiderable affinity; the Cajeput however is more potent and pungent: taken into the ſtomach, in the doſe of five or ſix drops, it heats and ſtimulates the whole ſyſtem, proving at the ſame time a very certain diaphoretic, by which probably the good effects it is ſaid to have in dropſies and intermittent fevers, are to be explained. For its efficacy in various ſpaſmodic and convulſive affections, it is highly eſteemed; and numerous inſtances of its ſucceſsful employment are publiſhed by different authors.[h] It has been alſo uſed both internally and externally with much advantage in ſeveral other obſtinate diſorders, as palſy, hypochondrical and hyſterical affections, deafneſs, defective viſion, tooth-ach, gout, rheumatiſm, menſtrual obſtructions, herpetic eruptions, &c. of which Thunberg gives a particular relation.[i]

The doſe is from two to ſix and even twelve drops.

The berries and leaves of Myrtus communis, and the bark of Myrtus caryophyllata, or *caſſiæ caryophyllatæ cortex*, referable to this order, have alſo been admitted into the Materia Medica; the former in the character of an aromatic and aſtringent, and the latter as a ſubſtitute for cloves.

[h] Theſe are reſpectively cited by Murray, to whoſe work we refer thoſe readers who wiſh for a fuller account of this article.

[i] *L. c.*

The odour of cajeput oil is remarkably deſtructive to inſects: a few drops, in a cabinet or drawer, wherein animal or vegetable ſpecimens of natural hiſtory are kept in a dried ſtate, have on this account been found very uſeful.

CYMOSÆ.

CYMOSÆ.

COFFEA ARABICA. COFFEE TREE.

SYNONYMA. Euonymo ſimilis ægyptiaca, fructu baccis lauri ſimili. *Bauh. Pin.* 498. Coffee frutex, ex cujus fructu fit potus. *Ray. Hiſt.* 1691. Bon. *Alpin. Pl. Ægypt.* 63. Jaſminum arabicum, lauri folio, cujus ſemen apud nos Coffé dicitur. *Juſſieu. Mem. de L'Acad. des Sc. de Paris.* 1713. *p.* 388. *t.* 7. Conf. Monogr. in *Linn. Amoen. Ac. T.* 6. *p.* 160. Alſo *Ellis. Hiſtor. Account of Coffee.* 1774.

COFFEA, (ſemen) *Pharm. Dale.* 317. *Alſton. ii.* 274. *Murray. i.* 386. *Bergius.* 111. *Lewis.* 243. *Edinb. New Diſpenſ.* 174.

Pentandria Monogynia. *Lin. Gen. Plant.* 230.

Gen. Ch. Cor. hypocrateriformis. *Stamina* ſupra tubum. *Bacca* infera diſperma. *Sem.* arillata.

Sp. Ch. C. floribus quinquefidis diſpermis.

A TREE of low ſtature, ſeldom exceeding twelve feet in height, ſlender, at the upper part ſending off long trailing branches: bark brown, and almoſt ſmooth. Leaves nearly elliptical, ſmooth, entire, pointed, waved, three or four inches in length, oppoſite, on ſhort footſtalks. Stipulæ in pairs, pointed. Flowers white, axillary, on ſhort ſimple peduncles, or ſeſſile, two or three together. Calyx very ſmall, tubular, five-toothed. Corolla monopetalous, funnel-ſhaped, cut at the limb into five reflexed oval or lanceolate ſegments: tube long, narrow, almoſt cylindrical. Filaments five, tapering, inſerted at the mouth of the tube: antheræ linear, incumbent, of the length of

Coffea arabica

Published by [illegible] April 1, 1790.

the filaments. Germen roundish. Style simple, longer than the stamina. Stigma cloven, reflexed. Fruit a round fleshy red berry, containing two seeds, invested by a cartilaginous arillus: the appearance of the seed is well known.

The Coffee tree is a native of Arabia Felix and Ethiopia, and was first noticed by Rauwolfius in 1573; but Alpinus, in 1591, was the first who described it. It was cultivated in Britain by Bishop Compton in 1696,[a] and is now to be found in many of the well stored hothouses of this country. For the specimen of it here figured we are obliged to Dr. Lettsom, who possesses the best plant of this species which we have seen, and which was highly valued by its late owner Dr. John Fothergill.

The use of Coffee, or the seed of the fruit of this tree, appears to have originated in Ethiopia, but the practice of drinking it in Arabia was introduced from Persia by the Mufti of Aden in the fifteenth century. In 1554 its use first began at Constantinople. From whence it was gradually adopted in the western parts of Europe. At Marseilles it was begun in 1644. At Paris, if we except the family of Mons. Thevenot,[b] it was unknown till the arrival of the Turkish Ambassador, Soliman Aga, in 1669; and in 1672 the first coffee-house was established in Paris by an Armenian, named Pascal, but he met with little encouragement, and therefore came to London, where this beverage had been previously introduced in the year 1652, when Mr. Edwards, a Turkey merchant, brought from that country a Greek servant, of the name of Pasqua, who understood the method of preparing coffee, and first sold it in London in a house which he kept for that purpose, in George-yard, Lombard-street. Eight years after this it contributed to the public revenue, by a duty of fourpence laid upon every gallon made and sold here.[c]

The general consumption of Coffee in Europe suggested the idea of cultivating it for the advantage of commerce; and in this view the Dutch took the lead, and first planted it at Batavia in 1690; and

[a] Vide *Douglas, History of the Coffee tree, p.* 21.

[b] This gentleman had resided some time in the East, and returned to Paris in 1657.

[c] See *Ellis, l. c.*

at Surinam in 1718. This example was followed by the French at Cayenne, and in Martinico; nor were our Colonies neglected, for in 1732 it was cultivated in Jamaica, and patronized by act of parliament.

But whether from mismanagement, or from causes unavoidable, it is a lamentable truth, that our colonial coffee is of less estimation than that of other states, and the Mocha coffee is superior to all others. We shall therefore present our readers with an account of the culture and management of Coffee, practised in Arabia Felix, and related by La Roque, who says, " that the Coffee tree is there raised from seed, " which they sow in nurseries, and plant them out as they have " occasion. They chuse for their plantations a moist shady situation, " on a small eminence, or at the foot of the mountains, and take " great care to conduct from the mountains little rills of water, in " small channels, to the roots of the trees; for it is absolutely " necessary that they should be constantly watered, in order to pro- " duce and ripen the fruit. For that purpose, when they remove or " transplant the tree, they make a trench three feet wide, and five " feet deep, which they line or cover with stones, that the water may " the more readily sink deep into the earth with which the trench is " filled, in order to preserve the moisture from evaporating. When " they observe that there is a good deal of fruit upon the tree, and " that it is nearly ripe, they turn off the water from the roots, to " lessen that succulency in the fruit which too much moisture would " occasion. In places much exposed to the south they plant their " Coffee trees in regular lines, sheltered by a kind of poplar tree, " which extends its branches on every side to a great distance, afford- " ing a necessary shade when the heat of the sun is too intense. " When they perceive the fruit advanced to maturity, they spread " cloths under the trees, which they shake, and the ripe fruit readily " drops off. They afterwards spread the berries upon mats, and " expose them to the sun until they are perfectly dry: after which " they break the husk with large heavy rollers, made either with " wood or stone. When the Coffee is thus cleared of its husk, it is " again dried in the sun, and lastly winnowed with a large ifan." [d]

[d] See *La Roque. Voyage de l'Arabie heureuse. p.* 285. of which we have followed Ellis's translation.

Both

Both the outer pulpy part of the berry, and the inner membrane immediately investing the seed, are prepared for use by the Arabians; the former is much esteemed, and constitutes the Coffee *à la Sultane*; the latter is chiefly employed by the common people, and sold under the name of *Kischer*.[e] The seeds used by us, and which by the Arabians are thought too heating, are principally imported into Europe from Yemen, where the Coffee is most abundantly cultivated; they are smaller than the other kinds produced in the Colonies, of a yellow hue, and more grateful in taste and odour. The manner of roasting and preparing Coffee for use is too well known to require being detailed here; we shall therefore proceed to consider its effects on the human body.

From various experiments instituted by Dr. Percival upon Coffee, he infers that this beverage "is slightly astringent and antiseptic; "that it moderates alimentary fermentation, and is powerfully seda- "tive. Its action upon the nervous system probably depends on the "oil it contains; which receives its flavour, and is rendered mildly "empyreumatic by the process of roasting. The medicinal qualities "of Coffee seem to be derived from the grateful sensation which it "produces in the stomach, and from the sedative powers it exerts on "the *vis vitæ*. Hence it assists digestion, and relieves the head- "ach; and is taken in large quantities with peculiar propriety by the "Turks and Arabians, because it counteracts the narcotic effects of "opium, to the use of which those nations are much addicted. In "delicate habits it often occasions watchfulness, tremors, and many "of those complaints which are denominated nervous. It has been "even suspected of producing palsies; and from my own observa- "tion, I should apprehend not entirely without foundation. Slare "affirms that he became paralytic by the two liberal use of Coffee, "and that his disorder was removed by abstinence from that liquor."[f]

Dr. Percival cites a letter from Sir John Pringle, who asserts that strong Coffee is the most powerful remedy, with which he is acquainted, in abating spasmodic asthma.

[e] *Braad, Niebuhr, Aublet, &c.*

[f] See *Essays, vol. ii.*

The

The late Dr. Fothergill has obſerved, that " it is a queſtion often propoſed to phyſicians, which is beſt Tea or Coffee?" The ſolution of this point would perhaps be a difficult one. We neither find the Chineſe or Turks ſubjected to any ſuch diſcriminating effects as to enable the faculty to ſay, with preciſion, that one is more injurious than the other; for my own part I leave it to the experience of individuals. Dr. F. recommends the Coffee to be made ſtrong, and as much boiled milk to be added to it before it is taken from the fire as there is water; it is then ſuffered to ſettle, and drunk either with or without cream. This the Dr. ſubſtituted for tea, which was not quite favourable to his health.

The French cuſtom of drinking Coffee immediately after dinner, is certainly much better than that which prevails with us of taking it at a late hour in the evening. For, from the obſervations of Dr. Percival, and indeed from the experience of mankind in general, this beverage very commonly ſuſpends the inclination to ſleep, and therefore may protract the time of watchfulneſs beyond the uſual hour of reſt. By habit, however, theſe and other unfavourable effects both of Coffee and tea, are often ſubdued, though certain conſtitutions may ſuffer much in the ſtruggle, and a morbid irritability of the nervous ſyſtem has not unfrequently been the conſequence.

The complaints ſaid to have been produced by the frequent or exceſſive uſe of Coffee are head-achs, vertigo, tremors, imbecility, pimples of the face, weakened viſion,[g] and according to Profeſſor Murray, apoplexy. It has been ſaid that it produces or aggravates hyſterical and hypochondriacal affections; and therefore Tiſſot[h] cautions literary and ſedentary people againſt its uſe. It is alſo accuſed of favouring an hemorrhagic diſpoſition, eſpecially in feveriſh, choleric, plethoric, and emaciated conſtitutions.

How far theſe diſorders were really cauſed by the uſe of Coffee, appears to admit of much doubt; and therefore until its ill effects are experienced, this catalogue of diſorders ought not to alarm thoſe

[g] See *Lin. Amoen. Acad. vol.* 6. *p.* 176. *F. Hoffman. Med. Syſt. T.* 4. *P. i.* 209. *Plaz. Diſſ. de potus coffé abuſu, &c. Zimmerman. Erfahr. P.* 2. *p.* 347. *Willis. Pharm. Ration. p.* 203.

[h] *Santé des gens de lettres. p.* 200.

who

who perceive no ill effects from its uſe. As an article of diet it is very generally drunk, and found, with very few exceptions, not only to be innocent but ſalubrious: to a ſtomach oppreſſed with animal food a cup or two of ſtrong Coffee affords conſiderable relief, conſequently it promotes digeſtion; this effect, and that of its obviating drowſineſs, are better aſcertained than any other aſcribed to this article.

A great variety of ſubſtitutes for Coffee has been recommended, which it would be unneceſſary here to enumerate. The fact is, that in moſt farinaceous matter, on being roaſted or burnt to that degree to which Coffee too frequently is, the peculiar ſapid principle is totally diſſipated by the heat, and nothing but the more fixed part common to all remains.

Two ſpecies of Lonicera, viz. Periclymenum and Diervilla, or the common, and the yellow-flowered upright Honey-ſuckle, and the Linnæa borealis, or Two-flowered Linnæa, belonging to the order Cymoſæ, have been ranked as medicinal plants; but they are not noticed in the Britiſh Diſpenſatories, nor do they ſeem intereſting enough to deſerve particular attention.

SUCCULENTÆ.

SEDUM ACRE. WALL STONE-CROP, or WALL PEPPER.

SYNONYMA. Sedum acre ſeu minus. *Pharm. Murray. v. iii. p.* 344. *Bergius.* 375. *Ed. New. Diſpenſ.* 281. Sempervivum minus vermiculatum acre. *Bauh. Pin.* 283. Vermicularis ſeu Illecebra minor acris. *Ger. Emac.* 517. Illecebra minor ſeu ſedum tertium Dioſcoridis. *Park. Theat.* 735. *Ray. Synop.* 270. Sedum acre. *Hall. Stirp. Helv. n.* 966. *Hudſon. Flor. Ang.* 171. *With. Bot. Arr.* 467. *Ic. Curt. Flor. Lond.*

Decandria Pentagynia. *Lin. Gen. Plant.* 579.

Gen. Ch. *Cal.* 5-fidus. *Cor.* 5-petala. *Squamae* nectariferæ 5, ad baſin germinis. *Caps.* 5.

Sp. Ch. S. fol. ſubovatis adnato-ſeſſilibus gibbis erectiuſculis alternis, cyma trifida.

ROOT perennial, ſlender, creeping. Stalks ſeveral together, about three inches high, covered with leaves. Leaves oval, blunt, ſhort, fleſhy, ſmooth, numerous, without footſtalks, cloſely inveſting the ſtalk, placed in an imbricated order. Flowers yellow, in ſubterminal trifid cymæ. Calyx permanent, divided into five ſegments, which are tapering, thick, blunt. Corolla compoſed of five pointed petals, which are more than twice the ſize of the ſegments of the calyx. Filaments ten, tapering, about the length of the corolla, and furniſhed with yellow antheræ. Germen oblong, yellow, terminating in five ſtyles, furniſhed with ſimple ſtigmata. Capſules five, pointed, containing minute oval browniſh ſeeds.

This is a common Britiſh plant, growing on houſes, walls, and gravelly banks. Like many other plants of this natural order it receives

Sedum acre.

Published by Dr. Woodville, May 1. 1794.

receives its nourifhment principally from the air, in proof of which it continues to grow when detached from the ground, and fufpended by the root.

It refembles the Sedum fexangulare very much, fo that fome botanifts have confidered the latter as only a variety of the former. The difference however is fufficiently fpecific both in a botanical and medical fenfe;[a] the latter being devoid of the pungent biting tafte which characterizes the plant here figured.

This fpecies of Sedum, in its recent ftate, is extremely acrid, like the Hydropiper; hence, if taken in large dofes, it acts powerfully on the primæ viæ, proving both emetic and cathartic; applied to the fkin, as a cataplafm, it frequently produces vefications and erofions. Boerhaave therefore imagined that its internal employment muft be unfafe; but experience has difcovered that a decoction of this plant is not only fafe, but of great efficacy in fcorbutic complaints; for which purpofe a handful of the herb is directed by Below[b] to be boiled in eight pints of beer till they are reduced to four, of which three or four ounces are to be taken every, or every other, morning. Milk has been found to anfwer this purpofe better than beer.[c]— Not only ulcers fimply fcorbutic, but thofe of a fcrophulous and even cancerous tendency, have been cured by the ufe of this plant, of which Marquet[d] relates feveral inftances. He likewife found it ufeful as an external application in deftroying fungous flefh, and in promoting a difcharge in gangrenes and carbuncles.

Another effect for which this plant has been efteemed is that of ftopping intermittent fevers.

[a] Mr. Curtis has remarked, that "the leaves of S. Acre are fhort, broad at the bafe, and at a confiderable diftance afunder, while thofe of the Sexangulare are nearly of the fame thicknefs throughout, longer, more numerous, and placed in fix rows or angles."

[b] A Swedifh Phyfician. V. *Mifc. Nat. Cur. Dec.* 1. *Ann.* 6. *Obf.* 22. *p.* 49.

[c] *Lange. Remed. Brunf. Domeft. p.* 121.

[d] *Mem. fur L'illecebra. &c.*

SAXIFRAGA GRANULATA. WHITE SAXIFRAGE.

SYNONYMA. Saxifraga alba. *Pharm. Dale.* 235. *Lewis.* 590. *Murray. iii.* 355. *Bergius.* 367. Saxifraga rotundifolia alba. *Bauh. Pin.* 309. Saxifraga alba. *Ger. Emaç.* 841. Saxifraga alba vulgaris. *Park. Theat.* 424. *Ray. Hiſt.* 1048. *Synop.* 354. *Haller. Stirp. Helv. n.* 976. S. granulata. *Hudſon. Flor. Angl.* 159. *Wither. Bot. Arr.* 434. *Ic. Flor. Dan.* 514. & *Flor. Lond.*

Decandria Digynia. *Lin. Gen. Plant.* 559.

Gen. Ch. *Cal.* 5-partitus. *Cor.* 5-petala. *Caps.* 2-roſtris, 1-locularis polyſperma.

Sp. Ch. S. foliis caulinis reniformibus lobatis, caule ramoſo, radice granulata.

ROOT perennial, conſiſting of a number of ſmall bulbs adhering to the fibrous part. Stalk ſomewhat branched, about a foot high, round, hairy towards the bottom, and ſcantily ſupplied with leaves. Leaves irregularly kidney-ſhaped, a little hairy, ſlightly divided into lobes, concave, thoſe near the root furniſhed with long hairy footſtalks. Calyx divided into five ſegments, which are hairy, oval, pointed, viſcous. Corolla conſiſting of five white ſpreading petals, which at the upper extremity are broad, at the baſe narrow, and of a yellow colour. Filaments ten, tapering, ſupporting yellow antheræ. Germen roundiſh, ſtanding below the corolla, and ſurrounded by a green gland. Styles two, ſhorter than the filaments, furniſhed with hollow ſtigmata. Capſule ſomewhat oval, two-celled, and furniſhed with two beaks or horns. Seeds numerous, very ſmall, black.

It is a native of England, but not very commonly met with: dry meadows and paſtures are the ſituations it affects. Its flowers appear in April and May.

Linnæus

Saxifraga granulata

Published by Dr. Woodville May 1. 1794

Linnæus describes the taste of this plant to be acrid and pungent, which we have not been able to discover: neither the tubercles of the root, nor the leaves manifest to the organs of taste any quality likely to be of medicinal use, and therefore though this species of Saxifrage has been long employed as a popular remedy in nephritic and gravelly disorders, yet we do not find either from its sensible qualities, or from any published instances of its efficacy, that it deserves a place in the Materia Medica.

The superstitious doctrine of *Signatures* suggested the use of the root, which is a good example of what Linnæus has termed radix granulata. The bulbs or tubercles of such roots answer an important purpose in vegetation, by supplying the plants with nourishment and moisture, and thereby enabling them to resist the effects of that drought to which the dry soils they inhabit peculiarly expose them.

Sedum Telephium (Orpine) is also admitted of the Materia Medica in the foreign pharmacopœias; it has not the acrid characters of the species here figured, but on the contrary is bland and mucilaginous. It is said to be diuretic, and, according to Dr. Withering, is used with success to cure the piles. Simpervivum tectorum (common Houseleek) which is nearly allied to the Telephium in botanical affinity, likewise abounds with a mucilaginous juice, said to be an useful application to burns, creeping ulcers, and in apthous cases. Cactus Opuntia (common Indian Fig) and Portulaca oleracea (Garden Purslane) both of this natural order, afford a similar juice, which also has been applied to medical purposes.

TRIHILATÆ.

TROPÆOLUM MAJUS. GREATER INDIAN CRESS, Or NASTURTIUM.

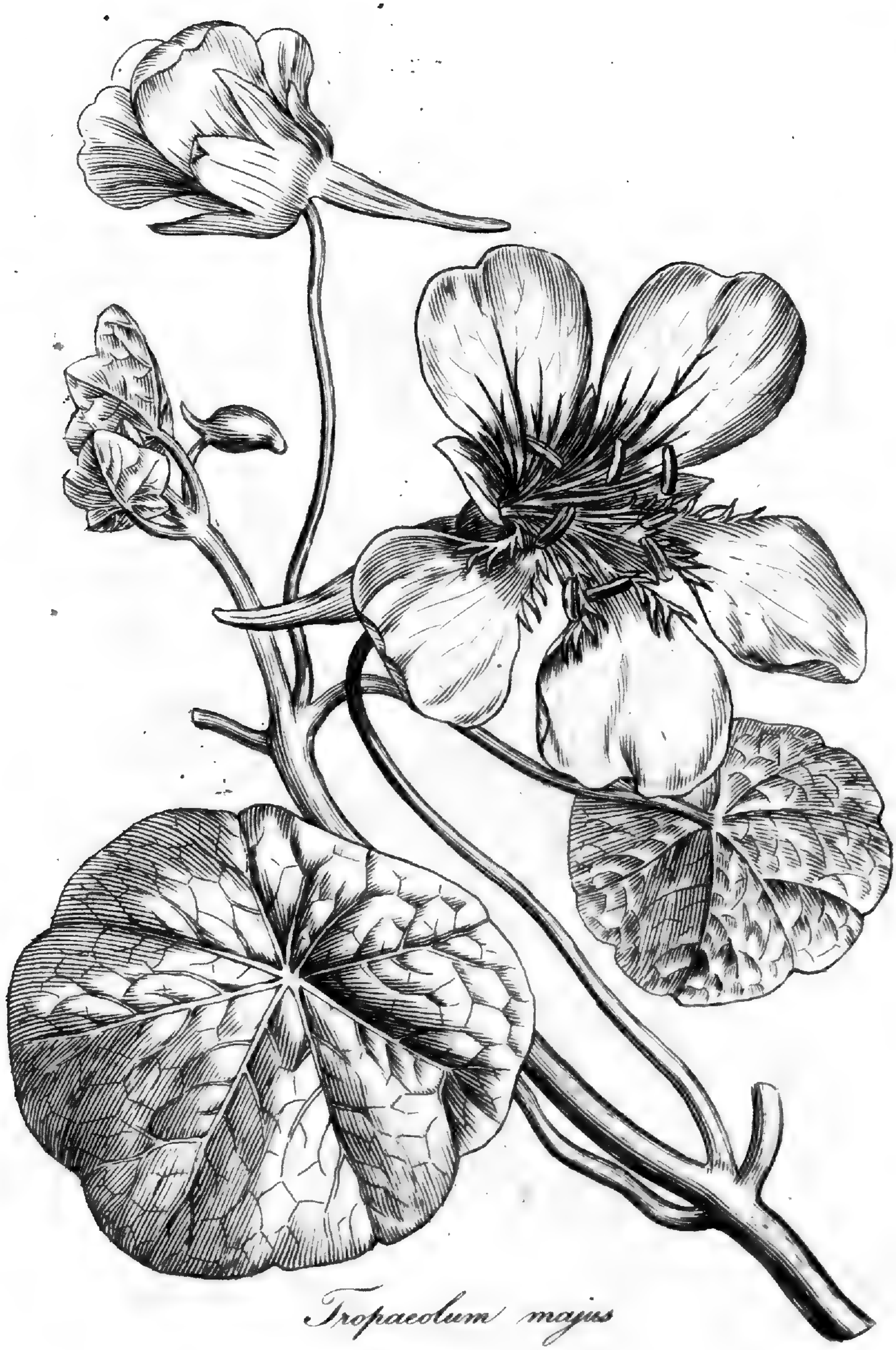
SYNONYMA. Nasturtium indicum. *Pharm. Dale.* 134. *Berg.* 293. *Murray. iv.* 77. *Gerard. Emac.* 252. *Park. Parad.* 280. *Ray. Hist.* 487. Nasturtium indicum majus. *Bauh. Pin.* 306. Viola indica scandens, Nasturtii sapore & odore, flore flavo. *Herm. Hort. Lugd. Bat.* 628. *Ic. Curt. Bot. Magaz.* 23.

Octandria Monogynia. *Lin. Gen. Plant.* 466.

Gen. Ch. *Cal.* 1-phyllus, calcaratus. *Petala* 5, inæqualia. *Bacca* 3, siccæ.

Sp. Ch. T. follis peltatis subquinquelobis, petalis obtusis.

ROOT annual. Stalk trailing, climbing, round, branched, smooth, succulent, several feet in length. Leaves roundish, marked by several radiated ribs, entire, obscurely five-lobed, standing singly upon long bending footstalks, which are attached to the centre of each leaf. Flowers large, solitary, of a tawny yellow, on long peduncles. Calyx yellowish, large, forming a horn-like nectarium behind, divided at the mouth into five irregular segments, which are acute, erect, striated. Corolla consisting of five petals, roundish, of which the two uppermost are bent backwards, marked with black lines at the base, and inserted into the segments of the calyx: the three undermost have long claws or ungues, and are bearded at the base. Filaments eight, yellow, tapering, spreading. Antheræ yellow, four-celled, ovate. Germen triangular. Style simple, erect, yellow. Stigma trifid, acute. Fruit three adhering berries, compact, externally



Tropaeolum majus

Published by D. Wadeville, May 1. 1794.

nally ſtriated, containing three irregular ſhaped ſeeds. Its flowers appear from June till October.

This plant is a native of Peru; it was firſt brought to France in 1684, and there called La grande Capucine; two years afterwards it was introduced into this country by Dr. Lumley Lloyd,[a] and ſince that time has been conſtantly cultivated in Britiſh gardens.

In its recent ſtate this plant, and more eſpecially its flowers, have a ſmell and taſte reſembling thoſe of water creſs; and the leaves, on being bruiſed in a mortar, emit a pungent odour, ſomewhat like that of horſe radiſh. By diſtillation with water they impregnate the fluid in a conſiderable degree with the ſmell and flavour of the plant.[b] Hence the antiſcorbutic character of the Naſturtium ſeems to be well founded, at leaſt as far as we are able to judge from its ſenſible qualities: therefore in all thoſe caſes where the warm antiſcorbutic vegetables are recommended, this plant may be occaſionally adopted as a pleaſant and effectual variety.

Patients, to whom the nauſeous taſte of ſcurvy-graſs is intolerable, may find a grateful ſubſtitute in the Naſturtium.

The flowers are frequently uſed in ſallads, and the capſules are by many highly eſteemed as a pickle.

The flowers, in the warm ſummer months, about the time of ſun-ſet, have been obſerved to emit ſparks like thoſe of the electrical kind.[c]

[a] Vide *Hort. Kew.*

[b] *Cartheus. Diſſ. de Cardam. p.* 9.

[c] *Vet. Acad. Handl.* 1762. *p.* 284.

BERBERIS

BERBERIS VULGARIS. COMMON BARBERRY.

SYNONYMA. Berberis. *Pharm. Dale.* 318. *Geoff. iii.* 172. *Alston. ii.* 255. *Lewis.* 144. *Edinb. New Disp.* 146. *Bergius.* 276. *Murr. iv.* 79. *Park. Theat.* 561. Berberis dumetorum. *Bauh. Pin.* 454. *Ray. Hist.* 1605. *Synop.* 465. *Gerard. Emac.* 1325. Berberis vulgaris. *Hudf. Flor. Ang.* 137. *Withering. Bot. Arr.* 366. *Ic. Eng. Bot.* 49.

Hexandria Monogynia. *Lin. Gen. Pl.* 442.

Gen. Ch. Cal. 6-phyllus. *Petala* 6; ad ungues glandulis 2. *Stylus.* 9. *Bacca* 2-sperma.

Sp. Ch. B. pedunculis racemosis; spinis triplicibus.

A LARGE spreading shrub, furnished with spines, covered with a light grey bark. Leaves inversely ovate, blunt, entire, smooth, minutely serrated, four or five standing together upon simple footstalks. Flowers yellow, in slender pendent racemi. Calyx composed of six leafits, which are ovate, concave, coloured, deciduous, alternately larger and smaller. Corolla consists of six petals, which are roundish, concave, and at the base each furnished with two small oblong orange-coloured corpuscles or nectaries. Filaments six, erect, compressed, tapering, shorter than the petals, and terminated by double antheræ, which adhere to their sides. Germen cylindrical, of the length of the filaments. Style none. Stigma circular, flat, encompassed by a sharp border. Fruit a cylindrical one-celled red berry, containing two oblong seeds.

It is a native of England, growing in woods and hedges, and flowering in June. In shrubberies, and in gardens where it is very generally cultivated, its flowers usually appear much sooner.

It

Berberis vulgaris

Published by Dr. Woodville May. 1. 1794.

It has been diſcovered, that the filaments of this ſhrub poſſeſs a remarkable degree of irritability; for on being touched near the baſe with the point of a pin, a ſudden contraction is produced, which may be repeated ſeveral times. This contraction of the ſtamina is evidently for the purpoſe of throwing the pollen upon the ſtigma, and is effected by means of inſects paſſing over the bottom of the filaments, which is the part in which their ſenſibility reſides.[a]

Another peculiarity aſcribed to this ſhrub is, that ears of corn growing near it conſtantly prove abortive, and that it extends this ſterile influence over them to the diſtance of three or four hundred yards acroſs a field;[b] but Monſ. Brouſſonet, a celebrated French naturaliſt, has refuted this very extraordinary though prevalent opinion.

The fruit or berries, which are gratefully acid[c] and moderately reſtringent, are ſaid to be of great uſe in bilious fluxes, and in all caſes where heat, acrimony, and putridity of the humours prevail. On the authority of Alpinus[d] we are informed, that the Egyptians employ them in peſtilential fevers and fluxes, with great ſucceſs; and Simon Paulli relates,[e] that he was cured of a malignant fever, accompanied with a bilious diarrhœa, by uſing theſe berries conformably to the Egyptian practice, viz. macerating the fruit for a day and a night in twelve times its quantity of water, with the addition of a little fennel ſeed; the liquor was then ſtrained, ſweetened, and uſed as a common drink.

[a] See Mr. Whatley's remark from Dr. Sims, in *Bot. Arr. p.* 366. and Dr. Smith's paper in the *Phil. Tranſ. for* 1788. *p.* 158.

[b] Dr. Withering ſays, "this ſhrub ſhould never be permitted to grow in corn lands, for the ears of wheat that grow near it never fill, and its influence in this reſpect has been known to extend as far as three or four hundred yards." *l. c.*

[c] Retzius ſays that it approaches very nearly to that of Tamarinds. *Vet. Acad. Handl.* 1776. *p.* 135. Scheele obtained from it a conſiderable quantity of the acid of ſugar. *Vet. Acad. Handl.* 1785. *p.* 17.

[d] *P. Alpinus. Med. Ægypt. L.* 4. *c.* 1.

[e] Vide *Quadrip. Bot.* 118.

That theſe berries are well calculated to allay heat and thirſt, and to correct a putrid tendency in the fluids, will be readily admitted; but in this reſpect they ſeem to poſſeſs no peculiar advantage over moſt of the other acid fruits: hence the Colleges of London and Edinburgh have expunged this fruit from the Materia Medica, and retained that of the currant. Barberries however are much more acid, inſomuch that they cannot be eaten without the addition of ſugar, but when boiled with this, they form a moſt agreeable rob or jelly; they are alſo much liked as a ſweet-meat, and as a pickle. The bark is ſaid to be purgative,[f] and Ray experienced its good effects in jaundice.

[f] "The roots, boiled in lye, dye wool yellow. In Poland they dye leather of a moſt beautiful yellow with the bark of the root. The inner bark of the ſtems dyes linen of a fine yellow with the aſſiſtance of allum." *With. l. c.*

SWIETENIA MAHAGONI. MAHOGANY TREE.

(Swieteniæ Cortex. *Pharm. Murray. App. Med. vi.* 132.)

SYNONYMA. Swietenia foliis abrupte pinnatis, pinnulis ovato-laneeolatis obliquis, &c. *Cavanill. Diſſ. Bot.* 7. *p.* 365. *t.* 209. Cedrela foliis pinnatis, floribus ſparſis, ligno graviori. *Browne. Jam. p.* 158. Arbor foliis pinnatis, nullo impari alam claudente, nervo ad latus unum excurrente, &c. *Cateſby. Carol. vol.* 2. *p.* 81. Conf. *Jacquin. Select. Stirp. Amer. p.* 127.

Decandria Monogynia. *Lin. Gen. Plant.* 521.

Eſſ. Gen. Ch. *Cal.* 5-fidus. *Petala* 5. *Nectarium* cylindricum, ore antheras gerens. *Caps.* 5-locularis, lignoſa, baſi dehiſcens. *Sem.* imbricata, alata.

S. Mahagoni. *Sp. Pl.* 548.

A VERY

Swietenia Mahagoni

Published by D. Wendelle May 1. 1794.

A VERY large tree, which, by ſending off numerous ſpreading branches, makes a beautiful appearance. Wood hard, compact, of a browniſh red, and from its general uſe well known in England. The bark is rough, ſcaly, and brown, but upon the young branches grey, and much ſmoother. Leaves pinnated, alternate, conſiſting of three, four, or five pairs of pinnulæ, which are entire, ovately lance-ſhaped, acute, oblique, reclining, on ſhort footſtalks. Flowers numerous, ſmall, whitiſh, in axillary open ſpikes. Calyx ſmall, bell-ſhaped, deciduous, cut into five ſegments. Petals five, inverſely ovate, concave, obtuſe, ſpreading. Nectarium monophyllous, cylindrical, erect, of the length of the corolla, divided at the brim into ten pointed teeth. Filaments ten, ſcarcely viſible, inſerted beneath the teeth of the nectarium. Antheræ oblong, erect. German ovate. Style tapering, erect, of the length of the nectarium. Stigma large, depreſſed at the top. Capſule ovate, large, obtuſe, five-celled, five-valved; valves woody, thick, opening at the baſe. Seeds numerous, compreſſed, imbricated, furniſhed with oblong membranous wings. Receptacle of the ſeed large, oblong, obtuſe, pentagonal.

It is a native of the Weſt Indies, and was firſt cultivated in England in 1739 by Mr. P. Miller, who then conſidered it as a ſpecies of Cedrus; but Jacquin diſcovered the Mahogany to be a diſtinct genus, and called it Swietenia, in honour of Gerard L. B. a Swieten, whoſe influence with the Houſe of Auſtria cauſed the botanic garden at Vienna to be founded.

For the botanical ſpecimen of the tree figured in the annexed plate, we are obliged to Sir Joſeph Banks.

The bark of the Swietenia has lately been found, in a conſiderable degree, to emulate that of the cinchona in its medicinal characters; we have therefore followed the late profeſſor Murray in conſidering it as an article of the Materia Medica.

This bark, according to Dr. Wright, is "rough, ſcaly, and brown," as found upon the trunk of a tree, but "that on the boughs and twigs is grey and ſmoother."[a] That intended for medicinal uſe ſhould be the growth of the trunk, or rather of the larger branches, and is brought here in flattiſh or ſomewhat convex pieces, about a foot in

[a] See London Medical Journal, vol. 8. p. 286.

length:

length: its epidermis is rough, and immediately under it a thick ſpongy dark extraneous coat is obſerved; the inner efficient part of the bark is of a lamellated texture, tough, and of a deep reddiſh brown;[b] its taſte is aſtringent and bitter, reſembling the Peruvian bark, but, in the opinion of Murray, more bitter.

On the teſtimony of Wright, Lind, and ſeveral other reſpectable authorities, this bark has been found to anſwer the general purpoſes of that of the cinchona, and like it alſo the different ſpecies of the tree agree in affording barks poſſeſſing in common a certain ſhare of febrifuge power, though in different degrees, and ſomewhat variable in their ſenſible qualities. Thus of the nine ſpecies of cinchona, lately deſcribed by Vahl, the febrifuge character pervades the whole, at leaſt as far as experiments have been made:[c] and Mr. Roxburgh, botaniſt to the Eaſt India Company, has diſcovered a new ſpecies of Swietenia, or Mahogany, the bark of which promiſes, from his account of it, to be a more efficacious medicine than that here deſcribed. This new ſpecies of mahogany is called by Mr. Roxburgh Swietenia febrifuga;[d] and from numerous experiments which he made from its bark, he draws the following concluſions:[e]

1. "The active parts of the bark of Swietenia febrifuga are much more ſolubile than thoſe of Peruvian bark, particularly in watery menſtruums."

2. "That it contains a much larger proportion of active (bitter and aſtringent) powers than Peruvian bark."

[b] This deſcription nearly agrees with that of Murray; but I have found the bark to vary conſiderably in its appearance, and in its taſte.

[c] *Yellow Peruvian bark*, the produce of a ſpecies of cinchona, of which we find no botanical account, has been lately brought to London. I have uſed it at the Small-pox Hoſpital with more advantage than I ever experienced from the beſt common bark. Its intenſe bitterneſs is the leading character in its ſapidity.

[d] This and ſeveral other Eaſt India plants have been engraved at the expenſe of the Eaſt India Company, but have not yet been publiſhed; it differs from the common Mahogany, in having its flowers in large terminal compound ſpikes, and in its foliola being oblong, and very obtuſe.

