Presented some time by
Thomas Pinkham to Abraham
Wm Pinkham

Botanical Description

AND

Medical, Culinary & other Uses of the Plants in the first Volume

OF MY

American Herbarium

Principally Compiled from the latest & most approved Writers on Botany

and

MATERIA MEDICA

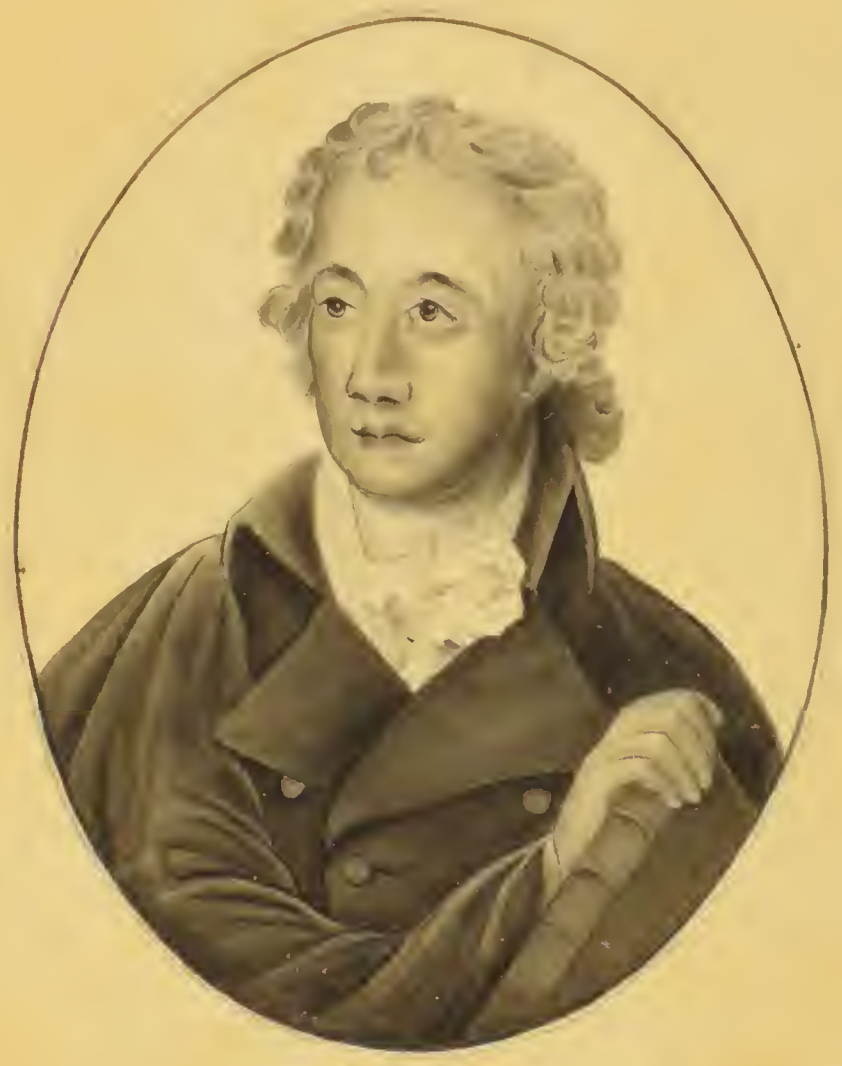
By

Stephen W. Williams

Fellow of the Massachusetts Medical Society & Corresponding Member of the Physico Medical Society New York.

"Seek science in her cozy abode."

1817.



Robert John Thornton M.D.

Index.

N.B. The first column of figures refers to the plants in my American Herbarium, the second to the description of these plants in this volume.

Latin

H.

I.

J.

Latin

K.

Index

Latin

M.

Mirabilis Jalapa	242	
Mitchella Repens	276	45
Melilotus Officinale	290	80
Milium Effusum	336	81
Monarda Monophilla	82	
Malva ~~Crispa~~	312	
Mentha Pulegium	174	58

N.

Nigella	21	
Nigella Damascena	106	
Nymphia Odorata	66	51
Neottia Pubescens	3	
Neottia	52	
Neottia	202	
Nepeta Cataria	250	56
~~Narrow leaved Dock~~		
Nyssa Biflora	370	44

O.

Oenothera Stricta vel Deleni (vel Cyclocella)	29	135
Oenothera Pumila	84	
Oenothera Biennis	84	135
Orchis Psychodes	9	
Orchis	52	
Osmunda Regalis	27	83

Latin

O.

Orchis ~~Fimbriata~~ Spectabilis	62	
Orobanche Virginiana	274	110
Oxycoccus Vulgaris	45	46
Orocha Strutholiris	220	
Orchis	372	

P.

Pyrola Umbellata	19	155
Pyrola Secunda	19	
Pyrola Rotundifolia	19	126
Pyrola minor	19	
Phlox Maculata	37	
Prunella Pennsylvanica ~~vulgaris~~	45	60
Pteris Gracilis	49	
Polypodium Vulgare	51	146
Pontederia Cordata	70	
Pycnanthemum Incanum	102	
Penthorum Sedoides	47	
Physalis Alkekengi	112	143
Polygala Sanguinaria	112	
Polygala Verticillata	114	
Prenanthes Alba	116	90
Papaver Somniferum	130	85
Polygonum Persicaria	134	85
Polygonum Fagopyrum	152	129
Podyllaria Tinctoria	152	109
Potentilla	158	132
Phytolacca Decandra	162	100
~~Pimpla Pulegioides~~	~~174~~	
Pycnanthemum Aristatum	192	
Pinus Canadensis	252	84

Index

Latin

English.

Ik.

L.

Index.

English

P.

English

R.

S.

English

Seed Bird	88	
Scull cap Hyssop leaved	72	
Scullcap, side flowering	74	
Sanicle	86	139
Solomon's Seal clustered	5	
Saffron Garden	246	96
Sun Flower small rough	120	
Sage garden	122	87
Snake Head	124	
Savory Summer	128	88
Spikenard	140	125
Swine Lettuce	154	
Sea Burdock	160	130
Stoke	162	100
Saffron False	164	146
Sand Wort	178	
Savine	182	62
Soapwort Gentian	184	
Soapwort	198	
Snakewort	200	
Spotted Euphorbia	206	139
Sedge Chaffy	330	
Sedge round spiked	338	
Spear Grass common	330	
Scratch Grass	340	
Soft Bulrush	332	87
Scurvy Grass	302	62
Sea Weed	314	
Swamp Rose	352	
Sweet Fern	364	109
Satin Plant	382	
Spotted Polygonum	194	85
Senna American	150	96

Indian English

Sharp Sorrel	13	124
Tall Anemone	21	
Tubious Cymbidium	39	
Touch me not	80	39
Thousand root	100	
Trefoil Field	106	
Thorn Apple	138	35
Trumpet Weed	142	
Thoroughwort	146	93
Toad flax	178	60
Trichostema	178	
Tansy	190	90
White Canada	170	140
White Sweet	170	91
Thatch	338	
Thyme Virginia ~~or Mother~~	29	60
Timothy Grass	332	65
Travellers Joy	15	92

U. V.

Virginia Bower	15	92
Vegetable Oyster	15	64
Virginia Thyme	29	
Vervain common Blue	90	
Virginia Opium	45	
Unicorn Plant	138	
Virginia Rhexia	178	
Viburnum ~~Nutt leaved~~ Maple	368	

Outline of the Linnæan System of Botany—

From Hosack's Hortus Elginensis—

Organs of Fructification.

1. Calyx, or flower cup.
2. Corolla, or blossom.
3. Stamen, or male organ; consisting. 1. Filamentum, or filament.
   2. Anthera, which contains,
   3. Pollen, or fecundating dust.
4. Pistillum, or female organ; consisting 1. Germen, containing the embryo of the future plant
   2. Style, or tube leading to the germen
   3. Stigma, the top or aperture of the style
5. Pericarpium, or seed vessel.
6. Semina, or seeds.
7. Receptaculum, or receptacle upon which the preceding parts are supported.

Such flowers as have only stamina, are denominated Flores masculi, or male flowers.
Such as have only pistilla, Flores fœminea, or female flowers.
Such as have both stamina & pistilla in the same flower, Flores hermaphroditi, hermaphrodite flowers.

Subdivisions of the Calyx.

Every calyx is either Monophillous consisting of one leaf; or Polyphillous more than one leaf. Calyxes are:

1. Perianth.
2. Involucre.
3. Spatha.
4. Glume.
5. Ament
6. Calyptra
7. Volva.

Subdivisions of the Corol.

Monopetalous or one petalled corols are.

1. Bell-form.
2. Funnel-form
3. Salver-form.
4. Wheel-form.
5. Labiate.

Polypetalous or more than one petalled are:

1. Cruciform.
2. Caryophillous.
3. Liliaceous.
4. Rosaceous.
5. Papillonaceous.

If the corol agrees with the discriptions of none of the above, it is Anomolous.

Subdivisions of the Stamen.

1. Anther.
2. Pollen.
3. Filament.

Subdivision of the Pistil.

1. Stigma.
2. Germ.
3. Style.

Subdivisions of the Pericarp.

1. Silique.
2. Legume.
3. Capsule.
4. Drupe.
5. Pome.
6. Berry.
7. Strobile.

Subdivisions of the Seed.

1. Corcle.
2. Cotyledons.
3. Tegument.
4. Hilum.

Subdivisions of the Receptacle.

1. Proper.
2. Common.
3. Rachis.
4. Columella.
5. Spadix.

General Divisions of Flowers.

1. Simple.
2. Aggregate.
3. Compound.

Inflorescence.

Of the manner in which flowers are situated upon plants.

1. Whorl.
2. Racemes.
3. Panicle.
4. Thyrse.
5. Spike
6. Umbel.
7. Cyme.
8. Corymb.
9. Fascicle.
10. Head.

Roots & Herbage.

The ~~out~~ substance of roots & herbage consists of

1. Cuticle
2. Cellular Integument
3. Bark.
4. Camb.
5. Wood. 6. Pith

Roots are the descending parts of vegetables; & are Annual, Biennial, or Perennial. They are of seven kinds.

1. Branching.
2. Fibrous.
3. Creeping.
4. Spindle
5. Tuberous, whether knobbed, oval, or fasciculed.
6. Bulbous, whether solid, coated, or scaly.
7. Granulated, whether moniliform, or dentate.

Herbage is all the plant except the root & carpogination. It includes the Stem, Leaves, & Appendages

Stems are:

1. Tidge.
2. Culm.
3. Scape
4. Peduncle
5. Petiole
6. Frond.
7. Stipe.

Leaves are Evergreen or deciduous.

Simple leaves are

1. Orbicular.
2. Ovate
3. Oval.
4. Oblong.
5. Obovate
6. Cordate.
7. Obcordate.
8. Kidney-form.
9. Lanceolate
10. Linear
11. Awl. form
12. Awl-pointed
13. Arrow-form.
14. Halbert form.
15. Guitar form.
16. Lobed.
17. Palmate.
18. Pedate
19. Sinuate.
20. Pinnatifid.
21. Lyrate.
22. Runcinate
23. Serrate.
24. Toothed.
25. Cornate.
26. Emarginate.
27. Retuse.
28. Obtuse.
29. Acute.

Compound leaves are:

1. Ternate.
2. Biternate
3. Triternate.
4. Pinnate.
5. Bipinnate.
6. Tripinnate.
7. Interruptedly pinnate.

Surface of leaves are:

1. Hairy.
2. Downy.
3. Silky.
4. Bristly.
5. Ciliate.
6. Nerved.
7. Veined.

Positions of leaves are

1. Decurrent.
2. Clasping.
3. Sheathed.
4. Perfoliate
5. Connate
6. Peltate
7. Opposite
8. Whorled.
9. Imbricate
10. Fasciculed
11. Radical.

Appendages

1. Stipule
2. Bract.
3. Thorn.
4. Prickle
5. Sting.
6. Gland.
7. Tendril

The Sexual System of Linnaeus

Consists of 1. Classes.
2. Orders, or subdivisions of the classes.
3. Genera, or families composing the orders.
4. Species, or individuals of the families; &
5. Varieties, which are accidental changes induced by climate, soil, culture, &c.

1. Classes.

The first eleven classes are formed upon the number of stamina, viz.

1. Monandria, having one stamen
2. Diandria — two stamina
3. Triandria — three do.
4. Tetandria — four do
5. Pentandria — five do
6. Hexandria — six do
7. Heptandria — seven do
8. Octandria — eight do
9. Ennandria — nine do
10. Decandria — ten do
11. Dodecandria — ~~eleven do~~ from twelve to nineteen do. inclusive

The next two classes are distinguished by the situation as well as the number of stamina.