[e] See "a botanical deſcription of a new ſpecies of Swietenia, (Mahogany) with experiments and obſervations on the bark thereof, addreſſed to the Honourable the Court of Directors of the United Eaſt India Company, by William Roxburgh."

3. "The

Smilax China.

Published by D. Wendelle, June 1, 1791

3. " The watery preparations of this bark remain good much longer than ſimilar preparations of Peruvian bark."

4. " The ſpirituous and watery preparations bear being mixed in any proportion without decompoſition."

5. " That this bark in powder, and its preparations, are much more antiſeptic than Peruvian bark, or ſimilar preparations of it."

He adds, " From the evident qualities of this new bark, and from the ſucceſsful experience I have had of it in intermittent fevers, &c. I have every reaſon to imagine it will prove equal, if not ſuperior, to the Peruvian bark for every purpoſe where that medicine is uſed."

Having before given an account of Æſculus Hippocaſtanum, or Horſe-cheſnut, the only remaining plant referred to the Materia Medica in the order Trihilatæ is the Trapa natans, called in the Pharmacopœias Tribulus aquaticus, or Nux aquatica (floating water caltrops). Its fruit or nut is of a quadrangular form, and contains a farinaceous kernel, which was formerly in eſtimation for its ſuppoſed aſtringent qualities.

SARMENTACEÆ.

SMILAX CHINA. CHINESE SMILAX.

SYNONYMA. China (radix). *Pharm, Geoff. V.* 2. *p.* 30. *Dale.* 167. *Alſton. i.* 409. *Lewis.* 226. *Edinb. New Diſpenſ.* 170. *Murray. i.* 339. *Bergius* 803. China vulgaris off. *Ger. Emac.* 1618. *Bauh. Pin.* 296. *Park. Theat.* 1578. *Ray. Hiſt.* 657. Smilax minus ſpinoſa, fructu rubicundo, radice virtuoſa China dicta. *Kæmpf. Amæn.* 781. *t.* 782. Conf. Sam. Gottl. Gmelin's *Reiſe durch Ruſsland. T. iii. p.* 32. *t.* 36.

Dioecia Hexandria. *Lin. Gen. Plant.* 1120.

Gen. Ch. *Masc.* *Cal.* 6-phyllus. *Cor.* o.

Fem. *Cal.* 6-phyllus. *Cor.* o. *Styli* 3. *Bacca* 3-locularis. *Sem.* 2.

Sp. Ch. S. caule aculeato teretiuſculo, fol. inermibus ovato-cordatis quinquenerviis.

ROOT perennial, ligneous, beſet with irregular knobs; externally of a reddiſh brown colour, internally paler. Stems long, roundiſh, ſlender, jointed, woody, prickly, climbing, branched, furniſhed with claſpers. Leaves ſmooth, ovate, or heart-ſhaped, pointed, five-nerved, placed on footſtalks. Flowers male and female on different plants, in cluſters, of a yellowiſh white, upon a ſlender common footſtalk, ariſing at the axillæ of the leaves. The calyx of the male flower is divided into ſix leafits, which are oblong, reflexed, and appear to occupy the place of the corolla, which is wanting. Filaments ſix, ſimple, furniſhed with oblong antheræ. The female flower differs from the male, in having no ſtamina, but is ſupplied with an ovate germen, ſupporting three minute ſtyles, terminated by oblong reflexed downy ſtigmata. Fruit a ſmall round berry, of three cells; when ripe of a red colour, and contains two round ſeeds.

This ſpecies of Smilax is tolerably well deſcribed by Kæmpfer and Rumphius, but ſtill more fully by Gmelin. It is a much taller ſhrub than the S. Sarſaparilla, and grows to the greateſt perfection in China, Japan, and in ſome parts of Perſia. It is alſo a native of Jamaica, but the occidental ſpecies has been accounted leſs efficacious than the oriental. Mr. Aiton informs us, that it was firſt cultivated in Britain by Miller: it ſeems however to be a tender plant, and is rarely brought to flower in this country, even when placed in the beſt ſtoves, and under the direction of the moſt ſcientific gardeners.

According to Lewis, "two ſorts of the roots are common in the ſhops, an oriental, and occidental; the firſt, which is accounted the beſt, is conſiderably paler coloured, and harder than the other. Of either kind, ſuch ſhould be choſen, as is freſh and heavy, and which, when cut, exhibits a cloſe ſmooth gloſſy ſurface."

"Theſe

" Theſe roots have ſcarcely any ſmell, or particular taſte; when freſh they are ſaid to be ſomewhat acrid, but as brought to us they diſcover, even when long chewed, no other than a ſlight unctuoſity in the mouth. Boiled in water they impart a reddiſh colour, and a kind of vapid ſoftneſs: the decoction, inſpiſſated, yields an unctuous farinaceous almoſt inſipid maſs, amounting to upwards of half the weight of the root." [a]

About the year 1535 this root was firſt brought to Europe with the character of being an incomparable medicine for the cure of the venereal diſeaſe.[b] For this purpoſe it was given in the form of a decoction, of which a large cupful was ordered to be made hot, and taken by the patient every morning while in bed, in order to produce a diaphoretic effect for two or three hours.

This, and the occaſional uſe of purgatives, was to be purſued for twenty-four days, after which the decoction was to be uſed as a common drink.[c]

This root was alſo recommended in many other diſorders, eſpecially thoſe of a chronic and inveterate kind, as ſome cutaneous diſeaſes, obſtructions, rheumatiſms, &c. But whatever may have been the opinion formerly entertained of the efficacy of China root, phyſicians, at this time, agree in conſidering it as a very inert ſubſtance, and therefore it is rarely employed. Like the ſarſaparilla, by which it has been ſuperſeded, it contains a conſiderable ſhare of bland nutritive matter, and appears to us not leſs adapted to the auxilliary purpoſes of medicine.

[a] Lewis. *l. c.*

[b] Thevet. *Coſmogr. univers. L.* 11. *c.* 25.

[c] Veſalius. *Epiſt. de rad. chinæ in Aphor. p.* 598. *&c.* Aſtruc. *de morb. ven. p.* 112.

RUSCUS ACULEATUS.

RUSCUS ACULEATUS. BUTCHER's BROOM, Or KNEE HOLLY.

SYNONYMA. Ruſcus. *Pharm. Geoff. Dale.* 169. *Alſton. i.* 386. *Lewis.* 546. *Murray. i. p.* 341. *Bergius.* 816. *Edinb. New Diſpenſ.* 267. *Bauh. Pin.* 470. *Ger. Emac.* 907. *Park. Theat.* 253. *Raii. Hiſt.* 664. *Synop.* 262. *Hudſon. Flor. Ang.* 437. *Haller. Hiſt. Stirp. Helv. n.* 1238. *With. Bot. Arr.* 1132. *Miller. Illuſt. t.* 155.

Dioecia Syngeneſia. *Lin. Gen. Plant.* 1139.

Gen. Ch. *Masc.* *Cal.* 6-phyllus. *Cor.* o. *Nectarium* centrale, ovatum, apice perforatum.

Fem. *Calyx*, *Corolla*, et *Nectarium* maris. *Stylus* 1. *Bacca* 3-locularis. *Sem.* 2.

Sp. Ch. R. foliis ſupra floriferis nudis.

A SMALL evergreen ſhrub, ſeldom much exceeding a foot in height. Stalk ſtrong, ſmooth, channelled. Leaves floriferous, ſeſſile, or on very ſhort footſtalks, ovate, rigid, ſharply pointed,* entire, marked with numerous parallel veins. Flowers male and female on different plants, ſolitary, appearing on the upper diſc of the leaves. Calyx of the male flower compoſed of ſix ſmall oval ſpreading leaves, of a yellowiſh green. Corolla none. Nectarium egg-ſhaped, inflated, upright, purple, open at the rim, of the length of the calyx. Filaments none. Antheræ three, expanding, uniting at the baſe, placed at the mouth of the nectarium. In the female flower the germen is oblong,

* Hence Virgil ſays, Horridior ruſco." Ec. 7. V. 41.

And again

——————— aſpera ruſci
Vimina per ſilvam, ———

enclofed

Ruscus aculeatus

Published by W. Wrankmore, June 1, 1794.

Aristolochia Clematitis.

Delineated by W. Hudson, 1, 1794.

enclofed in the nectarium, fupporting a cylindrical ftyle, fupplied with a blunt ftigma. Fruit a three-celled red berry, containing two globular feeds.

It ufually grows in woods and thickets, flowering in March and April.

The root, which is fomewhat thick, knotty, and furnifhed with long fibres, externally brown, internally white, and of a bitterifh tafte, has been recommended as an aperient and diuretic in dropfies, urinary obftructions, and nephritic cafes. Hence it has been termed one of the five greater aperient roots.

It is manifeftly the μυρσινη αγρια of Diofcorides,[b] who fpeaks highly of its deobftruent and diuretic powers; and Riverius relates a cafe of dropfy fuccefsfully treated by a decoction of the roots of Rufcus; but at prefent this plant is very rarely, if ever, employed in medicine.

[b] *Lib.* 4. *c.* 146.

ARISTOLOCHIA CLEMATITIS. CLIMBING BIRTHWORT.

SYNONYMA. Ariftolochia tenuis. *Pharm. Edinb. Geoff. ii.* 13. *Dale.* 194. *Alfton. i.* 391. *Lewis.* 111. *Murray. i.* 356. *Bergius.* 719. *Edinb. New Difp.* 132. Ariftolochia Clematitis recta. *Bauh. Pin.* 307. *Gerard. Emac.* 847. *Park. Theat.* 292. *Raii Hift.* 762. *Hall. Stirp. Helv. n.* 1029. *Hudf. Flor. Ang.* 394. *Withering. Bot. Arr.* 1003. *Mill. Illuft.*

Gynandria Hexandria. *Lin. Gen. Plant.* 1022.

Gen. Ch. Hexagynia. *Cal.* o. *Cor.* 1-petala, lingulata, integra. *Caps.* 6-locularis, infera.

Sp. Ch. A. foliis cordatis, caule erecto, floribus axillaribus confertis.

ROOT perennial, cylindrical, long, ſlender, creeping, fibrous. Stalks ſimple, ſlender, ſtriated, two feet in height, round, ſmooth, in a ſomewhat zigzag direction. Leaves on footſtalks, alternate, ſmooth, heart-ſhaped, blunt, of a ſhining bright green on the upper ſide, beneath veined. Flowers numerous, at the axillæ of the leaves, of a greeniſh yellow. Calyx none. Corolla monopetalous, tubular, tube nearly cylindrical, at the baſe round, at the mouth wider, and extended downwards into a long tongue. Filaments none. Antheræ ſix, growing underneath the ſtigma. Germen oblong, angular, placed below the corolla. Style very ſhort. Stigma roundiſh, divided into ſix portions. Capſule hexagonal, ſix-celled. Seeds numerous, ſmall, flattiſh.

It is a native of this country, growing in woods and hedges, and producing its flowers from July till September.

Various ſpecies of Ariſtolochia were formerly included in the Materia Medica, as noticed in the firſt part of this work; but the Clematitis here figured is the only ſpecies ſtill retained in the Edinburgh Pharmacopœia, and therefore ought to have ſuperſeded the A. longa, of which a plate is given at page 294.

The root, which is the part medicinally uſed, has a ſomewhat aromatic ſmell, and a warm bitteriſh taſte.

Not only writers on the Materia Medica, but moſt authors on the practice of medicine, from the remoteſt times, have aſcribed many virtues to the roots of Ariſtolochia, which it would be uſeleſs here to enumerate. The qualities for which they have been chiefly eſteemed are ſufficiently noticed in the following extract from Dr. Cullen:—
" Which of the ſpecies of Ariſtolochia are to be preferred I cannot
" determine, and believe the difference between the rotunda, longa,
" and tenuis, is not conſiderable, though the latter ſeems now to be
" preferred by both the Colleges of London and Edinburgh. They
" are all of them conſiderably bitter, with more acrimony than in
" any other of the bitters commonly employed. Its name ſeems to
" have ariſen from the ſuppoſition of its emmenagogue virtues, and
" in ſome caſes of retention and chloroſis, as a warm and ſtimulating
" medicine, I have found it uſeful; but in caſes of ſuppreſſion I
" never found it of any uſe: and the commendation of it by the
" ancients in promoting the lochia, facilitating birth, &c. is very ill
" founded.

Amygdalus Persica

Published by W. Wheatley June 1, 1791.

" founded. The Ariſtolochia has been long commended as a cure " for the gout. It makes a conſiderable part of the Portland powder,* " and has often been employed by itſelf in the ſame manner as that " powder, to be taken every day for a length of time." [a]

But Dr. Cullen thinks with Werlhoff,[b] that though it may prevent the recurrence of the gouty paroxyms, yet the long continued uſe of ſuch medicines is extremely hurtful, and commonly brings on a general ſtate of diſeaſe more fatal than the original diſtemper.

* For the compoſition of this powder, ſee *Med. Bot. vol. ii. p.* 296.

[a] *M. M. ii.* 83.

[b] See *Cautiones Medicæ Ed. Wickman. p.* 346.

AMYGDALUS PERSICA. COMMON PEACH TREE.

SYNONYMA. Perſica. *Pharm. Dale.* 301. *Alſton. ii.* 365. *Geoff. iii.* 798. *Lewis.* 483. *Edinb. New Diſpenſ.* 249. *Murray. iii.* 241. *Bergius.* 413. Perſica Malus. *Gerard. Emac.* 1447. *Park. Parad.* 580. *Raii. Hiſt.* 1515. *Du Hamel. Arb. fruit. T. ii. t.* 30.

Icoſandria Monogynia. *Lin. Gen. Plant.* 619.

Gen. Ch. *Cal.* 5-fidus, inferus. *Pet.* 5. *Drupa* nuce poris perforata.

Sp. Ch. A. foliorum ſerraturis omnibus acutis, floribus ſeſſilibus ſolitariis.

THE common Peach-tree grows to a conſiderable height, and ſends off numerous ſpreading branches. Leaves long, narrow, pointed, elliptical, acutely ſerrated, on footſtalks, alternate. Flowers ſeſſile, purpliſh, ſolitary, large. Calyx tubular, divided at the margin into five ovate ſegments, and at the baſe beſet with numerous ſcales. Petals five, inverſely ovate, ſpreading, attached by ſhort claws. Filaments numerous, tapering, inſerted into the calyx, furniſhed with purpliſh

purpliſh antheræ. Germen roundiſh, downy. Style ſhort, ſimple, terminated by a round ſtigma. Fruit too well known to require deſcription.

The varieties of this ſpecies are α, *fructibus lanuginoſis*, Common Peach. β, *fructibus glabris*, Nectarine. γ, *flore pleno*, the double-flowered Peach-tree.

It is not known of what country this tree is a native, but it was cultivated here in the time of Turner, 1562, and probably long before that period. From the name Perſica, it may be ſuppoſed to have been brought from Perſia; but this is conjecture, nor is it aſcertained to be the Περσικη μηλεα of Dioſcorides, or Περσια of Theophraſtus.

The fruit is known to be grateful and wholeſome, ſeldom diſagreeing with the ſtomach, unleſs this organ is not in a healthy ſtate, or the fruit has been eaten to exceſs, when effects ſimilar to thoſe of the other dulco-acid ſummer fruits may be produced.

The flowers, including the calyx, as well as the corolla, are the parts of the Perſica uſed for medicinal purpoſes; theſe have an agreeable but weak ſmell, and a bitteriſh taſte. Boulduc [a] obſerves, "that when diſtilled without addition by the heat of a water bath, they yield one-ſixth their weight, or more, of a whitiſh liquor, which communicates to a conſiderable quantity of other liquids a flavour like that of the kernels of fruits."

Theſe flowers have a cathartic effect, and eſpecially to children have been ſucceſsfully given in the character of a vermifuge; for this purpoſe an infuſion of a dram of the flowers dried, or half an ounce in their recent ſtate, is the requiſite doſe. The leaves of the Perſica are alſo found to poſſeſs an anthelmintic power, and from a great number of experiments appear to have been given with invariable ſucceſs both to children and adults.

However, as the leaves and flowers of the Perſica manifeſt in ſome degree the quality of thoſe of the lauroceraſus, they ought to be uſed with caution.

We find a "Syrupus florum perſicorum," ordered in the Pharm. Wurt.

[a] Mem. de L'Acad. 1714. p. 37.

[b] See *Coſte et Willemet. Eſſ. de Mat. Med. indig.* p. 32.

Meniſpermum

Prunus Lauro-cerasus

Published by W. Woodville, June 1, 1791.

Meniſpermum Cocclus of Linnæus, which produces the Cocculus Indus, formerly an officinal article, belongs alſo to this natural order. It is figured by Rumphius under the name of Tuba baccifera.

The fruit, which is brought here from the Eaſt Indies, is ſaid to be powerfully narcotic, and uſed for the purpoſe of intoxication.

P O M A C E Æ.

PRUNUS LAUROCERASUS. COMMON, or CHERRY LAUREL.

SYNONYMA. Lauroceraſus. *Pharm. Dale.* 309. *Lewis.* 380. *Bergius.* 399. *Murray. iii.* 213. *Cullen. ii.* 282. Ceraſus folio laurino. *Bauh. Pin.* 410. *Ger. Emac.* 1603. *Raii Hiſt.* 1549. *Duhamel. Traité des Arbres. t.* 133.

Icoſandria Monogynia. *Lin. Gen. Plant.* 620.

Gen. Ch. *Cal.* 5-fidus, inferus. *Petala* 5. *Drupæ* nux futuris prominulis.

Sp. Ch. P. floribus racemoſis fol. ſempervirentibus dorſo biglanduloſis.

A SHRUB or ſmall tree, ſending off long ſpreading branches, and covered with ſmooth brown bark. Leaves evergreen, elliptical, or obovate, blunt, rather ſerrated, furniſhed with yellowiſh glands at the baſe, of a ſhining deep green, placed alternately upon ſtrong ſhort footſtalks. Flowers on ſhort peduncles, in ſpikes, which ariſe at the alæ of the leaves. Calyx tubular, ovate, divided at the brim into five pointed reflexed ſegments. Corolla compoſed of five petals, which are ſmall, white, roundiſh. Filaments about eighteen, tapering, in-

 ſerted

ſerted in the calyx, furniſhed with ſimple antheræ. Germen oblong, ſupporting a columnar ſtyle, terminated by a blunt ſtigma. Fruit drupous, reſembling a ſmall cherry both in its external and internal ſtructure.

It is a native of the Levant, and appears to have been long cultivated in Britain, and by its poliſhed evergreen leaves adds much to the beauty of our ſhrubberies.

The leaves of the Lauro Ceraſus have a bitter ſtyptic taſte, accompanied with a flavour reſembling that of bitter almonds, or other kernels of the drupaceous fruits. The flowers of this plant alſo manifeſt a ſimilar flavour. The powdered leaves, applied to the noſtrils, excite ſneezing, though not ſo ſtrongly as tobacco.

The kernel-like flavour which theſe leaves impart being generally eſteemed grateful, has ſometimes cauſed them to be employed for culinary purpoſes, and eſpecially in cuſtards, puddings, blancmange, &c. and as the proportion of this ſapid matter of the leaf to the quantity of the milk is commonly inconſiderable, bad effects have ſeldom enſued. But as the poiſonous quality of this laurel is now indubitably proved, the public ought to be cautioned againſt its internal uſe.

The following communication to the Royal Society, by Dr. Madden of Dublin, contains the firſt and principal proofs of the deleterious effects of this vegetable upon mankind. " A very extraordinary " accident that fell out here ſome months ago, has diſcovered to us a " moſt dangerous poiſon, which was never before known to be ſo, " though it has been in frequent uſe among us. The thing I mean " is a ſimple water, diſtilled from the leaves of the *Lauro-ceraſus.*— " The water is at firſt of a milky colour, but the oil which comes " over the helm with it, being in a good meaſure ſeparated from the " phlegm, by paſſing it through a flannel-bag, it becomes as clear as " common water. It has the ſmell of bitter almond, or peach ker- " nel, and has been for many years in frequent uſe among our houſe- " wives and cooks, to give that agreeable flavour to their creams and " puddings. It has alſo been much in uſe among our drinkers of " drams; and the proportion they generally uſe it in, has been one " part of laurel-water to four of brandy. Nor has this practice, " (however frequent) ever been attended with any apparent ill con-

" ſequences,

" ſequences, till ſome time in the month of September, 1728, when " it happened that one Martha Boyſe, a ſervant, who lived with a " perſon that ſold great quantities of this water, got a bottle of it " from her miſtreſs, and gave it to her mother, Ann Boyſe, as a " very rich cordial. Ann Boyſe made a preſent of it to Frances " Eaton, her ſiſter, who was a ſhopkeeper in town, and who ſhe " thought might oblige her cuſtomers with it. Accordingly, in a " few days, ſhe gave about two ounces of the water to a woman " called Mary Whaley, who drank about two-thirds of what was " filled out, and went away. Frances Eaton drank the reſt. In a " quarter of an hour after Mary Whaley had drank the water, (as I " am informed) ſhe complained of a violent diſorder in her ſtomach, " ſoon after loſt her ſpeech, and died in about an hour, without " vomiting or purging, or any convulſion.

" The ſhopkeeper, F. Eaton, ſent word to her ſiſter, Ann Boyſe, " of what had happened, who came to her upon the meſſage, and " affirmed that it was not poſſible the cordial (as ſhe called it) could " have occaſioned the death of the woman; and to convince her of " it, ſhe filled out about three ſpoonfuls, and drank it. She con- " tinued talking with F. Eaton about two minutes longer, and was " ſo earneſt to perſuade her of the liquor's being inoffenſive, that ſhe " drank two ſpoonfuls more, but was hardly well ſeated in her chair " when ſhe died without the leaſt groan or convulſion. Frances " Eaton, who, as before obſerved, had drank ſomewhat above a " ſpoonful, found no diſorder in her ſtomach or elſewhere; but to " prevent any ill conſequence ſhe took a vomit immediately, and " has been well ever ſince." *

Dr. Madden mentions another caſe of a gentleman at Kilkenny, who " miſtook a bottle of this laurel water for a bottle of ptiſan; " what quantity he drank is uncertain, but he died in a few minutes, " complaing of a violent diſorder in his ſtomach."

* See *Phil. Tranſ. vol.* 37. *p.* 84. " *A letter from T. Madden. M. D. giving an account of two women being poiſoned by the ſimple diſtilled water of Laurel-leaves, and of ſeveral experiments upon dogs, by which it appears, that this laurel is one of the moſt dangerous poiſons hitherto known.*"

In

In addition to this, we may refer to the unfortunate caſe of Sir Theodoſius Boughton, whoſe death, in 1780, an Engliſh jewry declared to be occaſioned by this poiſon. In this caſe the active principle of the Lauroceraſus was concentrated by repeated diſtillations, and given to the quantity of an ounce; the ſuddenly fatal effects of which muſt be ſtill in the recollection of the public.

To brute animals this poiſon is almoſt inſtantaneouſly mortal, as amply appears by the experiments of Madden, Mortimer,[b] Nicholls,[c] Langriſh,[d] Vater,[e] Fontana, and others.

The experiments, conducted by theſe gentlemen, ſhow, that the laurel-water is deſtructive to animal life, not only when taken into the ſtomach, but alſo on being injected into the inteſtines, or applied externally to different organs of the body. It is remarked by Abbé Fontana, that this poiſon, even "when applied in a very ſmall quantity to the eyes, or to the inner part of the mouth, without touching the oeſophagus, or being carried into the ſtomach, is capable of killing an animal in a few inſtants; whilſt applied in a much greater quantity to wounds, it has ſo little activity, that the weakeſt animals, ſuch as pigeons, reſiſt its action."[f]

The moſt volatile is the moſt active part of the Lauroceraſus; and if we judge from its ſenſible qualities, an analagous principle ſeems to pervade many other vegetable ſubſtances, eſpecially the kernels of drupaceous fruits; and in various ſpecies of the amygdalus, this ſapid principle extends to the flowers and leaves.

It is of importance to notice, that this is much leſs powerful in its action upon human ſubjects than upon dogs, rabbits, pigeons, and reptiles. To poiſon man the eſſential oil of the Lauroceraſus muſt be ſeparated by diſtillation, as in the ſpirituous or common laurel-water; and unleſs this is ſtrongly imbued with the oil, or given in a large doſe, it proves innocent.

[b] *Phil. Tranſ. v.* 37. *p.* 163.

[c] & [d] Vide Langriſh. *Phil. Experiments upon brutes, to which is added a courſe of experiments with the Lauroceraſus.*

[e] *Diſſ. de Lauroceraſi indole venenata.* Alſo in his *Progr. de olei animal. contra hydrop.*

[f] See *Skinner's Tranſlation. ii. p.* 180.

Dr. Cullen

Dr. Cullen obſerves, that the ſedative power of the Lauroceraſus acts upon the nervous ſyſtem in a different manner from opium and other narcotic ſubſtances, whoſe primary action is upon the animal functions: for the Lauroceraſus does not occaſion ſleep, nor does it produce local inflammation, but ſeems to act directly upon the vital powers. Abbé Fontana ſuppoſes that this poiſon deſtroys animal life, by exerting its effects upon the blood; but the experiments and obſervations from which he draws this opinion are evidently inconcluſive. It may alſo be remarked, that many of the Abbé's experiments contradict each other.

Thus it appears, from the citation given above, that the poiſon of this vegetable, when applied to wounds, does not produce a fatal effect; but future experiments led the Abbé to aſſert, that the oil of the Lauroceraſus, "whether given internally, or applied to the wounds of animals, is one of the moſt terrible and deadly poiſons known."

Though this vegetable ſeems to have eſcaped the notice of Stoerck, yet it is not without advocates for its medicinal uſe. Linnæus informs us, that in Switzerland it is commonly and ſucceſsfully uſed in pulmonary complaints. Langriſh mentions its efficacy in agues; and as Bergius found bitter almonds to have this effect, we may from analogy conclude, that this power of the Lauroceraſus is well eſtabliſhed. Baylies found that it poſſeſſed a remarkable power of diluting the blood, and from experience recommended it in all caſes of diſeaſe ſuppoſed to proceed from too denſe a ſtate of that fluid; adducing particular inſtances of its efficacy in rheumatiſm, aſthma, and in ſchirrous affections. Nor does this author ſeem to have been much afraid of the deleterious quality of the Lauroceraſus, as he directs a pound of its leaves to be macerated in a pint of water, of which he gives from thirty to ſixty drops three or four times a day.

Of the other ſpecies of Prunus, or Cherry, we find nothing deſerving of particular attention.

The Sorbus aucuparia, or Mountain Aſh, belongs to this order. Its berries, which appear in large beautiful cluſters, are by ſome writers eſteemed for their cathartic and antiſcorbutic qualities.

VERTICILLATÆ.

BETONICA OFFICINALIS. WOOD BETONY.

SYNONYMA. Betonica. *Pharm. Geoff. iii.* 183. *Dale.* 151. *Alſton. ii.* 88. *Lewis.* 146. *Edinb. New Diſp.* 146. *Murray. ii.* 158. *Bergius.* 524. *Cullen. ii.* 145. Betonica purpurea. *Bauh. Pin.* 235. *Gerard. Emac.* 714. *Raii. Synop.* 238. *Hall. Stirp. Helv.* 264. *Park. Theat.* 238. B. officinalis. *Hudſon. Flor. Ang.* 258. *Withering. Bot. Arr.* 611. *Ic. Flor. Dan.* 726. *Flor. Lond.* 154.

Didynamia Gymnoſpermia. *Lin. Gen. Plant.* 718.

Gen. Ch. Cal. ariſtatus. *Corollæ* lab. ſuper. adſcendens, planiuſculum. *Tubus* cylindricus.

Sp. Ch. B. ſpica interrupta, corollarum labii lacinia intermedia emarginata.

ROOT perennial, tapering, woody, brownifh, furniſhed with long white fibres. Stalks uſually more than a foot in height, erect, ſquare, ſimple, channelled towards the top, nearer the baſe hairy. Lower leaves on footſtalks, cordate, or lance-ſhaped, notched, obtuſe, veiny, ſomewhat hairy, and wrinkled: upper leaves narrower, oppoſite, reflexed. Flowers purple, in ſpikes compoſed of ſeveral whorls. Bracteæ abundant, placed under the flowers, of the length of the calyx. Calyx permanent, tubular, divided at the edge into five narrow teeth. Corolla monopetalous; tube longer than the calyx, bending inwards, below ſmooth and white, above purple, downy: upper lip roundiſh, entire, erect; lower one divided into three ſegments, of which the middle one is the broadeſt. Filaments four,

Delineated by Dr Woodville July. 1. 1791.

four, longer than the tube, two long and two ſhort, furniſhed with purple antheræ. Germen divided into four parts. Style tapering, white, longer than the filaments, and terminated by a bifid ſtigma. Seeds four, of an irregular ſhape, and lodged in the calyx.

It is common in woods and heaths, flowering in Auguſt and September.

The deſcription of the Βετονικη by Dioſcorides applies equally to many of the other verticillated plants: he alſo ſtates it to be purgative, ſo that it ſeems very doubtful if by that name he meant the plant here figured.

The leaves and tops of the Betony have an agreeable but weak ſmell: to the taſte they diſcover a ſlight warmth, accompanied with ſome degree of aſtringency and bitterneſs. They yield very little eſſential oil, inſomuch that only a few drops can be obtained from a large quantity of the herb.

Betony, like many other plants formerly in great medical eſtimation, is at this time almoſt entirely diſregarded. Antonius Muſa, phyſician to the Emperor Auguſtus, filled a whole volume with enumerating its virtues, ſtating it as a remedy for no leſs than forty-ſeven diſorders; and hence in Italy aroſe this proverbial compliment *You have more virtues than Betony.*[a]

Simon Paulli alſo aſcribes to it powers, which may be conſidered as rather miraculous than natural, and which did not ſeem to require contradiction from the experiments of Alſton.[b]

Modern writers do not allow the Betony to poſſeſs any conſiderable efficacy: Scopoli indeed ſays that he experienced its cephalic and corroborant effects; but its ſenſible qualities ſhow it to be more inert than moſt of the other verticillatæ. Both this plant and Eyebright enter into the compoſition of Rowley's Britiſh herb tobacco and ſnuff.

[a] The Italians alſo introduced the maxim *Vende la tonica et compra la Betonica.*

[b] See *Alſton. l. c.*

[c] *Flor. Carn. Ed.* 1. *p.* 460.

ORIGANUM.

ORIGANUM DICTAMNUS. DITTANY of CRETE.

SYNONYMA. Dictamnus creticus. *Pharm. Geoff. ii.* 272. *Dale.* 148. *Alston. ii.* 129. *Lewis.* 274. *Edinb. New Dispens.* 183. *Murray. ii.* 139. *Bergius.* 529. *Bauh. Pin.* 222. *Park. Theat.* 27. *Ray. Hist.* 537. *Ger. Emac.* 795.

Didynamia Gymnospermia. *Lin. Gen. Plant.* 726.

Gen. Ch. *Strobilus* tetragonus, spicatus, calyces colligens.

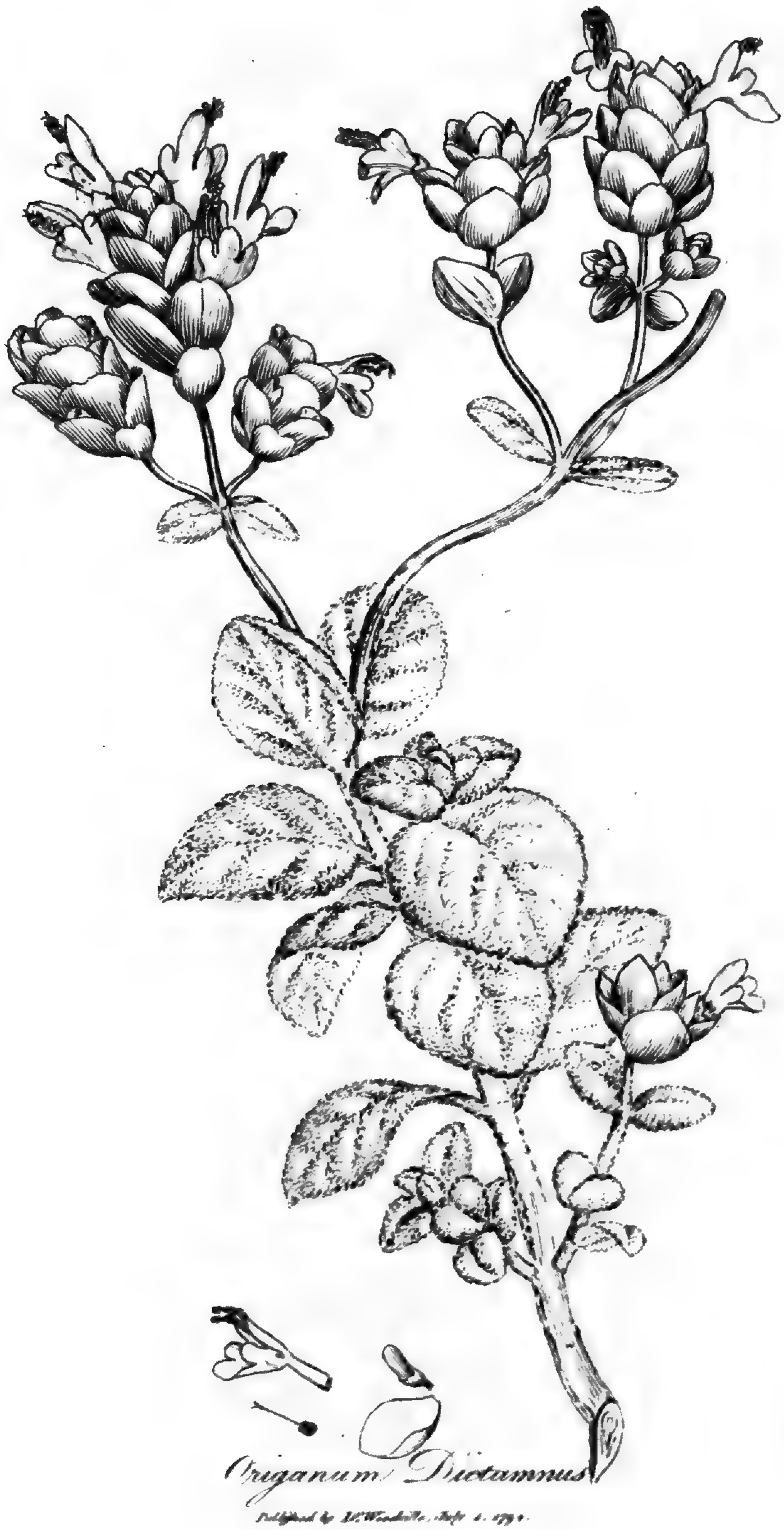
Sp. Ch. O. foliis inferioribus tomentosis, spicis nutantibus.

ROOT fibrous, perennial. Stalk about a foot in height, branched, downy, ligneous. Leaves ovate, blunt, opposite, on short footstalks, thick, covered with soft white hairs. Flowers purple, in spikes. Bracteæ roundish, smooth, coloured, numerous, forming quadrangular spikes. Calyx small, five-toothed, concealed by the bracteæ. Corolla monopetalous, consisting of a long tube, divided at the limb into two lips, of which the upper is straight, and encloses the filaments: the under lip is cut into three obtuse lobes, of which the middle one is the largest. Filaments two long and two short, filiform, longer than the corolla, and furnished with simple antheræ. Germen divided into four parts. Style slender. Stigma bifid. Seeds four, of an irregular ovate shape, and lodged at the bottom of the calyx.

It flowers from June till August.

This plant, which is a native of the Island of Candia, appears from Turner to have been cultivated in Britain previous to the year 1568, by Mr. Riche. The specimen here delineated grew in the Royal garden at Kew.

The


Origanum Dictamnus

The leaves of this plant are apparently very warm and aromatic; of an agreeable ſmell, and hot biting taſte. They impart their virtues both to water and rectified ſpirit. Diſtilled with water, they give over a moderately ſtrong impregnation to the aqueous fluid; from which, if the quantity of Dittany be large, there ſeparates, as Neuman obſerves, a ſmall portion of a yellowiſh eſſential oil, of a highly pungent aromatic taſte and ſmell, and which congeals in the cold into the appearance of camphor.[a]

Both the Greek and Roman writers have fabled this plant into great celebrity; of which a ſingle inſtance, related by the Latin Poet, affords a beautiful illuſtration.[b]

Though rarely uſed at this day, it certainly poſſeſſes, in a very conſiderable degree, the ſtimulant and aromatic qualities which characterize this claſs of plants; and has at leaſt an equal ſhare of emmenagogue, carminative, and ſtomachic virtue.

[a] *Lewis. l. c.*

[b] Hîc Venus, indigno nati concuſſâ dolore,
Dictamnum genitrix Cretæâ carpit ab Idâ,
Puberibus caulem foliis, et flore comantem
Purpureo: non illa feris incognita capris
Gramina, cùm tergo volucres hæſêre ſagittæ.
ÆN. L. XII. 411.

TEUCRIUM CHAMÆDRYS. COMMON GERMANDER.

SYNONYMA. Chamædrys. *Pharm. Geoff. iii.* 296. *Dale.* 145. *Alston. ii.* 105. *Lewis.* 219. *Cullen. ii.* 82. *Ed. New. Dispens.* 169. *Murray. ii.* 119. *Bergius.* 506. Chamædrys minor repens. *Bauh. Pin.* 148. *Ger. Emac.* 656. Chamædrys vulgaris. *Park. Theat.* 104. *Ray. Hist.* 527. *Synop.* 231. *Hudson. Flor. Ang.* 248. *With. Bot. Arr.* 592. *Ic. Flor. Dan. p.* 448.