12. Icosandria, having twenty stamina & upwards, but situated upon the ~~receptacle~~ calyx & by this circumstance distinguished from the next class.
13. Polyandria, having also twenty stamina, & upwards but situated upon the receptacle.

The two following classes are distinguished by the relative length as well as number of stamina viz.

14. Didynamia, having four stamina, viz. ~~four~~ two long & two short.
15. Tetradynamia, having six stamina, viz. four long, two short.

The next three classes are formed upon the union of the filaments, viz.

16. Monadelphia, having the filaments united into one parcel or brotherhood
17. Diadelphia, having the filaments divided into two brotherhoods.
18. Polydelphia. into many brotherhoods
19. Syngenesia, having the antherae united into a tube.
20. Gynandria, having the stamina & pistillum united & supported by the same footstalk proceeding from the receptacle.
21. Monoecia, - male flowers & female flowers separated, but upon the same plant.
22. Dioecia, male & female flowers separated & upon different plants.
23. Polygamia, having male flowers
female do
hermaphrodite do
} Upon the same or different plants.
24. Cryptogamia, the organs of fructification very small, & obscure to the naked eye.

2. Orders.

The orders are formed in the first thirteen classes, upon the number of pistilla, or female organs.

1. Monogynia, having one pistillum
2. Digynia — two pistilla
3. Trigynia — three do
4. Tetragynia — four do
5. Pentagynia — five do
6. Hexagynia — six do
7. Heptagynia — seven do

8. Decagynia . . ten pistilla
9. Dodecagynia – twelve do
10. Polygynia — many do

In the 14th class the orders are formed upon the seeds being naked in the calyx, or contained in a capsule:

1. Gymnospermia, naked seeds.
2. Angiospermia, enclosed seeds.

In the 15th class, the orders are formed upon the seed-vessel, or pod:

1 Siliculosa, small podded, as the Shepherd's purse.
2. Siliquosa, long podded, as the radish.

In the 16th, 17th & 18th, upon the number of stamina. & are expressed as the first thirteen classes.

In the 19th class are six orders, viz.

1. Polygamia Æqualis, i.e. the florets are all equal & fertile.
2. ——— Superflua. Hermaphrodite in the centre or disc, & fertile; & female florets in the radius, or circumference, which are also fertile, & therefore superfluous.
3 ——— Frustranea. Hermaphrodite & fertile florets in the disc but barren florets in the radius.
4 ——— Necessaria. Hermaphrodite florets in the disc, but their ~~florets~~ females barren the females in the circumference being fertile, are therefore necessary for the propagation of the plant.
5 ——— Segregata. The florets separated by partial calyces, as well as contained in a common calyx.
6. Monogamia, i.e. composed of simple, not compound flowers as in the preceding orders. e.g. violet & lobelia.

The orders of the 20th class are taken from the number of stamina.

The orders of the 21st & 22nd classes are formed from the preceding class
Ice: Vim,

Monoecia Monandria
——— Diandria
——— Triandria &c. &c.

Dioecia Monoecia
——— Diandria
——— Triandria &c. &c.

The orders of the 23d class are formed upon the male, female, & hermaphrodite flowers being contained upon one, two, or three plants; hence denominated

Polygamia Monoecia.
——— Dioecia.
——— Trioecia.

The 24th class consists of four orders:

Filices, or Ferns.
Musci, or Mosses.
Algae, including sea weeds, &
Fungi, including mushrooms, &c.

30

Class 2nd Diandria.

Order Monogynia.

Lycopus Europeus. — Water Bore Hound, Horehound, Gypsy-wort. vulgo Water Agrimony.

Generic Description. Blos. four-cleft; one segment notched at the end; stamens distant; seed four, blunt.

Specific Description. Leaves indented, serrated, a little hairy. Stem with four corners, & four hollow sides, hairyish. Blossom whitish with a tinge of purple, hairy within, upper segments slightly notched, lower ones with purplish spots at the inside; between the stamens frequently two or three shorter filaments, generally without anthers. Germen on a yellow glandular receptacle. Flowers several together on the bosoms of the upper leaves. Branches opposite, rising from the bosom of the leaves. In sandy ground on the banks of streams & ponds. Blos. July & Sept.

Use. (This plant is excellent in suppressing active hemorrhagy. A strong decoction of it is useful in checking spitting, & in preventing or abating the violence of menorrhagia, haemoptysis, & all internal bleeding. Where a strong decoction of it fails in spitting, chewing the plant & plugging up the nostril with it has been found of service. This astringent property of the plant has been unnoticed by botanical or materia medica writers. It however, deserves honourable notice in this class of remedies. S. W. Williams.)

It dies black & has been used with linen & clothes. The juice gives a permanent colour to linen, wool, & silk, which will not wash out. Travelling gypsies use it to stain their faces. Sheep & goats eat it; cows & horses refuse it.

Class 4th Tetandria.

Tetandria, Dygynia

Cuscuta, Americana. C. epithymum. C. europea. Eng. Dodder.

Gen. Desc. Calyx four or five cleft; Blossom one petal; caps two celled, at round

Seeds in pairs.
Spec. Desc. Flowers sitting. Jaw cleft, whitish. Leaves round. A parasytical plant, without seed lobes. In hops, nettles, heath &c. Blos. July & August.

Use. This is a very curious & singular plant, which will not grow in the ground. It was formerly celebrated as a cathartic, but it is a very languid one, & now out of use. Hill

Class Pentandria.

Order Monogynia.

Cynoglossum. C. Officinale. C. Vulgare. Eng. Great hound's tongue.

Gen. Desc. Blos. funnel shaped, mouth closed by projecting valves; nuts 4. depressed, fixed to the style by the inner side only, imperforated

Spec. Desc. Stamens shorter than the blossoms. Leaves broad strap-spear shaped, sitting collony. the whole plant downy; cal. segments oblong, egg shaped. Blos. one colour; valves fringed. Road sides, rubbish. Blos. June.

Use. It is excellent, & somewhat mucilaginous, especially the root, which for medicinal purposes is preferred to the leaves. It is reported to be deleterious, & the dingy hard appearance of the leaves, peculiar to shrubs of the narcotic kind, favours the opinion; nor are facts wanting to confirm it. A whole family eat ing of it by mistake for comfrey severely experienced its ill effects. Experience has not yet determined how far it may be employed as a medicine. Dr. Hulse is said to have prescribed a decoction of roots internally, together with a poultice of them to scrophulous tumours with safety & advantage. For its use in coughs, hemoptysis, diarrhoea dysentery see Shrenkius Diss. de Cynoglosso &, Woodville. Both the root & the leaves have been suspected to possess narcotic ~~effects~~ properties, but some will not admit the fact; it was formerly kept in the shops as a pectoral & narcotic, but it is discarded from the present practice. Mr. Ray says, however, that Dr. Hulse used a decoction of the roots inwardly & cataplasms of them outwardly in strumous & scrophulous cases. Its scent is very disagreable & greatly

resembles that of mice. Withering. Rats & mice will fly from houses & barns where this plant is kept. Europ. Magy. Goats eat it; cows, horses, sheep & swine refuse it.

Pentand. ~~Pentagyn~~ Monogyn.

Symphytum. S. Officinale. S. consolida Major. S. vulgare. Eng. Comfrey. common comfrey. Gen. Desc. Blos. funnel shaped, belying towards the top; mouth closed by hollow radiate valves, having an open hole on the outside near the border; outs 4, perforated. Spec. Desc. Leaves egg shaped, decurrent. Cal. close. Blos. yellow-white; tube as long as the calyx; valves spear shaped, flat, covering the anthers; edge studded with small shining glands. River banks, wet ditches. Blos. May. There is a variety with red flowers. Use. The root of this plant is a powerful agglutinant, good in the fluor albus. Hill. The root is very mucilaginous, & being rather inferior to the Althaea, & more easily obtained may be usefully substituted in its place, for the general purposes of an emollient & demulcent. Woodville. Dr. Cullen says there is no reason why, while mucilaginous matters are obtained in our lists symphytum should be omitted. It may be of service, as alleged in diarrhoea & dysentery. The roots are glutinous & mucilaginous; a decoction of them is used by dyers to extract the colouring matter of gum lac. The leaves give a grateful flavour to cakes & panada; & the young stems & leaves are excellent when boiled. The particles of the pollen appear in the microscope like two globules united together. Cows & sheep eat it; horses, goats & swine refuse it. Linn.

Pentand. Monogyn.

Borago. B. Officinalis. Buglosson latifolium. Eng. Common Borage. Gen. Desc. Blos. Wheel shaped; mouth closed with rags; outs 4 imperforated. Spec. Desc. Leaves alternate, egg-spear shaped, rough as well as the stems, with white prickly hairs. Blos. blue, white, or flesh colour; segments spear shaped; anthers black; filaments above the insertion of the anthers, cylindrical, dark blue, below, thick, brown, glandular. Walls, rubbish. Blos. June, August. Use. The flowers have been termed cordial, & were formerly much recommended

 in melancholia, & other affections of the nervous system. But as they possess neither warmth, pungency nor fragrance, & as no saline matter appears to be contained in the flowers, any advantage supposed to be derived from a vinous infusion of them, can only be attributed to the menstruum. The leaves abound with a rattish juice, which, on being boiled a sufficient time forms crystals of nitre; hence the plant may be inferred to possess refrigerating & aperient virtues. (Woodville) The juice of this plant affords true nitre. It is now seldom used internally, except as an ingredient in cool tankards for summer drinking; though the young & tender leaves are good in salads, or as a pot herb. (Withering) A horse eat it (Dr Stokes.)

#

Pentand. Monogyn.

Verbascum. V. Thapsus. V. Album. Thapsus barbatus. Eng. Great white mullein. High taper. Cow's lung-wort. Lady's foxglove.

Gen. Desc. Blos. Wheel shaped, nearly regular; caps. two-celled, two-valved, many seeded.

Spec. Desc. Leaves decurrent, cottony on both sides. Stem embranched from four to six feet high. Summits globular. Flowers in a long terminating spike. Blossom yellow, rarely white.

Dry banks, chalky or gravelly soil. Blos. July.

Use. The leaves have an herbaceous, bitterish, astringent taste, but scarcely any smell; on being chewed they discover a mucilaginous quality, & hence they are recommended as emollients both internally & externally; in the way of fomentation & cataplasm they are said to be an useful application to haemorrhoidal tumours; & also for promoting the resolution or suppuration of glandular indurations; it has been recommended internally for catarrhal coughs & diarrhoeas; Dr Home found it successful only in the latter. (Woodville) In diminishing, or stopping diarrhoeas of old standing, or easing the pains of the intestines, Dr. Home found it useful; for the former purpose he advises a decoction, two ounces to a quart, of which he gave a quart every day, four ounces every three hours. (Woodville) It is used with advantage as an injection in tenesmus, & is often applied externally to the piles (Clin. Exp.) The flowers have also been used

~~nicotiana~~ medicinally, being supposed to possess anodyne & pectoral virtues; but
is probable that no part of the plant deserves much consideration as a medicine
(Woodville) The seeds of this plant are said to intoxicate or stupify fish so that they suf-
fer themselves to be taken out of the water by hand (Bergius) In the pulmonary com-
plaints of cattle, it has been found of great service, & is used for consumptive cows
Norway. The clover serves for fodder. Horses, cows, sheep, goats & swine refuse it. (Withering)

Pentand. Monogyn.

Datura. D. Stramonium. Solanum Foetidum. Datule. Eng. Thorn Apple.
Gen. Desc. Blos. funnel shaped, plaited; cal. tubular, angular, falling off with
the blossom; caps four valved.
Sp. Desc. Seed vessel thorny, upright, egg-shaped. Leaves egg-shaped, smooth, deeply in-
cised. Blossom large, white, sometimes purplish. A large, wide spreading plant, na-
tive of America. Rubbish, dunghills. Blos. July. August.
Use. An ointment prepared from the leaves gives ease in external inflammations
& hæmorrhoids. The Edinburgh College directs an extract to be prepared by evap-
orating the expressed juice of the leaves. This has been given with advantage in cases
of convulsions, epilepsies, mania, especially that succeeding child-birth (Woodville)
out of fourteen epileptic patients at Stockholm, eight were cured & five relieved
by Dr. Phelius; the dose two to sixteen grains a day. This plant has been long
known as a powerful narcotic poison. Numerous instances are recorded of its
deleterious effects, especially the seeds, which taken internally have produced
madness, tremors, swelling, itching, inflammation (Med. Com. & Woodville) All parts
of the plant possess a narcotic power, but the seeds are the only parts of whose fa-
tal effects instances are recorded. Their soporiferous & intoxicating qualities are
well known in the East, & are said to have been frequently converted to the most
nefarious & dishonourable purposes (Hatter. Lindenbalm) By holding this plant
to the nose for some time, or sleeping in a bed where the leaves are strewed, giddiness

Sic & tutor have been produced. - (Stork) Internally the leaves of stramonium have been used as an application to inflammatory tumours & burns. - (Gerard) Smoking a few whiffs of the leaves or roots of the stramonium & swallowing the smoke & saliva has produced the most surprising effects in the cure of long-continued Asthmas. C. W. Hufeland informs us that he has found the tincture of the seed of thorn apples to be in many cases superior as a narcotic remedy to opium, as it neither heats nor causes costiveness. & that he had cured with it all obstinate affections of the mind, & convulsive symptoms. Horses, cows, goats, & sheep refuse it.

#

Pentand. Monogyn.

Hyosciamus. H. Niger. H. flavus. H. vulgaris. Eng. Henbane. Black Henbane

Gen. Desc. Blossom funnel shaped, blunt, irregular, stem leaning, caps with a lid, two-celled, seed many, kidney shaped.

Spec. Desc. Leaves embracing the stem, indented. Flowers sitting. Blossoms tube white, middle dusky purple, borders pale yellowish brown, veined with purple, anthers & style dusky purple. The whole plant woolly & clammy with a strong peculiar odour. Villages, road-sides, rubbish. Blos. Jun. July -

Use. Henbane is a powerful narcotic poison, & many instances are recorded of its deleterious effects, from whence it appears that any part of the plant taken in sufficient quantity is capable of producing the most alarming & terrible symptoms (See in Phil. Transactions. Eng. vol. 40. p. 446 an account of the dreadful madness occasioned to nine persons from eating the root, attended with the remarkable circumstance that after their recovery, for some days all objects appeared bright red. A few seeds of the henbane have been known to deprive a man of the use of his reason & of his limbs. (Lightfoot). It is probable that the powerful qualities of this plant may under proper management be used with good effect in medicine. Baron Stoerck published cases of different diseases in which extract prepared from the juice was found to be an efficacious remedy; such as internal spasms & convulsions, palpitations of the heart, madness, melancholy, epilepsy, inveterate head-ache, haemoptysis. It has been found to produce sleep more powerfully than opium; & as it possesses a laxative quality may be useful where the astringency of opium renders the use of it liable to objection. Experience proves this medicine to be an useful an

lyne. (Woodville) The leaves are said to have been applied with advantage exter-
nally, in the way of poultice, to resolve schirrous tumours, & to remove some pains
of the rheumatic & arthritic kind. The smell of the henbane is peculiar, & the bruised leaves
emit an odour like that of tobacco. This is stronger if the leaves are burnt, & they
crackle with a deflagration resembling that of nitre, but to the taste they are mild
& mucilaginous. It is poisonous to birds & dogs, but cows, goats & swine are not af-
fected by it. (Wdville) Scattered about a house it is said to drive away mice.
The Edinburgh college order the expressed juice to be evaporated to an extract which
may, perhaps in that state, be advantageously joined with opium if costiveness
is to be avoided. The dose is from half a scruple to half a dram.

Solanum. S. Dulcamara. S. Scandens glycy-picros. Eng. Woody nightshade, Bitter sweet.
Gen. Desc. Blos. Wheel-shaped. Anthers a little united, two holes at the top of each.
Berry two celled.
Spec. Desc. Stems smooth, rather shrub-like, zig-zag, twining. Leaves egg spear-shaped, the
upper sometimes halberd shaped. Flowers in tufts like bunches, purple, with two
green dots at the base of each segment, sometimes flesh colour, rarely white. Berries
two celled, scarlet. Moist brakes, hedges, sides of ditches. Blos. June, July.
Use. The roots & stalks, when being chewed, first cause a sensation of bitterness,
which is soon followed by a considerable degree of sweetness; hence the name
of bitter sweet. The berries have not yet been applied to the purposes of
medicine, but they seem to act powerfully upon the primae viae, in ex-
citing violent vomiting & purging. Thirty were given to a dog, which soon
became mad, & died in three hours, when, on his being opened, the berries were
found in his stomach unchanged by digestion. The stipites or young twigs
are directed for use in the Edinburg Pharm either fresh or dried, allowance be-
ing made for the diminution of its powers in drying. They should be gathered
in Autumn. Murray says it promotes all the secretions, in which Ber-
gius seems to coincide. Haller observes that at partaking of the mildest powers

powers of the nightshade joined to a resolvent, & saponaceous quality. Linnaeus says it is useful in Acute rheumatisms, inflammations, fevers & suppressions of the lochia. In Asthma it was found very efficacious by Dr. Hill, & Dr. Hallenberg has advised it in ischiatic & rheumatic pains, jaundice, scurvy, & lues venerea. Linnaeus directs a pint of boiling water to be poured upon two drams of the stalks sliced & dried; after standing half an hour it must be boiled fifteen minutes. The dose is two tea cups full, or more morning & evening. The stalks may be gathered early in the spring, but better in autumn as the sensible qualities are then strongest. Med. Comm. The root has the smell of the potatoe. (Dr. Beddoes)

#

Solanum Nigrum. Gen. Desc. Above. # Common Nightshade. Garden Nightshade. Spec. Desc. Stem without prickles, herbaceous, branched, angular. Leaves egg-shaped, toothed, angular. Branches nodding, pointing two ways. Fruit stalks lateral, mid way between the leaves. Blossom white. Berries black. This plant is subject to great varieties, with us it is herbaceous, in southern countries woody & very hard. Rubbish, dunghills, kitchen gardens.

Use. The leaves infused in boiling water, & taken at bed-time, from one to three grains, occasion a copious perspiration, increase the secretion by the kidneys, & generally purge once or twice the following day. The leaves applied externally abate inflammation & assuage pains. The leaves are poisonous & the berry equally with the leaf. & to poultry they are immediately fatal. Externally it has been found useful as a discutient & anodyne in various affections of the skin, tumefactions of the gland, ulcers & disorders of the eyes; with the Arabians it is a common application to burns & ulcers. Mr. Ray speaks highly of its effects in indurations of the breast. Mr. Gattaker has recommended in a publication on the subject, its internal use in old sores, scrophulous & cancerous ulcers, cutaneous eruptions & even in dropsies; one grain of the dried leaves, he says, infused in one ounce of water sometimes produced considerable effect; in a dose of two or three

ains it seldom failed to evacuate the first passages, or to increase
nsibly the discharge by the skin, or by the kidneys; & not unfrequently to oc
asioned head-ach, giddiness, dimness, & drowsiness. The flowers smell like musk

Pentand. Monogyn.

Impatiens. I. Noli-tangere. Eng. Quick in hand. Impatient. Touch me not.

en. Desc. Cal. two-leaved. Blos. five petal, irregular. Nectary hood like Stem coh
ing; caps superior, one celled, opening with a jerk into five spiral valves.
pec. Desc. Fruit stalk, many flowered, solitary. Leaves egg-shaped, pendant
t night. Stem swollen at joints. Blos. yellow with red spots. Moist shady pla
Blos. July. August.
Use. The whole plant is considerably acrid. Goats feed upon it; horses, cow
sheep refuse it. (Withering)

Pentand. Digyn.

Chenopodium Anthelminticum officinalis. Jerusalem oak. Worm seed.
Perennis in Pennsylvania; foliis ovata oblongis dentatis, racem. aphyllis.
Use. Dr. Wilkins of Baltimore recommends the essential oil of chenopodium as one
the most powerful anthelmintics. He likewise observes that there is great reason
believe that it may be extended to various disorders incident both to children &
adults. It certainly promises fair to be useful as any other essential oil for hysteria, cho
ea, convulsions, or palsy. The dose he recommends is about one drop & a half
each year of the child's age, till nine drops are required, beyond which it may
probably be imprudent to extend it for any age if the oil is genuine. The oil shou
be dropped on a lump of sugar, & grated into as much water as it will render highly
pungent, taking care with young children not to make it too stimulating.
This quantity should be given on an empty stomach, twice a day till half a dram
or a dram is consumed, when a gentle purge of castor oil, or calomel & jalap should
be administered. The appearances & qualities to be expected of genuine oil are:
Of a light straw colour, possessing much of the odour of the plant, very pungent

 to the tongue & hermanent.

Boerra says. The seeds of this vegetable, which grows in Pennsylvania, have an agreeable pretty strong odour, & an aromatic taste; it is said to be much used in America against worms, especially against the lumbricoides. Chalmers who gives the description of it, affirms that with the powder of these seeds only is compound that anthelmintic electuary, so famous in North America.

Pentand. Monogyn.

Conium. C. maculatum. Cicuta major. Cicuta vulgaris. Eng. Hemlock. Common hem

Gen. Desc. Involucrum going about half-way round of about three leaves. Fruit egg-shaped, oblong, ribs compressed, waved before the fruit is ripe.

Spec. Desc. Leaves without prickles. Stem branched, smooth, shining, spotted & streaked with blackish purple. Involucel. one half divided into three & four segm. at the edges white & membranous. Lower leaves dark green & shining. Outer petals largest. Flowers white. Hedges, orchards, dunghills, rubbish, & cultivated ground. Flow. June & July.

Use. This plant has a peculiar faint smell & fetid, & a slight aromatic & somewhat nauseous taste. That the plant is poisonous there can be no doubt, & numerous instances are recorded by various authors of its deleterious effects; but it seems probable from some circumstances, that it is less powerfully so than was first imagined. That the root does not possess any noxious power whatever, several recent instances of its being repeatedly eaten with impunity have unequivocally been shown. Had Mr. Lane informed Mr. Curtis that from his own experience he was of opinion "the roots might be cultivated in gardens, & either eaten raw like celery, or boiled as parsnips & carrots." Vinegar has been found the most useful in obviating the effects of the poison of hemlock, & by macerating or boiling the plant in vinegar it becomes totally inert. For the principal symptoms produced by immoderate doses of hemlock see Heller. Murray &c. This was generally employed by the Greek & Arabian Physicians

an external remedy for tumours, ulcers & cutaneous eruptions; it was also thought to have the peculiar power "frangere stimulum veneris" et "incrementa mmarum et testium cohibere": which seems the more remarkable, as Stoerck, Bergius, & others recommend its internal use in complaints of a contrary nature. & adduce proof of its aphrodisiacal powers. Baron Stoerck first brought it into repute as a medicine of extraordinary efficacy, & Bergius considers its virtues to be narcotica, resolvens, suppurationem promovens, diuretica, & recommends its use in various disorders; others however have condemned it, & the value of this medicine seems still to be undetermined. It has been found that several disorders which have resisted other medicines, have yielded to hemlock, & that some if not cancerous at least of that tendency, have been relieved by it. In chronic rheumatisms, glandular swellings &c. & in the chin-cough it is now generally employed. Externally the leaves of hemlock have been variously applied with advantage to ulcers, indurated tumours, & gangrenous parts. Dr. Withering recommends the powder of the leaves & prefers it to the pills. He recommends the following method of preparation: Let the leaves be gathered about the end of June, when the plant is in flower. Pick off the little leaves & throw away the leafstalks. Dry these selected little leaves in a hot oven, or in a tin dripping pan, or a pewter dish before the fire. Preserve them in bags made of strong brown paper, or powder them & keep the powder in bottles in a drawer, or something that will exclude the light; for the light soon dissipates the fine green colour, & with its colour the medicine loses its efficacy. From fifteen to twenty five grains of this powder may be taken twice or thrice a day. I have found it peculiarly useful in chronic rheumatism, & also in many of those diseases that are usually supposed to arise from acrimony. Mrs. G. In Ireland cured a poor woman of a cancer in the breast by hemlock pills taken inwardly, with strips of the same plant. H. B. Baron Stoerck used an extract from the fresh root in cancerous & scrophulous complaints. — Lightfoot)

Class. Pentand. Order. Monogyn.

Cicuta. C. Maculat. C. viros. C. aquat. Ang. Long leaved water hemlock. Water cowbane.

Gen. Desc. Fruit nearly egg-shaped, ribbed.

Spec. Desc. Leaves winged; leaflets spear shaped, in threes, serratures white at the point. Stem four feet high, reddish below. Fruit stalks, sheathed at the base. Styles upright, white, in the fruit straggling. Fruit compressed, even, lopped.

Petals yellow green. Perls. Blos. July. Aug.