Didynamia Gymnospermia. *Lin. Gen. Plant.* 706.

Gen. Ch. *Corollæ* labium superius (nullum) ultra basin 2-partitum, divaricatum ubi stamina.

Sp. Ch. T. foliis cuneiformi-ovatis incisis crenatis petiolatis, floribus ternis, caulibus procumbentibus subpilosis.

ROOT perennial, branched, fibrous. Stalk about a foot in height, decumbent, roundish, branched, rough. Leaves in pairs, on footstalks, ovate, narrow, irregularly toothed, veined, hairy. Flowers purple, placed in whorls at the alæ of the leaves. Calyx rough, quinquifid. Segments pointed. Corolla consists of a short curved tube, at the limb divided into two lips, of which the upper is short, and cut in the middle in such a manner as to disappear: the lower lip separates into spreading lobes, of which the middlemost is large, and of a roundish form. Filaments two long and two short, slender, white, and furnished with simple antheræ. Germen four, parted. Style filiform. Stigma bifid. Seeds four, enclosed in the calyx.

It is a native of England, flowering in June and July. The annexed figure is taken from a garden specimen.

The leaves and tops of Germander have a moderately bitter taste, accompanied with a weak aromatic flavour, which is diminished but not totally dissipated when the plant is dried. They give out their virtues both to watery and spirituous menstrua. Water seems to dissolve the bitter matter more perfectly than pure spirit, the watery extract

Teucrium Chamædrys

Published by W. Woodville July 1, 1791.

extract being ſtronger in taſte than the ſpirituous;[a] though the quantity of both extracts, according to Cartheuſer's experiments, is very nearly alike.

The Chamædrys has been eſteemed chiefly in the character of a mild aperient and corroborant: it is recommended in uterine obſtructions,[b] intermitting fevers,[c] and in the rheumatiſm and gout. Of the laſt mentioned complaint, Charles the Vth is ſaid to have been cured by a vinous decoction of this, with ſome other herbs, taken daily for ſixty ſucceſſive days.[d]

Other and leſs equivocal evidence of the good effects of the Chamædrys, in this diſorder, are recorded by different authors, who appear to have employed it in various forms and combinations, of which the celebrated antiarthritic, or Portland powder, is an inſtance.

According to Murray the virtues of this plant ſhould be nearly allied to thoſe of the Marrubium, and therefore promiſes to be equally uſeful in aſthmatic affections, coughs, and infarctions of the lungs. However, while we admit this concluſion, we conſider the virtues of both as ſomewhat problematical.

[a] *Lewis. l. c.* [b] See *Ray. l. c.*
[c] *Alpinus. Med. Ægypt. p.* 316. *Riverius, Obſerv. Cent.* 4.—82. *Chomel. Us. ii.* 139. *Seguier. Pl. Veron. T. i. p.* 319. [d] *Veſal. Rad. Chin.* 111.

MANY other medicinal plants of the order VERTICILLATÆ ſtill remain unnoticed; but conſidering the great number of this claſs figured in our former volumes, it has been thought that the medical reader will not regret the ſuppreſſion of the following:

LIN. NAME.	OFFICINAL.	ENGLISH.
Ajuga pyramidalis	Conſolida media	Mountain Bugle
Teucrium creticum	Polium creticum	Poley of Candia
..... Chamæpitys	Chamæpitys	Ground pine
..... Montanum	Polium montanum	Mountain poley
Melittis Meliſſophyllum	Meliſſophyllum	Baſtard balm
Meliſſa Calamintha	Calamintha	Calamint
Lavendula Stoechas	Stoechas	French Lavender
Satureja hortenſis	Satureja	Summer Savory
Nepeta Cataria	Nepeta	Catmint
Origanum creticum	Origanum creticum	Marjoram of Candia
Salvia Sclarea	Sclarea	Clary
Leonurus Cardiaca	Cardiaca	Mother-wort
Prunella vulgaris	Prunella	Self heal
Lamium album	Lamium album	Dead-nettle

ERYSIMUM.

SILIQUOSÆ.

ERYSIMUM OFFICINALE. HEDGE MUSTARD.

SYNONYMA. Erysimum. *Pharm. Geoff. iii.* 444. *Dale.* 203. *Alston. ii.* 135. *Lewis.* 289. *Cullen. ii.* 166. *Edinb. New Disp.* 186. *Murray. ii.* 315. *Bergius.* 561. *Hall.* 478. Erysimum vulgare. *Bauh. Pin.* 100. Erysimum Dioscoridis Lobelii. *Ger. Emac.* 254. Irio sive Erysimum vulgare. *Park. Theat.* 833. Eruca siliqua cauli appressa, Erysimum dicta. *Ray. Hist.* 810. *Synop.* 298. Erysimum officinale. *Hudson. Ang.* 286. *Wither. Bot. Arr.* 695. *Ic. Flor. Dan.* 560. *Curt. Flor. Lond.*

Tetradynamia Siliquosa. *Lin. Gen. Plant.* 814.

Gen. Ch. *Siliqua* columnaris, exactè tetraëdra. *Cal.* claufus.

Sp. Ch. E. filiquis spicæ adpressis, foliis runcinatis.

ROOT annual, tapering, furnished with long fibres. Stalk from one to two feet in height, erect, round, branched, hairy. Leaves on footstalks, rough, downy, pinnatifid segments, opposite, ovate, toothed, terminal one the largest. Flowers yellow, small, placed in long racemi or spikes. Calyx of four leafits, which are ovate, narrow, blunt, hairy. Corolla composed of four petals, placed oppositely, inversely ovate, standing upon long claws. Filaments six, tapering, two of which are shorter than the others, and having at the base two nectarious glands. Antheræ heart-shaped. Germen cylindrical, striated. Stigma roundish, compressed, notched. Pods nearly conical, obscurely quadrangular, hairy, pressed to the stalk. Seeds of a dingy yellow colour, obliquely truncated at each end.

It

Erysimum officinale

Published by W. Woodville July 1, 1790.

It is common on dry banks and waſte places, and flowers from June till September.

The taſte of this herb is ſomewhat acrid, eſpecially the tops of the flower ſpikes. Its ſeeds are conſiderably pungent, and appear to be nearly of the ſame quality with thoſe of muſtard, but weaker.

The Eryſimum is ſaid to be attenuant, expectorant, and diuretic, and has been ſtrongly recommended in chronical coughs and hoarſeneſs. Rondeletius informs us, that the laſt mentioned complaint, occaſioned by loud ſpeaking, was cured by this plant in three days. Other teſtimonies of its good effects in this diſorder are recorded by writers on the Materia Medica, of whom we may mention Dr. Cullen, who, for this purpoſe recommends the juice of the Eryſimum to be mixed with an equal quantity of honey or ſugar. In this way alſo it is ſaid to be a uſeful remedy in ulcerations of the mouth and throat.

In moſt caſes of diſeaſe, perhaps the ſeeds of Eryſimum, as more pungent, ſhould be preferred to its leaves.

ERYSIMUM ALLIARIA. SAUCE-ALONE, Or, STINKING HEDGE-MUSTARD.

SYNONYMA. Alliaria. *Pharm. Geoff. iii.* 58. *Dale.* 200. *Alston. ii.* 79. *Lewis.* 31. *Edinb. New Dispens.* 120. *Murray. ii.* 317. *Burgius.* 564. *Bauh. Pin.* 110. *Gerard. Emac.* 794. *Park. Theat.* 112. *Ray. Hist.* 792. *Synop.* 293. *Hall. Hist. Stirp. Helv.* 480. Erysimum Alliaria. *Hudf. Ang.* 286. *With. Bot. Arr.* 696. *Ic. Curt. Flor. Lond.* 144.

Tetradynamia Siliquosa. *Lin. Gen. Plant.* 814.

Gen. Ch. Siliqua columnaris, exacte tetraëdra. *Cal.* clausus.

Sp. Ch. E. foliis cordatis.

ROOT biennial, whitish, tapering, fibrous. Stalk erect, two or three feet in height, round, smooth, channelled, sparingly branched. Leaves alternate, heart-shaped, on footstalks, unequally toothed, veiny: on the upper part of the stalk they are pointed, and narrower; at the root kidney-shaped, and standing on long footstalks. Flowers white, in terminal spikes. Calyx of four leafits, which are ovate, concave, of a pale green. Corolla consists of four petals, which are inversely ovate, and placed in opposite directions upon erect claws. Filaments six, tapering, four of which are long and erect, two short, and bent inwards. Antheræ yellow, oblong, incumbent. Germen long, quadrangular. Style very short. Stigma roundish. Pod two inches long, obscurely quadrangular, marked with a prominent line between each angle; the cavity divided into two cells, containing oblong shining brown seeds, which appear obliquely truncated at each end.

It is common on hedge banks, and flowers in May and June.

The leaves of this plant have a moderate acrimony, and a strong flavour, resembling that of garlic or onions; they give the same kind of taint to the breath as those roots, and have been used for the same culinary

Erysimum Alliaria

culinary purpoſes: hence the name Alliaria. On drying, however, their ſenſible qualities are conſiderably diminiſhed, or entirely loſt.

"The juice, expreſſed from the freſh leaves, is ſtrongly impregnated with their active matter, but loſes the greateſt part of it on being inſpiſſiated to an extract with the gentleſt warmth: in its liquid ſtate, duly ſecured from the air, it may be kept uninjured for many months. On diſtilling the freſh herb with water, there ariſes a ſmall portion of eſſential oil, which taſtes and ſmells exceeding ſtrongly." [a]

The medicinal character of Alliaria is that of a powerful diaphoretic, diuretic, and antiſcorbutic; and as partaking of the qualities of garlick it has been deemed uſeful as an expectorant and deobſtruent, in humoral aſthmas, and other caſes of dyſpnœa. It has alſo been much eſteemed as an external application, to promote ſuppuration; and Boerhaave informs us, that he cured a gangrene of the leg, ariſing from a neglected fracture and contuſion, by applying the bruiſed leaves of Alliaria with wine.[b]

It has been thought unavailing to publiſh figures of the remaining medical plants of this order, not only becauſe they appear unimportant, but becauſe they are nearly allied to each other both in their medicinal and botanical characters, and are ſufficiently exemplified here and in the former volumes of this work.—See Cochlearia, Sinapi, Cardamine, Raphanus ruſticanus, Naſturtium aquaticum.

[a] *Lewis. l. c.* [b] *Hiſt. Plant. Lugd. Bat.* 437.

Thoſe omitted are

Lin. Name.	Officinal.	English.
Siſymbrium Sophia	Sophia chrurgorum	Flix-weed
Eryſimum Barbaræa	Barbaræa	Winter Hedge-muſtard
Raphanus ſativus	Raphanus	Garden-Radiſh
Braſſica oleracea	Braſſica	Cabbage
..... Rapa	Rapa	Turnep
..... Napus	Napus	Rape, or Wild-Cabbage
..... Eruca	Eruca	Garden-Rocket
Cheiranthus Cheiri	Cheiri	Wall-Flower
Lepidium ſativum	Naſturtium hortenſe	Garden-Creſs
Thlaſpi arvenſe	Thlaſpi	Baſtard-Creſs
..... Burſa paſtoris	Burſa paſtoris	Shepherd's-Purſe

MULTESILIQUÆ.

MULTISILIQUÆ.

RANUNCULUS ACRIS. UPRIGHT MEADOW CROWFOOT.

SYNONYMA. Ranunculus pratensis. *Pharm. Murray. iii.* 75. Ranunculus foliis hirsutis semitrilobis, lobis lateralibus bipartitis, foliis caulinis semitrilobis. *Hall. Stirp. Helv. n.* 1169. Ranunculus pratensis erectus acris. *Bauh. Pin.* 178. *Ger. Emac.* 951. *Park. Theat.* 329. *Ray. Synop.* 248. R. acris. *Hudf. Flor. Ang.* 211. *Withering. Bot. Arr.* 576. *Scop. Flor. Carniol.* 398. *Ic. Curt. Flor. Lond.*

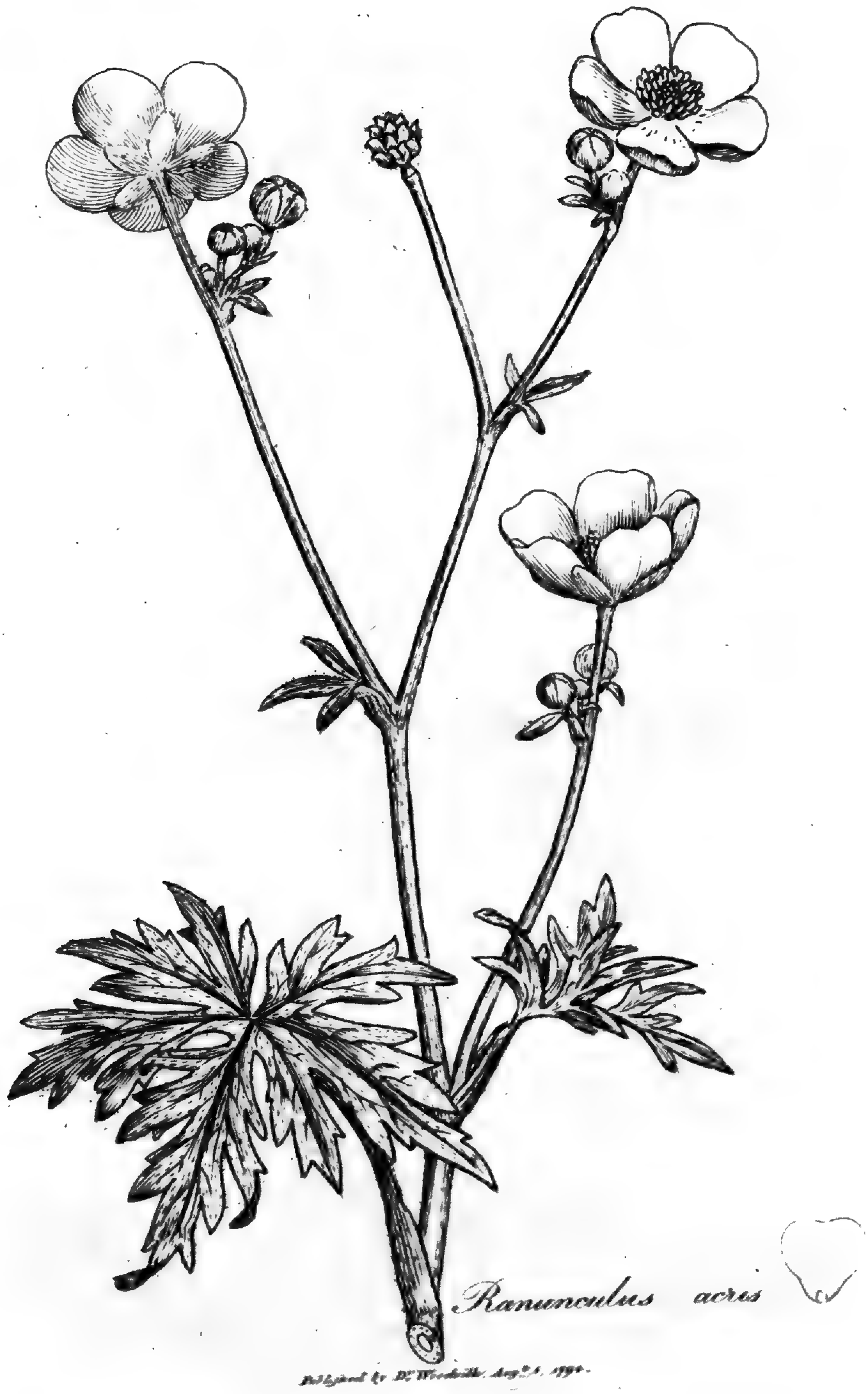
Polyandria Polygynia. *Lin. Gen. Plant.* 699.

Gen. Ch. *Cal.* 5-phyllus. *Petala* 5 intra ungues poro mellifero. *Sem.* nuda.

Sp. Ch. R. calycibus patulis, pedunculis teretibus, foliis tripartito-multifidis, summis linearibus.

ROOT perennial, consisting entirely of long white slender fibres. Stalk erect, branched near the top, round, hairy, about two feet in height. Leaves on long upright footstalks, trifid, subdividing into smaller laciniated lobes, marked beneath with small prominent reticulated veins: at the base of the peduncles, the leaves are simple, linear, and fringed with hairs. Flowers yellow, terminal, on long round hairy peduncles. Calyx of five leaves, which are ovate, spreading, hairy, yellowish. Corolla of five petals, yellow, shining, heart-shaped, commonly notched at the top. Filaments numerous, short, furnished with yellow inclining antheræ. Nectatarium, a small scale at the base of each petal. Germina numerous, forming an orbicular head. Styles none. Stigmata reflexed. Seeds numerous, roundish, of a brown colour.

It



Published by Dr. Withering, Aug.st 1, 1792.

It is a native of meadows and moiſt paſtures, flowering in June and July.

The great acrimony of this, and many of the other, ſpecies of Ranunculus, is ſuch, that on being applied to the ſkin they excite itching, redneſs, and inflammation, and even produce bliſters, tumefaction, and ulceration of the part. On being chewed they corrode the tongue; and, if taken into the ſtomach, bring on all the deleterious effects of an acrid poiſon.

The corroſive acrimony, which this family of plants poſſeſſes was not unknown to the ancients, as appears from the writings of Dioſcorides; but its nature and extent had never been inveſtigated by experiments before thoſe inſtituted by C. Krapf [a] at Vienna, by which we learn that the moſt virulent of the Linnean ſpecies of Ranunculus are the bulboſus, ſceleratus, acris, arvenſis, thora, and illyricus. The effects of theſe were tried either upon himſelf, or upon dogs, and ſhow, that the acrimony of the different ſpecies is often confined to certain parts of the plant, manifeſting itſelf either in the roots, ſtalks, leaves, flowers, or buds: the expreſſed juice, extract, decoction, and infuſion of theſe plants were alſo ſubjected to experiments.

In addition to theſe ſpecies, mentioned by Krapf, we may alſo notice the R. Fammula, and eſpecially the R. Alpeſtris, which, according to Haller, is the moſt acrid of this genus. However, as the ſpecies here delineated is a common Engliſh plant, and poſſeſſes this active principle diffuſed in a very conſiderable degree throughout the whole herb, it has been judged proper to ſelect it for this work as a ſufficient example and repreſentative of the whole tribe.

Mr. Curtis obſerves that even pulling up this plant, and carrying it to ſome little diſtance, excited a conſiderable inflammation in the palm of the hand in which it was held.

It is neceſſary to remark, that the acrimonious quality of theſe plants is not of a fixed nature; for it may be completely diſſipated by

[a] Vide *Experimenta de nonnullorum Ranunculorum venenata qualitate, horum externo et interno uſu.* 1766.

The R. ſceleratus ſeems more corroſive than the R. acris; and we are told by Dr. Withering, that "beggars are ſaid to uſe it to ulcerate their feet, which they expoſe in that ſtate to excite compaſſion."

 heat;

heat; and the plant on being thoroughly dried, becomes perfectly bland.

Krapf attempted to counteract this venomous acrimony of the Ranunculus by means of various other vegetables, none of which was found to anſwer the purpoſe, though he thought that the juice of ſorrel, and that of unripe currants, had ſome effect in this way; yet theſe were much leſs availing than water; while vinegar, honey, ſugar, wine, ſpirit, mineral acids, oil of tartar, p. d. and other ſapid ſubſtances manifeſtly rendered the acrimony more corroſive. It may be alſo noticed, that the virulency of this plant, as well as of moſt others, depends much upon the ſituation in which they grow, and is greatly diminiſhed in the cultivated plant.

This and ſome other ſpecies of Ranunculus have, for medical purpoſes, been chiefly employed externally as a veſicatory, and are ſaid to have the advantage of a common bliſtering plaſter, in producing a quicker effect, and never cauſing ſtranguary. But, on the other hand, it has been obſerved, that the Ranunculus is leſs certain in its operation, and that it ſometimes occaſions ulcers, which prove very troubleſome and difficult to heal. Therefore their uſe ſeems to be applicable only to certain fixed pains,[b] and ſuch complaints as require a long continued topical ſtimulus, or diſcharge from the part, in the way of an iſſue, which in various caſes has been found to be a powerful remedy.

[b] Caſes of its ſucceſs in chronic rheumatiſm, and other complaints, are related by Cheſnau *(obſ. med)*. Bagliv. *(oper. p. 113)*. Stoerck *(ann. med. ii. p. 125)*.

The manner of uſing the plant is to bruiſe it in a mortar, and to apply it to the ſkin as a poultice or plaſter.

PÆONIA

Paonia officinalis.

Delineated by Dr Woodville, Aug 5, 1791.

PÆONIA OFFICINALIS. COMMON PEONY.

SYNONYMA. Pæonia. *Pharm. Dale.* 175. *Alston. i.* 485. *Lewis.* 470. *Edinb. New Disp.* 246. *Murray. iii.* 37. *Bergius.* 477. Pæonia folio nigricante splendido, quæ mas—et. Pæonia fœmina, &c. *Bauh. Pin.* 323. *Ger. Emac.* 989. *Park. Theat.* 1381. *Ray. Hist.* 693. Pæonia foliis lobatis ex ovato-lanceolatis. *Hall. Helv. Miller. Dict. Ic. Mill. Illust.*

Polyandria Digynia. *Lin. Gen. Plant.* 678.

Gen. Ch. Cal. 5-phyllus. *Petala* 5. *Styli* 0. *Caps.* polyspermæ.

Sp. Ch. P. foliolis oblongis.

ROOT perennial, large, knobby, externally brown, internally white, compact. Stalks two feet in height, thick, smooth, succulent, branched. Leaves pinnated, or cut into lobes, which are oblong, few, terminated by an odd one. Flowers large, terminal, solitary, red. Calyx composed of five unequal ovate concave leaves. Corolla naturally consisting of five large petals, which are roundish and concave. Filaments about thirty, short, slender, supporting oblong quadrangular antheræ. Germina two, ovate, erect, hairy. Styles none. Stigmata hooked. Capsules two, hairy, oblong, inclining outwardly, single-celled, single-valved, and containing numerous small seeds.

Peony is a native of Switzerland: it has been cultivated in Britain since the time of Turner, and is now a common plant in the English gardens, where it flowers in May and June.

This

This plant has long been conſidered as a powerful medicine; and, till the late reviſion of the Pharmacopœia by the London College, it had a place in the catalogue of the Materia Medica; in which the two common varieties of this plant are indiſcriminately directed for uſe, and, on the authority of C. Bauhine, improperly diſtinguiſhed into male and female Peony.

" The roots and ſeeds of Peony have, when freſh, a faint unpleaſant ſmell, ſomewhat of the narcotic kind; and a mucilaginous ſubacrid taſte, with a ſlight degree of bitterneſs and aſtringency. In drying they loſe their ſmell, and part of their taſte. Extracts made from them by water are almoſt inſipid, as well as inodorous; but extracts made by rectified ſpirit are manifeſtly bitteriſh and conſiderably aſtringent."

" The flowers have rather more ſmell than any of the other parts of the plant, and a rough ſweetiſh taſte, which they impart, together with their colour, both to water and ſpirit." [a]

The roots, flowers, and ſeeds of Peony have been eſteemed in the character of an anodyne and corroborant, but more eſpecially the roots; which ſince the days of Galen [b] have been very commonly employed as a remedy for the epilepſy. For this purpoſe it was uſual to cut the root into thin ſlices, which were to be attached to a ſtring, and ſuſpended about the neck as an amulet; if this failed of ſucceſs, the patient was to have recourſe to the internal uſe of this root, which Willis [c] directs to be given in the form of powder, and in the quantity of a dram two or three times a day, by which, as we are informed, both infants and adults were cured of this diſeaſe. Other authors recommend the expreſſed juice to be given in wine, and ſweetened with ſugar, as the moſt effectual way of adminiſtering this plant. Many writers, [d] however, eſpecially in modern times, from repeated trials of the Peony in epileptic caſes, have found it of no uſe whatever; though profeſſor Home, who gave the radix pæoniæ to

[a] *Lewis. l. c.*

[b] *De ſimp. lib. 6. p. 807. Ricc.*

[c] *Pathol. Cerebri. cap. 3.*

[d] Boerhaave, Haller, Tiſſot, and others.

two

two Epileptics at the Edinburgh Infirmary, declares that one received a temporary advantage from its uſe.[e]

Of the good effects of this plant in other diſorders we find no inſtances recorded.

[e] See *Clinical Experiments, &c. p.* 209.

The following are the remaining medicinal plants of this order which we have not thought ſufficiently important to require any particular conſideration;

Systematic Names.	Officinal.	English.
Aquilegia vulgaris	Aquilegia	Columbine
Aconitum Anthora	Anthora	Wholeſome Wolf's-bane
Delphinium Conſolida	Conſolida regalis	Branched Larkſpur
Nigella ſativa	Nigella	Fennel-flower
Ranunculus ſceleratus	R. paluſtris	Marſh Crowfoot
——— Flammula	Flammula	Spearwort Crowfoot
——— bulboſus	R. bulboſus	Bulbou Crowfoot
——— Ficaria	Chelidonium minus	Pilewort Crowfoot
Anemone nemoroſa	Ranunculus albus	Wood Anemone
——— Hepatica	Hepatica nobilis	Blue Hepatica
Thalictrum flavum	Thalictrum	Meadow Rue

COMPOSITÆ.

CICHORIUM INTYBUS. WILD, or BLUE SUCCORY.

SYNONYMA. Cichoreum. *Pharm. Geoff. iii.* 319. *Dale.* 84. *Alston. i.* 412. *Lewis.* 227. *Edinb. New Disp.* 171. *Murray. i.* 100. *Bergius.* 650. Cichorium sylvestre, sive officinarum. *Bauh. Pin.* 126. *Gerard. Emac.* 284. *Park. Theat.* 776. *Ray. Hist.* 255. C. Intybus. *Hudson. Flor. Ang.* 348. *Withering. Bot. Arr.* 862. *Curt. Flor. Lond.* 241.

Syngenesia Polygamia Æqualis. *Lin. Gen. Plant.* 921.

Gen. Ch. *Receptaculum* subpaleaceum. *Cal.* calyculatus.
Pappus sub-5-dentatus, obsolete pilosus.

Sp. Ch. C. floribus geminis sessilibus, foliis runcinatis.

ROOT perennial, long, tapering, branched, or spindle-shaped; externally yellowish, internally white, lactescent. Stalk erect, rough, branched, angular, from one to two or even three feet in height. Leaves at the root numerous, pinnatifid, or cut into irregular segments like those of dandelion: on the stalk they are alternate, sessile, somewhat spear-shaped, but indented and rough at the base. Flowers compound, large, blue, commonly in pairs. Calyx common to all the florets, composed of a double set of leaves, of which the outer are in number five, ovate, spreading, and fringed with glandular hairs; the inner set consists of about eight. Corolla composed of hermaphrodite florets, which are regular, blue, and about twenty in number, each consisting of a short white tube, from which arises a long flat ribbed limb, divided at the extremity into five teeth. Fila-

ments

Cichorium Intybus

Delineated by R. Trimbell Sept. 1. 1777.

ments white, ſlender, unconnected. Antheræ blue, forming a hollow angular cylinder. Germen conical, crowned with ſhort hairs. Style filiform. Stigmata two, rolled back, blue. Seeds numerous, naked, angular, lodged at the bottom of the calyx.

It commonly grows about the borders of corn fields, and flowers in July and Auguſt.

This plant belongs to the ſame family with the garden endive, and by ſome botaniſts has been ſuppoſed to be the ſame plant in its uncultivated ſtate; but the endive commonly uſed as ſallad is an annual, or at moſt a biennial plant, and its parent is now known to be the Cichorium Endivia.

It appears from Horace and others,[a] that the Cichorea was commonly eaten by the Romans; and according to Pliny[b] this name ſignified the wild ſpecies of the plant. The Intybus and Seris are alſo mentioned as its congeners, the latter implying the cultivated ſpecies.

Wild Succory, or Cichory, as it has been called, " abounds with a milky juice, of a penetrating bitteriſh taſte, and of no remarkable ſmell, or particular flavour: the roots are bitterer than the leaves or ſtalks, and theſe much more ſo than the flowers."

By culture in gardens, and blanching, it loſes its bitterneſs, and may be eaten early in the ſpring in ſallads. The roots, if gathered before the ſtems ſhoot up, are alſo eatable, and when dried may be made into bread.[c]

The roots and leaves of this plant are ſtated by Lewis to be " very uſeful aperients, acting mildly and without irritation, tending rather to abate than to increaſe heat, and which may therefore be given with ſafety in hectic and inflammatory caſes. Taken freely, they keep the belly open, or produce a gentle diarrhæa; and when thus

[a] ——— —— Me paſcunt olivæ
Me cichorea, leveſque malvæ. *Hor. Od.* 31.

" Cichorea, & teneris frondens lactucula fibris." *Juvenal.*

[b] *Lib. xx. c.* 8. [c] *Withering. l. c.*

continued

continued for ſome time, they have often proved ſalutary in beginning obſtructions of the viſcera, in jaundices, cachexies, hypochondriacal and other chronical diſorders." [d]

A decoction of this herb, with others of the like kind, in whey, and rendered purgative by a ſuitable addition of polychreſt ſalt, was found an uſeful remedy in caſes of biliary calculi,[e] and promiſes advantage in many complaints requiring what have been termed attenuants and reſolvents. The virtues of Succory, like thoſe of dandelion, reſide in its milky juice; and in moſt of the plants of the order Semifloſculoſæ, a juice of a ſimilar nature is to be found: therefore what has been before obſerved of the effects of taraxacum, will, in a great meaſure, apply to the Cichorium; and we are warranted in ſaying, that the expreſſed juice of both theſe plants, taken in large doſes, frequently repeated, has been found an efficacious remedy in phthiſis, pulmonalis, as well as in the various other affections above mentioned.

The ſeeds of the Cichorium, which are ſmall, angular, and of a brown colour, are reckoned among the *four ſmaller cooling ſeeds*.

[d] *Lewis. l. c.*

[e] Van Swieten. *Comment. T. iii. p.* 137.

Matricaria Parthenium

Published by W. Woodville, Aug.t 1, 1794.

MATRICARIA PARTHENIUM. COMMON FEVERFEW.

SYNONYMA. Matricaria. *Pharm. Geoff. iii.* 825. *Dale.* 97. *Alston. ii.* 175. *Lewis.* 414. *Ed. New. Dispens.* 227. *Murray. i.* 148. *Bergius.* 687. *Cullen. ii.* 364. Matricaria vulgaris sive sativa. *Bauh. Pin.* 133. *Gerard. Emac.* 652. *Park. Theat.* 83. *Ray. Hist.* 357. *Synop.* 187. *Hall. Hist. Stirp. Helv. n.* 100. M. Parthenium. *Hudson. Flor. Ang.* 371. *Withering. Bot. Arr.* 931. *Ic. Flor. Dan.* 192.

Syngenesia. Polygamia Superflua. *Lin. Gen. Plant.* 967.

Gen. Ch. *Recept.* nudum. *Pappus nullus.* *Cal.* hemisphæricus, imbricatus: marginalibus solidis, acutiusculis.

Sp. Ch. M. foliis compositis planis: foliolis ovatis incisis, pedunculis ramosis.

ROOT perennial, composed of numerous long fibres. Stalk erect, firm, much branched, striated, round, smooth, rising above two feet in height. Leaves alternate, hairy, pinnated; lobes irregular, toothed, blunt; terminal lobe bifid. Flowers large, compound, at the centre yellow, at the radius white, upon long peduncles, forming a kind of umbel. Calyx common to all the florets, hemispherical, and composed of numerous ovate squamæ, which are membranous at the border. Florets at the radius, female, oblong, about two lines in breadth, terminated by three small teeth. Stigma bifid, turned in opposite directions. Florets of the disk numerous, tubular, hermaphrodite, five-toothed. Filaments five, capillary, very short. Antheræ forming a hollow cylinder. Seeds egg-shaped, truncated at the base, furrowed, whitish, without pappus.

It is common about hedges, walls, and waste grounds, flowering in June and July.

" The leaves and flowers of Feverfew have a ftrong not agreeable fmell, and a moderately bitter tafte, both which they communicate, by warm infufion, to water and rectified fpirit. The watery infufions, infpiffated, leave an extract of confiderable bitternefs, and which difcovers alfo a faline matter both to the tafte and in a more fenfible manner by throwing up to the furface fmall cryftalline efflorefcences in keeping: the peculiar flavour of the Matricaria exhales in the evaporation, and impregnates the diftilled water, on which alfo a quantity of effential oil is found floating. The quantity of fpirituous extract, according to Cartheufer's experiments, is only about one-fixth the weight of the dry leaves, whereas the watery extract amounts to near one-half."

This plant is evidently the Parthenium of Diofcorides, fince whofe time it has been very generally employed for medical purpofes. In natural affinity it ranks with camomile and tanfy, and its fenfible qualities fhow it to be nearly allied to them in its medicinal character, Bergius ftates its virtues to be tonic, ftomachic, refolvent, and emmenagogue. It has been given fuccefsfully as a vermifuge, and for the cure of intermittents; but its ufe is moft celebrated in female diforders, efpecially in hyfteria;[a] and hence it is fuppofed to have derived the name Matricaria.[b]

Its fmell, tafte, and analyfis prove it to be a medicine of confiderable activity; we may therefore fay with Murray, " Rarius hodie " præfcribitur, quam debetur."

[a] According to Sim. Paulli, its efficacy in this diforder was very remarkable.—*Quadrip. p.* 432.

[b] " Παρθενιον, quafi virginalis, quod morbis mulierum uterinis medeatur, hinc vulgo matricaria." &c.—*C. B.*

LACTUCA

Lactuca virosa
Published by D. Wendelle Aug. 1. 1790.

LACTUCA VIROSA. STRONG-SCENTED WILD LETTUCE.

SYNONYMA. Lactuca virosa. *Pharm. Edinb. nov. New Ed. Dispens.* 217. *Murray. App. Med. vol.* 6. 13. Lactuca sylvestris, odore virosо. *Bauh. Pin.* 123. Lactuca sylvestris major, odore opii. *Gerard. Emac.* 309. Lactuca Endiviæ foliis, odore virosо. *Park.* 813. *Ray. Hist.* 219. *Synop.* 161. *Haller. Hist.* 15. L. virosa. *Hudson. Flor. Ang.* 337. *Withering. Bot. Arr.* 835. *Ic. Collin. Obs. vi. præf.*

Syngenesia. Polygamia Æqualis. *Lin. Gen. Plant.* 909.

Gen. Ch. Recept. nudum. *Cal.* imbricatus, cylindricus, margine membranaceo. *Pappus* simplex, stipitatus. *Sem.* lævia.

Sp. Ch. L. foliis horizontalibus carina aculeatis dentatis.

ROOT biennial, tapering, branched, firm, furnished with long fibres. Stalk from two to four feet high, slender, erect, round, prickly near the base, above smooth, branched. Branches spreading. Leaves at the root oblong, wedge-shaped, entire, or cut into winged clefts, toothed, commonly prickly at the underside of the midrib, sessile, horizontal: leaves on the stem arrow-shaped, embracing the stalk, either entire or cut into pinnated lobes: upper and floral leaves arrow-shaped, entire, pointed, embracing the branches at which they are placed. Flowers composed of numerous equal yellow florets. Calyx oblong, consisting of several small spear-shaped unequal scales. Florets numerous, uniform, hermaphrodite, each composed of narrow petals, cut at the extremity into four or five minute teeth. Filaments five, very short, hair-like. Antheræ forming a cylindrical tube. Germen egg-shaped. Style filiform. Stigmata two, reflexed. Seeds ovate, compressed, lodged upon the naked receptacle, and furnished with a simple hairy feather placed upon a footstalk.

It grows about ditch banks, borders of fields, and old walls, flowering in July and August.

This

This plant has a ſtrong ungrateful ſmell, reſembling that of opium, and a bitteriſh acrid taſte; it abounds with a milky juice, in which its ſenſible qualities ſeem to reſide, and which appears to have been noticed by Dioſcorides, who deſcribes the odour and taſte of this juice as nearly agreeing with that of the white poppy; its effects are alſo ſaid, according to Haller, to be powerfully narcotic.

Dr. Collin, at Vienna, (whoſe name has been frequently mentioned in the courſe of this work) firſt brought the Lactuca viroſa into medical repute,[a] and its character has lately induced the College of Phyſicians at Edinburgh to inſert it in the catalogue of the Materia Medica. More than twenty-four caſes of dropſy are ſaid by Collin to have been ſucceſsfully treated, by employing an extract prepared from the expreſſed juice of this plant; which is ſtated not only to be powerfully diuretic, but by attenuating the viſcid humours to promote all the ſecretions, and to remove viſceral obſtructions. In the more ſimple caſes, proceeding from debility, the extract, in doſes of eighteen to thirty grains a day, proved ſufficient to accompliſh a cure; but when the diſeaſe was inveterate, and accompanied with viſceral obſtructions, the quantity of extract was increaſed to three drams: nor did larger doſes, though they excited nauſea, ever produce any other bad effect; and the patients continued ſo ſtrong under the uſe of this remedy, that it was ſeldom neceſſary to employ any tonic medicines.