Use. As an internal medicine this is universally superseded by the common hemlock, but externally employed in the way of poultice it is said to afford relief in various fixed pains, especially those of the rheumatic & arthritic kind. In its dried state Bergius tells us it may be taken in considerable quantities without producing any bad effect; but the root when fresh, is extremely deleterious. The symptoms produced upon some children who ate of it for parsnip root, were intoxication, vertigo, great heat & pain in the stomach, convulsions & even epilepsy, distortions of the eyes, vomiting or retching, discharge of blood from the ears, swelling of the abdomen, hiccup, spasms, &c. In a man, delirium with constant heat of the stomach, & an unextinguishable thirst, were of long continuance, & followed by an erysipelatous tumour in the neck. The timely administration of an emetic is the only remedy.—(Willdn) It is one of the rankest of all vegetable poisons. Numerous instances are recorded of its fatality to the human species in a treatise upon it by Wepfer, Haller &c. Early in the spring when it grows in the water, cows often eat it & are killed by it, but as the summer advances its scent becomes stronger, & warns them carefully to avoid it. But though it is a certain & fatal poison to horned cattle, goats devour it greedily & with impunity. Horses & sheep also eat it greedily.—(Withering)

Pentand. Pentagyn.

rosera. D. rotundifolia Ros. Solis. Ang. Round leaved Sundew. Red rot. Youth-
rt. Moor Grass.

en. Desc. Cal. five div. Pet. five. Caps. one cell, five valves at top Seeds several
ed to the side.

hec. Desc. Stalks from the root. Leaves circular. Styles six. Leaf stalks fringed
the base. Blossom white. Mossy bogs. Blos. July, Aug.

se. The whole plant is acrid, & sufficiently caustic to erode the skin; but
e ladies know how to mix the juice with milk, so as to make it an innocent &
fe application to remove freckles & sunburn. The juice that exudes
ill, ammixed, destroy warts & corns. This plant has the same effect upon
ilk as the pinguicula vulgaris, & like that too is supposed (particularly
the Scotch highlands, Lightfoot) to occasion the rot in sheep. The name
Sundew seems to be derived from the striking appearance of these
lants: the leaves being fringed with hairs supporting small globules
pellucid liquor like dew which continue even in the hottest sun.
erhaps its acrimony resides in this secreted liquor — Withering.

The leaves of this marsh plant are purple, & have a fringe very unlike the exqui-
ble productions. And which is curious, at the point of every thread of this e-
ct fringe stands a pellucid drop of mucilage, resembling a crucial coronet. This
cus is a secretion from certain glands, & like the viscous material round the
ower stalks of Silene (catch-fly) prevents small insects from infesting the leaves.
is the ear-wax in animals, seems to be in part to prevent flies & other insects
m getting into their ears. Mr. Whately, an eminent mycon in London ob-
ved these leaves to bend upward when an insect settled on them like the
ves of the Muscipula Dionei, & pouring all their globules of mucus to the
ect, that they completely entangled & destroyed it. M. Bronsonet in the
Mem. de l'Acad. des Sciences, for the year 1784, after having described the motion
the bionea adds that a similar appearance has been observed in the leaves of two spec
of Drosera (Dionea)

Class 6th Hexandria. Ord. Monogynia

Asparagus. A. Officinalis. Eng. Asparagus. Sparrow grass. Sperage.

Gen. Desc. Blos. six div. upright. Inner petals, tops reflected. Berry sup. three celled. Seeds two.

Spec. Desc. Stem herbaceous, cylindrical, upright, jointed. Leaves bristle shaped; leaf scales solitary or in pairs. M. & F. flowers sometimes on distinct plants, but not when cultivated. Blos. bell shaped, yellow green; flow. M. & Hem. or hermaph. Berries red: seeds one to three. Meadows & rocks on the sea coast. Bl. July.

Use. The young shoots in a cultivated state are universally esteemed for their flavour & nutritious qualities. They impart to the urine the scent that is perceived on the water in which they have been boiled. (Withering.)

Hexandria. Virginia.

Rumex. R. Crispus. Eng. Curled Dock. Narrow leaved Dock.

Gen. Desc. Calyx three leaved. Petals three, closing. Seed one, three cornered inclosed in the blossom.

Spec. Desc. Flow. hem. Pet. entire, all bearded. Values, strongly veined. Leaves spear shaped, acute, waved, & curled at the edge. Root yellow. Beard on or three, rarely two. Values large brown red when ripe. Beard pale when young changing to blood red, then to brown red. Pastures, road sides, all soils. Bl. June July.

Use. The fresh roots bruised & made into an ointment, or a decoction of them is a cure for the itch, (Withering) & is useful in other cutaneous eruptions (P. H. Williams) The seed have been given with advantage in dysentery. In Norfolk, (Eng) this plant is the pest of the clover fields. Horses, goats, & cows refuse it (Withering).

Take the narrow leaved dock root, & boil it in water till it be quite soft then bathe the part affected in the decoction as hot as can be borne, the root must then be mashed & applied as a poultice. This is said to cure cancer. (Coulson's Advertiser)

Hexand. Virgin.

Rumex. R. Acetosa. Lapathum acetosum. Acetosa pratensis. Oxalis crispa Eng. common sorrel. Sorrel dock. —

Gen. Disc. As above

Spec. Disc. M. & F. flow. on distinct plants. Leaves oblong, arrow shaped. Leaf stalks purplish. Blos. Reddish. Male cal. leaf obtuse. Female cal. leaf acuminated, reflexed, waved on the margin. Meadows, & pastures. Bl. June-July. The leaves have an agreeable acid taste, & have been esteemed refrigerant, antiscorbutic, & diuretic. Taken in considerable quantity, or used variously as prepared food, sorrel will be found of important advantage where a refrigerant, or anti-scorbutic regimen is required; Linnaeus says that the Laplanders experience it as a welcome acid, to be in this respect an useful & pleasant diet. (Wolle) The Laplanders boil the leaves in water, & mix the juice when cold in the milk of the rein deer, which is thus esteemed by them an agreeable & wholesome food. (Pallas) The leaves are eaten will keep in a cool place a long while. (Lightfoot) The leaves are eaten raw in sauces & salads. In France they are cultivated for the use of the table, being introduced into soups, ragouts & fricasees. In some parts of Ireland they are plentifully eaten with milk, alternately biting & sipping. The Irish also eat them with fish, & other alcalescent food. The dried root gives out a beautiful red colour when boiled. Horses, cows, sheep, goats & swine eat it. (Withering) See page 124 — & M. M. v. 1. p. 112

Class Tetandria. Ord. Monogyn.

Mitchella. M. repens — Ang. Chequer Berry. Partridge berry.

Perennial. — Flowers (in Pennsylvania, New Jersey &c) in June & July; ripens its fruit in August & September. The fruit often continues upon the plant through the winter, & succeeding spring. The stems are slender & shrubby, lying close to the ground, & throwing out radicles at the joints. The leaves are opposite of a pretty thick consistence, obtusely egg-shaped, entire, very smooth & of a dark green colour. They are marked, both longitudinally & transversely, with whitish or rubescent coloured veins, which are especially observable upon the upper surface. The flowers are axillary twinned (two arising from a common peduncle)

villous internally. & of a white colour. Stamens four. Germen twin, orbicular, common to both flowers & inferior. A single style to each flower; stigmas four. The pericarp is a berry, two parted & globose: seeds commonly four, compressed & callous. The flowers have a very agreeable odour.

Cotton Mather says, that the Mitchella is a valuable remedy in cases of dropsy. A decoction of the leaves is directed to be taken for several days together as a tea. It is said to act as a diuretic, "as long as the disease lasts; after which it may be drank without provoking urine observably." He adds that "gouty people drink it with benefit." l.c. I am assured that in Georgia this plant has been found very beneficial in some cases of dropsy, & that its diuretic operation is very manifest. Birds of various species, especially the Tetrao umbellus (called Pheasant & Partridge) & the Tetrao maritandicus (called Partridge in Pennsylvania) eat the ripe fruit. Hence one of the most common names of this plant, Partridge-berry by which it is known in Pennsylvania, & in the New England states, & even in Hudson's bay. The berries though not very agreeable to the taste, are, it is believed, quite innocent, notwithstanding one of the names of the plant, Poison berries by which it is sometimes ~~known~~ in the country around Hudson's Bay. (Barton Journal)

Vaccinum V. Oxycoccos. Hexand. Monogyn. Oxycoccos vulgare. Ang. Cran berries. Moss berries. Fen berries. Marsh Whorts. Marsh whortle berries. Cow berries.

Spec. Char. Leaves evergreen, egg-shaped, entire, edges rolled back. Fruit stalk single or in pairs, one flowered, red, semi transparent. Stem thread-shaped, trailing, not hairy. Cal. smooth, fringed at the points, coloured. Blos. four distinct petals, deep flesh colour. Stam. often ten. anth. two celled, ending in a hair like open tube. Style red, tubular. Summit an open hole. Berry purplish red. Peaty Bogs.

Use. Made into tarts they are generally much esteemed. But their peculiar flavour renders them disagreeable to some people. If they be picked clean & then closely corked in dry bottles, they will keep for several years, or the bottles may be filled with water. The name of Cranberry, which is the most general originated, probably from the fruit stalks being crooked at the top, & before the expansion of the blos. resembling the head & neck of the crane.

Class Icosand. 4th Ord. Monogin.

ornus. C. Sericea. Ang. Blue berried dogwood. Europ. Americana, Red willow. Rose
illow. Swamp dogwood. American red-rod cornus. New England Dogwood. Female Dogwood
en. Desc. Involucrum 4-phyllum caspius. Petala supera 4. Drupa unc 2. loculari-
Kinnikinnick is the name which some of our Indians, of the Delaware stock give to the
nicture which they are fond of smoking, of the bark of this species of cornel & tobacco-
In swamps, on the margins of rivers & streams I believe on high dry ground. This species has
very extensive range through the continent of North America.
shrub from six or eight to ten or twelve feet in height. Flowers in Pennsylvania
July & August.
Use. The bark of Cornus Sericea is one of the favorite winter articles of food of the
American beaver (castor fiber). The ripe drupes are greedily devoured by the common
domestic fowl. From the bark of the more fibrous roots of this shrub, the Indians, in
ome parts of the continent, obtain a good scarlet colour with which they dye some of the
ticles of their dress. I have not learned what mordant (if any) they employ to fix the
lour. (Barton)
Both the cornus florida, & the cornus sericea are found by experiments instituted by Dr. John
H. Walker, to possess the same ingredients with cinchona. The cornus florida possesses
ort of the gum, mucilage, & extract; the sericea the next which appears to be an in-
mediate between the florida & cinchona, which the latter possesses most of the resin
e virtues appear equally similar in their residence. The extract & resin possess all the
tive virtues. The extract appears to possess all their tonic powers. The resin when per-
ctly separate from the extract appears to be purely stimulant. The bark of cornus
ricea forms a beautiful tincture with proof spirit, which has been found useful in the lat
stages of diarrhoea unaccompanied with fever. This & the powdered bark of both species
well deserving a place in the apothecaries shops, as valuable additions to the Materia
Medica. The industrious & learned Professor Barton says, "I believe, however, that it may with
tive safety be asserted that as yet we have not discovered within the limits of the Uni-
d States, any vegetables which have been found as effectual to answer the purpose
the Peruvian Bark in the management of intermittent fevers, as the cornus florida & the
ornus sericea. — These articles have already attracted the attention of medical practi-
oners in the U. States, many of whom have vouched for their astringent & tonic powers to be little
any thing inferior to those of cinchona officinalis. (Thacher) —

Class 10th Decandria. Ord. Monogin.

Arbutus. A. uva ursi. — Vaccinia ursi. Arg. Bear berries. Bear whortle berries. Bearberry. Strawberry tree. Trailing arbutus. —

Spec. Desc. Stem trailing. Leaves oblong. egg-shaped. very entire. veined like net work underneath. Blos. flesh-colour. tinged with red. mouth contracted. Berries red. Dry heaths & woods. Bl. May. June.

Use. The leaves have in a dry state a bitterish astringent taste. The berries, insipid pulpy & mealy. The uva ursi was much employed by the Ancients as an astringent but in modern practice was neglected till about the middle of the 18th century. it acquired a celebrity for its efficacy in calculous & nephritic affections, & also in almost every complaint to which the urinary organs are liable, as ulcers of the kidneys, & bladder cysterrhoea. diabetes &c. It was first used at Montpelier for this purpose, & afterwards by Dr. de Haen at Vienna who relates several cases in which it proved of the greatest service. But in England its use has been more uncertain some patients found no relief, & some thought their complaints rather aggravated than alleviated; while in other calculous & nephritic cases the symptoms have been almost entirely removed. Perhaps upon the whole it may be found no better than other vegetable astringents; some of which have been long used by the country people in gravelly complaints & with very great advantage. Hitherto unnoticed by the regular practitioner. Half a dram of the powdered leaves given every day, or every other day has been found useful in calculous cases. The leaves may be used either in powder or decoction; the former is generally preferred. & given in doses from a scruple to a drachm two or three times a day. Those plants which grow in dry, lofty & exposed situations, are preferred for medical use, to those found in valleys & in shady ground. This plant is much used in Sweden to dye an ash colour, & to tan leather. Woodville. Horses, cows, sheep & goats refuse it. Withering

Professor Barton, from long experience of its efficacy, is high in its commendation in cases of nephritis depending on gout, & has found it serviceable in old gonorrhea.

Decand. Trigyn. Nat. ord. Caryophyllae

Stellaria. S. Media. — Alsine Media. Arg. Common Chickweed.

Gen. Desc. Cal. five leaves expanding. Petals five divided down to the base. Capsule one celled. Seeds many.

Spec. Desc. Petals, deeply divided. white. Stamens very greatly in number. Leaves egg. heart. shaped. Stems with a hairy ridge on one side. Caps. six valve; Seeds round compressed. yellow, rough, with little tubercles. All soils from the damp to the dry

re. The young shoots & leaves boiled are a very good eatable; they can scarcely be
distinguished from spring spinach, & are equally wholesome. - (Withering.) This spe-
is of Stellaria is a notable instance of what is called the sleep of plants; for every
ight the leaves approach in pairs, so as to include within their upper surfaces
e tender rudiments of the new shoots; & the uppermost pair but one, at the end
the stalk are furnished with longer leaf stalks than the others, so that they can
lose upon the terminating pair, & protect the end of the branch. Linn. The flow-
s are open from nine o' clock till noon, but of a day that it rains they do not
en; after rain they become purulent, but in a few days rise again & are up-
ight. Swine are extremely fond of it; cows & horses eat it; sheep are indiffe-
ent to it; goats refuse it. It is a grateful food to small birds, & to young chicken
Withering.

Decand. Trigin.

Spergula. S. Arvensis. Ang. Horned Spur. Corn Spurry.
Gen. Desc. Cal. five leaved. Pet. five, entire. Caps. egg shaped, one celled, five valved
Spec. Desc. Leaves in whorls, three on each side, cylindrical, thread like, woolly, clam
y. Stem thick at the joints. Fruit stalk branching. Flowers white. Stamens five
ten. Seed, rough, black with a white border. Corn fields, gravel walks. Flowering
ept. Use. The inhabitants of Finland & Norway use the seeds to make bread, when
eir crops of corn fail. Poultry are very fond of them. Experience shews it to be very
utritious to the cattle that eat it. Horses, sheep, goats & swine eat it; cows refuse it.
Withering.

Class 11th Dodecandria. Order Digynia.

Agrimonia. A. Eupatoria. Eupatorium veterum. Ang. Common Agrimony
Gen. Dis. Cal. five toothed, surrounded by another. Petals five. Seeds two in caps at the bot-
m of the calyx, which become indurated.
Spec. Desc. Stem cylindrical, roughish, hairy. Stem leaves winged. The odd leaflet on
leaf stalk. Leaves hairy covered with minute dots, & segments ending in small reddish
lands, interruptedly winged; leaflets deeply serrated, oblong egg shaped; smallest hair

entire. Fruit ripened; fruit stalks surrounded at the top with a sort of outer calyx, cloven into five spear shaped irregular segments with white upright bristles, & above a circle of numerous green awns hooked at the end, & within these the proper calyx of five leaves, spear shaped, concave, glandular without, within marked with three darker green lines, ending in a reddish point. Petals egg shaped, concave, slightly notched, twice as long as the capsule. Stam. 5 to 12. Germen crowned with the calyx & a yellowish fleshy receptacle. Styles thread shaped. Summits two thin lips at the end of each style. Caps. egg shaped hairy, ribbed. Seeds egg shaped, flattened on one side. Flowers in long, upright, terminating bunches, fine yellow. Borders of corn fields hedges, shady places. Bl. June, July.

Use. This plant has been principally regarded in the character of a mild astringent & corroborant; & it is recommended by many as a deobstruent, especially in hepatic & other visceral obstructions. Chomel relates two instances of its successful use in cases ~~of~~ where the liver was much enlarged & indurated. It has been used with advantage in hemorrhagic affections, & to give tone to a lax & weak state of the solids. In cutaneous disorders, particularly in scabies, it is said to manifest great efficacy; for this purpose it was given with liquorice in the form of tea; but, according to Alston it should be always exhibited in the state of powder. (Woolly) An infusion of the root is said to be made use of by the Canadians in burning fevers with great success. An infusion of 6 oz. of the crown of the root, in one quart of boiling water, sweetened with honey, & drank half a pint three times a day, is said by Dr. Hill to be an effectual cure for the jaundice. He advises to begin with a vomit, afterwards to keep the bowels soluble, & to continue the medicine as long as any symptoms of the disease remain. (Withering) The leaves make a very pleasant tea, said to be serviceable in hemorrhagies & in obstructions of the liver & spleen. They are sometimes used by the country people by way of cataplasms in fresh wounds & contusions. (Lightfoot) It has been esteemed a cephalic but now is not used. Hill. The flowers fresh gathered smell like spirits. Sheep & goats eat it; horses, cows, & swine refuse it. - Linn.

Dodecand. Monogyn

Nymphea. N. alba. N. odorata Eng. Fragrant Water Lilly. White water Lilly. Wa-
can. Cardock. Water rocks.

Gen. Desc. Blos. many pet. Cal. four or five leav. Sum. round, flat sitting. Berry su-
rior. Coppid, many celled.

Spec. Desc. Leaves oval, heart shaped with a deep notch at the base, valv. entire
l. four cleft, leaves smaller than the outer petals. Petals in several rows resem-
g a double flower, bright white. Flowers open about seven o'clock in the mor-
g & close about 2 P.M. & then lie down on the water. Leaf & fruit stalks round
ll of flower within. Summits seventeen or eighteen, in a circle, corresponding
th its many cells in the germen. Show rivers, ponds. In the sea at Cook.—
l. July.

Use. The roots are used in Ireland, & in the island of Java, to dye a dark
own. This is one of the most beautiful of the English plants, & for the splendour of
stary blossom, brilliant white, & natural double, well deserves to be cultivated by
curious florist. It may be propagated by transplanting in winter its roots, which
e bulbous. It extends itself by long runners, which from a root at the end, & send
h leaf-stalks in deep water. The petals gradually lessen as they approach the
ntre of the flower, where the outer filaments, expanding in breadth, gradual-
sume the form of petals, as is generally the case in the double flowers of the
arden. (The roots form a most excellent inspirating poultice, for boils,
breches & tumours, S.W.W.) Swine eat it; goats are not fond of it; horses & cows
refuse it. Withering.

See my Mat. Med. vol. 1. p. 101.

#

~~Polyandria~~ ~~Dodecand.~~ Monogyn.

Tilia. T. europea. T. Femina. T. Americana. Eng. Lime tree. Linden tree.

Gen. Desc. Blos. five pet. cal. five div. Seed vess. nutlike, globular, five celled,
five val. opening at the base.

Spec. Des. Flowers without ovetary. Berry four celled. Leaves heart shaped, serrated.
Flower-leaf. yellow green, nearly as long as the fruit-stalk, & attached to half its
ing th. Blos. whitish. Woods & Ridges.

Uses. The sap inspissated affords a considerable quantity of sugar. The leaves are dried in some countries for the winter food of sheep & goats; they are eaten by cows in the autumn, but they give a bad taste to the milk. The flowers are fragrant, & afford the best honey for bees. The bark macerated in water may be manufactured into ropes & fishing nets. The wood is soft, light & smooth, close grained & not subject to the worm. It makes charcoal for gun powder & for drawing; it is used for leather cutters board, & for carved work, & is also employed by the turners. This tree flourishes best on the sides of hills, but will grow very well in meadow grounds. It is useful for forming shady walks, & clipped hedges, is easily transplanted & does not destroy the grass beneath it. (Withering)

Extract of a Letter from Thomas Walmsley M.D. to B.S. Barton M.D.

"Sometime since I mentioned the Vitis Americana as an application to burns, scalds &c. & supposed it to be entitled to further consideration. I have since that had considerable experience with it, & have no hesitation in recommending it as superior to any thing I have seen used in these cases; & as my confidence increases with every opportunity I have of using it, I think it ought to make you this communication, not doubting but you will give it a trial as you have already done so much towards ascertaining the properties of our indigenous vegetables. The part of the bark of the tree made use of is the liber or inner bark. I have generally used it fresh taken from the tree; but it answers very well when carefully dried. In either case it is cut into small pieces, & macerated in cold water, frequently stirring it about. In a short time the water becomes extremely viscid, & with this the injured part is to be kept constantly wetted.

In what manner this application produces so wonderful an effect, I do not pretend to know. Neither would I say if it would be serviceable in erysipelatous or other inflammations; but as there is some analogy between this & the inflammation from burns & scalds, the experiment would be worth making. — Relief is obtained in a very short time after the application, & a cure is soon performed. — Whether my confidence is too sanguine or not future observation must determine. It has scarcely happened that I have been under the necessity of employing any thing else. I have no doubt that the cold water has considerable effect in abating the inflammation,

t I am equally certain, that if it were used unimpregnated with the
ullage of the Silia, a very perceptible difference would be found.
The Silia often reaches the height of forty or fifty feet, & there are many trees two feet
diameter. It is generally found along the water side, where it makes a beautiful
pearance while in flower; & from its singular mode of inflorescence, the pedunc
ing a continuation of the omidolle rib, projected from the centre of the bractea
is calculated to arrest the attention of almost every one."
See my M. M. vol. 1. page 120

Class Polyandria 13th Order Trigyn. 3d

Delphinium. D. Consolida. D. vulgare. Consolida Hortensis. Eng. Wild Larkspur.
Larkspur. Lark. Lark. claw. Larkstoes. — Lousewed.

Gen. Desc. Cal. 0. pet. 5. or 6; nect. cloven, horn shaped behind; caps. leguminous,
many seeded.

Ch. Desc. Capsule single. Nectary one leaf. Stam. subdivided. Leaves deeply
divided into three or five parts: these deeply cut into slender strap. shaped segments, of-
ten forked at the end. Petals irregularly notched. Lateral ones broadest, upper one
harshaped, blue; by cultivation, white, purple, red, or bay. Nect. within upper pe-
tal, tube projecting backwards within the tube of that petal. Anth. double yellow.
Corn. conical, woolly. Style 0. Summit two; white, small, fleshy, flatted.
Seed. Bl. June. Sept.

Use. The seed are acrid & poisonous. The expressed juice of the petals, with
the addition of a little alum makes a good blue ink. By cultivation the flowers
often become double. Sheep & goats eat it; cows & swine refuse it. (Withering.) (The
plant steeped in spirit & the infusion applied to the head of young children, will
completely destroy the vermin. S. W. W.) —

One ounce of the bruised seed of Delphinium consolida infused in one pound of proof
spirit, according to Dr. Blanchard of Pembroke N. H. has been found of essential service
in affections of the lungs, in asthma, particularly the spasmodic; & in most cases of
cough. The Dr. observes, "I am clearly of the opinion that when compared with digitalis
it merits a decided preference; except in cases when it becomes necessary to diminish
arterial action.

A common dose for an adult is from ten to twenty drops, two or three times a day.
I have generally given it with paregoric, one part to three, beginning with twenty

drops & increasing as the case may require. — Large doses nauseate, produce a slight diarrhoea, & sometimes a few use perspiration; do not affect the pulse, nor the urinary system."

From a foreign species of this plant is produced the Nauseacum (D. Staphisagrum) of the shops, the acrid, narcotic qualities of which prohibit its internal use altogether. See my Mat. Med. vol. 1. p. 74.

Polyand. Polygyn.

Anemone. A. Nemorosa. Eng. Wood anemony.

Gen. Desc. Cal. generally 0. Pet. five to ten. Caps. with awns & tails, formed by the style.

Spec. Desc. Flower naked. Seed tail-less, pointed. Stem 1-fl. simplish. Stem leaves doubly three fold. Leaflets egg-spear-shaped, smooth, slightly hairy. Petals three inward & three outer, the latter tinged with deep purple underneath. Wood, hedges, hollow ways.

Blos. April.

Use. The whole plant is acrid. When it is eaten by sheep that are unaccustomed to it, it brings on a bloody flux. The flowers fold up in a curious manner against rain. Goats & sheep eat it; horses, cows, & swine refuse it. — Linn. The paper on which the dried specimens are preserved is stained brown, whence it appears probable that it might be employed as a dye. — Stokes. This plant is used as a substitute for Spanish flies. See my Mat. Med. vol. 1. p. 45.

Polyand. Polygyn.

Thalictrum. T. Flavum. T. Cornuti — Eng. Meadow rue. wed.

Gen. Desc. Cal. 0. Petals 4 or five, capsules many rather beaked.

Spec. Desc. Stem furrowed, leafy. Leaflets acute, three cleft. Panicle much branched, upright, compact. Flowers upright, yellow, white. Pet. 4. Stam. 24. Pist. 10 to 16. Moist grounds. Bl. June.

Use. A cataplasm made of the leaves has been known to give relief in the sciatica. The root dyes a cool yellow. Horses, cows, sheep & goats eat it; swine are not fond of it. — (Stokes) —

Polyand. Polygyn.