Though Dr. Collin began his experiments with the Lactuca at the Pazman hoſpital, at the time he was trying the arnica in 1771, yet very few phyſicians, even at Vienna, have ſince adopted the uſe of this plant.

Plenciz indeed has publiſhed a ſolitary inſtance[b] of its efficacy, while Quarin[c] informs us that he never experienced any good effect from its uſe, alledging that thoſe, who were deſirous of ſupporting its character, mixed with it a quantity of extractum ſcillæ. Under theſe circumſtances we ſhall only ſay, that the recommendation of this medicine by Dr. Collin, will be ſcarcely thought ſufficient to eſtabliſh its uſe in England.

[a] *Obſerv. circa Morb. P. vi.*
[b] Joſeph de Plenciz. *Act. & Obſ. Med. p.* 107.
[c] Animadv. *Pract. p.* 188.

The

The remaining medicinal plants of the order Compositæ, which have not been figured in this work, are

Systematic Names.	Officinal.	English.
Carduus marianus	Carduus Mariæ	Milk Thistle
Onopordon Acanthium	Carduus tomentosus	Cotton Thistle
Carlina acaulis	Carlina	Dwarf Carlina
Carthamus tinctorius	Carthamus	Bastard Saffron
Centaurea Cyanus	Cyanus	Blue-bottle
Centaurea Calcitrapa	Calcitrapa	Star Thistle
Cichorium Endivia	Endivia	Common Endive
Scorzonera humilis	Scorzonera	Dwarf Viper's-grass
Tragopogon pratense	Tragopogon	Yellow Goat's-beard
Lactuca sativa	Lactuca	Garden Lettuce
Sonchus oleraceus	Sonchus	Common Sow-thistle
Hieracium Pilosella	Pilosella	Mouse-ear Hawkweed
Gnaphalium arenarium	Stœchas citrina	German Cudweed
Gnaphalium dioicum	Gnaphalium	Cat's-foot Cudweed
Artemisia rupestris	Genipi album	Creeping Wormwood
Tanacetum Balsamita	Balsamita mas	Cost-mary
Eupatorium cannabinum	Eupatorium	Hemp Agrimony
Santolina Chamæ-Cyparissus	Santolina	Lavender Cotton
Spilanthus Acmella	Acmella	Balm-leav'd Spilanthus
Tussilago Petasites	Petasites	Butter-bur
Xanthium strumarium	Xanthium	Lesser Xanthium
Matricaria Chamomilla	Chamomilla nostras	Corn Feverfew
Chrysanthemum Leucanthemum	Bellis major	Ox-eye Daisy
Anthemis Cotula	Cotula fœtida	Stinking Camomile
Bellis perennis	Bellis minor	Common Daisy
Inula dysenterica	Conyza media	Middle Elecampane
Doronicum Pardalianches	Dorohicum	Great Leopard's-bane
Achillea Ptarmica	Ptarmica	Sneeze-wort Milfoil
Achillea Ageratum	Ageratum	Sweet Milfoil
Solidago Virgaurea	Virga aurea	Golden-rod
Senecio vulgaris	Senecio	Common Groundsel
Erigeron acre	Conyza cœrulea	Blue Erigeron
Calendula officinalis	Calendula	Common Marygold

CARYOPHYLLEÆ.

SAPONARIA OFFICINALIS. SOAPWORT.

SYNONYMA. Saponaria. *Pharm. Dale.* 230. *Rutty.* 463. *Lewis.* 584. *Edinb. New Dispens.* 277. *Murray. iii.* 505. *Bergius.* 369. *Hall. Hist. Helv. n.* 980. Saponaria major lævis. *Bauh. Pin.* 206. *Gerard. Emac.* 444. Saponaria vulgaris. *Park.* 641. *Ray. Hist.* 999. Lychnis Saponaria dicta. *Ray. Synop.* 339. S. officinalis. *Hudf. Ang.* 183. *With. Bot. Arr.* 438. *Ic. Flor. Dan.* 543. *Flor. Lond.*

Decandria Digynia. *Lin. Gen. Plant.* 564.

Gen. Ch. *Cal.* 1-phyllus nudus. *Petala* 5, unguiculata. *Caps.* oblonga, 1-locularis.

Sp. Ch. S. calyc. cylindricis, fol. ovato-lanceolatis.

ROOT perennial, ſpreading, widely branched, covered with a reddiſh cuticle. Stalks about a foot in height, erect, firm, round, jointed, ſending off oppoſite branches. Leaves oval, entire, pointed, connate, furniſhed with three ribs. Flowers numerous, terminal, of a pale fleſh or white colour. Calyx cylindrical, rigid, oblong, divided at the apex into five pointed teeth. Corolla compoſed of five petals, which are furniſhed with long angular claws: the limb is inverſely heart-ſhaped, and at its baſe ſupplied with two nectarious teeth, placed in the centre. Filaments ten, tapering, longer than the calyx, furniſhed with oblong antheræ. Germen oblong, beſet with tranſverſe rugæ. Styles two, tapering, white. Stigmata ſimple. Capſule one-celled, containing numerous black kidney-ſhaped ſeeds.

It is a native of England, affecting moiſt ſituations, and flowering in July and Auguſt.

A double-flowered variety of this plant is not unfrequently met with in gardens.

The

Saponaria Officinalis.

Published by Dr. Woodville, August 1st 1794.

The root has no peculiar ſmell; its taſte is ſweetiſh, glutinous, and ſomewhat bitter; on being chewed for ſome time, it is ſaid to diſcover a degree of acrimony, which continues to affect the mouth a conſiderable time. According to Neuman, two ounces of the root yielded eleven drams of watery extract; but Cartheuſer, from a like quantity, only obtained ſix drams, and twenty-four grains. This extract manifeſted a ſweetiſh taſte, followed by an acrid quality. The ſpirituous extract is leſs in quantity, but of a more penetrating acrid taſte. Decoctions of the root, on being ſufficiently agitated, produce a ſaponaceous froth; a ſimilar ſoapy quality is obſervable alſo in the extract, and ſtill more manifeſtly in the leaves, inſomuch that they have been uſed by the mendicant monks as a ſubſtitute for ſoap in waſhing of their clothes; and Bergius, who made ſeveral experiments with the Saponaria, declares that it has all the effects of ſoap itſelf.[a]

From theſe peculiar qualities [b] of the Saponaria there can be little doubt of its poſſeſſing a conſiderable ſhare of medical efficacy, which we could wiſh to find faithfully aſcertained.

The diſeaſes for which the Saponaria is recommended, as ſyphilis, gout, rheumatiſm, and jaundice, are not perhaps the complaints in which its uſe is moſt availing; for a fancied reſemblance of the roots of Saponaria with thoſe of ſarſaparilla, ſeems to have led phyſicians to think them ſimilar in their effects, and hence they have both been adminiſtered with the ſame intentions, particularly in fixed pains, and venereal affections. Bergius ſays, "in arthritide, cura mercu-" riale, &c. nullum aptiorem potum novi."

However, according to ſeveral writers, the moſt inveterate caſes of ſyphilis were cured by a decoction of this plant, without the uſe of mercury.[c]

Haller informs us, that Boerhaave entertained an high opinion of its efficacy in jaundice, and other viſceral obſtructions.

[a] He obſerves alſo, that the Saponaceous quality is not injured by acids, like that of the common ſoap.

[b] Perhaps we ſhould except the kernels of the fruit of the Sapindus Saponaria, the root of Gypſophila Struthium, and the flowers of the Lychnis chalcedonica.

[c] Vide Rudius. *De morb. occult. et venenat. L. 5. c. 18. p. 215.* Septalius, *Animadv. et caut. med. p. 275.* Zapata, *Memorab. medico-chir.* Werner. *Diſſ. de virtute ſaponar.*

CAMPANACEÆ.

CAMPANACEÆ.

VIOLA TRICOLOR. PANSIE, Or THREE-COLOURED VIOLET.

SYNONYMA. Viola tricolor. *Pharm. Dale.* 239. *Bergius.* 708. *Murray. vi.* 33. Viola tricolor arvenſis. *Bauh. Pin.* 200. V. tricolor ſylveſtris. *Park.* 755. *Ger. Emac.* 854. Jacea tricolor ſive Trinitatis flos. *J. Bauh. iii.* 546. *Ray. Synop.* 336. *Hall. Hiſt. Stirp. Helv.* 569. *Hudſ. Flor. Ang.* 331. *Withering. Bot. Arr.* 957. *Curt. Flor. Lond. Flor. Dan.* 623. β Viola tricolor hortenſis repens. *C. B.*

Syngeneſia Monogamia. *Lin. Gen. Plant.* 1007.

Gen. Ch. Cal. 5-phyllus. *Cor.* 5-petala, irregularis, poſtice cornuta. *Caps.* ſupera, 3-valvis, 1-locularis.

Sp. Ch. V. caule triquetro diffuſo, fol. oblongis inciſis, ſtipulis pinnatifidis.

ROOT annual, ſimple, tapering, fibrous. Stalk from four to ſix inches high, branched, thick, angular, ſucculent. Leaves various ſhaped, ovate, or elliptical, crenated, narroweſt at the upper part of the plant, often three together, on long footſtalks. Stipulæ compound, cut into linear ſegments. Flowers ſolitary, tricoloured, placed on long angular footſtalks furniſhed with a pair of membranous ſtipulæ near the flower. Calyx of five pointed leaves, of which the three uppermoſt are ſomewhat ſmaller than the others. Corolla pentapetalous, irregular. The two uppermoſt petals roundiſh, erect, dark purple; the two lateral petals elliptical, obtuſe, yellowiſh, rough at the baſe, and marked with purple lines; lower petal broad, notched in the middle, yellow, tinged with dark radiated lines, forming behind

Viola tricolor

Published by W. Woodville M.D. F.L.S. 1793.

behind a ſpur-like proceſs or nectarium. Filaments five, very ſhort. Antheræ ſcaly, lax, united, two-celled, terminated by an orange-coloured membrane. Germen conical. Style twiſted at the baſe. Stigma round, obliquely perforated, permanent. Capſule one-celled, three valved, containing numerous oval ſhining ſeeds.

It grows in corn fields, waſte and cultivated grounds, flowering all the ſummer months.

This plant varies much by cultivation, and by the vivid colouring of its flowers often becomes extremely beautiful in gardens, where it is diſtinguiſhed by various names.

To the taſte this plant, in its recent ſtate, is extremely glutinous, or mucilaginous, accompanied with the common herbaceous flavour and roughneſs. By diſtillation with water, according to Haaſe,[a] it affords a ſmall quantity of odorous eſſential oil, of a ſomewhat acrid taſte. The dried herb yields about half its weight of watery extract, the freſh plant about one eighth.

Though many of the old writers on the Materia Medica repreſent this plant as a powerful medicine in epilepſy, aſthma, ulcers, ſcabies, and cutaneous complaints, yet the viola tricolor owes its preſent character as a medicine to the modern authorities of Starck,[b] Metzger,[c] Haaſe,[d] and others,[e] eſpecially as a remedy for the cruſta lactea. For this purpoſe, a handful of the freſh herb, or half a dram of it dried, and boiled two hours in milk, is to be ſtrained and taken night and morning. Bread, with this decoction, is alſo to be formed into a poultice, and applied to the part. By this treatment it has been obſerved, that the eruption during the firſt eight days increaſes, and that the urine, when the medicine ſucceeds, has an odour ſimilar to that of cats; but on continuing the uſe of the plant a ſufficient time, this ſmell goes off, the ſcabs diſappear, and the ſkin recovers its natural purity.

[a] *De viola tricolore.* Erlang. 1782.

[b] *De cruſta lactea infantum ejuſdemque remedio diſſertatio, quam Acad. ſcient. Lugd. Gall. præmio coronavit.* 1776. Franc. ad Moen. 1779. See alſo *London Medical Journal. vol. ii.*

[c] *Verm. Med. Schriften. vol. 2.* [d] *L. c.*

[e] Armſtrong's publication on this ſubject we have not ſeen. In Sweden many teſtimonies of the good effects of this plant have been publiſhed. See *Murray. l. c.*

Inſtances of the ſucceſsful exhibition of this medicine, as cited by theſe authors, are very numerous; indeed this remedy, under their management, ſeems rarely, if ever, to have failed. It appears, however, that Murſinna,[f] Ackermann,[g] and Henning,[h] were leſs fortunate in the employment of this plant; the laſt of whom declares, that in the different cutaneous diſorders in which he uſed it, no benefit was derived.

Haaſe, who adminiſtered this ſpecies of violet in various forms, and large doſes, extended its uſe to many chronic diſorders; and from the great number of caſes in which it proved ſucceſsful, we are deſirous of recommending it to a further trial in this country.

It is remarkable that Bergius ſpeaks of this plant as a uſeful mucilaginous purgative, and takes no notice of its efficacy in the cruſta lactea, or in any other diſeaſe.

[f] *Med. chirurg. Beobacht.* 2. *Samml. p.* 107. *&c.*

[g] See *Comment. de rebus, &c. vol.* 27. 170.

[h] See *Beob. über einige Arzneymittel. p.* 65.

The remaining medicinal plants, belonging to this order, are the ſpecies of the convolvulus, officinally called Mechoacanna, convolvulus major, Turpethum and Soldanella; Dentaria or Plumbago europæa: Viola canina, or dog's violet, the roots of which have lately been diſcovered to be both emetic and cathartic.

PAPILONACEÆ.

Astragalus acaulis

Delineated by Dr. Woodville Sept. 1. 1792.

PAPILONACEÆ.

ASTRAGALUS EXSCAPUS. STEMLESS MILK VETCH.

SYNONYMA. Aſtragalus exſcapus. *Off. Murray. vi.* 83. *Jacquin Collect. ad bot. vol.* 2. *p.* 269. *Icon, ejuſd. Plant. rar. vol.* 2. *faſc.* 1. *t.* 17. *Cf. Winterl. Ind. Hort. bot. Peſtin. p.* 14. Aſtragalus perennis ſupinus, foliis et ſiliquis hiſpidis, flore luteo. *Knauth. Fl. Hal. p.* 41. *Buxbaum. Pl. Hal. p.* 32. Cicer montanum ακαυλον. *Bauh. Pin.* 341. Glaux lanuginoſa montana acaulos. *Rupp. Fl. Jen. ed. Hall.* 270. *Ic. Girtanner. l. c. inf.*

Diadelphia Decandria. *Lin. Gen. Plant.* 892.

Gen. Ch. *Legumen* biloculare, gibbum.

Sp. Ch. A. acaulis exſcapus, leguminibus lanatis, foliis villoſis.

ROOT perennial, ſimple, or generally branched towards the extremity; very long, ſlender, running deeply in the ground. Leaves all radical, long, pinnated, conſiſting of numerous pinnæ, which are regular, ovate, oppoſite, villous, entire, gradually ſmaller towards the top of the leaf, at which ſtands a ſingle leafit. The flowers are large, of a pale yellow colour, and placed at the crown of the root. Calyx tubular, deeply cut into five long pointed teeth. Corolla papilionacious, conſiſting of the vexillum, which is large, ſtraight, cloſing, emarginated at the apex, two alæ or oblong lateral petals, and a ſhort blunt carina or keel-ſhaped under-petal. Filaments ten, nine of which are united, and all furniſhed with ſmall roundiſh antheræ. Germen oblong. Style tapering, bent upwards, and ſupplied with a blunt ſtigma. Pod oblong, hairy, two-valved, containing kidney-ſhaped ſeeds.

This ſpecies of Aſtragalus is a native of Hungary, growing in mountainous ſituations. It was firſt introduced into the Royal Garden at Kew by Jacquin in 1787.*

* See *Hort. Kew.*

The

The root, which is the medicinal part of the plant, is, in its dried ſtate, rough, and wrinkled, in long ſlender pieces, externally brown, internally white, and eaſily dividing longitudinally into filamentous fibres. It is deſtitute of odour, but to the taſte it is bitteriſh, and ſomewhat aſtringent. In decoction its taſte approaches to that of liquorice; ſome however compare its flavour to that of bitter almonds.[b] It yields about a third part of its weight of extract by means of water, but by ſpirit a very inconſiderable quantity is obtained.

Since the year 1786 this plant has been much celebrated as a remedy in ſyphilitic complaints. It was firſt brought into notice by Profeſſor Winterl, at Peſt, who wrote to his friends in Vienna, that on the borders of Hungary it was in common uſe as a remedy for the venereal diſeaſe; in conſequence of this information it was tried with ſucceſs at the General Hoſpital by Quarin.* From Vienna its reputation ſpread over all Germany; nor does its character reſt wholly on the teſtimony of foreigners, as Dr. Crighton,‡ during his reſidence at Vienna had occaſion to witneſs its efficacy. This root is employed in decoction in the proportion of half an ounce to a pint of water, and taken warm night and morning: it is alſo occaſionally to be uſed externally. By perſevering a few weeks in the uſe of this decoction, we are told that, without mercury, the various ſymptoms of the moſt inveterate ſyphilis, as nodes, exoſtoſes, tophi, ſcabies, venereal blotches, buboes, ulcers, &c. have been effectually cured. Beſides the authors above noticed, we may remark, that the ſubſequent publications of Endter,[d] Wegerich,[e] Girtanner,[f] Werner,[g] Tietz,[h] Carmanti,[i] all tend in ſome meaſure to confirm the efficacy of this root.

Its uſe is perfectly ſafe; and Carmanti and others found it neceſſary to make the decoction much ſtronger than that before mentioned. Profeſſor Hunczowſky, though unable to diſcover its anti-venereal powers, admits it to be an uſeful remedy in rheumatiſm.

Its ſenſible effects are an increaſe of the cutaneous and urinary diſcharges.

[b] Endter. *Diſſ. de Aſtrag. exſcapo. p.* 12.

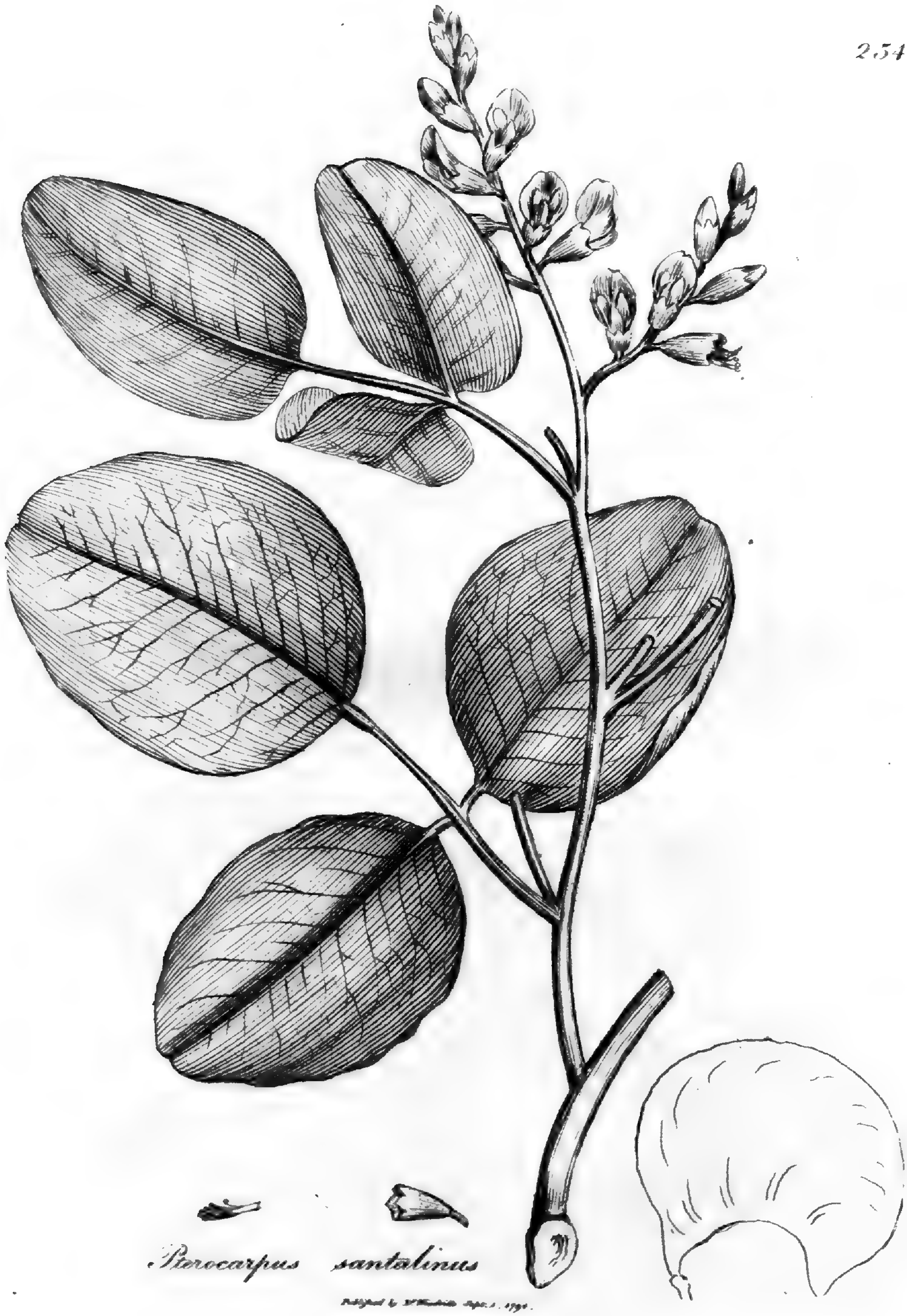
* Vide *Animadv. pract.*

‡ Dr. C's letter is publiſhed by Girtanner, and in the London Med. Journal. v. 9. 405.

[d] *L. c.* [e] *Diſſ. de Aſtragali exſcapi radice. Erf.* 1789.

[f] *Abh. über d. vener. krankh. vol. i. p.* 406. *& ſeq.* [g] See *Diſſ. de virtute Saponariæ eff.* 1789. [h] Vide *Diſſ. de virtute Aſtrag. &c.* 1790. [i] Vide *Opuſc. therapeut. v.* 2.

PTEROCARPUS



Pterocarpus santalinus

PTEROCARPUS SANTALINUS. RED SAUNDERS TREE.

SYNONYMA. Santalum rubrum. *Pharm. Lond. & Edinb.* Sandalum rubrum. *Rumph. Amb. vol.* 2. *p.* 47. Moutouchi ſuberoſa. *Aublet. Guian. vol.* 2. *p.* 742. *t.* 200. Conf. *Supp. Plant.* 318.

Diadelphia Decandria. *Lin. Gen. Plant.* 854.

Gen. Ch. *Cal.* 5-dentatus. *Caps.* falcata, foliacea, varicoſa. *Sem.* aliquot ſolitaria.

Sp. Ch. P. foliis ternatis ſubrotundis retuſis glaberrimis, petalis crenatis undulatis.

A LARGE tree, ſending off lofty alternate branches, and covered with rough bark, reſembling that of common alder. Leaves alternate, on footſtalks, in our ſpecimen placed in pairs, and divided into three ſimple leaves, but according to the *Supp. plant.* the leaves are three together, and each ſeparating into four or five alternate pinnæ: ſimple leaves roundiſh or ovate, blunt, retuſe, or ſomewhat notched at the apex, entire, veined, above ſmooth, beneath hoary. Flowers yellow, in axillary ſpikes. Stipulæ none. Bracteæ none. Calyx rough, cut at the brim into five ſhort ſegments. Corolla papilionacious; vexillum obcordate, erect, ſomewhat reflexed at the ſides, dentated, waved, yellow, ſtriated with red; alæ ſpreading, edges appearing toothed; carina oblong, a little inflated, ſhort. Filaments ten, diadelphous, furniſhed with white round antheræ. Germen on a footſtalk, oblong, compreſſed, hairy. Style curved. Stigma obtuſe. Pod roundiſh, compreſſed, ſmooth, falcated upwards, lower margin keel-ſhaped, containing a round compreſſed ſeed.

This tree is a native of India, affecting mountainous ſituations.

Its characters were firſt aſcertained by König, who ſent a ſpecimen and deſcription of it to the younger Linnæus, by whom it is publiſhed in the Species plantarum.

The annexed figure, which ſhould have been given in the firſt part of Medical Botany, is taken from a very perfect ſpecimen in the Herbarium of Sir Joſeph Banks.[a]

There is reaſon to believe, that ſeveral red woods, capable of communicating this colour to ſpirituous liquors, are ſold as Red Saunders; but the true officinal kind appears, on the beſt authority, to be of this tree, which is extremely hard, of a bright garnet red colour, and bears a fine poliſh. It is only the inner ſubſtance of the wood that is uſed as a colouring matter, and the more florid red is moſt eſteemed. On being cut it is ſaid to manifeſt a fragrant odour, which is more eſpecially perceptible in old trees.

According to Lewis, this wood "is of a dull red almoſt blackiſh colour on the outſide, and a deep brighter red within; its fibres are now and then curled, as in knots. It has no manifeſt ſmell, and little or no taſte: even of extracts made from it with water, or with ſpirit, the taſte is inconſiderable. To watery liquors it communicates only a yellowiſh tinge, but to rectified ſpirit a fine deep red: a ſmall quantity of an extract, made with this menſtruum, tinges a large one of freſh ſpirit of the ſame elegant colour; though it does not, like moſt other reſinous bodies, diſſolve in expreſſed oils: of diſtilled oils, there are ſome, as that of lavender, which receive a red tincture from the wood itſelf, and from its reſinous extract, but the greater number does not."[b]

Red Saunders has been eſteemed as a medicine; but its only uſe attaches to its colouring property.

The juice of this tree, like that of ſome others, affords a ſpecies of ſanguis draconis.

[a] The ſpecimen is accompanied with a piece of the wood, which anſwers to the deſcription here given. [b] *M. M.* 579.

The medicinal plants of this order, which remain unnoticed, are

Systematic Names.	Officinal.	English.
Lupinus albus	Lupinus	White Lupine
Geniſta canarienſis	Rhodium lignum	Rhodium Wood
Ononis arvenſis	Ononis	Reſt-harrow
Vicia Faba	Faba	Garden-bean
Ervum Lens	Lentes	Lentil, or flat Tare
Ervum Ervilia	Ervum	Officinal Tare
Cicer arietinum	Cicer	Chick Pea
Galega officinalis	Galega	Goat's-rue
Trifolium melilotus off.	Melilotus	Melilot Trefoil

TRICOCCÆ.

Siphonia elastica

Published by Dr. Wallich Sept. 1, 1830.

TRICOCCÆ.

SIPHONIA ELASTICA. INDIA RUBBER; Or ELASTIC RESIN TREE.

SYNONYMA. Hevea guianenſis. *Aublet. Hiſtore des plantes de la Guiane Françoiſe. tom.* 2. *p.* 871. *tab.* 335. Caoutchouc. *Richard, in Rozier obſ. ſur la phyſique. tom.* 27. *p.* 138. *t.* 2. Jatropa elaſtica. *Supp. Plant.* The figure by Freſnau in Mem. de L'Acad. des Scien. a. 175. t. 20. is erroneous.

Monoecia Monadelphia. *Schr. Gen. Plant.* 1465.

Gen. Ch. *Masc.* *Cor.* o. *Cal.* globoſo-campanulatus, ſemiquinquefidus. *Filament.* colum. *Antheræ* 5, adnatæ.

Fem. *Cor.* o. *Cal.* 5-fidus, patens, ſolitarius, racemum terminans. *Stylus* o. *Stigmata* 3. *Caps.* 3-locularis, lignoſa, duriſſima.

Sp. Ch. S. foliis ternatis ellipticis integerrimis ſubtus canis longe petiolatis. Supp. Plant.

A LARGE ſtraight tree, growing to the height of fifty or ſixty feet; at the upper part ſending off numerous branches, covered with rough bark. Leaves on long footſtalks, ternate, elliptical, ſomewhat pointed, entire, veined, ſmooth, on the underſide whitiſh. Flowers male and female on the ſame tree, ſmall, in dividing racemi at the ends of the branches. *Male flowers* numerous: calyx globoſo-campanulate, five-cleft, ſegments erect, pointed. Corolla none. Filaments in a column, ſhorter than the calyx. Antheræ five, united. *Female flower* ſolitary, larger than the male, and placed at the extremity of the racemus: calyx bell-ſhaped, cut into five teeth, which are acute, patent, or recurved, deciduous. Germen roundiſh, ſhorter than the calyx. Style none. Stigmata three, depreſſed. Capſule large, three-parted, woody, very hard, covered with fibrous bark, three-celled, valves opening. Seeds ovate, ſpotted.

This

This tree is a native of South America, growing abundantly in the woods of Guiana, in the Province of Quito, and along the borders of the River of Amazons, in the kingdom of Mexico.

The younger Linnæus admitted this tree into the *Supp. Plant.* under the genus Jatropa, to which its fruit ſeemed to bear a greater affinity than to that of any other; but by the diligence of Richard[a] its characters have been found ſufficiently different to conſtitute a new genus, which Schreber calls Siphonia. This we have therefore adopted, ſtill preſerving the ſpecific name elaſtica.

The ſubſtance, known by the names India rubber, elaſtic gum, Cayenne reſin, cautchuc, and by the French caoutchouc, is prepared from the juice of this tree: as ſubſervient to ſeveral medical or chirurgical purpoſes, it comes within the ſcope of this work, and muſt therefore prove ſufficiently intereſting to the medical reader.

This ſingular ſubſtance was little known in Europe till long after the commencement of the preſent century; and its origin and compoſition was firſt learned from M. de la Condamine,[b] who by travelling into the interior parts of South America had an opportunity of acquiring the neceſſary information. This active and enterprizing member of the French Academy found that the Caoutchouc was formed from the juice of a large tree, which has ſince been botanically examined and aſcertained to be that here repreſented.[c]

The manner of obtaining this juice is by making inciſions through the bark of the lower part of the trunc of the tree, from which the fluid reſin iſſues in great abundance, appearing of a milky whiteneſs as it flows into the veſſel placed to receive it, and into which it is conducted by means of a tube or leaf fixed in the inciſion, and ſupported with clay. On expoſure to the air this milky juice, according to Aublet, gradually inſpiſſates into a ſoft reddiſh elaſtic reſin; but M. de la Borde, and ſome others, aſſert that the juice undergoes a certain preparation before its inſpiſſation, which is effected by a pecu-

[a] Vide *Rozier obſ. ſur la phyſique. tom.* 27.

[b] *Relation d'un voyage dans l'interieur de l'Amerique meridionale, in Mem. de l'Acad.* 1751. *p.* 322.

[c] It was taken from a very complete ſpecimen in the poſſeſſion of Sir Joſeph Banks. We muſt remark however, that ſome other vegetable juices admit of being formed into a ſpecies of caoutchouc, of which Freſnau has given an account. *L. c. p.* 324.

liar

liar proceſs, which the Indians keep a profound ſecret.[d] To ſuit the different purpoſes for which it is employed in South America, the Caoutchouc is ſhaped into various forms;[e] but it is commonly brought to Europe in that of pear-ſhaped bottles, which are ſaid to be formed by ſpreading the juice of the Siphonia over a proper mould of clay, and as ſoon as one layer is dry another is added till the bottle be of the thickneſs deſired. It is then expoſed to a denſe ſmoke, or to a fire, until it becomes ſo dry as not to ſtick to the fingers, when by means of certain inſtruments of iron or wood it is ornamented on the outſide with various figures. This being done it remains only to pick out the mould, which is eaſily effected, on being firſt ſoftened with water.

The ſubſtance, thus manufactured, is ſo well known as to render any particular deſcription of it unneceſſary. It may be ſubjected to the action of ſome of the moſt powerful menſtrua without ſuffering the leaſt change, while its pliability and elaſticity are eminently peculiar to itſelf. It is true that the lacteſcent juice of ſeveral vegetables may be converted into a ſubſtance reſembling the Caoutchouc, but no art has yet been diſcovered to give it the ſame properties.

The Chineſe elaſtic reſin is ſaid to be prepared of caſtor oil and lime;[f] or, according to Retzius, it is nothing but a certain expreſſed oil evaporated by heat:[g] hence its eaſy ſolubility.

With a view to inveſtigate the intereſting nature of the Caoutchouc, and to render it of more general utility, ſeveral able chemiſts have been diligently employed, eſpecially Macquer,[h] Achard,[i] Juliaans,[k] and Berniard,[l] from whom its chemical hiſtory is to be learned: our duty however is to ſtate only ſome of the principal facts.

[d] Vide *Rozier. obſ. et mem. ſur la phyſique. tom. 1. p. 464.*

[e] The curious diverſity of figures in which this ſubſtance was ſold in Portugal is noticed by Mr. Twiſs. See *Travels through Portugal and Spain.* 323.

[f] V. Faujas de Saint-Fond *Suite de la deſcription des experiences aëroſtatiques tom. 2. p.* 258.

[g] *Pharm. reg. veg. p.* 60.

[h] *Mem. de l'Acad. des Sc. de Paris, pour* 1768.

[i] *Chymiſch phyſ. Schriften cap. De reſina elaſtica.* [k] *Diſſ. de Reſina elaſtica Cayennenſi.*

[l] See *Rozier Obſ. ſur la Phyſique. tom.* 17.

Though it appears that neither water nor alcohol, aided by all the heat capable of being produced in Papin's digeſter, could diſſolve this ſubſtance, yet its ſolution was effected not only by the concentrated mineral acids, but in a conſiderable degree even by moſt of the unctuous, diſtilled, and empyreumatic oils. However, as it was found that the ſolutions of this inſpiſſated juice by theſe menſtrua irrecoverably loſt their elaſticity, and became uſeleſs, the great deſideratum of re-forming the Caoutchouc was not attained till ether was employed as its ſolvent; which was firſt done by Macquer, who for this purpoſe found it neceſſary to uſe the vitriolic ether in a highly rectified ſtate.

The Caoutchouc, cut into ſmall pieces, and put into a proper veſſel with as much of the ether as was ſufficient to cover it, was completely diſſolved without the application of heat. This ſolution, which was tranſparent, and of an amber colour, on being thrown into water, did not produce a milky liquor; but there aroſe to the ſurface a ſolid membrane, poſſeſſing the elaſticity and other properties of the Caoutchouc. This experiment was alſo executed with ſucceſs by Theden;[m] therefore thoſe with whom it failed muſt have uſed ether in a leſs concentrated ſtate. According to Theden one dram of the Caoutchouc requires for its perfect ſolution an ounce of ether. Nitrous ether diſſolves but a ſmall proportion of the Caoutchouc, and at the ſame time deſtroys its elaſtic power.

It has been aſſerted that the elaſtic reſin not only diſſolves in oil of guaiacum by digeſtion, but that on evaporating the oil, the reſin in a little time recovers its elaſtic property. By the induſtry of Achard, who made this diſcovery, we likewiſe learn that ſolutions of this ſubſtance, made by the etherial oils, may be decompoſed by the addition of ſpirit of wine, when the Caoutchouc ſeparates from the oil in the form of mucilage, and on being ſufficiently expoſed to the air, is reſtored to its former firmneſs and elaſticity.

However Juliaans, who attempted this proceſs, was unable to re-produce a ſubſtance poſſeſſing the characters of the elaſtic reſin: it is therefore to be feared that this method, which ſeemed to promiſe an eaſy and cheap way of forming various inſtruments of the Caoutchouc, has been prematurely recommended: nor does the method of

[m] *N. Bemerk. a. d. Wundarzneyk. P. 2. p. 152.*

ſoftening

ſoftening the elaſtic reſin with the animal oil of Dippelius, or with oil of turpentine, as propoſed by Heriſſant, for the purpoſe of forming it into probes, &c. produce the effect deſired. It appears therefore that Macquer's proceſs of diſſolving this ſubſtance in ether, by which he was enabled to give a coat of Caoutchouc of conſiderable thickneſs to a cylindrical mould of wax, is the beſt way yet diſcovered of adapting this ſubſtance to ſurgical and other purpoſes: for on immerſing the waxen mould, thus covered with the elaſtic reſin, in boiling water, the wax ſoon melts and riſes to the ſurface, leaving behind a regular tube of Caoutchouc. In order to render the tubes of ſufficient firmneſs to be uſed as catheters, it has been recommended that gold or ſilver wire, rolled in a cloſe ſpiral manner, ſhould be coated with the elaſtic reſin, and theſe, as poſſeſſing both pliability and firmneſs, are ſaid to ſucceed very well. Various other methods of forming catheters, bougies, peſſaries, truſſes, &c. of this ſubſtance, are to be found in the Journal de Medicine,[n] eſpecially by Durand and Juville; and by its remarkable flexibility and elaſticity it accommodates itſelf to the motion of the body, and thereby poſſeſſes peculiar advantages. For a ſyringe, or injecting machine, the common form in which it is brought here is exceedingly well adapted, and only requires that a proper pipe be fixed to the neck of the elaſtic bottle to render it fit for uſe, which is now well known.

We are told that in Quito one of theſe bottles, faſtened to a hollow reed, and filled with water, is always preſented at entertainments to each of the gueſts, who uſe it as an injection before eating.

The Indians make boots of the Caoutchouc; alſo a kind of cloth which they uſe for the ſame purpoſes as we uſe oil cloth. Flambeaux are likewiſe made of this reſin, which yield a beautiful light without any diſagreeable ſmell. In this country it is much uſed for rubbing out black-lead pencil marks.

[n] See *tom.* 60. & 62.

THEA.