Ranunculus — R. Sceleratus — Eng. Round leaved water crowfoot. Celery leaved crowfoot.

Gen. Desc. Cal. deciduous five or three leaved. Petals five (rarely two, three or eight) with a nectariferous scale or pore within the claw. Styles permanent. Seeds mounted, upright.

Spec. Desc. Lower leaves hand shaped — Upper 3. fingered; root leaves

idney. shaped lobed, on long leafstalks, smooth. Plant dark green, branchi
culent. Petals small, yellow. Recept. egg shaped. Fruit oblong. Erallow waters
Bl. May. June.

Obs. The whole plant is very corrosive, & it is said to be made use of by beggars
for the purpose of ulcerating their feet, which they thus expose to the public to
excite compassion. Goats eat it; horses, cows & sheep refuse it (Withg.) —
rmind & applied to the skin it will blister in a few hours. Dom. Lin.

Polyand. Polygin.

Sagittaria. S. Sagittifolia. Ang. Common Arrow head.
Gen. Desc. Monoecious. Cal. three div. Petals three. St. filam. about 24. F. seeds
many, naked.
Ehlc. Desc. Leaves all from the root, arrow shaped, acute, smooth, entire, with
valid ribs & a net work of veins; the first leaf always under water, strap shaped.
Stalk nicedged. Leaf st tapering, convex underneath, concave above, under water.
Flowers three in a whorl; lowest fem. on fruit stalks half an inch long; upper m.
one to five pistils. Fruit s. ~~from 1 to 5 inches long~~ ? inch long slender. Flower
white, tinged with purple at the claws. Ditches. Low Grounds. Bl. July.
Obs. At the lower part of the root, growing in the solid earth beneath the
It is always found a bulb. This bulb constitutes a considerable part of the food
the Chinese, & upon that account the plant is cultivated by them. Horses,
ats, & swine eat it; cows are not fond of it. (Withering.)

Class 14th Didynamia. - Ord. Gymnospermia -

Veronica. V. Chamaedrys. Ang. Wild Germander. Germander Speedwell.
Gen. Desc. Upper lip upright, deeply divided, con- below the base. Stamen
in the division. An indigenous perennial plant growing in pastures & the
sides of hedges, & flowering in May. It is eaten by cows, goats, sheep & horses, but
swine refuse it. The leaves of this plant have been recommended as a substi
tute for tea; but it is chiefly used as a mild astringent. Dom. Lin.

Didynam. Gymnosperm.

Nepeta. N. Cataria. Ang. Catmint.

Gen. Desc. Blos. middle segm. of lower lip crenated, mouth edges reflected. Stam. approaching.

Spec. Desc. Flowers in spikes, white, a tinge of red, & spotted with purple. Whorls on short foot st. mostly lateral. Leaves on leaf st. heart shaped, tooth serrated, of a velvet like softness, downy. Cal. downy, green ribs. Pastures, in calcarious soils. Bl. July.

Use. An infusion of this plant is deemed a specific in chlorotic cases; two ounces of the expressed juice may be given for a dose. Cats are so delighted with this plant that it is difficult to keep them out of the garden where it grows. Miller says that if it be raised from seed, cats will not meddle with it, & in support of this opinion he quotes an old saying. "If you set it, the cats will eat it, if you sow it, the cats will know it." It cannot well be planted without being more or less bruised. Sheep eat it; horses, cows, goats, & swine refuse it. — (Withg.) —

Didynam. Gymnosperm.

Verbena. V. officinalis. Ang. Vervain. Simpler's joy —

Gen. Desc. Blos. funnel shaped, segments nearly equal. Calyx. one of its teeth topped. Seeds two or four, naked.

Spec. Desc. Spikes thread shaped, panicled. Leaves with many jagged clefts the upper three-cleft or simple. Stem solitary, four cornered. Stamens four, two longer; often only two. Seeds four. Waste places, stone walls, road sides.

Use. From being used in Sacrificial rites, this plant was held sacred, & by degrees adopted as a medicine, hung as an amulet about the neck; it was afterwards bruised first in order to obtain its virtues more effectually; thus Fuchsius relates a remarkable instance of its efficacy in inveterate head-ache. In later times it has been employed by way of cataplasm, by which the most severe & obstinate cases of cephalalgia are said to have been cured. With us, however, it has fallen into disuse, nor has Mr. Morley's pamphlet, recommendedgets use in scrophulous cases been able to restore it. This gentleman directs this root to be tied with a yard of white satin ribband

and the neck. There to remain till the patient recovers; he has also on-
ce to infusions, & ointments prepared from the leaves of the plant; & occasion-
ally calls in the aid of the most active Medicines of the Materia Medica (Brit.)

#

Dydinam. Gymnosperm.

Mentha. c. M. piperita. Long, Peppermint.
m. Desc. Bract. nearly equal; four cleft; the broader segments notched at the end.
amens upright, distant.
ec. Desc. Leaves eggshaped, on leafstalks. Stamens shorter than the blossoms. Flowe
terminating spikes, separated in clusters, sometimes in whorls, small reddish purple
ch each which two pointed, spear shaped, hairy floral leaves. Var. Leaves spear shaped.
ing places. Bl. Aug. Sept.

Use. The spontaneous growth of this plant is said to be peculiar to Britain
t for medicinal uses, its cultivation has long been extended over Europe. It has a more
netrating smell than any of the other mints, a much stronger & warmer taste, pen-
nt & glowing like pepper, sinking as it were into the tongue, & followed by a sensa
ge of coldness. By maceration or infusion it readily & strongly impregnates both wa-
& spirit without urine. In distillation with water it yields a considerable quan
of essential oil, of a pale greenish yellow colour, growing darker coloured
age, very light, subtle, possessing in a high degree the specific smell & pene
ating pungency of peppermint. (Lewis) Rectification. Dr. Cullen observes, is
ticularly necessary & proper for this essential oil: What has been called essence
peppermint, seems to be no other than the rectified oil, dissolved in spirit of
ine. Its stomachic, antispasmodic, & carminative qualities render this plant
ful in flatulent colics, hysterical affections, retchings, & other dyspeptic
mptoms, acting as a cordial, & often producing immediate relief. Camphor
to be obtained from this plant. (Woodville) Peppermint water is well known
a carminative & antispasmodic. The stem & leaves of the plant are beset
th numbers of very minute glands containing the essential oil, which rises
plentifully in distillation. The Essence of Peppermint is an elegant medi-
cine & possesses the most active properties of the plant. (Withering)

See next page Mentha arvensis

 Tribe Polegioidis. Didynam. Gymnosperm.

Mentha M. Pulegium. Pulegium Latifolium. P. regium. Ang. Pennyroyal mint.

Gen. Desc. As above.

Spec. Desc. Leaves egg shaped, blunt, somewhat wolloped, thick, slightly toothed, underneath set with dark semi transparent dots. Stems roundish, creeping, four blunt corners, hairy branched. Blos. twice as long as the calyx, hairy without, pale purple. Moist heaths & pastures. Fl. Aug. Sept.

Use. It has a warm pungent flavour, somewhat similar to mint, but more acrid, & less agreeable both in smell & taste: its active principle is an essential oil of a more volatile nature than that of mint. Pennyroyal possesses the general ~~principle~~ properties of the other mints, but it is supposed to have less efficacy as a stomachic, though more useful as a carminative, & emmenagogue & more commonly employed in hysterical affections. We are told by Boyle & others that it has been successfully used in the hooping cough; but the chief purpose to which it has been long applied is promoting the uterine evacuation. With this intention Haller recommends an infusion of the herb with steel in white wine which he adds "me nunquam fefellit". Dr. Cullen, however, considers mint in every respect a more effectual remedy than Pennyroyal, & it is now less frequently used than formerly. - (Woodville) The expressed juice with a little sugar, is not a bad medicine in the hooping cough. A simple & a spirituous water, distilled from the dried leaves are kept in the shops; they are prescribed in hysterical affections, & are not without considerable antispasmodic properties; an infusion of the plant may be employed with the same intention. (Withering) See my M. M. vol. 1. p. 84.

Didynam. Gymnosperm.

Mentha. M. arvensis. M. sativa var. M. rubra. Ang. Corn. mint. Horse mint.

Gen. Desc. As above.

Spec. Desc. Leaves egg shaped, ~~blunt~~ ~~set with~~ acute serrated, towards the bottom roundish. Stem spreading, not tinged with red. whole pl. hairy. Flowers in whorls, lateral wh. two opposite numbers, sitting. Blos. hairy within & without lower segment blunt. Cal. pale green, hoary, interspersed with very minute semi transparent glands. In watery places & moist corn fields. Fl. July. Sept.

Use. This plant prevents the coagulation of milk; & when cows have eaten it as

y will do largely at the end of summer, when pastures are bare, & when hunger
tresses them. This milk can hardly be made to yield cheese, a circumstance which
metimes puzzles the dairymaids. (Withering). — The plant bruised & applied to a
oman's breast when it is caked, or much swelled, will take down the inflamma-
n. I am informed, & will cause it to yield milk in a short time. (P. W. W.)
See my Mat. Med. vol. 1. page 97

Dydinam. Gymnospermia.

Glecoma. G. hederacea. G. Hedera terrestris. Chamoecissus. Ang. Ground ivy.
Will. Cat's foot. Alehoof. Tun hoof. Robin run in the hedge.
Gen. Desc. Cal. five cleft. Anthers in pairs; each pair forming a cross.
Spec. Desc. Leaves kidney or heart-shaped, notched, underneath hollow dots, in which
e glands secreting an essential oil, & above little eminencies not secreting any o-
dorifeous oil. Stamens sometimes imperfect. Roots sending out trailing suckers.
Stem. Blue, rarely flesh colour. Groves, shady places. Bl. April. May. —
Use. It has a peculiar strong smell, & a bitterish taste, somewhat aromatic. It
as formerly supposed to possess great medicinal powers, which late experience
as been unable to discover. It is now omitted in the London Mat. Med. Its great
ers have been described as pectoral, detergent, aperient, diuretic, vulnerary, cor-
borant, errhine &c. & has been variously recommended for the cure of diseases to
hich their powers were adapted, but chiefly in pulmonary & nephritic complaints.
In obstinate coughs it is a favourite remedy with the poor, who probably ex-
erience its good effects, since they still persevere in its use. Ray, Mead, & others,
peak of its being useful joined with fermenting ale; but Dr. Cullen observes
hat "it appears to him frivolous: & says that he has never had any evidence
f its diuretic or of its pectoral effects: in common with many other of the ver-
ulatae, he thinks it may be employed as an errhine, & in that way cure a head-
che, but no other way by any specific qualities. Ray gives a remarkable instance
f its efficacy in this way in the complete cure of a most violent cephalalgia.
It is usually taken in the way of infusion, or drank as tea. (Woodville). The
aves thrown into a vat with ale, clarify it, & give it a flavour. The ale thus
repared, is often drank as an antiscorbutic. The expressed juice mixed with a

little wine, & applied morning & evening, destroys the white specks upon horses eyes.- Plants that grow near it do not flourish. It is said to be hurtful to horses if they eat much of it, but they are not fond of it. Sheep eat; cows, goats & swine refuse it.- (Withering) Tea made of the leaves, & sweetened with honey or sugar, is a good remedy for a cough.- H. B.

Didynam. Gymnospermia.

(Thymus. T. serpillum. Serpillum vulgare minus.- Ang. Common Thyme. Wild Thyme. Mother of Thyme.-
Gen. Desc. Cal. two lipped. mouth closed with soft hair.
Spec. Desc. Flowers in heads. Stems creeping, woody nearly cylindrical. Leaves flat blunt. fringed at the base, oblong egg shaped) Perhaps I have not the species S. W. W.

Didynam. Gymnospermia.

Prunella. P. vulgaris. Brunella vulgaris. B. Major fol. non dissect. P. Pennsylvan
Ang. Common Self Heal.
Gen. Desc. Filaments forked, one of the divisions bearing anthers. Summit cloven.
Spec. Desc. Leaves egg oblong, serrated, on leaf st. opposite. Cal. sup. lip bifid, three toothed, seven ribbed. Blos. blue, purple or white. sup. lip. hairy notched; lower mid. segm. jagged. Sem. segm. rolled back. Stem in many situations trailing, a finger long; in a wood upright, a foot high; thinly hairy. Meadows, pastures.
Blos. August.
Use It is an astringent, & vulnerary but it is rarely used at present except by the country people; by them it is bruised & applied to fresh wounds; they take it also in broths & apozems for spitting of blood & in bloody flux. & other haemorrhagies they use it by way of injection.- (Lightfoot) -

Didynamia Angiospermia

Antirrhinum - A. linaria. Ang. Toad flax yellow. Snap dragon. Butter & Eggs.
Gen. Desc. Cal. five div. Blos. bulging at the base, or ending in a spur. Caps. two celled, many seeded, opening at the top & the divisions bent back.
Spec. Desc. Leaves spear shaped, crowded, alternate; stems upright, many spikes terminating, nitting. Flowers tiled. Blos. petals woolly, orange; lower lip segm. circular. mid. segm. much smaller projecting part orange woolly; the crest pale yel

oothed. Nect. long, awl shaped. Barren fields, road-sides. Bl. July. Sept-
er. An ointment prepared from the leaves, & invented by Dr. Wolph, physician
the Landgrave of Hesse, has been used in the piles, & it is said to afford relief.
ept. Withy. The leaves in infusion are diuretic & purgative & are recommended in
hsies. It has also been used in jaundice. An infusion of the flowers is said to be
y efficacious in cutaneous disorders. (Wolph) The expressed juice mixed with
ilk is a poison to flies, & the smell of the flowers has the same effect upon them
s, horses & swine refuse it. Sheep & goats are not fond of it. — (Withy) —
See my Mat. Md. vol. 1. page 46

Dydinamia. Angiospermia.

Scrophularia. S. nodosa. S. Maryland. Eng. Great figwort. Kennel wort.
Knobby-rooted figwort. ~
en. Desc. Cal. five cleft. Blos. five div. tube globula; lower segment or fla-
d. Caps. two celled, partition double.
Spec. Desc. Leaves oblong, nail-shaped, three fibred at the base. Stem sharp
mered. Cal. toothed & membranous. Blos. tube filled with honey, upper segm.
illed with honey; upper segm. purple, the rest pale green, two lat expanding,
ower rolled back. Woods, moist hedges. Bl. July.
se. This plant is hardly known in modern practice. But its rank smell & the
the taste of the leaves seem to indicate some active properties. Swine in pasture with
n scab have been cured by washing with a decoction of the leaves. Warps greatly
root & the flower. Goats eat it; horses, cows, & swine refuse it. — (Withy)

Class 15th — Tetradynamia. Ord Siliculosa —

Cochlearia. C. Officinalis. C. hortensis. Cock. ovtundifolia. Eng. Scurvy grass. Scrooby grass
en. Desc. Pouch ~~ough~~ notched, turgid, rough, many seeded; valves bulging, blunt.
Spec. Desc. Root-leaves heart circular, entire, veined, on long leaf st. fleshy. Stem l. oblong,
ting, a little indented. Stem angular. Pet. fleshy, clear white claws, greenish. Pouch
slightly notched smooth. Partition double. Seeds rough. Sea shore. Blos.
April. May —

Cochlearia. C. Coronopus. Arg. Scurvy grass.

Gen. Desc. as above.

Spec. Desc. Leaves wing-cleft. Stem diffused. Root leaves prostrate; leaflets cut in long the fore edge, entire on the back edge. Pouch kidney. heart shaped. furrowed & ridged. Branches axillary. Blos. white. Corn fields. rubbish Bl. June. Thy.

Use. This plant was rendered famous some years ago by its ashes being an ingredient in Mrs Johanna Stephens's celebrated medicine for the stone & gravel, but unfortunately it has not retained its credit. (Lightfoot)

#

Class 16th Monadelphia. Ord. Triand.

Juniperus. J. Virginiana. Thy. Red. Cedar.

Gen. Desc. Staminate flowers. ament ovate: calyx a scale: stamens 3. Pistillate flowers. calyx three parted. petals 3. styles 3: berry 3 seeded. consisting of 3 unequal tubercles of the calyx. (Nat Bony. 1 celled. with balsamic glands at base.) Virginiana red cedar) leaves united by third days in threes. Perennial.

Use. The red cedar tree is a native of the United States & grows to the height of fifteen or twenty feet. Its berries are smaller than those of the true juniper. In Virginia & Carolina the berries are distilled into brandy. The leaves of this tree are now brought into notice by the investigation of Dr. Aaron Dexter Professor of Chemistry & Materia Medica in the University at Cambridge. He has found this to be the only species of juniper in the United States, whose leaves agree in their properties with those of the savine directed by Dr. Crowther as the basis of the savine ointment. (Thacher.) Dr. Dexter is incorrect. The juniperus sabina likewise makes the genuine savine cerate S. W. W.

#

Juniperus. J. Sabina. Arg. Savine.

Gen. Desc. As above. ~~Leaves opposite~~

This is an evergreen shrub which has rather prickly leaves. & produces blue berries. only after it has arrived at a considerable age. Its stem attains the height of seven feet. & is apt to grow in a reclining posture. The wood is internally of a beautiful reddish shade, resembling that of mahogany. The leaves of savine possess a bitter acrid taste, & their smell is so powerful & disagreeable that it expels moths & similar vermin. When distilled with water this leaves yield an uncommonly large

portion of essential oil.

Savine is a warm stimulating medicine, capable of producing diaphoresis increasing all the secretions, especially from the uterus. It has long been considered a powerful emenagogue, & Dr. Home asserts that in five cases of obstructions of the menses, four were cured by the Savine, which he gave in powder from a scruple to a drachm, twice a day. But this acrid & heating substance in the opinion of Dr. Cullen is improper in plethoric habits, & should be employed with caution in those cases only which proceed from a relaxed state of the solids.

The oil distilled from this shrub is one of the most violent emenagogues & ought therefore to be used with the greatest caution in obstructions of the uterus or other viscera proceeding from laxity or weakness. Savine is also used as an anthelmintic, & said to be very efficacious in the cure of the gout. Externally the leaves are applied in the form of powder or infusion to exfoliations, bones, & old ulcers; & in cases of psora, gangrene, & tinea. Farriers apply this article with success to the ulcers of horses. (Thacher)

Monadelphia. Polyand.

Althea. A. Officinalis. A. Ibiscus. A. rosa sis Malva. Hog. Mark Mallow.

Synoth.

Gen. Desc. Cal. double; outer nine cleft. Capsules many, one seed in each.

Spec. Desc. Leaves undivided, angular, cottony, obscurely lobed, doubly serrated, ovate egg-shaped; very soft like velvet on leaf stalks. Stem upright a yard high, cylind. velvety, branched. Flowers in panicles, axillary, on foot stalks; white or pale flesh colour. Pet fringed at base, wicked. Cal. sometimes eleven or twelve cleft. Salt marshes & banks of rivers. Bl. Aug.

Use. The dry roots boiled in water, give out half their weight of a gummy matter, nearly allied to gum arabic, tragacanth, starch &c. &c. dissolving much more readily than the first. Burkhold, which on evaporating the aqueous fluid forms a flavourless yellow mucilage. This mucilaginous ~~part of the plant~~ matter is the medicinal part of the plant.

& is commonly employed for its emollient & demulcent ~~properties~~ qualities; its use is recommended where the natural mucus of the membranes becomes acrid or abraded. For obtunding & incrassating acrimonious thin fluids, in tickling coughs from the deflexions of the fauces & lungs, in hoarseness, erosions of the stomach, & intestines, strangury. & for lubricating & relaxing the passages in nephritic & calculous complaints. (Lewis) It is directed only in the form of a syrup, the root was formerly used in substance. (Woodville) The root & leaves have a mucilaginous, & are often used in a syrup or decoction as a balsamic pectoral for coughs & hoarsenesses. It is also found useful in nephritic complaints & the strangury, & is employed in cataplasms & fomentations against swellings. The root will turn water to a jelly. (Lightfoot) The root boiled is much used as an emollient cataplasm; & an infusion of it is very generally prescribed in all cases where mild mucilaginous substances are useful. (Meth.) See Mat. Md. vol. 1. page 41

Class 18. Syngenesia. Order 1. Polygamia Æqualis.

Tragopon. T. porrifolium. Eng. Goat's beard. Vegetable oyster.

Gen. Desc. Calyx simple many leaved; receptacle ~~naked~~ pit ~~pheomous~~ stiped.

Use The porrifolium or purple goat's beard is found in meadows & not unfrequently in upland pastures. It flowers in the month of May. The succulent roots of this vegetable when cultivated in gardens are called salsafy. Cows, sheep & horses eat the whole of this plant. Swine devour it with avidity but it is not relished by goats. The tender roots afford a delicious salad, & also an excellent substitute for asparagus. Dom. Enc.

Class 10th Decandria. Order 2nd Digynia. Nat. Ord. Ericeæ

Gaultheria. G. Procumbens. Eng. Spicy Winter green. (Partridge berry, Ore.)

Gen. Des. Calyx inferior, double, outer 2 leaved, inner 5-cleft: corol ovate: capsule five celled, inverted with the inner, berried calyx, nectary 10 pointed. (Procumbens) Leaves ovate. Perennial. Flowers white.

Use There is but one species of the Gaultheria known to us as a native of the U. States

is called Canadian Gaultheria or mountain tea, Grouseberry Berberry Groundberry
is a common & very small shrubby plant, with slender stems having at their
tops four or five oval evergreen leaves, which have been used as a substitute for Bo-
hea tea; whence the name of mountain tea. This tea has been used with success in
alleviating the asthma. Dom. Enc. See my Nat. Hist. vol. 1. page 80.

Class Triand- Dygin

Gen. P. Pratense. Eng. Timothy Grass. Cats tail grass-

Gen. Desc. Calyx indurated, 2 valved, sessile, linear truncate, bicuspidate, corolla in-
ved (pratense) spike long, cylindric, green. Glumes 2 or 3 flowered; panicled.
A well known favourite & native grass of the Northern & middle United States. Accord
ing to Mr. Strickland (Trans. Acc. board of agric.) it is the same as the English Cats tail grass
except that the Timothy is about a fortnight earlier than the cats tail, the effect of the
change of seed & climate.
Dr. Muhlenberg, we have seen accords in the opinion.
Mr. Bean (New Eng. Farmer) says it obtained its name by being carried from Virginia to
North Carolina by one Timothy Hanson. Is it possible to ascertain the accuracy of
this statement? By what name is it known in Virginia?-
Timothy suits a moist low ground, & if somewhat shady it may be sown alone. On
upland it is generally sown with red clover, but as these grasses ripen at different
period, it certainly is bad economy to sow more Timothy than will answer to support
the clover which is very apt to lodge. But as a combination of Timothy & Clover is
preferred by horses, & the former tends to correct the tendency of the latter to injure
by wind. The best way is to sow it with grain, to roll the ground, & to permit it to
stand alone after the grain comes up. It may then be mixed with clover hay in alt-
ernate layers.
The Timothy will grow about four inches high in the autumn, & in the suc-
ceeding spring the grain will shelter it from the sun until after harvest, when
it will have acquired sufficient strength to bear the heat of our summers. The first
year after grain harvest it may be slightly pastured, but the second year it must
be kept up for hay, of which it will yield an abundant crop if the ground
has been well prepared. It may be pastured afterwards, & if the land be manured we
spring, will keep on the same ground many years.

Timothy is commonly cut too soon. That is before it has blossomed. It is then bitter & apt to bind, which weakens the stalk & frequently occasions the death of the plant; but if permitted to stand until in full blossom, the young leaves will be seen coming out from near the surface, which if the grass be then cut, will start up with vigour, stand the sun & yield a fine pasture.

It is a common opinion among farmers that Timothy hay is better for being heated or mow burned: but Mr. Joseph Cooper assures the editor, that this is a mere prejudice & unfounded in fact. — He justly remarked, "that cattle are the best judges of good hay, & that repeated attention to the subject has convinced him that they will seldom, if ever leave any part of bright Timothy hay which may be put before them, while on the contrary, a part of mow-burned hay will frequently be left. He also added an important fact: viz. that bright hay, even if made of coarse grass, will give yellow butter, while the best Timothy hay if mow burned, will always produce white butter.

One acre of Timothy hay will produce thirty bushels of seed, & on good upland, two tons of hay.

Timothy is spoken of in terms of contempt by Swayne, Sole & other practical English writers, the reason of which is that the heat of the sun in England is not great enough to bring this plant to perfection. Dom. Enc.

Triand. Digyn.

Dactylis. D. Glomerata. Eng. Orchard Grass

Gen. Desc. Calyx two valved, one valve smaller. corol 2 valved, awnless. convolute carinate. style long. Panicle straight. spikes lateral flowered, florets imbricate. (glomerata). a panicle condensed into a spike form Hard. Fern.

This is a native of the U. States, & is a strong, robust, productive plant. It is ripe before timothy, flourishes well in orchards in the shade (whence its name) & lasts three years. It should be cut when young, either for hay or fodder, as its stalk becomes coarse when permitted to grow old. Sole in the 9th Vol. of the Bath Society Trans. says it is refused by all cattle, but from this assertion, & from what he says of our favourite timothy he cannot be received as authority for American farmers. It is said that the American orchard grass is different from the grass known in Europe by that name. Dom. Enc.