SYNONYMA. Thea. *Pharm. V. Dale, Geoffroy, Alston, Lewis, Ed. New Dispens. Bergius, Murray, Cullen, &c.* Chaa. *Baub. Pin.* The Sinensium seu Tsia Japonensibus. *Breyn. Exot. Plant.* Tsja, Thea frutex folio Cerasi flore Rosæ sylvestris. *Kämpfer. Amæn. exot.* Le Thee. *Fougeroux de Bondaroi* in *Rozier, Obs. et Mem. sur la Physique. tom.* 1. *f.* 1. See *Lettsom's Natural History of the Tea-tree.*

Polyandria Monogynia. *Lin. Gen. Plant.* 668.

Gen. Ch. *Cor.* 6-f. 9-petala. *Cal.* 5-f. 6-phyllus. *Caps.* 3-cocca.

Sp. Ch. α *(Bohea)* foliis elliptico-oblongis rugosis.

Broad-leav'd Tea.

β foliis lanceolatis planis.

Narrow-leav'd Tea.

Aiton. Hort. Kew.

A SMALL evergreen tree or shrub, much branched, and covered with a rough dark grey bark. Leaves elliptical, or lanceolate, entire, alternate, obtusely serrated, veined, placed on short footstalks. Calyx small, smooth, persistent, divided into five obtuse segments. Flowers white, often two or three together, on separate peduncles, placed at the axillæ of the leaves. Corolla varying in the number and size of its petals, but commonly six, of an irregular roundish form. Filaments very numerous, short, inserted at the base of the corolla. Antheræ large, yellow. Germen roundish, or rather triangular. Style trifid, spreading at the top, and furnished with simple stigmata. Capsule three-celled, opening. Seeds three, oblong, brown.

This shrub is a native of China and Japan, and (according to Mr. Aiton) was first introduced into this country in 1768 by John Ellis, Esq. who raised it from seed, and presented it to the King's gardener at Kew. But we are told that the Tea-plant which first flowered in Europe, belonged to his Grace the Duke of Northumberland, at Sion-house.

Published by W. Wimbolt Oct. 1. 1791.

All the various kinds of Tea imported here come under the denomination of Bohea and Green, and even theſe are ſuppoſed to be the produce of the ſame ſpecies of the plant. Linnæus however has deſcribed them as ſpecifically different, founding the diſtinction in the number of their petals. Others have alſo obſerved, that the leaves of Tea plants differ conſiderably both in form and colour, and this difference we have frequently noticed in the Tea growing in the vicinity of London; but whether theſe which the gardeners ſell by the name of Bohea and Green Tea plants are to be regarded as permanent varieties, or diſtinct ſpecies, we have not the means to decide. De Loureiro [a] has deſcribed three ſpecies of Thea, viz. Thea cochinchinenſis, Thea cantonenſis, and Thea oleoſa. The firſt is a native of Cochin-China, where it is alſo cultivated, and uſed medicinally in hot weather as a ſudorific and refrigerant. The Thea oleoſa grows wild in the neighbourhood of Canton, where an oil obtained from its ſeed is uſed for various domeſtic purpoſes. The Thea cantonenſis, which Loureiro carefully examined in its native ſoil, was found to bear a cloſe reſemblance to another variety called *Siaò chong châ*, and by the Europeans Souchong. Both theſe are brown, but more fragrant and valuable than the common green Tea, which grows in the province of *Fo kien*. Notwithſtanding that this author has deſcribed the three ſpecies of Thea above mentioned, he ſays that on examining the dried flowers of the green Tea, brought from the province of Kiang ſi, he obſerved a great diverſity in the number of the parts of the calyx and corolla: hence he concludes that all the various Chineſe Teas are taken from the ſame botanical ſpecies, and that the different flavour and appearance of Teas depend upon the nature of the ſoil, the culture, and method of preparing the leaves.

This opinion, which is founded on the ſportive tendency of the flowers of the Tea plant, clearly ſhows the fallacy of diſtinguiſhing the bohea and green Tea trees by the number of their petals, which even in this country have been found to vary from three to nine; yet this circumſtance, though it proves the inſufficiency of the Linnean characters, by no means determines the botanical identity of the green and bohea Teas; and while the preſent narrow and jealous policy of

[a] Flor. Cochinchineſis.

the Chinese continues, many interesting particulars respecting the natural history of Tea must still remain unknown to Europeans: hence I have thought myself unauthorized to add a specific name to the plate of the Tea plant here annexed, *which represents the variety β in the *Hort. Kew.* or the Thea viridis of the London gardeners.

The various Teas imported into Europe are obtained both from the wild and cultivated plant. The manner of gathering and preparing the leaves, as practiced in Japan, is very fully described by Kæmpfer, and is, as far as our information extends, conformable to the method used by the Chinese.

The first gathering of the Tea leaves, according to this author, commences about the latter end of February, when the leaves are young and unexpanded. The second collection is made about the beginning of April, and the third in June. The first collection, which consists only of the fine tender leaves, is most esteemed, and is called Imperial Tea. The second is called Tootsjaa, or Chinese Tea, because it is infused and drunk after the Chinese manner. The last, which is the coarsest and cheapest, is chiefly consumed by the lower class of people. Besides the three kinds of Tea here noticed, it may be observed, that by garbling or sorting these, the varieties of Tea become still farther multiplied. As many Tea plants grow on cliffs and places of difficult access, the Chinese Tea gatherers are said† to have occasional recourse to the assistance of monkies, which are chased up the Tea trees, and so much irritated that in their fury they bite off the branches, and throw them down in resentment: the branches are then taken up, and the leaves picked off. The leaves are not collected from the cultivated plant till it is three years old; and after growing seven or ten years it is cut down, in order that the numerous young shoots may afford a greater supply of leaves.

The leaves should be dried as soon as possible after they are collected; and for this purpose Kæmpfer relates, that publick buildings are erected, containing from five to ten and even twenty small furnaces about three feet high, each having at the top a large iron pan. There is also a long table covered with mats, on which the leaves are

* Taken from the plant now in flower in the stove of John Liptrap, Esq.

† See *Lettsom. l. c.*

laid

laid and rolled by workmen who ſit round it. The iron pan being heated to a certain degree, by a fire made in the furnace beneath, a few pounds of the leaves are put upon the pan, and continually turned and ſhifted by the hands till they become too hot to be endured; they are then thrown upon the mats to be rolled, which is done between the palms of the hands, after which they are cooled as ſpeedily as poſſible.

In order that all the moiſture of the leaves may be completely diſſipated, and their twiſted form be better preſerved, the above proceſs is repeated ſeveral times with the ſame leaves, but leſs heat is employed than at firſt. The Tea thus manufactured is afterwards ſorted according to its kinds or goodneſs. Some of the young tender leaves are never rolled, and are immerſed in hot water before they are dried.

From this account of the Japaneſe method of curing their Teas it appears, that a prompt and complete exſiccation is the chief art employed. We ſuſpect however, that the Chineſe are more indebted to art than to nature for the various kinds of Tea with which they ſupply this country. Many of their Teas are ſo widely different in taſte, odour, colour, and form, that inſtead of appearing to be the leaves of the ſame ſpecies of plant, they are ſo much diſguiſed as ſcarcely to manifeſt any reſemblance to each other. It is true that ſome ſpecies and varieties of the Tea, as appears by Loureiro, are naturally more odorous than others; yet we cannot ſuppoſe that nature ever made them totally different. The ſame obſervation will be equally applicable to the various flavours and colours of this exotic. We may therefore infer, that the Chineſe method of curing their fine Teas is not quite ſo *ſimple* as that practiſed by the Japaneſe.

Tea was firſt introduced into Europe by the Dutch Eaſt India Company, and into England about the year 1666, when it ſold for ſixty ſhillings ℔ lb, and for many years its great price limited its uſe only to the moſt opulent. However, for a long time paſt it has been the common beverage of both the rich and poor; and its effects have been very variouſly repreſented; but as to enter fully upon this ſubject would far exceed the limits of this work, I ſhall refer the reader for a more full account to Dr. Lettſom's elaborate hiſtory of the Tea tree; and conclude this article with a tranſcript of its medicinal powers,

as

as given by Dr. Cullen, whoſe opinion in this place cannot fail to be well received.

" With reſpect to its qualities as a medicine, that is, its power of " changing the ſtate of the human body, we might ſuppoſe it aſcer- " tained by the experience of its daily uſe; but from the univerſality " of this uſe in very different conditions of the plant, and in every " poſſible condition of the perſons employing it, the concluſions " drawn from its effects muſt be very precarious and ambiguous, " and we muſt attempt by other means to aſcertain its qualities with " more certainty.

" To this purpoſe it appears, from the accurate Dr. Smith's expe- " riments *De Actione Muſculari*, No. 36, that an infuſion of green " Tea has the effect of deſtroying the ſenſibility of the nerves, and " the irritability of the muſcles; and from the experiments of Dr. " Lettſom, it appears that green Tea gives out in diſtillation an " odorous water, which is powerfully narcotic.

" That the recent plant contains ſuch an odorous narcotic power, " we might preſume from the neceſſity which the Chineſe find of " drying it with much heat before it can be brought into uſe; and " that, even after ſuch preparation, they muſt abſtain from the uſe " of it for a year or more, that is, till its volatile parts are ſtill far- " ther diſſipated: and it is ſaid, that unleſs they uſe this precaution, " the Tea in a more recent ſtate manifeſtly ſhows ſtrong narcotic " powers. Even in this country, the more odorous Teas often ſhow " their ſedative powers in weakening the nerves of the ſtomach, and " indeed of the whole ſyſtem.

" From theſe conſiderations we conclude very firmly, that Tea " is to be conſidered as a narcotic and ſedative ſubſtance; and that " it is eſpecially ſuch in its moſt odorous ſtate, and therefore leſs in " the bohea than in the green Tea, and the moſt ſo in the more " odorous, or what are called the finer kinds of the latter.

" Its effects, however, ſeem to be very different in different per- " ſons; and hence the different, and even contradictory accounts, " that are reported of theſe effects. But if we conſider the difference " of conſtitution, which occaſions ſome difference of the operation " of the ſame medicine in different perſons, and of which we have

" a remark-

" a remarkable proof in the operation of opium, we ſhall not be " ſurpriſed at the different operations of Tea.

" If to this we add the fallacy ariſing from the condition of the " Tea employed, which is often ſo inert as to have no effects at all; " and if we ſtill add to this the power of habit, which can deſtroy " the powers of the moſt powerful ſubſtances, we ſhall not allow " the various and even contradictory reports of its effects to alter " our judgment, with reſpect to its ordinary and more general " qualities in affecting the human body.

" Theſe, from the experiments above mentioned, and from the " obſervations which I have made in the courſe of fifty years, in " all ſorts of perſons, I am convinced that the qualities of Tea are " narcotic and ſedative.

" It has been often alleged, that ſome of the bad effects imputed " to Tea are truly owing to the large quantity of warm water which " commonly accompanies it; and it is poſſible that ſome bad effects " may ariſe from this cauſe: but from attentive obſervation I can " aſſert, that wherever any conſiderable effects appear, they are in " nine of every ten perſons entirely from the qualities of the Tea; " and that any like effects of warm water do not appear in one of " a hundred who take in this very largely.

" But while we thus endeavour to eſtabliſh the poiſonous nature " of Tea, we do not at the ſame time deny that it may ſometimes " ſhow uſeful qualities. It is very poſſible, that in certain perſons, " taken in moderate quantity, it may, like other narcotics in a " moderate doſe, prove exhilirating, or, like theſe, have ſome effect " in taking off irritability, or in quieting ſome irregularities of the " nervous ſyſtem.

" As its bad effects have been often imputed to the warm water " that accompanies it, ſo we have no doubt that ſome of its good " effects may alſo be aſcribed to the ſame cauſe, and particularly its " being ſo often grateful after a full meal." *

* *Mat. Med. vol.* 2. *p.* 309.

WINTERA AROMATICA. WINTER's BARK TREE.

SYNONYMA. Winterana aromatica. *Solander* in *Med. Obſervations & Inquiries. vol.* 5. *p.* 41. *t.* 1. Drimys Winteri pedunculis aggregatis terminalibus. *Forſter* in *Nov. Act. Upſal. vol.* 3. *p.* 181. Laurifolia magelliana, cortice acri. *Bauh. Pin.* Periclymenum rectum foliis laurinis cortice acri aromatico. *Sloane* in *Phil. Tranſ. vol.* 17. *p.* 923. *tab.* 1. *f.* 1. 2.

Winteranus cortex. *Pharm. Edinb.*

Polyandria Tetragynia. *Schreb. Gen. Plant.* 929.

Gen. Ch. *Cal.* 3-lobus. *Petala* 6. ſ. 12. *Germina* clavata. *Stylus* 0. *Bacca* clavata.

Sp. Ch. W. pedunculis aggregatis terminalibus, piſtillis quatuor.

THIS very large tree often riſes to the height of fifty feet. The bark of the trunk is grey, and ſomewhat wrinkled, but that on the branches is green and ſmooth. Leaves oval, or elliptical, entire, obtuſe, flat, ſmooth, ſhining, evergreen, of a pale bluiſh colour underneath, and placed irregularly upon thick footſtalks. Flowers white, placed on long peduncles, which proceed from the alæ of the leaves at the tops of the branches. Bracteæ oblong, entire, concave, pointed, whitiſh, placed at the baſe of the peduncles. Calyx of one leaf, firm, dividing into three irregular pointed lobes. Corolla of ſeven petals, which are unequal, oval, obtuſe, concave, erect, white. Filaments numerous, (from 15 to 30) much ſhorter than the petals. Antheræ large, oval, divided longitudinally. Germina from three to ſix, turbinated. Styles none. Stigmata divided, flat. Capſules fleſhy, containing four triangular ſeeds.

It is a native of the Streights of Magellan and Terra del Fuego.

Dr. Solander

Wintera aromatica

Published by W. Woodville Oct. 1. 1794.

Dr. Solander relates that " the tree which produces the Winter's " Bark was utterly unknown to the Europeans till the return of " Captain John Winter, who, in the year 1577, failed with Sir " Francis Drake, as commander of a ſhip called the Elizabeth, " deſtined for the South Seas; but immediately after they had got " through the Streights of Magellan, Captain Winter, on the 8th " of October, was obliged, by ſtreſs of weather, to part company, " and to go back again into the Streights, from whence he returned " into England in June 1579, and brought with him ſeveral pieces " of this aromatic bark, which Cluſius called after him Cortex Win- " teranus. Several authors have mentioned it ſince in their botanical " works; but all they have ſaid has been copied from Cluſius. No " more was heard of this bark till the Dutch Fleet, under Admiral " Van Nort, returned from the Streights of Magellan, in the year " 1600. Afterwards all the navigators who paſſed through the " Streights of Magellan took notice of the tree, on account of the " uſefulneſs of its bark: but none furniſhed any deſcription that " could make it botanically known before Mr. George Handaſyd " came back from the Streights of Magellan in 1691, and brought " with him ſome dried ſpecimens, which he gave to Sir Hans Sloane, " and are now preſerved in the Britiſh Muſeum. From theſe ſpeci- " mens, and the account Mr. Handaſyd gave of this tree, Sir Hans " Sloane drew up a hiſtory, and gave a figure in the Philoſophical " Tranſactions. Still the ſyſtematical botaniſts could not give it a " place in their catalogues, being unacquainted with its flowers and " fruit." However this loſs was ſupplied by the induſtry of Mr. Wallis, Captain of the Dolphin, who returned from the South Seas in 1768, bringing with him ſeveral botanical ſpecimens of the Winter's Bark Tree, one of which came into the poſſeſſion of Dr. John Fothergill, who cauſed an engraving of it to be made by Ehret, which is publiſhed, together with its botanical deſcription written by Dr. Solander, in the fifth volume of the *Medical Obſervations and Inquiries.* From the plate here alluded to, the annexed figure is taken.

Though Winter's Bark has been very generally confounded with the canella alba, yet they are well known to be totally different, as we have already ſtated, when ſpeaking of the latter. See Med. Bot. p. 320.)

Winter's

Winter's Bark is of a dark brown cinnamon colour, with an aromatic ſmell when rubbed, and of a pungent hot ſpicy taſte, which is laſting on the palate, though imparted ſlowly.

This bark has been thought to be a uſeful antiſcorbutic; but in this character it ſeems to poſſeſs no advantage over the other pungent aromatics, and is now generally ſuperſeded by the canella alba, the uſes of which we have before noticed.

In natural order the Wintera has been ranked with the oleraceæ, but to this claſs it ſeems to have very little affinity.

SENTICOSÆ.

AGRIMONIA EUPATORIA. COMMON AGRIMONY.

SYNONYMA. Agrimonia. *Pharm. Geoff. iii.* 46. *Dale.* 112. *Alſton. i.* 76. *Lewis.* 28. *Edinb. New Diſpenſ.* 119. *Bergius.* 386. *Murray. iii.* 147. Eupatorium veterum ſeu Agrimonia. *Bauh. Pin.* 321. Agrimonia. *Gerard. Emac.* 712. Agrimonia vulgaris. *Park.* 594. *Ray. Syn.* 202. Agrimonia foliis pinnatis, pinnulis alterne minimis. *Hall. Hiſt. Stirp. Helv.* 991. A. Eupatoria. *Hudſon. Flor. Ang.* 206. *Withering. Bot. Arr.* 490. *Ic. Flor. Dan.* 588. *Curt. Flor. Lond. Mill. Illuſtr.*

Dodecandria Digynia. *Lin. Gen. Plant.* 607.

Gen. Ch. *Cal.* 5-dentatus, altero obvallatus. *Petala* 5. *Sem.* 2. in fundo calycis.

Sp. Ch. A. foliis caulinis pinnatis, impari petiolata, fructibus hiſpidis.

ROOT perennial, reddiſh, ſcaly. Stalk erect, round, hairy, reddiſh, varying from one to three feet in height. Leaves alternate, interruptedly pinnated, compoſed of five or ſix pair of pinnæ, with an odd one at the

Agrimonia Eupatoria

the end; the large pinnæ are commonly ſeſſile, oppoſite, ovate, deeply ſerrated, rough. Stipulæ two, oppoſite, ſerrated, ſpreading. Bracteæ trifid. Flowers yellow, on ſhort peduncles, in long ſimple ſpikes. Calyx permanent, divided into five ſegments, which are ovate, pointed, externally ſurrounded with rigid hairs, internally cloſed with a yellow ſubſtance of a glandular appearance: involucrum at the baſe of the germen, compoſed of two dentated leaves. Corolla compoſed of five petals, which are ovate, yellow, ſpreading, inſerted into the glandular ſubſtance of the calyx. Filaments eleven or twelve, yellowiſh. Antheræ two-lobed. Germen beneath the calyx, ſupporting two ſtyles, with blunt ſtigmata. Capſule formed of the calyx, containing two roundiſh ſmooth ſeeds.

It is common in fields about hedges and ſhady places, flowering in June and July.

" The leaves of Agrimony have a ſlightly bitteriſh roughiſh taſte, accompanied with an agreeable though very weak aromatic flavour: the flowers are in ſmell ſtronger and more agreeable than the leaves, and in taſte ſomewhat weaker. They readily give out their virtues both to water and to rectified ſpirit. In diſtillation with water the leaves afford a ſmall portion of a yellowiſh eſſential oil, which ſmells ſtrongly and agreeably of the herb."*

This plant has been principally regarded in the character of a mild aſtringent and corroborant, and many authors recommend it as a deobſtruent, eſpecially in hepatic and other viſceral obſtructions. Chomell relates two inſtances of its ſucceſsful uſe in caſes where the liver was much enlarged and indurated.[a] It has been uſed with advantage in hæmorrhagic affections, and to give tone to a lax and weak ſtate of the ſolids. In cutaneous diſorders, particularly in ſcabies, we have been lately told that it manifeſts great efficacy;[b] for this purpoſe it was given infuſed with liquorice in the form of tea: but according to Alſton it ſhould be always exhibited in the ſtate of powder.

* Lewis. l. c.

[a] Uſuelles. t. 2. p. 165.

[b] Becker Diſſ. de Eupatorio Græcorum ſeu Agrimoniæ viribus. Erf. 1783.

GEUM URBANUM. COMMON AVENS.

SYNONYMA. Caryophyllata. *Pharm. Dale.* 160. *Geoff. iii.* 263. *Alston. i.* 404. *Lewis.* 205. *Edinb. New Dispens.* 164. *Bergius.* 445. *Murray. iii.* 122. Caryophyllata vulgaris. *Bauh. Pin.* 321. *Park. Theat.* 136. *Ray. Hist.* 606. *Synop.* 253. *Ger. Emac.* 995. G. urbanum. *Hudson. Flor. Ang.* 198. *With. Bot. Arr.* 537. *Ic. Curt. Flor. Dan. t.* 672.

Icosandria Polygynia. *Lin. Gen. Plant.* 636.

Gen. Ch. Cal. 10-fidus. *Petala* 5. *Sem.* arista geniculata.

Sp. Ch. G. flor. erectis, fruct. globosis villosis, aristis uncinatis nudis, foliis lyratis.

ROOT perennial, fibrous, brown. Stalks branched, somewhat angular, hairy, about two feet in height. Leaves varying, commonly pinnated, hairy, toothed; pinnæ two pair, of which the lower are almost circular; the upper pair elliptical; terminal leaf the largest, and frequently cut into three lobes. Flowers terminal, on long hairy peduncles. Calyx divided into ten segments, which are alternately large and small. Corolla composed of five roundish yellow petals, widely spreading from each other. Filaments numerous, yellowish, tapering, inserted into the calyx. Antheræ roundish. Germina many, hairy, collected into an orbicular shape. Styles jointed in the middle, enlarged at the top, and furnished with simple stigmata. Seeds numerous, compressed, rough, crooked near the extremity, terminated by a long arista.

It is a common British plant, in woods and hedges, flowering from June till August.

The root, which is the part of this plant medicinally employed, has an aromatic and somewhat astringent taste, and a pleasant smell of the clove kind, especially when it is produced in dry and warm soils.

Geum urbanum

Published by W. Woodville, 1794

ſoils. " It gives out its aſtringent matter equally to watery and ſpirituous menſtrua; its aromatic part moſt perfectly to the latter. In diſtillation with water it yields a ſmall quantity of a whitiſh concrete oily matter, of a very grateful fragrance." [a]

According to Buchhave it yields a greater proportion of watery than of reſinous extract.

This plant, though little uſed in Britain, is held in great eſtimation on the Continent, where its virtues have been long conſidered as extremely various: but the character in which it has been lately received, and moſt particularly celebrated ſince the year 1780, is that of a febrifuge; thus Buchhave,[b] Aaſkow, Calliſen, Bang, Schönheyder, and Tode, alſo Weber and Koch,[c] Anjou,[d] &c. all bear teſtimony of its efficacy, adducing numerous inſtances of its ſucceſsful exhibition in obſtinate intermittents, many of which yielded to the root of this plant, after the Peruvian bark had failed.

It is ſaid that a tincture of this root, made in the proportion of four ounces of the root digeſted with a quart of brandy in a ſand heat, and given to the quantity of half an ounce or more, two, three, or four times a day, ſeldom failed to cure agues. Others gave it with equal ſucceſs in decoction, powder, or electuary, in the proportion in which the Cinchona bark is commonly employed.

This root has alſo been found an uſeful medicine in ſeveral chronic diſorders, as a general tonic and aſtringent; and experiments made by Buchhave ſhow its antiſeptic power to exceed that of Peruvian bark.

[a] Lewis. l. c. [b] *Obſ. circa radicem Gei urb.*
[c] *Diſſ. de nonnullorum febrifugorum virtute, et ſpeciatim Gei urbani radicis efficacia.*
[d] *Diſſ. de radice Caryophyllatæ.*

Medicinal plants of this order not introduced into this work, are

Systematic	Officinal	English Name
Spiræa Filipendula	Filipendula	Dropwort
Spiræa Ulmaria	Ulmaria	Meadow-ſweet
Geum rivale	Geum rivale	Water Avens
Potentilla Anſerina	Anſerina	Silvery Cinquefoil
Fragaria veſca	Fragaria	Strawberry
Alchemilla vulgaris	Alchemilla	Ladies-Mantle

DUMOSÆ.

DUMOSÆ.

SAMBUCUS EBULUS. DWARF ELDER.

SYNONYMA. Ebulus. *Pharm. Geoff. iii.* 415. *Dale.* 319. *Alston. i.* 485. *Lewis.* 376. *Ed. New Dis.* 184. *Cullen. ii.* 534. *Bergius.* 240. *Murray. iv.* 22. Sambucus humilis seu Ebulus. *Bauh. Pin.* 456. Ebulus sive Sambucus humilis. *Gerard. Emac.* 1426. *Park.* 209. *Ray. Syn.* 461. *Hall. Stirp. Helv. n.* 671. S. Ebulus. *Hudf. Ang.* 130. *Withering. Bot. Arr.* 319. *Flor. Lond.* 213.

Pentandria Trigynia. *Lin. Gen. Plant.* 372.

Gen. Ch. *Cal.* 5-partitus. *Cor.* 5-fida. *Bacca* 3-sperma.

Sp. Ch. S. cymis tripartitis, stipulis foliaceis, caule herbaceo.

ROOT long, creeping. Stalk six feet in height, herbaceous, erect, roundish, smooth, channelled, swelled at the joints, sending off opposite branches. Leaves opposite, pinnated, composed of four or five pair, with an odd one at the extremity: pinnæ somewhat lanceolate, unequal at the base, serrated, veiny, downy underneath. Stipulæ quadruple, nearly heart-shaped. Flowers in a terminal corymbus, divided into three branches, composed of numerous cymæ. Calyx divided into five teeth, which are short, erect, pointed. Corolla monopetalous, wheel-shaped, divided into five segments, which are ovate, pointed, hollow, reflexed. Filaments five, thick, white, of the length of the corolla. Antheræ large, double, changing from a reddish to a blackish colour. Germen below the corolla, ovate, somewhat angular, smooth. Style none. Stigmata three, glutinous, reniform. Fruit a roundish black single-celled berry, containing three irregularly-shaped seeds.

It is not unfrequent in hedges, flowering in June and July, but seldom bringing its fruit to maturity.

Every

Sambucus Ebulus

Published by D.C. Brandreth Oct. 1 1799

Every part of the plant has a faint diſagreeable ſmell, reſembling that of common elder, but ſtronger and more ungrateful; and when taken into the ſtomach manifeſts a greater ſhare of active power.

The *root* of the Ebulus, which is white, fleſhy, and of a nauſeous bitter taſte, was formerly very generally employed in dropſies. A decoction of two drams of it, or a ſmall quantity of its expreſſed juice, promotes both the alvine and urinary diſcharges; and if the decoction is prepared from the bark of the freſh root, its activity is ſo much increaſed, that it commonly proves both emetic and cathartic.

The inner bark of the ſtalk, when recent, is equally powerful in evacuating the primæ viæ; and its effects, as a diuretic, on the teſtimony of Dr. Brockleſby,[a] were found to be very conſiderable; but its operation is ſo violent and precarious, that it is now very rarely employed.

The berries, in their recent ſtate, according to Scopoli,[b] prove a gentle cathartic, though Haller[c] ſays that he never experienced this effect from their uſe.

The ſeeds are ſaid to be diuretic, and to have been given with advantage in dropſical complaints: they alſo afford an oil, which Haller applied with ſucceſs in painful affections of the joints.

The leaves,[d] boiled in wine, and formed into a cataplaſm, have been recommended in France as a diſcutient application to contuſions and tumours.

[a] See *Oecon. & Med. Obſervations. p.* 277.

[b] *Flor. Carn.*

[c] *Hiſt. Stirp. Helv. n.* 671.

[d] The odour of the green leaves drives away mice from granaries; and the Sileſians ſtrew theſe leaves where their pigs lie, under a perſuaſion that they prevent ſome of the diſeaſes to which theſe animals are liable.

RHUS CORIARIA. ELM-LEAVED SUMACH.

SYNONYMA. Sumach. *Pharm. Dale.* 314. *Alston. ii.* 370. *Lewis.* 630. *Ed. New Dispens.* 292. *Bergius.* 237. *Murray. iv.* 25. Rhus folio ulmi. *Bauh. Pin.* 414. Rhus Coriaria. *Ger. Emac.* 1474. Sumach sive Rhus obsoniorum & coriariorum. *Park. Theat.* 1450. Pes *Græcis.* *Ic. Du Hamel, Traité des arbres. vol. i. p.* 218. *tab.* 52.

Pentandria Trigynia. *Lin. Gen. Plant.* 369.

Gen. Ch. *Cal.* 5-partitus. *Petala* 5. *Bacca* 1-sperma.

Sp. Ch. R. foliis pinnatis obtusiusculè serratis ovalibus subtus villosis.

A SMALL tree rising to the height of ten feet, sending off many divaricating branches, and covered with a brown hairy bark. Leaves pinnated, alternate, consisting of several pair of pinnæ, which are ovato-lance-shaped, obtusely serrated, smooth above, hairy beneath, on short footstalks. Common footstalk somewhat winged, and terminated by a single leaflet. Flowers often dioicous, numerous, small, white, placed in large branched spikes. Calyx five toothed, erect, persistent, placed below the germen. Corolla of five petals, which are ovate, white, mostly erect. Filaments five, very short. Antheræ small. Germen roundish, about the length of the corolla. Style scarcely visible. Stigmata three, somewhat cordate. Fruit a roundish one-celled red berry, containing a solitary round hard seed.

This species of Sumach is a native of the South of Europe, and appears from the *Catalogus horti Oxoniensis* to have been cultivated in that garden previous to the year 1648, though it is still a scarce plant in this country.

The genus, to which this species belongs, comprehends several species which are known to be extremely poisonous, especially the Rhus Toxicodendron, radicans, and Vernix; but the Coriaria is perfectly

Rhus Coriaria.

Published by J. Wheatley Nov. 1, 1799.

perfectly innocent, and its berries are in ſome places uſed for culinary purpoſes.

Its medicinal qualities are wholly to be aſcribed to its ſtypticity or aſtringency; a property which it poſſeſſes in a ſufficient degree to render it uſeful in dyeing, and alſo in tanning of leather, for which it was uſed in the time of Dioſcorides.

Both the leaves and berries have been employed in medicine, but the former are more aſtringent and tonic, and have been long in common uſe in various complaints indicating this claſs of remedies.

The berries, which are red and of a roundiſh compreſſed figure, contain a pulpy matter, in which is lodged a brown hard oval ſeed, manifeſting a conſiderable degree of aſtringency. The pulp, even when dry, is gratefully acid, and has been diſcovered to contain an eſſential ſalt [a] ſimilar to that of wood-ſorrel, or perhaps more nearly allied to cryſtals of tartar.

An infuſion of the dry fruit is not rendered black by a ſolution of iron; hence it appears to be deſtitute of aſtringency: but its acidity is extremely grateful, which has cauſed the tree to be called by the French le Vinaigrier. Therefore like many other acid ſummer fruits theſe berries [b] may be advantageouſly taken to allay febrile heat, and to correct bilious putreſcency.

Lately the Rhus Toxicodendron and radicans have been recommended in paralytic affections; the latter by Monſ. Freſnoi, and the former by Dr. Alderſon, [c] of Hull; but the caſes in which theſe virulent plants were employed are but few and indeciſive.

[a] See Trommſdorff in *Act. Mogunt.* 1778-9. *Comment. Chem. p.* 25.

[b] In eaſtern countries they are commonly uſed as a pickle.

[c] See *an Eſſay on the Rhus Toxicodendron.*

The medicinal plants of this order not figured in Medical Botany, are,

Systematic Names.	Officinal.	English.
Rhamnus Frangula	Frangula	Berry-bearing Alder.
Rhamnus Zizyphus	Jujuba	Shining-leav'd Rhamnus.
Ilex aquifolium	Aquifolium	Common Holly.

ROTACEÆ.

ROTACEÆ.

GENTIANA PURPUREA. PURPLE GENTIAN.

SYNONYMA. Curſuta. *Pharm. Edinb.* Gentiana major purpurea. *Bauh. Pin.* 187. Gentiana major flore purpureo. *Flor. Dan. t.* 50. Gentiana corollis campaniformibus verticillatis, foliis imis petiolatis ellipticis. *Hall. Helv.* Gentiana purpurea. *Ait. Hort. Kew.* *Jacquin. Obſ.* 2. *t.* 39.

Pentandria Digynia. *Lin. Gen. Plant.* 322.

Gen. Ch. *Cor.* monopetala. *Caps.* 2-valvis, 1-locularis: *Receptaculis* 2, longitudinalibus.

Sp. Ch. G. corollis ſubquinquefidis campanulatis verticillatis, calycibus truncatis.

ROOT perennial, cylindrical, ſlender, branched; externally brown, internally yellowiſh. Stem erect, ſimple, ſmooth, ſtrong, ſucculent, riſing to a foot in height. Lower leaves nearly elliptical, ribbed, entire. Upper leaves in pairs, ſheath-like, concave, embracing the ſtem, pointed, ribbed, encloſing the flowers. Flowers large, purple, ſtanding in whorls, upon ſhort peduncles. Calyx a deciduous ſpatha. Corolla bell-ſhaped, purpliſh, plicated, divided at the limb into five ovate dotted ſegments. Filaments commonly five, of the length of the germen, and furniſhed with conical antheræ. Germen oblong. Style cleft, points reflexed, furniſhed with blunt ſtigmata. Capſule ovate, two-celled, containing numerous ſmall ſeeds.

It is a native of the Alps, and was firſt introduced for cultivation in this country by Profeſſor de Sauſſure in 1768.*

* See *Hort. Kew. i. p.* 322.

The

Gentiana purpurea

Drawn & Published Nov.r 1. 1791.

The annexed plate is given on the authority of the Edinburgh Pharmacopœia, in which the Curſuta, or root of this plant, has been lately received into the Materia Medica.

This root, both in appearance and taſte, ſo exactly reſembles that of the yellow or common officinal Gentian, that they are not to be diſtinguiſhed from each other; and in ſome northern countries, where the latter is ſcarce, the former is uſually employed in its ſtead.[b]

Its medical character is therefore to be regarded as the ſame with that of the gentiana lutea, of which an account is given in Medical Botany, p. 433.

[b] *See Linn. Flor. Suec. & Haller. l. c.*

The remaining medicinal plants of the order Rotaceæ, are,

Systematic Names.	Officinal.	English.
Anagallis arvenſis	Anagallis	Pimpernel
Lyſimachia Nummularia	Nummularia	Money-wort
Primula veris	Paralyſis	Cowſlip
Cyclamen europæum	Cyclamen	Common Cyclamen

RHOEADES.

CHELIDONIUM MAJUS. GREATER, or COMMON CELANDINE.

SYNONYMA. Chelidonium majus. *Pharm. Geoff. iii.* 309. *Dale.* 210. *Alston. i.* 407. *Lewis.* 224. *Edinb. New Dispens.* 170. *Murray. ii.* 300. *Bergius.* 451. *Ger. Emac.* 1069. *Raii. Hist.* 858. *Synop.* 309. *Hall. Helv. n.* 1059. Chelidonium majus vulgare. *Bauh. Pin.* 144. *Park. Theat.* 616. C. majus. *Hudf. Ang.* 228. *Withering. Bot. Arr.* 547. *Flor. Dan. t.* 542.

Polyandria Monogynia. *Lin. Gen. Plant.* 647.

Gen. Ch. *Cor.* 4-petala. *Cal.* 2-phyllus. *Siliqua* 1-locularis, linearis.

Sp. Ch. C. pedunculis umbellatis.

ROOT perennial, tapering, branched, externally brown, internally yellow. Stalks erect, cylindrical, branched, somewhat hairy, from one to two feet in height. Leaves pinnated, terminal leafit large, and often lobed; pinnæ roundish, with deeply scolloped edges. Flowers yellow, in small umbels, upon long hairy footstalks. Calyx consisting of two ovate, entire, hairy, deciduous leaves. Corolla of four petals, which are circular, large, spreading, narrow at the base. Filaments from twenty to thirty, compressed, tapering, shorter than the corolla. Antheræ double, oblong, flattish. Germen cylindrical, long, bent. Stigma blunt. Pod long, valved, somewhat tapering at each end, containing several oval shining seeds attached to the receptacle, which is placed at the junction of the valves.

It grows in hedges, or rough uncultivated places, flowering in most of the summer months.

" The leaves and roots of Celandine have a faint unpleasant smell, and a bitterish very acrid and very durable taste, which is considerably stronger in the roots than in the leaves. Both water and rectified spirit

Chelidonium majus

Published by Dr Woodville Nov.r 1 1790

ſpirit extract nearly the whole of their pungent matter: the leaves, notwithſtanding the yellow juice which iſſues ſo plentifully from a ſlight wound, and in which their activity ſeems to reſide, give to rectified ſpirit a green tincture: the roots, which yield a copious ſaffron red juice, tinge the ſame menſtruum of a browniſh yellow."

"The pungency of this plant is not of the volatile kind, little or nothing of it riſing in diſtillation with water any more than with ſpirit: it is nevertheleſs greatly abated by drying the plant itſelf, or by inſpiſſating with a gentle heat the ſpirituous or watery infuſions."[a]

This acrid plant has been much recommended in the general character of an aperient and attenuant. In jaundice it was long conſidered as the moſt effectual remedy that could be employed, as appears from the writings of Dioſcorides, Galen, Foreſtus, and other authors of more recent date; hence it was a principal ingredient in the *decoctum ad ictericos* in the Edinburgh Pharmacopœia. Nor has its uſe been confined to hepatic obſtructions; in thoſe of the other viſcera, as well as in the meſenteric and lymphatic glands, it is ſaid to have been equally efficacious.[b]

It has alſo been ſucceſsfully employed as an expectorant; and ſeveral writers found it of great efficacy in curing intermittents.[c] It has been adminiſtered in various forms and doſes. Half a dram, or a dram of the dry root in powder, or an infuſion in wine or water of a dram, or a dram and an half, of the freſh root, or three or four drops of its yellow juice in any convenient vehicle, are directed for a doſe. We have little doubt but that the virtues of Celandine have been greatly exaggerated, and its general employment in jaundice ſeems to have originated in the abſurd doctrine of ſignatures: in certain caſes however we ſhould expect to find it an uſeful remedy, for it evidently poſſeſſes active powers; and thus it is externally uſed to deſtroy warts, clean foul ulcers, and remove opacities of the cornea.

[a] *Lewis. l. c.*
[b] *Lange. De Med. Brunſ. p. 124.*
[c] See *Murray. l. c.*

This plant, and the two ſpecies of papaver, figured in the firſt part of Medical Botany, are all the medicinal plants belonging to this natural order.

BICORNES.

BICORNES.

SANTALUM ALBUM. WHITE or YELLOW SAUNDERS.

SYNONYMA. Santalum citrinum. *Pharm. Edinb. Park. Theat.* 1604. *Raii Hist.* 1804. Santalum pallidum. *Bauh. Pin.* 392. *Ger. Emac.* 1586. Sandalum. *Rumph. Herb. Amb. Tom.* 2, *p.* 42. *t.* 11. *Breyn. Icon. et Descript. p.* 19. *t.* 5. *f.* 1.

Tetrandria Monogynia. *Schr. Gen. Plant.* 215.

Gen. Ch. Cor. subinfundibulif. 4-fida staminifera: glandulis 4, staminibus alternantibus. *Drupa* rotunda monosperma. *Woodv.*

A LARGE tree, covered with reddish brown bark. Leaves ovate, somewhat lanceolate, entire, pointed, smooth, opposite, on footstalks. Flowers numerous, purple, terminating the younger branches in compound spikes. Calyx small, four-toothed, deciduous. Corolla monopetalous, consisting of a short ovate tube, divided at the limb into four sharp teeth. Filaments four, short, hairy, placed at the mouth of the tube, and furnished with large antheræ: between each filament stands a glandular nectarium, crenated at the top. Germen ovate. Style tapering, of the length of the tube of the corolla. Stigma four-parted. Fruit drupaceous, round, containing a hard seed or stone.

It is a native of the East Indies, especially of the Island of Timor, and has not yet been cultivated in this country. The plate of it here prefixed is taken from a specimen in the possession of Sir Joseph Banks.

From

Tantalum album

Published by Dr Woodville Nov.1. 1794.

From the ſtructure of the flower of the Santalum, as here delineated, and from the deſcription of it which is given above, it does not appear to have been ſufficiently underſtood by any of the botaniſts, who have hitherto deſcribed it; ſo that we have been under the neceſſity of aſſigning to this genus a new eſſential character.*

The four glands, placed within the corolla, were probably miſtaken for ſtamina, which induced Linnæus at firſt to claſs the Santalum among the octandria.

In the laſt edition of the *Syſtema Vegetabilium* this error is corrected, and had nothing more been done, the character would have remained tolerably complete; but unfortunately Cor. 1-petala was changed to 4-petala; and thus a new error was introduced, which we hope will in future be adjuſted.

White Saunders wood is of a pale white, often with a yellowiſh tinge; and being deſtitute of taſte or odour, it is ſuperſeded by the Santalum trinum, which is of a browniſh yellow colour, of a bitteriſh aromatic taſte, and of a pleaſant ſmell, approaching to that of the roſe.

Both kinds are brought from the Eaſt Indies in billets, conſiſting of large thick pieces, which, according to Rumphius, are ſometimes taken from the ſame, and ſometimes from different trees. For though the white and the yellow Saunders are the wood of the ſame ſpecies of tree, yet the latter, which forms the central part of the tree, is not always to be found in ſufficient quantity to repay the trouble and expence of procuring it, eſpecially unleſs the trees be old; while the white, which is the exterior part of the wood, is always more abundant, and is conſequently much cheaper.

" Yellow Saunders, diſtilled with water, yields a fragrant eſſential oil, which thickens in the cold into the conſiſtence of a balſam, approaching in ſmell to ambergris, or a mixture of ambergris and roſes: the remaining decoction, inſpiſſated to the conſiſtence of an extract, is bitteriſh and ſlightly pungent. Rectified ſpirit extracts by digeſtion conſiderably more than water: the colour of the tincture is

* Reſpecting the calyx we are unable to ſpeak decidedly from our own obſervation.

a rich yellow. The ſpirit, diſtilled off, is ſlightly impregnated with the fine flavour of the wood; the remaining browniſh extract has a weak ſmell, and a moderate balſamic pungency." [b]

The wood is chiefly valued on account of its fragrance; hence the Chineſe are ſaid to fumigate their clothes with it, and to burn it in their temples in honour of their gods. Though ſtill retained in the Materia Medica of the Edinburgh Pharmacopœia, it cannot be thought to poſſeſs any conſiderable ſhare of medicinal power. Hoffman conſiders its virtues as ſimilar to thoſe of ambergris; and ſome others have eſteemed it in the character of a corroborant and reſtorative.

[b] *Lewis. M. M. p. 578.*

Other medicinal plants of the order Bicornes, which have not been noticed in this work, are,

Systematic Names.	Officinal.	English.
Vaccinium Vitis idæa	Vitis idæa	Red Bilberry
——— Oxycoccos	Oxycoccos	Cranberry
——— Myrtillus	Myrtillus	Blea-berry
Ledum paluſtre	Roſmarinius ſylveſtris	Wild Roſemary
Pyrola rotundifolia	Pyrola	Winter-green
Lawſonia inermis	Alkanna vera	Smooth Lawſonia
Tamarix gallica	Tamariſcus	French Tamariſk

UMBELLATÆ.

Angelica sylvestris

Published by Dr. Woodville Nov.r 1, 1794.

UMBELLATÆ.

ANGELICA SYLVESTRIS. WILD ANGELICA.

SYNONYMA. Angelica ſylveſtris. *Pharm. Edinb. Ger. Emac.* 999. *Raii. Hiſt.* 437. *Synop.* 208. *Park. Theat.* 940. Angelica ſylveſtris major. *Bauh. Pin.* 155. A. ſylveſtris. *Hudſ. Flor. Ang.* 118. *Withering. Bot. Arr.* 290. *Hall. Helv. n.* 806. *Flor. Dan. t.* 178.

Pentandria Digynia. *Lin. Gen. Plant.* 347.

Gen. Ch. *Fructus* ſubrotundus angulatus ſolidus, ſtylis reflexis. *Corollæ* æquales, petalis incurvis.

Sp. Ch. A. foliolis æqualibus ovato-lanceolatis ſerratis.

ROOT perennial, long, thick, tapering, branched, externally brown, internally white. Stalk thick, hollow, jointed, ſcored, branched, round, ſmooth, ſeveral feet in height. Leaves pinnated, compoſed of ovate ſerrated equal pinnæ, with an odd one at the end. Leaf-ſtalks channelled on the upper ſurface, ſtanding upon a large membranous ſheath incloſing the ſtem. Flowers white, in large umbels, which are convex, and placed on long ſtalks ariſing from the ſheaths of the leaf-ſtalks. General involucrum moſt commonly wanting, or ſometimes compoſed of ſmall ſlender leaves. Partial involucrum, conſiſting of from five to twelve permanent narrow pointed unequal leaves. Corolla of five petals, which are nearly equal, ovate, pointed, bent inwards. Filaments five, ſpreading, longer than the petals. Antheræ roundiſh. Germen beneath. Styles two, bent downwards. Stigmata blunt. Fruit furniſhed with four winged appendages, and on each ſide three ſtriæ. Seeds two, egg-

ſhaped,

ſhaped, plano-convex, with a membranaceous border, convex ſide, marked with three ridges.

It grows in marſhy woods and hedges, flowering in June and July.

As the root of this ſpecies of Angelica is ſtill retained in the catalogue of the Materia Medica of the Edinburgh Pharmacopœia, we have judged it expedient to preſent a figure of the plant; and it is only in compliance with this authority that we have been induced to do ſo: for the garden Angelica, of which a plate is given in the firſt volume of Medical Botany, not only poſſeſſes all the medicinal properties of this ſpecies in a ſuperior degree, but may always be more readily procured.

PHELLANDRIUM AQUATICUM. FINE LEAVED WATER-HEMLOCK.

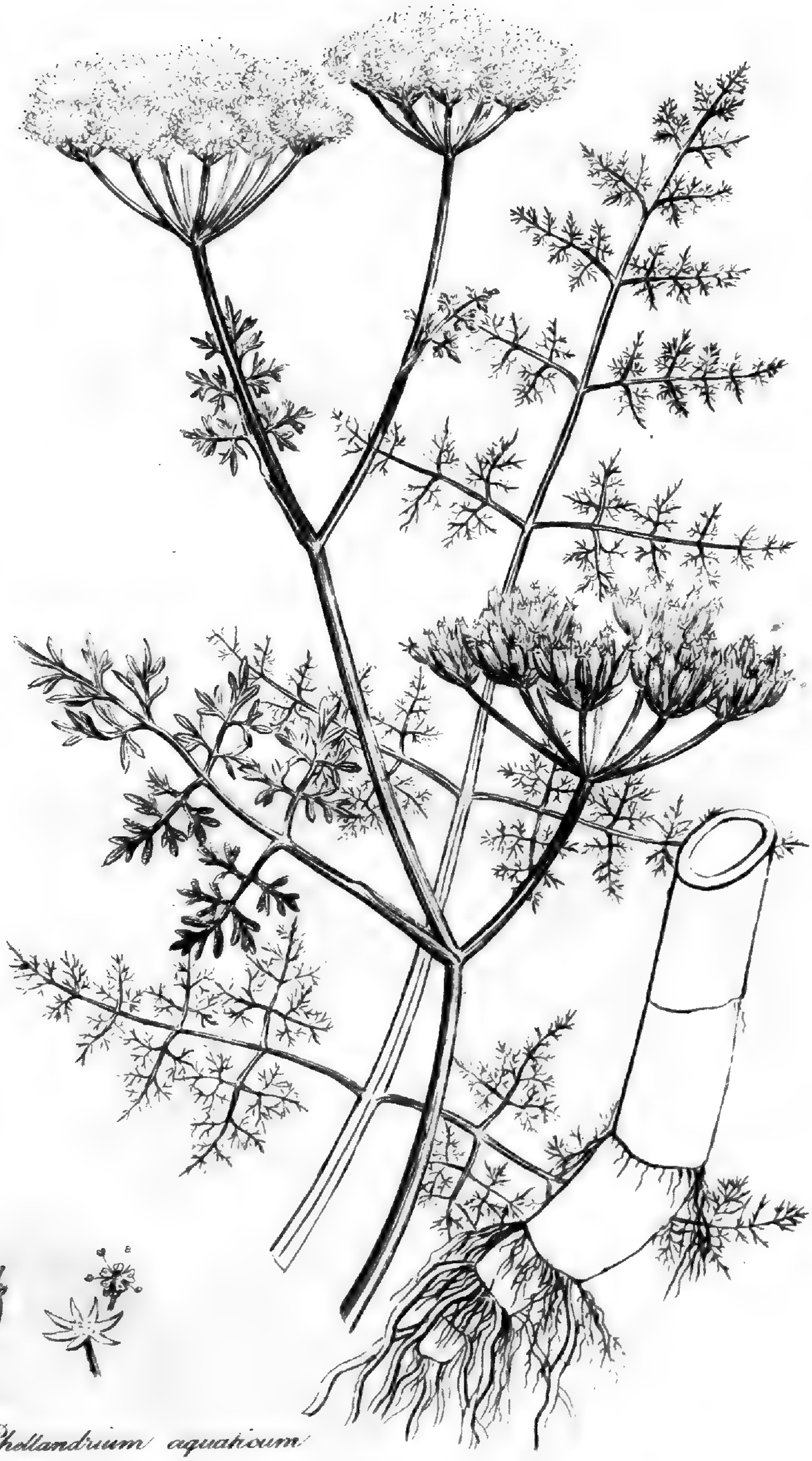
SYNONYMA. Fœniculum aquaticum. *Pharm. Murray. App. Med. i. p.* 267. *Rivin. Pent. tab.* 65. *Ernſtingii Phellandrologia. Lange, vom Waſſerfenchel.* 1771. Cicutaria paluſtris tenuifolia. *Bauh. Pin.* 161. *Park.* 933. Cicutaria paluſtris. *Ger. Emac.* 1063. *Ray. Hiſt.* 452. *Synop.* 215. *Petiv, t.* 28. *f.* 4. *Hall. n.* 757. P. aquaticum. *Hudſon. Flor. Ang.* 122. *Lightf. Flor. Scot.* 163. *Withering. Bot. Arr.* 298.

Pentandria Digynia. *Lin. Gen. Plant.* 353.

Gen. Ch. *Floſculi* diſci minores. *Fructus* ovatus lævis coronatus perianthio et piſtillo.

Sp. Ch. P. foliorum ramificationibus divaricatis.

ROOT



Phellandrium aquaticum

Published by Dr Woodville June 1. 1794.

ROOT biennial, thick, tapering, jointed, ſending off numerous long ſlender fibres. Stalk thick, hollow, ſmooth, jointed, branched, ſcored, uſually about two feet in height. Leaves large, triply pinnated, ramifying at right angles, or divaricating; leafits irregularly pinnatifid; leaves under the water filiform. Flowers ſmall, white, in terminal umbels. General involucrum none. Partial involucrum of ſeven leaves, which are pointed, and about the length of the proper umbel. Calyx five-toothed, permanent. Flowers all fertile, and forming a flat uniform ſurface. Individual florets unequal, ſmaller at the centre. Petals five, heart-ſhaped, bent inwards. Filaments five, capillary longer than the petals. Antheræ roundiſh. Germen ovate. Styles two, tapering, upright, permanent. Stigmata blunt. Fruit ovate, ſmooth, diviſible into two parts or ſeeds.

It grows in rivers, ditches, and pools, flowering in June and July.

This plant is generally ſuppoſed to poſſeſs deleterious qualities. Horſes, on eating it, are ſaid to become paralytic; but this effect ſhould not be aſcribed to the Phellandrium, but to an inſect which reſides within its ſtalks, viz. the *Curculio paraplectticus*.

The ſeeds of the plant, however, according to Dr. Lange,[a] when taken in large doſes, produce a remarkable ſenſation of weight in the head, accompanied with giddineſs, intoxication, &c. and therefore may be deemed capable of proving an active medicine. They are oblong, ſtriated, of a greeniſh yellow, about the ſize of thoſe of dill, and manifeſting an aromatic acrid taſte, approaching nearly to that of the ſeeds of lovage. Diſtilled with water they yield an eſſential oil, of a pale yellow colour, and of a ſtrong penetrating ſmell. One pound of the ſeeds affords an ounce of watery extract, but nearly double this quantity of ſpirituous extract, of which more than three drams conſiſts of reſin.[b]

Pliny[c] ſtates the ſeeds of Phellandrium to be an efficacious medicine in calculous complaints, and diſorders of the bladder; and in this opinion he is followed by Dodonæus,[d] who mentions them alſo as poſſeſſing diuretic and emmenagogue powers. But on theſe autho-

[a] See *Rem. Brunſ.* 235. [b] *Ernſtingius, l. c.* [c] *Lib.* 17. *c.* 13. [d] *Pempt.* 591.

rities little reliance is to be placed; ſo that the efficacy of this plant reſts chiefly on the teſtimonies of Ernſtingius and Lange, by whom various caſes of its ſucceſsful uſe are publiſhed, eſpecially in wounds and inveterate ulcers of different kinds, and even in cancers;* alſo in phthiſis pulmonalis, aſthma, dyſpepſia, intermittent fevers, &c.

About two ſcruples of the ſeed, two or three times a day, was the ordinary doſe given.

Though the diſorders here noticed are ſo multifarious and diſſimilar as to afford no ſatisfactory evidence of the medicinal qualities of theſe ſeeds, yet they appear to us well deſerving of farther inveſtigation, according to the maxim '*Ubi virus ibi virtus.*'

* Boerhaave alſo ſpeaks highly of its diſcutient power in all kinds of tumours. *Hiſt. Plant. Hort. Ludg. Bat.* 1. *p.* 94.

OENANTHE CROCATA. HEMLOCK WATER-DROPWORT.

SYNONYMA. Oenanthe Chærophylli foliis. *Bauh. Pin.* 162. Filipendula cicutæ facie. *Ger. Emac.* 1057. Oenanthe, ſucco viroſo, cicutæ facie *Lobelii. Bauh. Hiſt. iii.* 193. *Park. Theat.* 894. *Raii. Synop.* 210. *Morris. Sect.* 9. *tab.* 9. *Watſon. Phil. Tranſ. v.* 44. *n.* 480. *tab.* 3. Oenanthe crocata. *Hudſ. Flor. Ang.* 121. *Withering. Bot. Arr.* 297. *Lightfoot. Flor. Scot.* 162. *Ic. Jacquin. Hort. iii. t.* 55.

Pentandria Digynia. *Lin. Gen. Plant.* 352.

Gen. Ch. *Floſculi* difformes: in diſco ſeſſiles, ſteriles. *Fructus* calyce et piſtillo coronatus.

Sp. Ch. Œ. foliis omnibus multifidis obtuſis ſubæqualibus.

ROOT perennial, divided into numerous parts, or oblong tubercles, furniſhed with long ſlender fibres. Stalks erect, channelled, round, ſmooth, branched, of a yellowiſh red colour, two or three feet

Oenanthe crocata
Published by W. Woodville Dec. 1, 1794

feet in height. Leaves ſimply and doubly pinnated; ſmaller pinnæ wedge-ſhaped, ſmooth, ſtreaked, jagged at the edges: larger pinnæ three-lobed, indented, reſembling thoſe of ſmallage. Flowers in umbels, which are terminal, ſpreading, and almoſt globular. General involucrum none. Partial involucrum compoſed of many ſmall leaves. Calyx permanent, five-toothed. Florets unequal, thoſe at the circumference often ſterile. Petals five, heart-ſhaped, broad, bent inwards, emarginated. Filaments five, ſlender, tapering, twice the length of the petals. Antheræ oblong, brown. Germen beneath the corolla. Styles two, awl-ſhaped, reddiih, permanent. Stigmata pointed. Fruit oblong, ſtriated, diviſible into two parts or ſeeds, which are convex on one ſide, and flat on the other.

It grows on the banks of rivers, and in ditches, flowering in June and July.

We have ſelected this plant, to record it as a powerful poiſon, rather than as medicine. Its root, which is not unpleaſant to the taſte, is, by Dr. Poultney, eſteemed to be the moſt deleterious of all the vegetables which this country produces.

Mr. Howell, ſurgeon at Haverfordweſt, relates, that " eleven " French priſoners had the liberty of walking in and about the town " of Pembroke; three of them, being in the fields a little before noon, " dug up a large quantity of this plant, which they took to be wild " celery, to eat with their bread and butter for dinner. After waſhing " it, they all three ate or rather taſted of the roots. As they were " entering the town, without any previous notice of ſickneſs at the " ſtomach, or diſorder in the head, one of them was ſeized with " convulſions. The other two ran home, and ſent a ſurgeon to him. " The ſurgeon endeavoured firſt to bleed, and then to vomit him; but " thoſe endeavours were fruitleſs, and he died preſently. Ignorant " of the cauſe of their comrade's death, and of their own danger, " they gave of theſe roots to the other eight priſoners, who all ate " ſome of them with their dinner. A few minutes afterwards the " remaining two, who gathered the plants, were ſeized in the ſame " manner as the firſt; of which one died; the other was bled, and " a vomit, with great difficulty forced down, on account of his jaws " being as it were locked together. This operated, and he recovered, " but was ſometime affected with dizzineſs in his head, though not

" ſick

" ſick or the leaſt diſordered in his ſtomach. The other eight being " bled and vomited immediately, were ſoon well." [a]

At Clonmel, in Ireland, eight boys miſtaking this plant for water-parſnep, ate plentifully of its roots: about four or five hours after, the eldeſt boy became ſuddenly convulſed, and died; and before the next morning four of the other boys died in a ſimilar manner. Of the other three, one was maniacal ſeveral hours, another loſt his hair and nails, but the third eſcaped unhurt.[b]

Stalpaart vander Wiel mentions two caſes of the fatal effects of this root; theſe, however, were attended with great heat in the throat and ſtomach, ſickneſs, vertigo, and purging. They both died in the courſe of two or three hours after eating the root.

Allen, in his *Synopſis Medicinæ*, alſo relates that four children ſuffered greatly by eating this poiſon. In theſe caſes great agony was experienced before the convulſions ſupervened; vomitings likewiſe came on, which were encouraged by large draughts of oil and warm water, to which their recovery is aſcribed.

The late Sir William Watſon,[c] who refers to the inſtances here cited, alſo ſays that a Dutchman was poiſoned by the *leaves* of the plant boiled in pottage.

It appears from various authorities that moſt brute animals are not leſs affected by this poiſon than man; and Mr. Lightfoot informs us that a ſpoonful of the juice of this plant, given to a dog, rendered him ſick and ſtupid; but a goat was obſerved to eat the plant with impunity.

The great virulence of this plant has not however prevented it from being taken medicinally. In a letter from Dr. Poultney to Sir William Watſon,[d] we are told that a ſevere and inveterate cutaneous diſorder was cured by the juice of the root, though not without exciting the moſt alarming ſymptoms. Taken in the doſe of a ſpoonful, in two hours afterwards the head was affected in a very extraordinary manner, followed with violent ſickneſs and vomiting, cold ſweats and rigors; but this did not deter the patient from continuing the medicine, in ſomewhat leſs doſes, till it effected a cure.

[a] Phil. Tranſ, vol. 44. [b] Ibid. l. c.

[c] Sir William likewiſe inform us, that Mr. Miller knew a whole family at Batterſea, who were poiſoned with this plant. And that Mr. Ehret, while drawing the freſh plant, was affected with univerſal uneaſineſs and vertigo. [d] Phil. Tranſ, vol. 62.

Cicuta virosa

Published by D. Wendelle, Dec. 1, 1791.

CICUTA VIROSA. WATER HEMLOCK.

SYNONYMA. Cicuta aquatica. *Pharm. Murray. i.* 271. *Bergius.* 212. *Wepfer. Hist. Cicutæ Aquat. p.* 4. Sium alterum olusatri facie. *Lobel. Ic.* 208. *Ger. Emac.* 256. *Ray. Hist.* 450. *Synop.* 212. Sium erucæ folio. *Bauh. Pin.* 154. Sium majus angustifolium. *Park. Theat.* 1241. *Conf. Phil. Transf. v.* 44. 242. *tab.* 4. *Hall. n.* 781. *Flor. Dan.* 208. Cicuta virosa. *Hudf. Flor. Ang.* 122. *Lightfoot. Scot.* 164. *With. Bot. Arr.* 299.

Pentandria Digynia. *Lin. Gen. Plant.* 354.

Gen. Ch. *Fructus* subovatus, sulcatus.

Sp. Ch. C. umbellis oppositifoliis, petiolis marginatis obtusis.

ROOT perennial, thick, short, hollow, beset at the joints with numerous slender fibres. Stalk thick, round, fistular, striated, smooth, sparingly branched, about four feet in height. Leaves pinnated, leafits usually placed in ternaries, spear-shaped, serrated; serratures white at the points. Flowers in large expanding umbels. Partial involucrum composed of several short bristle-shaped leaves. Calyx scarcely discernible. Florets all uniform, fertile, each consisting of five petals, which are ovate, turned inwards, of a greenish white. Filaments five, capillary, longer than the petals. Antheræ simple, purplish. Styles two, at first close, afterwards divaricating. Stigmata simple. Fruit egg-shaped, divisible into two seeds, which are ribbed and convex on one side, and flat on the other.

It grows on the borders of pools and rivers, flowering in July and August.

This plant, which in its recent state has a smell resembling that of smallage, and a taste somewhat like that of parsley, is well known to be a powerful poison. Haller supposes it to be the κωνειον of Dioscorides; but whether it is the Athenian cicuta, or the plant of which the

 poisonous

poiſonous potion of the Greeks was compoſed, cannot poſſibly be aſcertained.

The root has a ſtrong ſmell, and a warm ſomewhat acrid taſte; by diſtillation with water it yields a volatile matter, which is of a narcotic quality, and of a very ungrateful odour.

It appears from Bergius, that Water-Hemlock, in its dried ſtate, may be taken in a conſiderable quantity without producing any bad effect;[a] but of the fatal effects of its root when freſh, numerous inſtances are recorded. Of two boys and ſix girls, who ate of this root for that of parſnep, the greater part died in a ſhort time afterwards, thoſe only eſcaping who were enabled to diſcharge it by vomiting. The ſymptoms it produced were intoxication, vertigo, great heat and pain in the ſtomach, convulſions, and even epilepſy, diſtortions of the eyes, vomiting or retching, a diſcharge of blood from the ears, ſwelling of the abdomen, hiccup, ſpaſms, &c.[b] In the caſe of a man who had eaten of this poiſonous root, we are told the ſymptoms were vertigo, ſucceeded by delirium, with conſtant heat at the ſtomach, and inextinguiſhable thirſt: theſe ſymptoms were of long continuance, and followed by an eryſipelatous tumour of the neck.[d]

To cite all the inſtances related of the deleterious effects of this root would be unneceſſary, as thoſe here ſtated from Wepfer will ſufficiently ſhow the train of ſymptoms which uſually follow the taking of this poiſon. It may be obſerved however that in moſt of the caſes in which it proved fatal, the patients died in a convulſed or epileptic ſtate, and that whenever the root was rejected by vomiting, only a ſlight degree of ſtupefaction was for a few hours experienced.[e]

[a] Recentem cicutam nunquam adhibui; pilulas vero e ſucco cicutæ expreſſo & inſpiſſato, cum pulvere foliorum formatas, dedi fœminæ, cancro vero mammarum laboranti, incipiendo a parca doſi, ſenſim adſcendendo ad dracm. 3. quotidie; ſed nullum effectum inde ſenſit, neque bonum, nec malum. Præſcripſi famulo cuidam decoct. ſaturat. herbæ cicutæ ſiccatæ libr. 4. quod externe adhiberet, ſed per errorem intra binas horas totam ebibit lagunculam, abſque ullo tamen inſequente damno." *Vide l. c.*

[b] *Wepfer. l. c.* [d] See *Eph. Nat. Cur. Cent.* 10. *Obſ.* 58. *p.* 355.

[e] See Breſl. Samml. 1722. p. 286. Schwencke gives an account of four boys who had the misfortune to eat this root, three of whom died in convulſions; the other was ſaved by the timely adminiſtration of an emetic.

On

On examination of the bodies of thoſe who periſhed by eating this root, we are told that the ſtomach and inteſtines were diſcovered to be inflamed, and even in a gangrenous or eroded ſtate, and the blood-veſſels of the brain much diſtended.[f]

To ſeveral brutes this plant has likewiſe proved mortal; but the facts upon this point are ſomewhat vague and various. Though ſaid to be a fatal poiſon to cows, it is eaten with impunity by goats and ſheep.[g]

As an internal medicine the Cicuta aquatica is univerſally ſuperſeded by the common hemlock; but externally employed in the way of a poultice, it is ſaid to afford relief in various fixed pains, eſpecially thoſe of the rheumatic and arthritic kind.

[f] Vide Wepfer, Schwencke, *Breſl. Samml.* 1722. *p.* 286. *Eph. Nat. Cur. Dec.* 2. *a.* 6. *p.* 321.

[g] ——videre licet pingueſcere ſæpe cicuta
Barbigeras pecudes, hominique eſt acre venenum.
LUCRET.

Other medicinal plants of this Order, are

SYSTEMATIC NAMES.	OFFICINAL.	ENGLISH.
Sanicula europæa	Sanicula	Common Sanicle
Tordylium officinale	Seſeli creticum	Hartwort
Athamanta cretenſis	Daucus creticus	Cretan Spignel
Athamanta Oreoſelinum	Oreoſelinum	Divaricated Spignel
Peucedanum officinale	Peucedanum	Sulphur-wort
Laſerpitium latifolium	Gentiana alba	Broad leav'd Laſſer-wort
Laſerpitium Siler	Siler montanum	Mountain Laſſer-wort
Heracleum Sphondylium	Branca urſina	Cow Parſnep
Sium Ninſi	Ninſi	Baſtard Ginſeng
Siſon Ammi	Ammi verum	True Biſhopſweed
Bubon macedonicum	Petroſelinum macedon.	Macedonian Parſley
Aethuſa Meum	Meu	Common Spignel
Scandix Cerefolium	Cerefolium	Chervil
Chærophyllum ſylveſtre	Cicutaria	Common Cow-weed
Seſeli tortuoſum	Seſeli maſſilienſe	Hard Meadow Saxifrage
Paſtinaca ſativa	Paſtinaca	Garden Parſnep
Apium graveolens	Apium	Smallage
Bupleurum rotundifolium	Perfoliata	Thorow-wax

GALUM

STELLATÆ.

GALIUM APARINE. CLEAVERS, or GOOSE GRASS.

SYNONYMA. Aparine. *Pharm. Murray. vi.* 24. *Dale.* 133. *Rutty.* 321. Aparine vulgaris. *Bauh Pin.* 334. Aparine. *Ger. Emac.* 1122. *Park. Theat.* 567. *Ray. Syn.* 225. Galium caule ferrato, foliis fenis linearibus lanceolatis ferratis, petiolis unifloris. *Hall. Hist. Stirp. Helv. n.* 723. Galium Aparine. *Scop. Fl. Carn. n.* 157. *Hudson. Flor. Ang.* 57. *Withering. Bot. Arr.* 157. *Lightfoot. Flor. Scot.* 117. *Flor. Dan. Icon.* 495. *Curt. Flor. Lond.*

Tetrandria Monogynia. *Lin. Gen. Plant.* 125.

Gen. Ch. *Cor.* 1-petala, plana. *Sem.* 2, subrotunda.

Sp. Ch. G. foliis octonis lanceolatis carinatis scabris retrorsum aculeatis, geniculis villosis, fructu hispido.

ROOT branched, fibrous, annual. Stalk quadrangular, three or four feet in height, weak, climbing, jointed branched: angles beset with short prickles, which are bent backwards, and fasten hold of neighbouring plants. Leaves standing at the joints of the stalk six or eight together, lanceolate, narrow, finely pointed, on the upper side rough, with sharp prickles. Flowers small, white, on rough footstalks. Calyx none. Corolla very small, wheel-shaped, divided into four oval pointed segments. Filaments four, white, shorter than the corolla. Antheræ yellow. Germen below the corolla, double, rough. Styles two, short. Stigmata globular. Fruit two dry roundish berries, slightly adhering together, covered with hooked prickles. Seeds solitary, kidney-shaped.

It is common in cultivated ground and hedges, producing its flowers from June till September.

This

Galium Aparine

Published by W. Wilkie, Dec. 1. 1791.

This ſucculent plant is deſtitute of odour, but to the taſte it is bitteriſh, and ſomewhat acrid. Dioſcorides [a] ſpeaks of an ointment made of the bruiſed herb, mixed with lard, as an uſeful application to diſcuſs ſtrumous ſwellings; and Gaſpari,[b] an Italian, adopted a ſimilar practice with great ſucceſs. He alſo informs us, that a decoction of the plant, employed in the way of fomentation, was found to be very efficacious in ſwellings of the glands of the neck, which followed a certain epidemic at Verona. Dr. Cullen, however, relates that he tried the Aparine in ſome glandular indurations, but without deriving any advantage.[c]

It is ſaid by Mayerne, that three ounces of the juice of the plant, taken twice a day in wine, were experienced to be an uſeful aperient and diuretic in incipient dropſies. But the character in which the Aparine has of late been chiefly eſteemed, is that of an antiſcorbutic; for this purpoſe, a tea-cupful of its expreſſed juice is to be taken every morning for nine or ten days. When the freſh plant cannot be procured, it may be uſed in a dried ſtate as tea.[d]

Other ſpecies of Galium have been uſed for the purpoſes of medicine, eſpecially the G. verum, or yellow lady's bed-ſtraw, the flowers of which have been recommended in hyſteric and epileptic complaints. It has been aſſerted, that theſe flowers contain an acid, which coagulates milk; but neither Bergius, Cullen, nor Young, obſerved this effect from them, after repeated trials.

[a] *M. M. Lib.* 3. *cap.* 104.

[b] See *Oſſervazioni Storiche, Mediche, &c.* 1731. *p.* 17.

[c] *M. M. vol.* 2. *p.* 37.

[d] See *Med. & Philoſ. Commentaries. vol.* 5. *p.* 326. Alſo Edward's *Treatiſe on the Gooſe-graſs, or Clivers, and its efficacy in the cure of the moſt inveterate Scurvy.*

Other medicinal plants of this Order, are

Systematic Names.	Officinal.	English.
Galium verum	Galium luteum	Yellow Ladies bedſtraw
Galium Mollugo	Galium album	White ditto
Aſperula odorata	Matriſylva	Sweet Woodroof

CONGLOMERATÆ.

VISCUM ALBUM. MISSELTOE.

SYNONYMA. Viſcus. *Pharm. Dale.* 313. *Alſton. ii.* 53. *Lewis.* 666. *Edinb. New Diſpenſ.* 302. *Cullen. ii.* 47. *Murray. i.* 199. *Bergius.* 788. *Ger. Emac.* 153. *Ray. Syn.* 464. *Hiſt.* 1583. Viſcum baccis albis. *Bauh. Pin.* 423. Viſcum vulgare. *Park. Theat.* 1392. *Hall. n.* 1609. V. album. *Hudſon. Flor. Ang.* 431. *Withering. Bot. Arr.* 1112. *Ic. Mill. Illuſt.*

Dioecia Tetrandria. *Lin. Gen. Plant.* 1105.

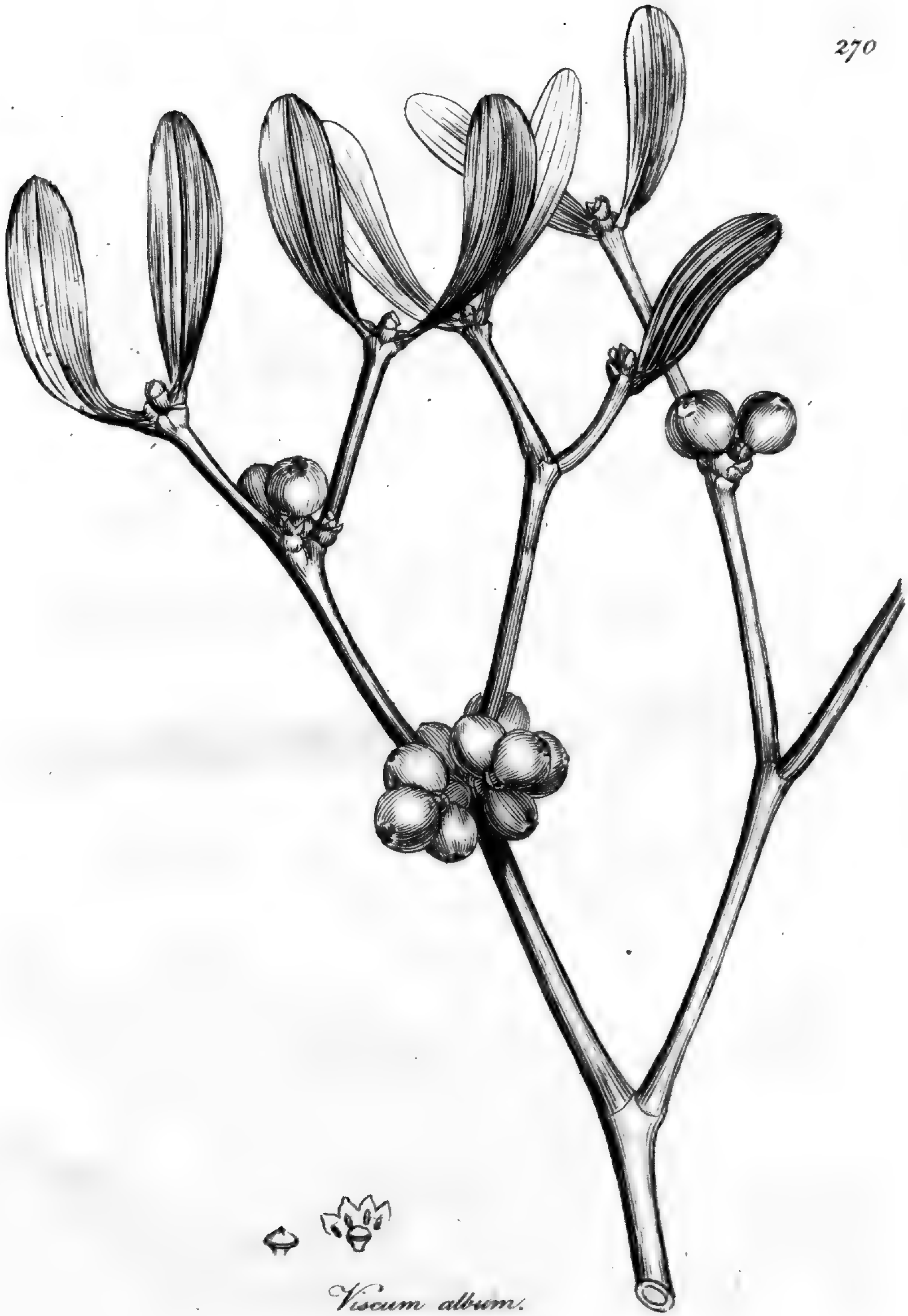
Gen. Ch. *Masc. Cal.* 4-partitus. *Cor.* o. *Filamenta* o. *Antheræ* calyci adnatæ.

Fem. Cal. 4-phyllus, ſuperus. *Cor.* o. *Stylus* o. *Bacca* 1-ſperma, *Sem.* cordatum.

Sp. Ch. V. foliis lanceolatis obtuſis, caule dichotomo, ſpicis axillaribus.

A PARASITICAL evergreen ſhrub, inſinuating its radical fibres into the wood of the trees on which it grows. Branches numerous, regularly dichotomous, covered with ſmooth bark, of a yellowiſh green colour. Leaves ſpear-ſhaped, blunt, entire, ſtriated, ſtanding in pairs upon ſhort footſtalks. Flowers male and female in different plants, ſmall, axillary, in cloſe ſpikes. Calyx of the *male flower* divided into four ovate equal ſegments. Corolla none. Filaments none. Antheræ four, oblong, attached to the calyx. Calyx of the *female flower* divided into four leaves, which are ſmall, ovate, deciduous, placed on the common germen. Corolla none. Germen beneath, oblong, three-edged, indiſtinctly crowned with a border with four clefts. Style none. Stigma blunt, and ſomewhat notched.

Fruit



Viscum album.

Published by Dr Woodville Dec.r 1.1792.

Fruit a globular white ſmooth one-celled berry, containing a fleſhy ſeed, which is inverſely heart-ſhaped, blunt, compreſſed.

It grows on various kinds of trees, producing its flowers in May; but its berries remain throughout the winter.

This ſingular paraſitical plant moſt commonly grows on apple trees, alſo on the pear, hawthorn, ſervice, oak, haſel, maple, aſh, lime-tree, willow, elm, hornbeam, &c. It is ſuppoſed to be propagated by birds, eſpecially by the fieldfare and thruſh, which feed upon its berries, the ſeeds of which paſs through the bowels unchanged, and along with the excrements adhere to the branches of trees where they vegetate.*

The Miſſeltoe of the oak, has, from the times of the antient druids been always preferred to that produced on other trees; but it is now well known that the viſcus quernus differs in no reſpect from others.

This plant is the ἶξος of the Greeks, and was in former times thought to poſſeſs many medicinal virtues; however, we learn but little concerning its efficacy from the ancient writers on the Materia Medica; nor will it be deemed neceſſary to ſtate the extraordinary powers aſcribed to the Miſſeltoe by the crafty deſigns of druidical knavery.

"Both the leaves and branches of the plant have very little ſmell, and a very weak taſte of the nauſeous kind. In diſtillation they impregnate water with their faint unpleaſant ſmell, but yield no eſſential oil. Extracts, made from them by water, are bitteriſh, roughiſh, and ſubſaline. The ſpirituous extract of the wood has the greateſt auſterity, and that of the leaves the greateſt bitterneſs. The berries abound with an extremely tenacious moſt ungrateful ſweet mucilage." §

The Viſcus Quernus obtained great reputation for the cure of epilepſy; and a caſe of this diſeaſe, of a woman of quality, in which it proved remarkably ſucceſsful, is mentioned by Boyle.* Some years afterwards its uſe was ſtrongly recommended in various convulſive diſorders by Colbach, who has related ſeveral inſtances of

* Or if the berries, when fully ripe, be rubbed on the ſmooth bark of almoſt any tree, they will adhere cloſely and produce plants the following Winter.

§ *Lewis. l. c.*

* See *Uſefulneſs of Nat. & Exper. Philoſ.* 174.

its

its good effects.[b] He adminiſtered it in ſubſtance in doſes of half a dram, or a dram, of the wood or leaves, or an infuſion of an ounce.

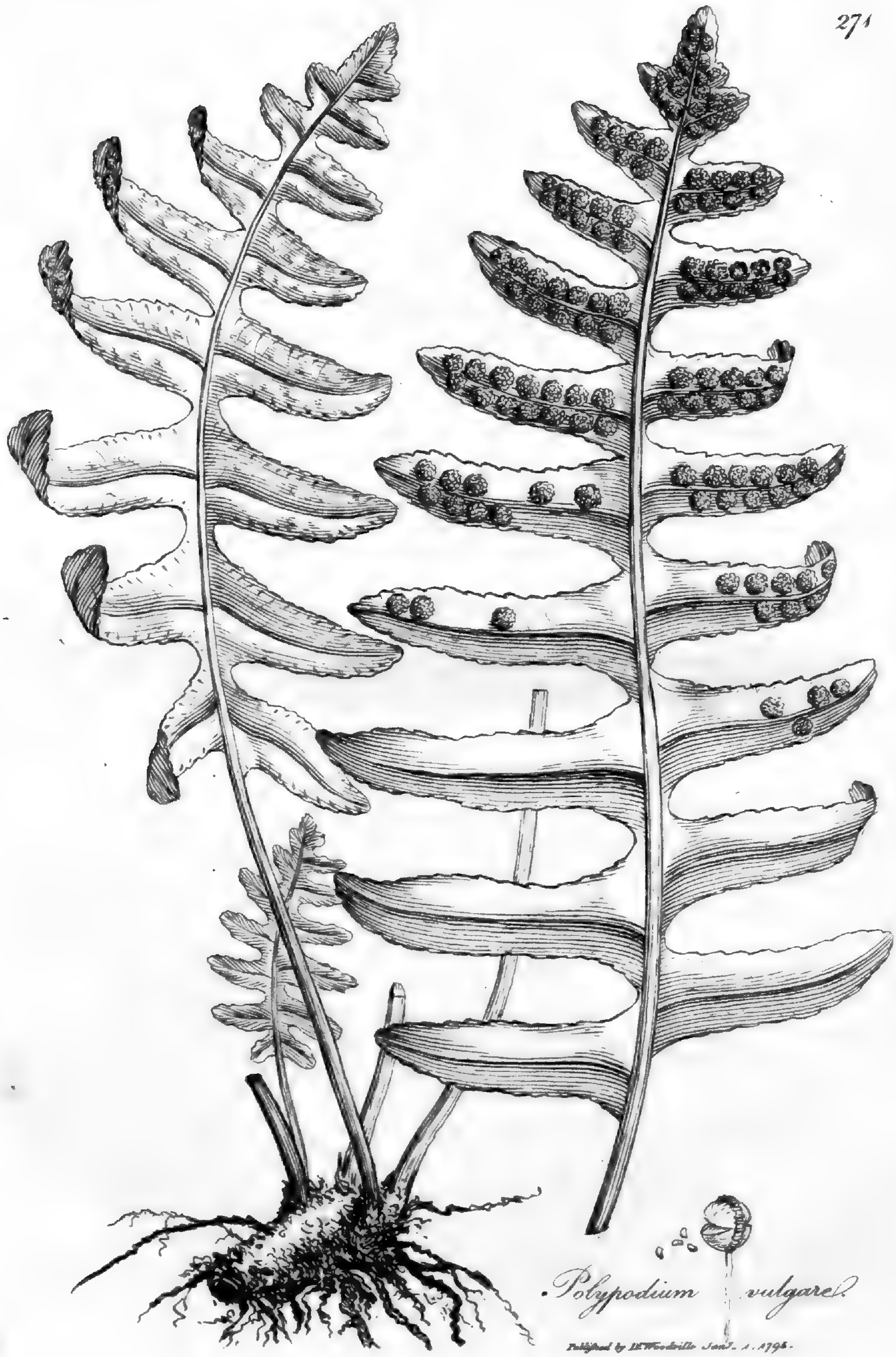
This author was followed by others, who have not only given teſtimony of the efficacy of the Miſſeltoe in different convulſive affections, but alſo in thoſe complaints denominated nervous, in which it was ſuppoſed to act in the character of a tonic. But all that has been written in favour of this remedy, which is certainly well deſerving of notice, has not prevented it from falling into general neglect; and the Colleges of London and Edinburgh have, perhaps not without reaſon, expunged it from their catalogues of the Materia Medica.

[b] *Diſſertation concerning the Miſſeltoe, a moſt wonderful ſpecifick remedy for the cure of convulſive diſtempers.*

Other medicinal plants of this Order, are

SYSTEMATIC NAMES.	OFFICINAL.	ENGLISH.
Poterium Sanguiſorba	Pimpinella italica (herba)	Common Burnet
Sanguiſorba officinalis	Pimpinella italica (radix)	Burnet Blood-wort
Plantago Pſyllium	Pſyllium	Clammy Plantain
Cuſcuta europæa	Cuſcuta	Common Dodder
Cuſcuta epithymum	Epithymum	Leſſer Dodder

FILICES.


Polypodium vulgare.
Published by W. Woodville June 1. 1795.

F I L I C E S.

POLYPODIUM VULGARE. COMMON POLYPODY.

SYNONYMA. Polypodium. *Pharm. Dale.* 63. *Alſton. i.* 496. *Rutty.* 405. *Lewis.* 519. *Edinb. New Diſpenſ.* 259. *Bergius.* 844. *Murray. v.* 449. *Gerard. Emac.* 1132. *Raii. Hiſt.* 137. *Synop.* 117. Polypodium foliis pinnatis lanceolatis radice ſquamata. *Hall. Hiſt. n.* 1696. Polypodium vulgare. *Bauh. Pin.* 359. *Park. Theat.* 1039. *Hudſon. Ang.* 387. *Withering. Bot. Arr. iii.* 55. *Ic. Curtis. Lond. Bolton. Fil. Brit. t.* 18.

Cryptogamia Filices. *Lin. Gen. Plant.* 1179.

Gen. Ch. Fructif. in punctis ſubrotundis, ſparſis per diſcum frondis.

Sp. Ch. P. frondibus pinnatifidis: pinnis oblongis ſubſerratis obtuſis, radice ſquamata.

ROOT perennial, creeping, in an horizontal direction, ſomewhat thicker than a gooſe's quill, externally yellowiſh, internally greeniſh, covered with brown ſcales, and beſet with ſmall tubercles, from which iſſue numerous fibres. Stalks or ſtipites ſmooth, tapering, grooved on the upper ſide. Frondes or leaves from half a foot to a foot in length, pinnated; pinnæ oblong, ſlightly ſerrated, obtuſe. Capſules placed in a row on each ſide of the midrib of the leaf: they are of a roundiſh form, and granulated appearance, furniſhed with footſtalks, and opening horizontally into two hemiſpheres, which are ſurrounded by an elaſtic ring. Seeds numerous, oval or reniform, yellow.

It grows on old walls, ſtumps and roots of trees, and various ſhady places, fructifying from June till October.

"The leaves of Polypody have a weak ungrateful ſmell, and a nauſeous ſweet taſte, leaving a kind of roughneſs and ſlight acrimony in the mouth. They give out their ſmell and taſte, together with a yellow colour, both to water and rectified ſpirit: the ſpirituous tincture is ſweeter than the watery; but in inſpiſſation its ſweetneſs is in great part deſtroyed, or covered by the other matter; the ſpirituous extract, as Cartheuſer obſerves, being to the taſte only ſubaſtringent and ſubacrid, with very little ſweetneſs, while the watery extract retains the full ſweetneſs of the polypody." [a]

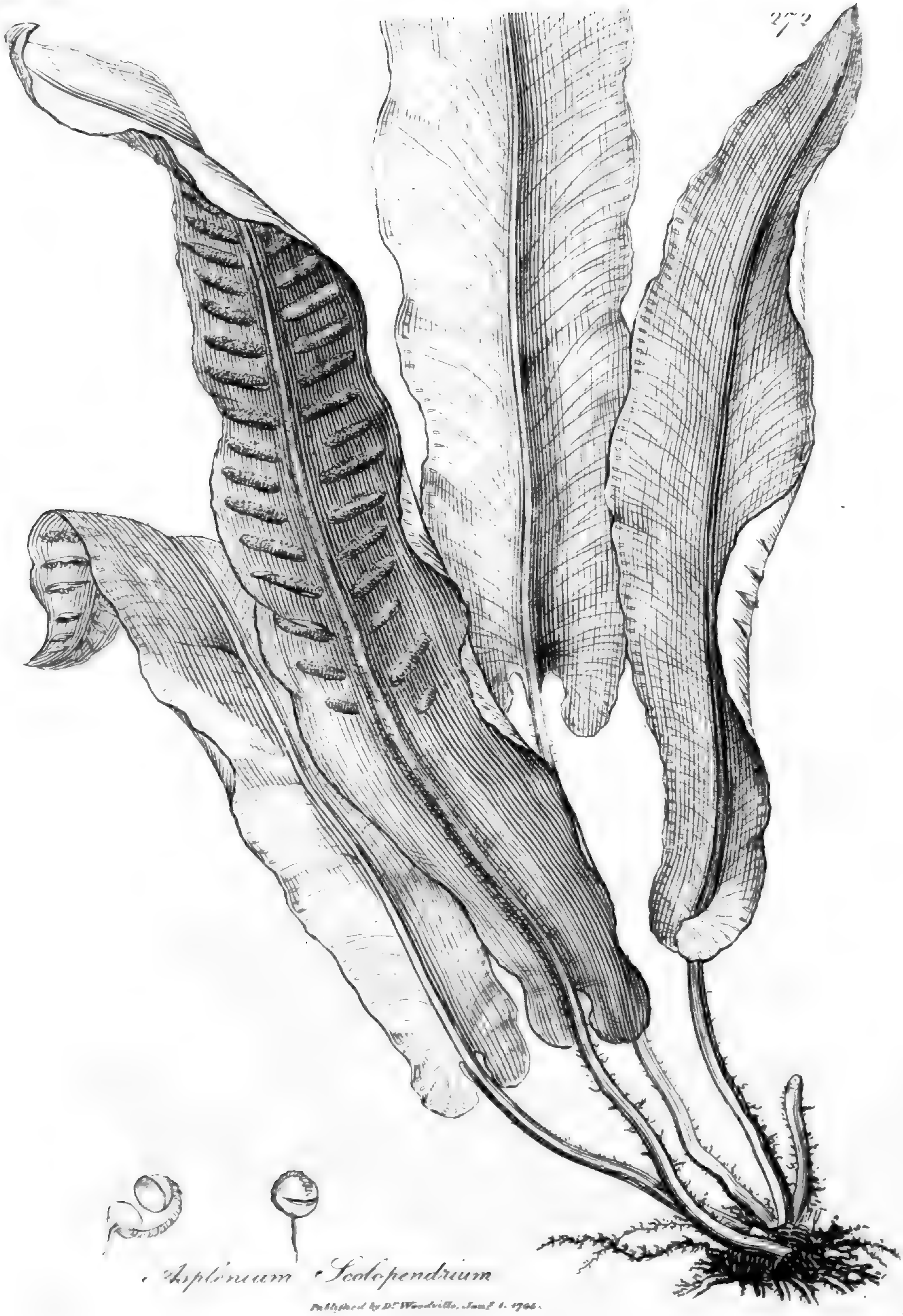
The root of the Polypodium quercinum, or thoſe that grow on the oak, has been moſt eſteemed for medicinal uſe, though no juſt reaſon can be aſſigned for this preference. By the ancients it was employed as a purgative, and thought to be peculiarly uſeful in expelling bile and pituitous humours; therefore much uſed in maniacal melancholical diſorders; but to act as cathartic the root muſt be exhibited in its recent ſtate, and in a large doſe. Another character in which it has been recommended, and for which from its ſenſible qualities it ſeems to promiſe more advantage, is that of a demulcent or pectoral; thus joined with liquorice its good effects have been experienced in coughs and aſthmatic affections.

However it is now rarely uſed in this country; nor have the French authors, Poiſſoner and Malouin,[b] who have cited inſtances of its ſucceſs in mania, been able to reſtore to it its antient reputation in this calamitous diſorder.

[a] *Lewis. l. c.* Gmelin tried to obtain ſugar from this root, but without ſucceſs. See *Diſſert. Conſideratio generalis filicium. p.* 38.

[b] See *Med. de L'Acad. de Scien. de Paris.* 1751.

ASPLENIUM



Published by Dr. Woodville, June 1. 1794.

ASPLENIUM SCOLOPENDRIUM. HARTS-TONGUE.

SYNONYMA. Scolopendrium ſeu Lingua cervina. *Pharm. Ed.* Lingua cervina officinarum. *Bauh. Pin.* 350. *Ger. Emac.* 1138. *Park. Theat.* 1046. *Ray. Hiſt.* 134. *Synop.* 116. Aſplenium petiolis hirſutis, folio longe lineari, lanceolata, integerrimo circa petiolum exſicco. *Hall. Hiſt. n.* 1695. Aſplenium, Frondes lanceolatæ, &c. *Scop. Fl. Carn.* A. Scolopendrium. *Hudſon. Flor. Ang.* 384. *Withering. Bot. Arr. iii.* 51. *Ic. Bolton. Fil. Brit. t.* 11. *Curt. Flor. Lond.*

Cryptogamia Filices. *Lin. Gen. Plant.* 1178.

Gen. Ch. *Fructific.* in lineolis diſci frondis ſparſis.

Sp. Ch. A. frondibus ſimplicibus cordato-lingulatis integerrimis, ſtitibus hirſutis.

ROOT perennial, furniſhed with numerous fibres, which are brown and ſubdividing. Stipites or ſtalks ſimple, beſet with moſſy hair, extending along the midrib. Leaves long, tongue-ſhaped, pointed, entire, ſmooth, often a foot in length, of a ſhining yellowiſh green colour, and waved at the margin. Fructifications placed in oblique lines on each ſide of the midrib of the leaf. Involucrum a membranous linear-ſhaped veſicle, opening longitudinally. Capſules numerous, on footſtalks, globular, furniſhed with an elaſtic ring like thoſe of Polypodium. The ſeeds, which are exceedingly minute, and very numerous, are thrown to a conſiderable diſtance by the veſſel containing them, being violently forced open by the elaſtic power of the ring.

It grows on moiſt ſhady rocks, old walls, and at the mouths of wells and caverns, producing its fructifications in Auguſt and September.

Beſides

Besides the names above-mentioned, this plant has also been called hemionitis and phyllitis: it is supposed to possess medicinal qualities in common with several other species of the same genus, as golden and common maiden hair, wall-rue, and common spleen-wort, which were termed the *five capillary herbs*, and formerly held in great estimation. To the taste they are slightly astringent, mucilaginous, and sweetish; and they change a solution of iron to a black colour; their smell is inconsiderable, except the scolopendrium, which, when recent, and rubbed, manifests a disagreeable odour.

They have been formerly used to strengthen the viscera, restrain hæmorrhages, and alvine fluxes, expel gravel, and to open obstructions of the liver and spleen; as well as for the general purposes of demulcents and pectorals, as noticed when speaking of common maidenhair, which with the present plant are the only two of the five capillary herbs retained in the Materia Medica of the Edinburgh Pharmacopœia.

The other Medicinal Plants of this Order, are

Systematic Names.	Officinal.	English.
Pteris aquilina	Filix femina	Common Fern
Adiantum capillus veneris	Capillus veneris	True Maidenhair
Asplenium Ceterach	Ceterach	Common Spleenwort
Asplenium ruta muraria	Ruta muraria	Wall-rue
Equisetum arvense	Equisetum	Corn Horse-tail

Lichen caninus

Published by Dr Woodville, Jan.y 1. 1796.

A L G Æ.

LICHEN CANINUS. ASH-COLOURED GROUND LIVERWORT.

SYNONYMA. Lichen cinereus terreſtris. *Pharm. Dale.* 59. *Alſton.* 353. *Lewis.* 386. *Ed. New Diſpenſ.* 219. *Murray. v.* 524. *Raii. Hiſt.* 117. *Synop.* 76. *Hall. Hiſt. n.* 1988. Lichen caninus. *Hudſon. Flor. Ang.* 546. *Relhan. Flor. Cant.* 434. *Withering. Bot. Arr. iii.* 203. *Ic. Blackw.* 336. *Dill. Hiſt. Muſc. p.* 200. *t.* 27. *f.* 102. *Flor. Dan.* 767.

Cryptogamia Algæ. *Lin. Gen. Plant.* 1202.

Gen. Ch. Masc. Receptaculum ſubrotundum, planiuſculum, nitidum.

Fem. Farina foliis adſperma.

E. Coriacei.

Sp. Ch. L. coriaceus repens lobatus obtuſus planus: ſubtus venoſus villoſus, pelta marginali adſcendente.

GROWING on the ground, conſiſting of creeping leaves, of a leather-like ſubſtance, greeniſh, or aſh-coloured, and appearing as if covered with a farinaceous ſubſtance, about a ſpan in length, one or two inches in breadth, widening towards their extremities, ſeparated into lobes, which are ſhort, blunt, ſingle, or in ſtrata; beneath woolly, veined, and attached by ſlender white fibres. Peltæ or targets round or oblong, terminal, hard, ſolid, aſcending, of a reddiſh brown colour. It grows on heaths, dry paſtures, and woods.

This vegetable has a weak faint ſmell, and a mucid ſharpiſh taſte. It was for a long time highly extolled as a medicine of ſingular virtue in preventing and curing that dreadful diſorder which is produced by the

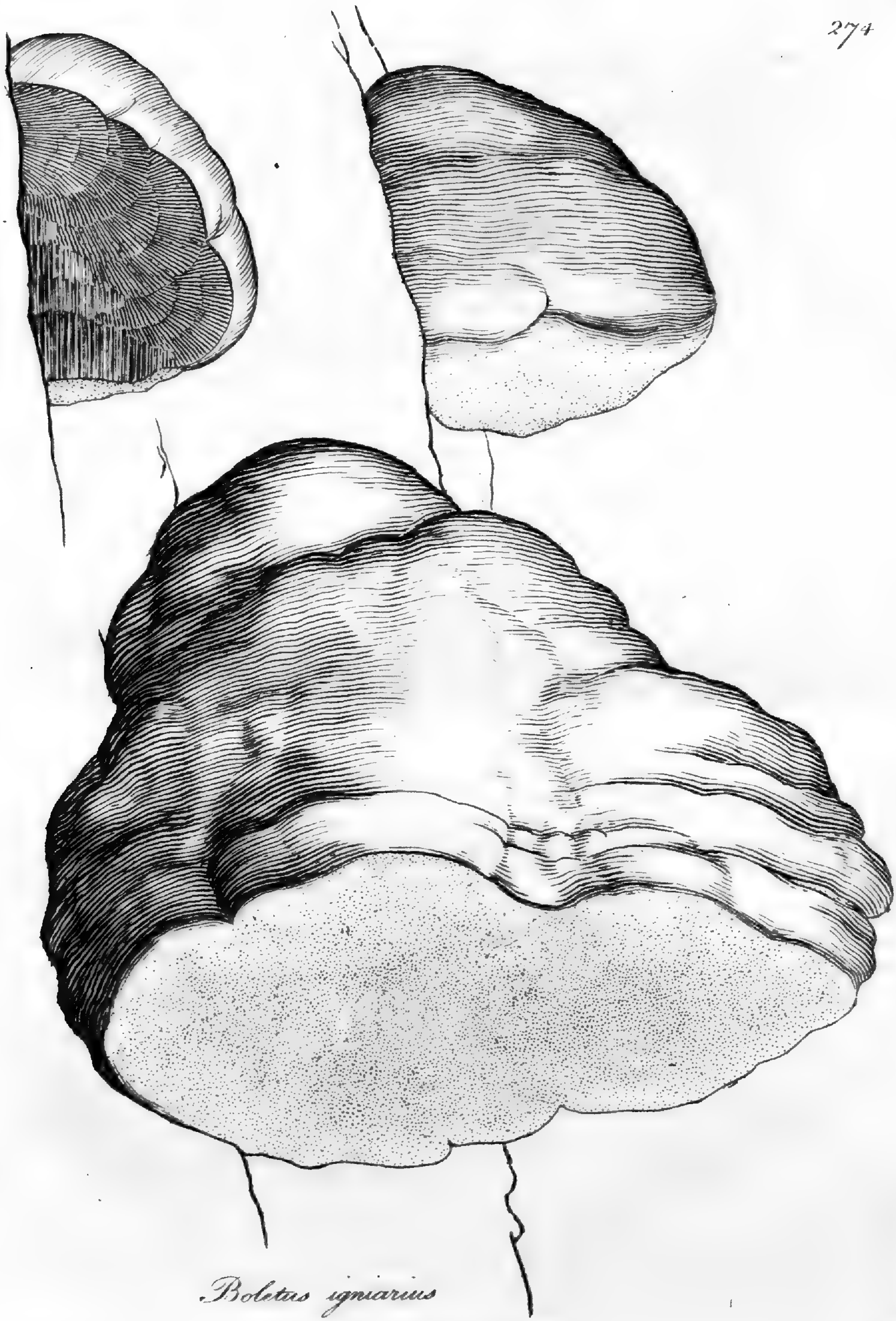
the bite of rabid animals. The pulvis antilyſſus, a powder compoſed of equal parts of this lichen and black pepper,[a] was firſt recommended as a preſervative againſt the rabies canina by Mr. Dampier, brother of the celebrated circumnavigator of that name; and by the authority of Sir Hans Sloane it was publiſhed in the Philoſophical Tranſactions.[b] This powder was afterwards adopted in the London Pharmacopœia in 1721, at the deſire of Dr. Mead, who appears to have had repeated experience of its good effects, and who declares that he had never known it to fail where it had been uſed, with the aſſiſtance of cold bathing before the hydrophobia came on. He directs the patient to be blooded to the extent of nine or ten ounces; afterwards a dram and a half of the powder is to be taken in the morning faſting in half a pint of cow's milk warm, for four mornings ſucceſſively. After theſe four doſes are taken, the patient is directed to go into the cold bath every morning for a month, and then three times a week for a fortnight longer.

On the character of Mead the pulvis antilyſſus was long retained in the London Pharmacopœia; but on the reviſion of that book in 1788 it was deſervedly expunged.

[a] This was the original compoſition; but the quantity of pepper rendering the medicine too hot, the powder was prepared of two parts of the lichen and one of pepper.

[b] *Vol.* 20. *p.* 49. In the *Hiſtory of the Royal Society* we are told that a dog became rabid, and bit ſeveral other dogs belonging to the Duke of York; but by the timely adminiſtration of this lichen, they were all preſerved from madneſs. Vol. 492. and vol. 3. 19.

FUNGI.



Boletus igniarius

Published by Dr. Woodville, June 1, 1796.

F U N G I.

BOLETUS IGNIARIUS. TOUCHWOOD BOLETUS, Or AGARIC.

SYNONYMA. Agaricus chirurgorum. *Pharm. Edinb.* Agaricus quernus. *Pharm. gener.* Fungus in caudicibus nascens, unguis equini figura. *Bauh. Pin.* 372. Polyporus sessilis, convexo-planus, durissimus, cinereus, inferne albus. *Hall. Helv. n.* 2288. *Raii. Synop.* 22. *n.* 7. B. igniarius. *Hudson. Flor. Ang.* 625. *Withering. Bot. Arr. iii.* 425. *Lightfoot. Flor. Scot.* 1034. *Ic. Flor. Dan.* 953. *Bulliard.* 82. & 491. *Schæffer.* 137, 138 *Battarra.* 37. *f. c.*

Cryptogamia Fungi. *Lin. Gen. Plant.* 1210.

Gen. Ch. *Fungus* horizontalis: subtus porosus.

* *PARASITICI, ACAULES.*

Sp. Ch. B. acaulis pulvinatus lævis, poris tenuissimis.

TUBES green, grey, red, or brownish. *Pores* yellowish, changing to red brown, very fine. *Pileus* shaped like a horse's hoof, smooth, blackish. *With. l. c.*

This fungus is sessile, horizontal, consisting of a very hard woody substance, shaped somewhat like a horse's hoof; on the upper side smooth, but marked with circular ridges of different colours: the under side is flat, white, or yellowish, full of very minute pores: the internal substance is fibrous, hard, tough, of a tawny brown colour. Seeds oval, contained in the tubes.

Tubes very slender, equal, colour of tanned leather; in old plants stratified, a fresh layer being added every year. *Pileus* very hard, admitting

admitting of a poliſh by rubbing; marked with concentric bands or ridges, each broad ridge indicating a year's growth, and three or four ſmall ones that of the different ſeaſons of the year, varying extremely in colour. *Fleſh* fibrous. *Bulliard.*

It grows on the trunks of trees, and varies in ſize from two to ſeven or eight inches in diameter.

This fungus has been ſpecifically named Igniarius, from being uſed in ſome places as tinder. For this purpoſe the Germans boil it in ſtrong lye, dry it, and boil it again in a ſolution of ſaltpetre.*

This Agaric has been much uſed by ſurgeons as an external ſtyptic, and that produced on the oak has been generally preferred. Its uſe was firſt borrowed from the French; and it was ſucceſſively recommended by Broſſard, Morand, Bouquot, Faget, Rochard, De Mey, who employed it not only to reſtrain the bleedings in wounds, but to prevent hæmorrhages after amputations, which it is reported to have done as effectually as the ligature. Several Engliſh ſurgeons have alſo publiſhed caſes in which the Agaric was ſucceſsfully uſed, as Sharp, Warner, Gooch, and others.

It muſt not be concealed, however, that ſeveral others, ſoon after the introduction of the uſe of the Agaric in this country, declared it to be an ineffectual application; and at this day, though it may be uſeful in certain caſes, yet in hæmorrhages from the larger arteries, the ligature is the only remedy depended on both in France and England.

To prepare the Agaric for ſurgical purpoſes, the hard outer part is cut off, and the ſoft inner ſubſtance is divided into pieces of different ſizes, and beat with a hammer to render it ſtill ſofter.

* We are informed by Gleditch, that in Franconia they beat pieces of the inner ſubſtance of this fungus, ſo as to reſemble ſoft leather, and ſew them together to form garments.

In order that this work ſhould contain the whole of the vegetable MATERIA MEDICA, *included in the* LONDON *and* EDINBURGH PHARMACOPOEIAS, *it has been thought neceſſary to add the following*

APPENDIX.

AMMONIACUM (gummi reſina) *Pharm. Lond. & Edinb.*

THIS concrete gummy-reſinous juice is compoſed of little lumps, or tears, of a milky whiteneſs: the external parts of the maſs are yellowiſh or browniſh, and the white tears change to the ſame colour on being expoſed for ſome time to the air.

We have hitherto had no information concerning the plant which produces this drug, nor of the manner in which it is obtained: judging however from the ſeeds and pieces of an umbelliferous plant, with which it is often intermixed, there is no doubt of its being the produce of a vegetable of this kind; and as Ammoniacum is very analogous to galbanum, the former, as well as the latter, is probably procured from a ſpecies of the Bubon. According to the antient account of this drug, it was produced in the weſt of Egypt, where the famous temple of Jupiter Ammon formerly ſtood, now the kingdom of Barca. At preſent it is brought here from Turkey, and from the Eaſt Indies.

Ammoniacum has a ſtrong and ſomewhat ungrateful ſmell, and a nauſeous ſweetiſh taſte, followed by bitterneſs. Its effects are ſimilar to thoſe of galbanum, or rather of aſſafœtida, but it has been generally preferred to either of theſe for reſolving obſtructions of the lungs; hence it is chiefly employed in aſthmas and difficulty of expectoration. In large doſes it opens the bowels.

ANGUSTURA (cortex) *Pharm. Edinb.*

ANGUSTURA Bark is imported here in thin convex pieces, of about an inch and an half or lefs in breadth, and about fix inches in length. It is not fibrous, but hard, compact, of a yellowifh brown colour, and covered with a whitifh uneven epidermis. Reduced to powder it has the yellow appearance of rhubarb. To the tafte it manifefts a bitterifh and an aromatic quality, leaving a fenfation of heat upon the tongue, which continues for fome time. Its odour, when recent, is faid to be ungrateful, but in its dried ftate this is not perceptible. An ounce of this bark affords, by means of alcohol, about two drams of a refinous bitter extract; and nearly three drams and an half of a gummy extract may be obtained from the like quantity, by water.

Some have contended that this drug fhould be called Auguftine, from St. Auguftin in Eaft Florida; but it feems more properly named Anguftura, which is a place in South America, whence it was brought by the Spaniards to the Ifland of Trinidad.

From what tree it is obtained we find no certain account. It has been fuppofed to be the bark of the Magnolia glauca; but, with more probability, it has been fince thought to be that of the Brucea antidyfenterica; (fee *Bruce's Travels, &c. vol.* 5. *p.* 69. and *J. F. Miller, tab.* 25.) or Brucea ferruginea of L'Heritier and Aiton: (*Hort. Kew. iii.* 397) for the defcription of the bark of this tree, given by Mr. Bruce, agrees very well with the cortex angufturæ; and as far as can be judged by the bark of a living plant of this fpecies, now growing in the Royal Garden at Kew, this opinion is ftill further confirmed.

During the laft five years, in which the Anguftura bark has been known as a medicine in this country, it has been fuccefsfully ufed in the characters of a febrifuge, tonic, and aftringent. In intermittents it has been found equally effectual as Peruvian bark, and generally more acceptable to the ftomach; and in cafes of diarrhæa, dyfpepfia, fcrophula, and great debility, it has been found to be an ufeful remedy. (See *Brande, in London Med. Journal for* 1790.)

Balsamum peruvianum. *Pharm. Lond. & Edinb.*

THE tree which produces this balſam was not botanically aſcertained till the year 1781, when a ſpecimen of it was ſent by Mutis, from Terra Firma, to the younger Linnæus, who has deſcribed it in the Supplementum plantarum under the name of *Myroxylon peruiferum*. Its ſynonyma are Hoitziloxitl. *Hernand. Theſ. rer. Med. Nov. Hiſp. p.* 51. *cum fig.* and Cabureiba Piſ. *Ind. Hiſt. Nat. et Med. p.* 119.

It grows in Peru, Braſil, Mexico, and Terra Firma.

Two kinds of this balſam are imported here; the common or black, and the white. The firſt, which is chiefly uſed, is about the conſiſtence of a ſyrup, of a dark opake reddiſh brown colour, inclining to black, and of an agreeable aromatic ſmell, and a very hot pungent taſte.

Balſam of Peru is a very warm aromatic medicine, hotter than any of the other natural balſams; hence, in cold phlegmatic habits, it has been given to warm the conſtitution, ſtrengthen the nervous ſyſtem, and attenuate viſcid humours. It has been alſo uſed by ſurgeons in certain wounds and ulcers.

The White Balſam of Peru, or white ſtorax, is brought here in gourd ſhells, and is of a pale yellow colour, thick, and tenacious, becoming by age ſolid and brittle.

This balſam is leſs hot than the former, but of a more agreeable fragrant ſmell, approaching ſomewhat to that of ſtorax.

Balsamum canadense. *Pharm. Lond. & Edinb.*

THIS balſam is the reſinous juice of the Pinus Balſamea, or Balm of Gilead Fir; a tree now well known in this country: which ſhould have been figured with the other pines, but the drawing of it was at that time unfortunately miſlaid.

This balſam, which is tranſparent, of a light amber colour, and tolerably firm conſiſtence, is brought to this country from Canada; and hence receives the name of Canada balſam. It may be conſidered

ſidered as one of the pureſt of the turpentines; and on this account it has lately been received into the Materia Medica; and from being leſs offenſive to the ſtomach, promiſes to ſuperſede the balſam of Copaiva.

CASSIA LIGNEA. (*cortex, flores nondum explicatæ.*) *Pharm. Edinb.*

IN the Edinburgh Pharmacopœia this is referred to the Laurus Caſſia; but we have already ſtated the caſſia to be only a variety of the Cinnamomum, and late obſervations tend to confirm this opinion. As a medicine it is certainly in every reſpect inferior to cinnamon.

COLOMBA (radix) *Pharm. Lond. & Edinb.*

SYNONYMA. Calumba. Redi, Exp. circa varias res naturales, 1685. *p.* 142. *Raijs de Moſambique* of the Portuguese.

WE have no botanical account of the vegetable which furniſhes this root. It is brought from Colomba in Ceylon in knobs, or circular pieces, brown, and wrinkled on the outer ſurface, yellowiſh within, and conſiſting of cortical, woody, and medullary lamina. Its ſmell is aromatic; its taſte is pungent, and nauſeouſly bitter.

Practitioners in the Eaſt Indies firſt borrowed the uſe of this root from the natives of thoſe countries where it is produced, and found it of great ſervice in moſt diſorders of the ſtomach and bowels, and eſpecially in the cholera, ſo fatal in hot climates. It ſtopped the vomiting in this complaint, more ſpeedily and effectually than any other medicine; an effect attributed to its property of correcting the putrid diſpoſition of the bile. With this intention its uſe has been recommended by Dr. Percival; and it has been ſucceſsfully uſed in this country, not only in bilious complaints, but in various caſes of dyſpepſia.

Cubeba. *Pharm. Lond. & Edinb.*

IT is generally admitted that this is a ſpecies of pepper, and in the Supplementum plantarum a deſcription of the Piper Cubeba, a ſhrub growing in the woods of Java, is given: but we have no certain account that this is the ſpecies which furniſhes the officinal cubebs; nor have we any information of the manner in which this fruit is collected.

The long footſtalk attached to the Cubeba diſtinguiſhes it at firſt ſight from the other kinds of pepper, and hence it has been called Piper caudatum. Though ſtill retained in both the Britiſh Pharmacopœias, it is much inferior to pepper, and has juſtly fallen into diſuſe.

Elemi (reſina) *Pharm. Lond.*

THE London College refers this reſin to the Amyris Elemifera of Linnæus; but this celebrated naturaliſt, in applying the name Elemifera to Cateſby's Frutex trifolius reſinoſus floribus tetrapetalis albis racemoſis, has ſince acknowledged himſelf to have been miſtaken; as appears in the Amœn. Acad. vol. 7. where he ſuppoſes the Elemi to be produced by a ſpecies of Burſera.

However, the parent plant of this reſin is ſtill unaſcertained.

Elemi is brought here from the Spaniſh Weſt Indies; it is moſt eſteemed when ſoftiſh, ſomewhat tranſparent, of a pale whitiſh colour, inclining a little to green, and of a ſtrong, though not unpleaſant ſmell.

Its uſe is confined to ointments and plaſters.

Gambogia (gummi-reſina) *Pharm. Lond. & Edinb.*

BY the induſtry of Kœnig, a phyſician who reſided many years at Tranquebar, it has been lately diſcovered that the genuine Gamboge is the concrete juice of a tree which conſtitutes a new genus, under the name Stalagmitis (*Schr. Gen.* 1585). It belongs to the claſs Polygamia monœcia, and is fully deſcribed by Profeſſor Murray in the Comment. Gotting. (9. p. 175.) and App. Med. Vol. 4.

The Cambogia gutta of Linnæus, according to Kœnig, alſo affords a yellow juice; but this, on drying, acquires a browniſh hue, and is conſidered as a ſpurious kind of Gamboge.

Gamboge is brought from the Eaſt Indies, and is well known to operate powerfully both upwards and downwards. Geoffroy ſays, that its emetic tendency is counteracted, if given in combination with mercurius dulcis, and that it may be given with leſs danger from its violence, in a liquid form than in ſubſtance. In hydropic caſes it is often uſed to quicken the operation of other purgatives.

Though the ordinary doſe of this cathartic is two or three grains, yet for the expulſion of the tape worm it has been given, with an equal quantity of vegetable alkali, to the extent of fifteen grains.

Kino (reſina) *Pharm. Lond. & Edinb.*

Seu gummi rubrum aſtringens gambienſe.

THE tree, from which this reſin is obtained, though not yet botanically aſcertained, is known to grow on the banks of the river Gambia, in Africa. The firſt account of this drug is related by Moor in his "*Travels into the interior parts of Africa,*" *Ed.* 2. *p.* 113. by which we learn, that on wounding the bark of the tree, the fluid Kino immediately iſſues drop by drop, and by the heat of the ſun is formed into a hard maſs. This, which was for ſome time conſidered as a ſpecies of ſanguis draconis, was afterwards fully explained, and its medical character eſtabliſhed, by Dr. John Fothergill. (*Med. Obſ. & Inq. vol.* 1.)

Kino has a conſiderable reſemblance to catechu, but redder, and is more firm, reſinous, and aſtringent. It is now in common uſe, and is the moſt efficacious vegetable aſtringent, or ſtyptic, in the Materia Medica.

Myrrha (gummi-reſina) *Pharm. Lond. & Edinb.*

THOUGH Mr. Bruce (*Travels to diſcover the Source of the Nile, vol.* 5. 27.) was unable to obtain a botanical ſpecimen of the tree which

which produces Myrrh, yet, from his account of it, we have no doubt in referring it to the genus mimosa; for in his opinion it very nearly resembles the *acacia vera*, which is the mimosa nilotica figured by us in the second volume of Medical Botany; and this corresponds with the description of the tree given by Dioscorides. The trees producing Myrrh grow on the eastern coast of Arabia Felix, and in that part of Abyssinia which is situated near the Red Sea, and called by Mr. Bruce Troglodyte. The same author says, "In order to have Myrrh of the first or more perfect sort, the "Savages chuse a young vigorous tree, whose branches are without "moss or any parasite plant, and above the first large branches give "the tree a deep wound with an axe. The Myrrh which flows the "first year through this wound is Myrrh of the first growth; and "never is in any great quantity. This operation is performed some-"time after the rains have ceased, that is, from April to June, and "the Myrrh is produced in July and August. The sap, once "accustomed to issue through the gash, continues so to do spon-"taneously at the return of every season: but the tropical rains, "which are very violent, and continue six months, wash so much "dirt, and lodge so much water in the cut, that in the second year "the tree has begun to rot and turn foul in that part, and the Myrrh "is of a second quality, and sells in Cairo about a third cheaper than "the first. The Myrrh also produced from gashes near the roots, "and in the trunks of old trees, is of the second growth and quality, "and sometimes worse. This, however, is the good Myrrh of the "Italian shops every where in Venice. It is of a black red foul "colour, solid, and heavy, losing nothing in weight, and easily "distinguished from that of Arabia Felix. The third and worst kind "is gathered from old wounds or gashes formerly made in old trees, "or Myrrh that, passing unnoticed, has hung upon the tree a whole "year, of a black earth-like colour, heavy, with little smell or bit-"terness." (*Phil. Transf. vol.* 65.)—Mr. Bruce also says, that sassa gum is fraudulently mixed with the Myrrh.

The medical effects of Myrrh are warm, corroborant, and antiseptic; it has also been successfully employed in phthisical cases as a pectoral; and though allied to some of the balsams, it is found to be more efficacious and less irritating to the system.

PALMA

PALMA (fructus oleum expressum) *Pharm. Edinb.*

PALM Oil is produced chiefly from the Cocos butyracea, thus specifically named from the butter-like appearance of the oil which it yields. It is well known, however, that other palms furnish this unctuous substance, as the Elaeis Guineensis L. (see *Jacquin*); also "The palm-oil tree" of Sloane, or Palma oleosa of Hughes. To these we may add the Palma dactylifera aculeata fructu corallino major of Barrere *(de la France equinoxiale)*, and the spinous palms (Palmiers Avoira) mentioned by Aublet *(Guiane Franc. tom. 2. App. p. 95.)*

In the Supplementum plantarum we find not only a full description of the Cocos butyracea, on the authority of Mutis, but also an account of the method used to obtain the oil by the inhabitants of the warmer parts of America, where this palm is a native.

The fruit of this palm, which is triangular, yellow, and about the size of a plum, is bruised and thrown into water, by which the kernels are gradually dissolved without the aid of heat; the oil then rises to the surface, and on being washed two or three times is rendered fit for use.

When brought to this country, it is of the consistence of an ointment, and of an orange yellow colour, with little taste, and of a strong though not disagreeable smell. When it becomes white it is rancid, and ought to be rejected. In the countries where this oil is produced, it is used for culinary and dietetic purposes; with us it has been confined to external application, in pains, tumours, and sprains; but it seems to have no advantage over the other bland oils.

SAGAPENUM (gummi-resina) *Pharm. Lond. & Edinb.*

IT is conjectured that this concrete juice is the production of an umbelliferous plant, like ammoniacum, and for the same reasons. It is brought from Persia and Alexandria in large masses, externally yellowish, internally paler, and of a horny clearness. Its taste is hot and biting, its smell of the alliaceous or fœtid kind.

Its virtues are similar to those which we have ascribed to assafœtida, but weaker, and consequently it is less powerful in its effects.

SARCACOLLA

SARCOCOLLA (gummi-resina) *Pharm. Lond.*

LINNÆUS supposes this to be produced by the Penæa mucronata, an Ethiopian shrub of the order conglomeratæ. Others however have, in this instance, doubted his authority, and the fact is still undetermined.

Sarcocolla is a concrete juice, brought from Persia and Arabia in small grains of a pale yellow, having also sometimes mixed with them a few of a deep red colour. Its taste is bitter, but followed with some degree of sweetness. It has been chiefly used for external purposes, and, as its name imports, has been thought to conglutinate wounds and ulcers; but this opinion now no longer exists.

It is an ingredient in the pulvis è cerussa.

RADIX INDICA LOPEZIANA. *Pharm. Edinb.*

THIS root is called after Lopez, a Portuguese, who, according to Redi, found it growing in the province of Zanquebar in Africa; but Gaubius states it to be a native of Asia, and brought from Goa in Malacca to Batavia.

To what tree this root is to be referred we have not the means to determine.

The root is brought in pieces of eight or nine inches in length, and from one to two inches in thickness, though generally smaller, consisting of a whitish or straw-coloured light wood, having a brownish firm medullary substance. Its bark is soft, wrinkled, brown, somewhat spongy, and covered with a thin yellowish epidermis.

This root, which possesses no remarkably sensible qualities, is regarded in the East Indies as a medicine of extraordinary efficacy in diarrhœas; and the numerous trials of it, made by Gaubius and others, have tended greatly to confirm its reputation.

Its dose, in powder, is from 15 to 30 grains, repeated three or four times a day.

Alphabetical Latin Index. see Vol: 3. P. VII. MS
Do English Do. . . . . see Vol: 3. P. XII. MS

INDEX TO THIS VOLUME.

Systematic Names.	Officinal.	English.	Page
Clutia *Eluteria*	Cascarilla	Cascarilla	2
ASPERIFOLIÆ.			
Pulmonaria *officinalis*	Pulmonaria	Common Lungwort	5
Lithospermum *officinale*	Lithospermum	Common Gromwell	7
Anchusa *officinalis*	Buglossum	Officinal Buglos	9
Symphytum *officinale*	Consolida	Comfrey	10
Cynoglossum *officinale*	Cynoglossum	Hounds-tongue	12
Borago *officinalis*	Borago	Borage	14
PERSONATÆ.			
Verbena *officinalis*	Verbena	Common Vervain	17
Veronica *officinalis*	Veronica	Male Speed-well	19
Euphrasia *officinalis*	Euphrasia	Common Eyebright	21
Antirrhinum *Linaria*	Linaria	Common Toad-flax	24
Vitex *Agnus Castus*	Agnus castus	Chaste-tree	26
SOLANACEÆ.			
Strychnos *Nux vomica*	Nux vomica	Vomic Nut	29
Physalis *Alkekengi*	Alkekengi	Winter Cherry	33
Atropa *Mandragora*	Mandragora	Mandrake	35
Solanum *nigrum*	Solanum	Garden Nightshade	37
CONTORTÆ.			
Asclepias *Vincetoxicum*	Vincetoxicum	Officinal Swallow-wort	40
PUTAMINEÆ.			
Capparis *spinosa*	Capparis	Caper-Bush	42
HESPERIDEÆ.			
Melaleuca *Leucadendron*	Cajeputa	Cajaput-tree	44
CYMOSÆ.			
Coffea *arabica*	Coffea	Coffee-tree	48
SUCCULENTÆ.			
Sedum *acre*	Sedum acre s. minus	Wall Stone-crop	54
Saxifraga *granulata*	Saxifraga alba	White Saxifrage	56
TRIHILATÆ.			
Tropæolum *majus*	Nasturtium indicum	Nasturtium	58
Berberis *vulgaris*	Berberis	Common Barberry	60
Swietenia *Mahagoni*	Swietenia	Mahogany	62

INDEX.

SARMENTACEÆ.

Systematic Names.	Officinal.	English.	Page
Smilax *China*	China	Chinese Smilax	65
Ruſcus *aculeatus*	Ruſcus	Knee Holly	68
Ariſtolochia *Clematitis*	Ariſtolochia tenuis	Climbing Birthwort	69

POMACEÆ.

Amygdalus *Perſica*	Perſica	Peach-tree	71
Prunus *Lauro-ceraſus*	Lauroceraſus	Cherry Laurel	73

VERTICILLATÆ.

Betonica *officinalis*	Betonica	Wood Betony	78
Origanum *Dictamnus*	Dictamnus creticus	Dittany of Crete	80
Teucrium *Chamædrys*	Chamædrys	Common Germander	82

SILIQUOSÆ.

Eryſimum *officinale*	Eryſimum	Hedge Muſtard	84
Eryſimum *Alliaria*	Alliaria	Sauce-alone	86

MULTISILIQUÆ.

Ranunculus *acris*	Ranunculus pratenſis	Meadow Crowfoot	88
Pæonia *officinalis*	Pæonia	Common Peony	91

COMPOSITÆ.

Cichorium *Intybus*	Cichoreum	Wild Succory	94
Matricaria *Parthenium*	Matricaria	Common Feverfew	97
Lactuca *viroſa*	Lactuca viroſa	Stinking Wild Lettuce	99

CARYOPHYLLEÆ.

Saponaria *officinalis*	Saponaria	Soapwort	102

CAMPANACEÆ.

Viola *tricolor*	Viola tricolor	Panſie	104

PAPILIONACEÆ.

Aſtragalus *exſcapus*	Aſtragalus exſcapus	Stemleſs Milk Vetch	107
Pterocarpus *ſantalinus*	Santalum rubrum	Red Saunders	109

TRICOCCÆ.

Siphonia *elaſtica*	Reſina elaſtica	Elaſtic reſin-tree	111
Thea	Thea	Tea-tree	116
Wintera *aromatica*	Winteranus (cortex)	Winter's bark-tree	122

SENTICOSÆ.

Agrimonia *Eupatoria*	Agrimonia	Common Agrimony	124
Geum *urbanum*	Caryophyllata	Common Avens	126

INDEX.

DUMOSÆ.

Systematic Names.	Officinal.	English.	Page
Sambucus *Ebulus*	Ebulus	Dwarf Elder	128
Rhus *coriaria*	Sumach	Elm-leav'd Sumach	130
ROTACEÆ.			
Gentiana *purpurea*	Curſuta	Purple Gentian	132
RHOEADES.			
Chelidonium *majus*	Chelidonium majus	Greater Celandine	134
BICORNES.			
Santalum *album*	Santalum citrinum	Yellow Saunders	136
UMBELLATÆ.			
Angelica *ſylveſtris*	Angelica ſylveſtris	Wild Angelica	139
Phellandrium *aquaticum*	Fœniculum aquaticum	Fine-leav'dWaterHemlock	140
Oenanthe *crocata*	Oenanthe crocata	Water Dropwort	142
Cicuta *viroſa*	Cicuta aquatica	Water Hemlock	145
STELLATÆ.			
Galium *Aparine*	Aparine	Cleavers	148
CONGLOMERATÆ.			
Viſcum *album*	Viſcus	Miſſeltoe	150
FILICES.			
Polypodium *vulgare*	Polypodium	Common Polypody	153
Aſplenium *Scolopendrium*	Scolopendrium	Hart's Tongue	155
ALGÆ.			
Lichen *caninus*	Lichen cinereus terreſtris	Ground Liverwort	157
FUNGI.			
Boletus *igniarius*	Agaricus chirurgorum	Agaric	159

Appendix - - - - - - - - - - - - - - - 161

A GENERAL INDEX TO THE PLATES.

A GENERAL INDEX TO THE PLATES,

In which the PLANTS are arranged according to their NATURAL ORDERS.

I.—CONIFERÆ.

SYSTEMATIC NAMES.	OFFICINAL.	ENGLISH.	PLATE
Pinus *sylvestris*	Pix liquida	Scotch Fir	207
—— *Picea*	Terebinthina vulgaris	Silver Fir Tree	209
—— *Abies*	Pix Burgundica	Norway Spruce Fir Tree	208
—— *Larix*	Terbinthina veneta	Common White Larch Tree	210
Juniperus *communis*	Juniperus	Common Juniper	95
——— *Lycia*	Olibanum *gummi resina*	Olibanum Juniper	206
——— *Sabina*	Sabina	Common Savin	94

II.—AMENTACEÆ.

Salix *fragilis*	Salix	Crack Willow	198
Juglans *regia*	Juglans	Common Walnut Tree	127
Quercus *Robur*	Quercus	Common Oak Tree	126
Pistacia *Terebinthus*	Terebinthina chia	Common Turpentine Tree	153
——— *Lentiscus*	Mastiche	Common Mastich Tree	152

III.—COMPOSITÆ.

Arctium *Lappa*	Bardana	Common Burdock	15
Centaurea *benedicta*	Carduus benedictus	Holy Thistle	42
Cynara *Scolymus*	Cinara	Artichoke	199
Leontodon *Taraxacum*	Taraxacum	Common Dandelion	3
Artemisia *Abrotanum*	Abrotanum	Common Southernwood	119
——— *Absinthium*	Absinthium	Common Wormwood	120
——— *vulgaris*	Artemisia	Common Mugwort	121
——— *maritima*	Absinthium maritimum	Sea Wormwood	122
——— *Santonia*	Santonicum	Tartarian Wormwood	123
Tanacetum *vulgare*	Tanacetum	Common Tansy	115
Tussilago *Farfara*	Tussilago	Colt's Foot	13
Anthemis *nobilis*	Chamæmelum	Common Camomile	103
——— *Pyrethrum*	Pyrethrum	Pellitory of Spain	104
Chicorium *Intybus*	Chicoreum	Wild Succory	248
Matricaria *Parthenium*	Matricaria	Common Feverfew	249
Lactuca *virosa*	Lactuca virosa	Stinking Wild Luttuce	250
Inula *Helenium*	Enula campana	Elecampane	108
Arnica *montana*	Arnica	Mountain Arnica	4
Achillea *Millefolium*	Millefolium	Common Yarrow	64

IV.—AGGREGATÆ.

Valeriana *officinalis*	Valeriana sylvestris	Officinal Valerian	96

V.—CONGLOMERATÆ.

Plantago *major*	Plantago	Great Plantane	14
Viscum *album*	Viscum	Misseltoe	270

GENERAL INDEX TO THE PLATES.

VI.—UMBELLATÆ.

Systematic Names.	Officinal.	English.	Plate
Eryngium *maritimum*	Eryngium	Sea Eryngo	102
Daucus *Carota*	Daucus sylvestris	Wild Carrot	161
Conium *maculatum*	Cicuta	Common Hemlock	22
Ferula *Assa fœtida*	Asafœtida, *gummi resina*	Asafœtida Gigantic Fennel	8
Angelica *Archangelica*	Angelica	Garden Angelica	50
Angelica *sylvestris*	Angelica sylvestris	Wild Angelica	265
Phellandrium *aquaticum*	Fœniculum aquaticum	Fine-leav'd Water Hemlock	266
Œenanthe *crocata*	Œnanthe crocata	Water Dropwort	267
Cicuta *virosa*	Cicuta aquatica	Water Hemlock	268
Bubon *Galbanum*	Galbanum, *gummi resina*	Lovage-leaved Bubon	12
Cuminum *Cymynum*	Cuminum	Cumin	191
Coriandrum *sativum*	Coriandrum	Common Coriander	181
Sium *nodiflorum*	Sium	Creeping Water Parsnep	182
Imperatoria *Ostruthium*	Imperatoria	Common Masterwort	35
Pastinaca *Opopanax*	Opoponax, *gummi resina*	Rough Parsnep	113
Anethum *graveolens*	Anethum	Common Dill	159
——— *Fœniculum*	Fœniculum	Common Fennel	160
Carum *Carui*	Caruon	Common Carraway	45
Pimpinella *Saxifraga*	Pimpinella	Small Burnet Saxifrage	179
——— *Anisum*	Anisum	Anise	180
Apium *Petroselinum*	Petroselinum	Common Parsley	73
Ligusticum *Levisticum*	Levisticum	Lovage	190

VII.—HEDERACEÆ.

Vitis *vinifera*	Vitis	Common Vine	195
Panax *quinquefolium*	Ginseng	Ginseng	99

VIII.—SARMENTACEÆ.

Smilax *China*	China	Chinese Smilax	236
Smilax *Sarsaparilla*	Sarsaparilla	Sarsaparilla Smilax	194
Cissampelos *Pareira*	Pareira brava	Pareira brava Cissampelos	82
Aristolochia *Serpentaria*	Serpentaria virginiana	Snakeroot Birthwort	106
——— *longa*	Aristolochia rotunda	Long-rooted Birthwort	107
——— *Clematitis*	Aristolochia tenuis	Climbing Birthwort	238
Asarum *europæum*	Asarum	Asarabacca	86
Ruscus *aculeatus*	Ruscus	Knee Holly	237

IX.—STELLATÆ.

Rubia *tinctorum*	Rubia tinctorum	Dyer's Madder	68
Galium *Aparine*	Aparine	Cleavers	269
Spigelia *marilandica*	Spigelia marilandica	Perennial Worm-grass	105

X.—CYMOSÆ.

Coffea *arabica*	Coffea	Coffee-tree	230

GENERAL INDEX TO THE PLATES.

XI.—CUCURBITACEÆ.

Systematic Names.	Officinal.	English.	Plate
Cucumis *Colocynthis*	Colocynthis	Bitter Cucumber	175
Momordica *Elaterium*	Cucumis agreſtis	Wild Cucumber	43
Bryonia *alba*	Bryonia	White Briony	189

XII.—SOLONACEÆ.

Solanum *nigrum*	Solanum	Garden Nightſhade	226
Solanum *Dulcamara*	Dulcamara	Woody Nightſhade	33
Atropa *Belladonna*	Belladonna	Deadly Nightſhade	1
Atropa *Mandragora*	Mandragora	Mandrake	225
Hyoſciamus *niger*	Hyoſciamus	Black Henbane	52
Datura *Stramonium*	Stramonium	Common Thorn Apple	124
Nicotiana *Tabacum*	Nicotiana	Tobacco	60
Capſicum *annuum*	Piper indicum	Annual Capſicum	144
Phyſalis *Alkekengi*	Alkekengi	Winter Cherry	224
Verbaſcum *Thapſus*	Verbaſcum	Common Mullein	125
Digitalis *purpurea*	Digitalis	Common Foxglove	24
Strychnos *Nux vomica*	Nux vomica	Vomic Nut	223

XIII.—CAMPANACEÆ.

Convolvulus *Scammonia*	Scammonium	Scammony Bindweed	5
Convolvulus *Jalappa*	Jalapium	Jalap Bindweed	21
Lobelia *ſiphilitica*	Lobelia	Blue Lobelia	63
Viola *odorata*	Viola	Sweet Violet	81
Viola *tricolor*	Viola tricolor	Panſie	252

XIV.—CONTORTÆ.

Cinchona *officinalis*	Peruvianus cortex	Peruvian Bark Tree	200
Cinchona *rubra*	Cortex per. rub.	Red Peruvian Bark	201
Aſclepias *Vincetoxicum*	Vincetoxicum	Officinal Swallow-wort	227

XV.—ROTACEÆ.

Gentiana *lutea*	Gentiana	Yellow Gentian	156
Gentiana *purpurea*	Curſuta	Purple Gentian	262
Chironia *Centaurium*	Centaurium minus	Leſſer Centanry	157
Menyanthes *trifoliata*	Trifolium paludoſum	Buck Bean	2

XVI.—SEPIARIÆ.

Olea *europæa*	Oliva	Common European Olive	136

XVII.—BICORNES.

Santalum *album*	Santalum citrinum	Yellow Saunders	264
Arbutus *Uva urſi*	Uva urſi	Bear-Berry	70
Styrax *officinale*	Styrax, *reſina*	Storax Tree	71
Styrax *Benzoin*	Benzoe, *reſina*	Gum Benjamin Tree	72
Rhododendron *Chryſanthum*	Rhododendron	Yellow Rhododendron	149

XVIII.—ASPERIFOLIÆ.

Systematic Names.	Officinal.	English.	Plate
Anchusa *tinctoria*	Anchusa	Dier's Bugloss	92
Anchusa *officinalis*	Buglossum	Officinal Bugloss	214
Pulmonaria *officinalis*	Pulmonaria	Common Lungwort	212
Lithospermum *officinale*	Lithospermum	Common Gromwell	213
Symphytum *officinale*	Consolida	Comfrey	215
Cynoglossum *officinale*	Cynoglossum	Houndstongue	216
Borago *officinalis*	Borago	Borage	217

XIX.—VERTICILLATÆ.

Teucrium *Marum*	Marum syriacum	Herb Mastich	56
Teucrium *Scordium*	Scordium	Water Germander	57
Teucrium *Chamædrys*	Chamædrys	Common Germander	243
Thymus *vulgaris*	Thymus	Garden Thyme	109
Thymus *Serpyllum*	Serpyllum	Wild Thyme	110
Melissa *officinalis*	Melissa	Common Balm	147
Hyssopus *officinalis*	Hyssopus	Common Hyssop	65
Lavandula *Spica*	Lavendula	Common Lavender	55
Origanum *vulgare*	Origanum	Common Marjoram	164
Origanum *Marjorana*	Marjorana	Sweet Marjoram	165
Origanum *Dictamnus*	Dictamnus creticus	Dittany of Crete	242
Mentha *piperita*	Mentha piperitis	Pepper Mint	169
Mentha *viridis*	Mentha sativa	Spear-Mint	170
Mentha *Pulegium*	Pulegium	Pennyroyal-Mint	171
Marrubium *vulgare*	Marrubium	Common Horehound	97
Salvia *officinalis*	Salvia	Garden Sage	38
Rosmarinus *officinalis*	Rosmarinus	Rosemary	87
Glecoma *hederacea*	Hedera terrestris	Ground Ivy	28
Betonica *officinalis*	Betonica	Wood Betony	241

XX.—PERSONATÆ.

Gratiola *officinalis*	Gratiola	Hedge-Hyssop	47
Veronica *officinalis*	Veronica	Male Speedwell	219
Veronica *Beccabunga*	Becabunga	Brooklime	7
Verbena *officinalis*	Verbena	Common Vervain	218
Euphrasia *officinalis*	Euphrasia	Common Eyebright	220
Antirrhinum *Linaria*	Linaria	Common Toadflax	221
Vitex *Agnus Castus*	Agnus Castus	Chaste-tree	222

XXI.—RHOEADES.

Papaver *Rhœas*	Papaver erraticum	Red Poppy	186
Papaver *somniferum*	Papaver album, Opium	Common White Poppy	185
Chelidonium *majus*	Chelidonium majus	Greater Celandine	268

XXII.—PUTAMINEÆ.

Capparis *spinosa*	Capparis	Caper-Bush	228

XXIII.—SILIQUOSÆ.

Systematic Names	Officinal.	English.	Plate
Sisymbrium *Nasturtium*	Nasturtium aquaticum	Water-Cresses	48
Cardamine *pratensis*	Cardamine	Ladies Smock	30
Sinapis *nigra*	Sinapi	Common Mustard	151
Cochlearia *officinalis*	Cochlearia hortensis	Scurvy-Grass	29
Cochlearia *Armoracia*	Raphanus rusticanus	Horse-Radish	150
Erysimum *officinale*	Erysimum	Hedge Mustard	244
Erysimum *Alliaria*	Alliaria	Sauce-alone	245

XXIV.—PAPILIONACEÆ.

Dolichos *pruriens*	Dilichos	Cowhage Dolichos	172
Geoffroya *inermis*	Geoffræa	Smooth Bastard Cabbage-tree	112
Spartium *scoparium*	Genista	Common Broom	89
Glycyrrhiza *glabra*	Glycyrrhiza	Common Liquorice	167
Astragalus *Tragacantha*	Tragacantha, *gummi*	Goats Thorn Milk Vetch	98
Astragalus *exscapus*	Astragalus exscapus	Stemless Milk Vetch	253
Trigonella *Fœnicum græcum*	Fœnum græcum	Common Fenugreek	158
Pterocarpus *santalinus*	Santalum rubrum	Red Saunders	254

XXV.—LOMENTACEÆ.

Cassia *Senna*	Senna	Senna Cassia	162
Cassia *Fistula*	Cassia fistularis	Purging Cassia	163
Mimosa *Catechu*	Cetechu, *extractum*	Catechu Mimosa	66
Mimosa *nilotica*	Arabicum, *gummi*	Egyptian Thorn Mimosa	67
Tamarindus *indica*	Tamarindus	Tamarind Tree	166
Hæmatoxylum *campechianum*	Lignum Campechense	Logwood Tree	17
Polygala *Senega*	Seneka	Rattlesnake-Root Milk-Wort	93
Fumaria *officinalis*	Fumaria	Common Fumitory	88

XXVI.—MULTISILIQUÆ.

Aconitum *Napellus*	Napellus	Common Wolf's Bane	6
Delphinium *Staphisagria*	Staphisagria	Stavesacre	154
Helleborus *niger*	Helleborus niger	Black Hellebore	18
Helleborus *fœtidus*	Helleboraster	Bear's Foot	19
Anemone *pratensis*	Pulsatilla nigricans	Meadow Anemone	148
Ranunculus *acris*	Ranunculus pratensis	Meadow Crowfoot	246
Pæonia *officinalis*	Pæonia	Common Peony	247
Clematis *recta*	Flammula Jovis	Upright Virgin's Bower	62
Dictamnus *albus*	Dictamnus albus	Bastard Dittany	116
Ruta *graveolens*	Ruta	Common Rue	37

XXVII.—SENTICOSÆ.

Potentilla *reptans*	Pentaphyllum	Cinquefoil	59
Rubus *idæus*	Rubus idæus	Rasp-Berry	138
Rosa *centifolia*	Rosa damascena	Hundred-leav'd Rose	140
Rosa *gallica*	Rosa rubra	Red Officinal Rose	141
Rosa *canina*	Cynosbatus, *fructus*	Hip, or Dog Rose	139
Agrimonia *Eupatoria*	Agrimonia	Common Agrimony	258
Geum *urbanum*	Caryophyllata	Common Avens	259

GENERAL INDEX TO THE PLATES.

XXVIII.—POMACEÆ.

Systematic Names	Officinal.	English.	Plate
Pyrus *Cydonia*	Cydonium malum	Quince Tree	79
Prunus *domestica*	Prunum gallicum	Prune, or Plum Tree	85
Prunus *spinosa*	Prunum sylvestre	Sloe Tree	84
Prunus *Laurocerasus*	Laurocerasus	Cherry Laurel	240
Amygdalus *communis*	Amygdala	Common Almond	83
Amygdalus *Persica*	Persica	Peach Tree	239
Punica *Granatum*	Granatum	Pomegranate	58
Citrus *Medica*	Limon	Lemon Tree	184
Citus *Aurantium*	Aurantium hispalense	Orange Tree	183
Ribes *rubrum*	Ribes rubrum	Red Currant	74
Ribes *nigrum*	Ribes nigrum	Black Currant	75

XXIX.—HESPERIDEÆ.

Myrtus *Pimenta*	Pimento	All-Spice	26
Caryophyllus *aromaticus*	Caryophyllum aromaticum	Clove Tree	135
Melaleuca *Leucadendron*	Cajeputa	Cajeput-tree	229

XXX.—SUCCULENTÆ.

Sedum *acre*	Sedum acre s. minus	Wall Stone-crop	231
Saxifraga *granulata*	Saxifraga alba	White Saxifrage	232

XXXI.—COLUMNIFERÆ, S. MALVACEÆ.

Althæa *officinalis*	Althæa	Marsh Mallow	53
Malva *sylvestris*	Malva	Common Mallow	54

XXXII.—GRUINALES.

Guaiacum *officinalis*	Guaiacum	Guaiacam	16
Quassia *amara*	Quassia	Bitter Quassia	76
Quassia *Simaruba*	Simarouba	Simaruba Quassia	77
Linum *usitatissimum*	Linum	Common Flax	111
Oxalis *Acetosella*	Acetosella	Wood-Sorrel	20

XXXIII.—CARYOPHYLLEÆ.

Dianthus *Caryophyllus*	Caryophyllum rub.	Clove Pink	80
Saponaria *officinalis*	Saponaria	Soapwort	251

XXXIV.—CALYCANTHEMÆ.

XXXV.—ASCYROIDEÆ.

Cistus *creticus*	Ladanum, *resina*	Cretan Cistus	91
Hypericum *perforatum*	Hypericum	St. John's Wort	10
Fraxinus *Ornus*	Manna	Flowering Ash	36

XXXVI.—COADUNATÆ.

GENERAL INDEX TO THE PLATES.

XXXVII.—DUMOSÆ.

Ststematic Names.	Officinal.	English.	Plate
Rhamnus *catharticus*	Spina cervina	Purging Buckthorn	114
Sambucus *nigra*	Sambucus	Common Black Elder	76
Sambucus *Ebulus*	Ebulus	Dwarf Elder	260
Rhus *coriaria*	Sumach	Elm-leav'd Sumach	261
Amyris *gileadensis*	Balsamum gileadense	Balsam of Gilead Tree	192
Copaifera *officinalis*	Balsamum Copaiva	Balsam of Capaiva Tree	137
Toluifera *Balsamum*	Balsamum tolutanum	Balsam of Tolu Tree	193

XXXVIII.—TRIHILATÆ.

Æsculus *Hippo-castanum*	Hippocastanum	Horse-Chesnut	128
Tropæolum *majus*	Nasturtium indicum	Nasturtium	233
Berberis *vulgaris*	Berberis	Common Barberry	234
Swietenia *Mahagoni*	Swietenia	Mahogany	235

XXXIX.—TRICOCCÆ.

Croton *Cascarilla*	Cascarilla	Willow-leaved Croton	41
Clutia *Eluteria*	Cascarilla	Cascarilla	211
Ricinus *communis*	Ricinus	Palma Christi	61
Siphonia *elastica*	Resina elastica	Elastic Resin-tree	255
Thea	Thea	Tea-tree	256
Wintera *aromatica*	Winteranus (cortex)	Winter's Bark-tree	257

XL.—OLERACEÆ.

Solsola *Kali*	Barilla, Natron	Prickly Salt-Wort	143
Chenopodium *Vulvaria*	Atriplex fœtida	Stinking Goosefoot	145
Rumex *aquaticus*	Hydrolapathum	Water Dock	178
Rumex *Acetosa*	Acetosa	Common Sorrel	69
Rheum *palmatum*	Rhabarbarum	Officinal Rhubarb	46
Polygonum *Bistorta*	Bistorta	Bristort Snakeweed	34
	. . . . .		
Laurus *Cinnamomum*	Cinnamomum	Cinnamon-Tree	27
Laurus *nobilis*	Laurus	Sweet Bay	32
Laurus *Sassafras*	Sassafras	Sassafras Tree	31
Laurus *Camphora*	Camphora	Camphor Tree	155
Canella *alba*	Canella alba	Laurel-leaved Canella	117
Myristica *Moschata*	Nux moschata	Nutmeg Tree	134

XLI.—SCABRIDÆ.

Parietaria *officinalis*	Parietaria	Wall Pellitory	142
Dorstenia *Contrayerva*	Contrayerva	Contrayerva	51
Ficus *Carica*	Carica	Fig Tree	130
Urtica *dioica*	Urtica	Common Nettle	146
Morus *nigra*	Morum	Mulberry Tree	129
Ulmus *campestris*	Ulmus	Common Elm	197

XLII.—VERPECULÆ.

Daphne *Mezereum*	Mezereum	Mezereon	23

XLIII.—PALMÆ.

GENERAL INDEX TO THE PLATES.

XLIV.—PIPERITÆ.

Systematic Names.	Officinal.	English.	Plate
Piper *nigrum*	Piper nigrum	Black Pepper	187
Piper *longum*	Piper longum	Long Pepper	188
Acorus *Calamus*	Calamus aromaticus	Sweet Flag	173
Arum *maculatum*	Arum	Common Arum	25

XLV.—SCITAMINEÆ.

Amomum *Zingiber*	Zingiber	Ginger	11
Amomum *Cardamomum*	Cardamomum minus	Cardamom	131
Curcuma *longa*	Curcuma	Turmeric	132
Kæmpferia *rotunda*	Zedoaria	Zedoary	133

XLVI.—LILIACEÆ.

Lilium *candidum*	Lilium album	Common White Lily	101
Scilla *maritima*	Scilla	Officinal Squill	118
Allium *sativum*	Allium	Common Garlick	168
Veratrum *album*	Helloborus albus	White Hellebore	100
Colchicum *autumnale*	Colchicum	Common Meadow Saffron	177
Crocus *sativus*	Crocus	Saffron	176
Aloës *species variæ*	Aloë	Aloe	202
Convallaria *Polygonatum*	Convallaria	Solomon's Seal	44

XLVII.—ENSATÆ.

Iris *florentina*	Iris florentina	Florentine Orris	39
Iris *Pseudo-acorus*	Iris palustris	Yellow Water Flag	40

XLVIII.—ORCHIDEÆ.

Orchis *mascula*	Satyrium	Male Orchis	90

XLIX.—TRIPETALOIDEÆ.

Calamus *Rotang*	Sanguis draconis	Dragon's Blood Tree	174

L.—CALAMARIÆ.

LI.—GRAMINA.

Saccharum *officinarum*	Saccharum	Sugar Cane	196

LII.—FILICES.

Polypodium *vulgare*	Polypodium	Common Polypody	271
Polypodium *Filix mas*	Filix	Male Fern	49
Asplenium *Trichomanoides*	Trichomanes	Maidenhair	204
Asplenium *Scolopendrium*	Scolopendrium	Hart's Tongue	272

LIII.—MUSCI.

LIV.—ALGÆ.

Lichen *islandicus*	Lichen islandicus	Eryngo-leaved Lichen	205
Lichen *caninus*	Lichen cinereus terrestris	Ground Liverwort	273

LV.—FUNGI.

Boletus *igniarius*	Agaricus chirurgorum	Agaric	274