Agrostis. A. Vulgare Class Triand. Digyn.
Eng. Red top. Red Grass.

Gen. Desc. Calyx two valved, ~~corol 1 valved~~ flowered, ~~ventricose~~ valves acute.
corol 2 valved; stigmas longitudinally hispid or plumose; florets spreading; vulgaris
panicle spreading, glume calyx twice as long as corol. perennial.
The red top & white top are only varieties of herd grass. The latter is larger of
the two. The red top is particularly valuable, as it will grow & rod the first
year on banks, where no other grass will thrive. Com. Enc.

Class 21 Dioecia. Ord 4. Petandria.

Cannabis. C. Sativus. Eng. Hemp.
Gen. Desc. Staminate flowers - calyx five parted. Pistillate flowers - calyx five
leaved, entire gaping laterally: styles 2: nut 2 valved, within the closed calyx. sativa
Stem hairy leaves digitate staminate flowers solitary - Annual.
This is a valuable plant which grows wild in the East Indies, & is cultivated to a very
considerable extent in Britain & the U. States. It thrives most favorably on a sandy
moist loam, or on old meadows & low bottoms near rivers, & is propagated from seed
which is sown in the proportion of eleven pecks, or two bushels per acre, broad cast; the
much smaller quantity will answer, if it be drilled. The proper time for sowing
hemp is from the middle to the end of April, or even a month later, but the
best crops are generally produced from the earlier seed.

This useful plant requires no weeding, the male or fimble is usually fit for
pulling in the middle of July or about nine weeks after it is sown. The female termed
female or seed hemp is seldom ripe till September when it is pulled, tied in bundles,
set to dry; at the end of ten days they are loosened & the head or tops are held up-
on a handle by one person, while another with a small threshing flail, beats out
the seed.

Besides the strong cloth & other articles made from it, hemp is of considerable
utility for other purposes. The refuse, called hemp shaves afford an excellent fuel,
the seeds yield by expression a pure oil, which is peculiarly adapted for burning
in chambers, & is perfectly limpid & possesses no smell. Another valuable prop-
erty of hemp is that it effectually expels vermin from plantations of cabbages
or if it be sown on the borders of fields &c. planted with that vegetable, or cater

pillars will infest it. When fresh hemp has a strong narcotic smell; the water in which it has been soaked is said to be in a high degree poisonous, & to produce fatal effects immediately after drinking it. The seeds have an unctuous nauseous taste, they may be triturated with water, or boiled in milk as an emulsion which is occasionally taken as a domestic remedy in coughs, heat of urine, & similar complaints. Dom. Enc.

Class 16th ~~Tetradynamia~~ Monadelph. Ord. Decand.

Geranium G. Robertianum. Eng. Herb robert.

Gen. Desc. Calyx five leaved: corol 5 petalled, regular: nectariferous glands 5 adhering to the base of the long filaments: anthers 5, 1 seeded, awned, beaked at the head of the receptacle: awn naked, strait. robertianum calyx 10 angled pilose, peduncles 2 flowered, leaves in 3 or 5 three cleft divisions. Annual. Fl. June.

Use. This herb is in great repute among many farmers, for its efficacy against staling of blood, & the bloody flux in cattle; in which cases it is said to be preferable to most of the remedies used on such occasions.

In Germany, the Herb Robert is employed in the process of tanning, & Dambourney obtained from this, as well as from all the other species of Geranium, a more or less durable yellow dye. Dom. Enc.

Class 5. Pentand. Ord. Monogyn.

Lonicera. L. Periclimenum. Eng. Woodbine Honeysuckle.

Gen. Desc. Corol. tubular, 5 cleft: unequal: berry two or 4 celled: seeds many. (Simpson) tube of corol dilating upwards, woody. flowers red. exotic. flowers from June to August.

Use. It is eaten by cows, goats, & sheep, but refused by horses. The beauty & fragrance of its variegated flowers, render this species a pleasing ornament of our gardens, hedges, & arbours. The best as well as the easiest method of propagating it is by layers & cuttings, both of which readily strike root & form plants that are fit to be set out in one year. The ripe berries are strongly purgative. Dom. Enc.

Class Cryptogamia. Ord. 1.

uisetum. E. Arvense. Ang. Field Horsetail. (Origo, Cat-tail.

n. Desc. Fruit placed under peltate bodies which are arranged in whorls forming a
ike form racemes, four spiral filaments surround the seed (probably) which resemble
ium globules. (Fertile places mostly naked. The stems of all are jointed with toothed
eaths at every joint, & usually longitudinally striated & hollow. (Arvense)
ertile stem simple naked, sheaths broad, shaft black distinct.

Use. It is a most troublesome weed in pastures, & is seldom touched by cows unless
ressed by hunger, when it occasions an incurable diarrhoea: it is eaten with impu
ity by horses, but it is noxious to sheep. This rough grass is employed for cleaning
polishing tin vessels. According to Gleditsch, this species, as well as the Fen
ale, or River horsetail, are of considerable service in tanning or dressing leather
m. Linn.

Class 13th Polyand. Ord. Pentagyn.

Hypericum. H. Perforatum. Ang. Common St. John's Wort.

er. Desc. Calyx five parted, divisions ovoate: corol 5 petalled: filaments 5
n united at the base in 3 or 4 sets: styles 2 to 5: capsules roundish with a number of
ells equal to the number of styles (Perforatum) stem 2 edged. leaves oblong having
~~yellow~~ pellucid dots. Perennial fl. yellow.

Use. It is eaten by goats, though refused by horses & hogs. The leaves are said
o destroy worms, & the semi-pellucid dots found on them yield on distillation an
essential oil. In Sweden the flowers are used to impart a purple tinge to spirit
& the whole plant when dried & boiled in alum water, communicates yellow or
brown red shades to yarn. The seed, bearing tops, contain a fine red colour, that
appears on friction between the fingers; & more than any other vegetable, re-
sembles gum lac. Dom. Enc.

The Hypericum Perforatum or Common St John's Wort, according to Barton, infused
in spirits, is a valuable remedy in diarrhoea & in obstructed perspiration. Mr. Bar-
ton was affected in this way & after many various remedies to no effect, he very
In this state of any indisposition I met with a neighboring gentleman, who

70 The use of Bitters made by infusing the dried flowers & the top leaves of the plant called St. John's Wort in Brandy & exposing to the heat of the sun five or six days to digest. I immediately procured some of these bitters from another friend & took a small wine glass full. This very soon produced a grateful warmth in the stomach & bowels. Towards the close of the day I repeated the dose, but in somewhat smaller quantity. For three succeeding mornings I continued it.

The gentleman who favored me with the medicine, & another with whom I also conversed concerning it, had, I found, invariably used it with success in their own cases of a like nature. The former told me, he had recently taken three glasses in the course of a night, when afflicted with a violent diarrhoea, & that he was cured by that quantity. In my own case, the fact is, that I have had but one slight attack of the diarrhoeal symptoms since I took the medicine; & that was in the evening of the first day on which I used it. Since then I have been recovering my appetite, strength & spirits, & my natural state of body seems now restored. I firmly believe this medicine has produced this effect.

The St. John's Wort grows abundantly in our neighborhood, & probably in most parts of this country. (Lancaster Pennsylvania.) It seems to be pretty generally known to people here of German extraction, by whom it is considered as a specific in cases of diarrhoea, both for adults & children. The season in which it is gathered & dried is from the end of June to the end of August, when the flowers disappear. It is in bloom on St. John's (Baptist) day when our people say it ought to be taken in.

Dr. Muhlenberg first recommended this plant in diarrhoeas & dysenteries. It is I suppose the balsam or essential oil which is to be found in the perforations of the leaves or petals, which impart a fine colour to the spirit in which the flowers are infused.

When it is given to children for what is called "the summer disorder" or "vomiting & purging" Dr. Muhlenberg recommends this tincture prepared with brandy, with the addition of a small quantity of cinnamon. This

may be mixed with a little sugar & water when the medicine is administered. It says also that it ought not to be given in dysentery, until some evacuating medicine has been previously used: but this precaution is not necessary in cases of mere diarrhoea. W. B." Phil. Med. & Phys. Jour. Sec. my Mat. Md. vol. 1. p. 87.

Class 14th Order 1.

Hyssopus. H. Officinalis. Eng. Hyssop.

Gen. Desc. Corol. with the under lip 3-parted. its intermediate division subrotund. Stamens straight distant. (Officinalis) leaves lanceolate obtuse entire. herbaceous perennial. fragrant.

Use. It grows to the height of 18 inches: is a very hardy plant, & may be propagated either by slips or cuttings, or by seed. The leaves have an aromatic smell, & a warm pungent taste. They are particularly recommended in humoral asthmas, coughs, & other disorders of the breast & lungs, being supposed powerfully to promote expectoration. According to Ray these leaves are of great service when applied in cataplasms to bruises, the pain of which they speedily mitigate, & at the same time disperse every mark or spot, from the part affected. Dom Lu

Class 10th Order 1.

Kalmia. K. Angustifolia. Eng. Narrow leaf Laurel. Nat. Ord. Ericaceae

Gen. Desc. Calyx 5 parted. Corol shut. salver form. with 10 horns beneath & 10 cavities within. Capsule 5 celled (Angustifolia.) Corymb lateral. plant small. ~~perennial~~ woody. flower red.

Use. Grows on sandy heaths & dry poor soils.... Bees collect a deleterious honey from this plant which produces very disagreeable symptoms in those who eat of it. The ingenious experimental inaugural dissertation was published in Philadelphia in 1802 by Dr. Thomas, upon this species of Kalmia, from which it appears that the leaves of this & the broad leaved Laurel abound with resin but that the narrow leaved is the most active of the two. From the same dissertation we find that a decoction of the K. Latifolia, Broad leaved Laurel, prepared by putting one ounce of the leaves in eight ounces of water, & boiling it down to four ounces, cured a diarrhoea of eight weeks continuance. The dose at first was thirty drops, six times a day

but producing vertigo. it was diminished to four times a day. The itch was speedily cured by washing the parts with the decoction.

The Scald head. Tinea Capitis. was also cured by anointing the head with an ointment, made of the leaves & hog's fat. Dr. Barton bears testimony of the efficacy of this ointment in the Tinea. Dom. Enc. See my Mat. Md. vol. 1. p. 91

Class 5. Order 1.

Solanum. S. Lycopersicum. Eng. Love Apple.

Gen. Desc. Calyx permanent: corol bell, or wheel form, 5 lobed, plaited: anthers thickened with two pores at the top: berry containing many seeds.

Use. A native of the West Indies whence it has been introduced into our gardens.

The love apple is greatly esteemed at table: it is either used in soups or broths, to which it imparts an agreeable taste; or it is boiled & served up as a garnish to dishes of animal food.

The cultivation of this excellent vegetable is rapidly extending in Pennsylvania, where a few years ago it was scarcely known. The apples stewed make an excellent sauce for fish: & a fine catsup, which is used by the Dutch in a variety of dishes. Ibid.

Class 17th Order 10

Lupinus. L. Albus. Eng. White Lupine.

Gen. Desc. Corol papilio: anthers 5 oblong, & 5 roundish: legume coriaceous, tomentose. Use. The seeds of the white Lupine have a leguminous, tho' disagreeably bitter taste, & are said to be vermifuge, both when taken internally & applied externally. Some authors, however, suppose them to be of a poisonous nature; yet such seeds were much used by the Greeks as an article of food, & have been recommended by Galen as affording wholesome aliment. Bechstein says that its flowers furnish the bees with abundance of honey. Ibid. (The seeds are used by many for coffee, & it is said that they are a good substitute. S. W. W.)

Class 2. Order 2

Circaea. C. Lutetiana. Eng. Enchanter's Nightshade.

Gen. Disc. Calyx 2 leaved: corol 2 petaled. capsule hispid, 2-celled, not gaping: cells 1. seeded (Lutetiana) leaves ovate, a little toothed. perem. fl. white.

Obs. Darwin says two males, one female. It was much celebrated in the mysteries of witchcraft, & for the purpose of raising the devil, as its name imports. It grows amid the mouldering bones & decayed coffins in the ominous vaults of the ancient church in Lincolnshire (Eng.) The superstitious ceremonies or histories belonging to some vegetables have been truly ridiculous. Thus the Druids are said to have cropped the Mistletoe with a golden axe or sickle, & the Briony or mandrake was said to utter a scream when its root was ~~taken~~ drawn from the ground, that the animal which drew it up became diseased & soon died; on which account when it was wanted for the purpose of medicine, it was usual to loosen or remove the earth about the root, & then to tie it by means of a cord, to a dog's tail, who was whipped to pull it up, & was then supposed to suffer for the impiety of the action. And even at this day bits of dried roots of Peony are rubbed smooth & strung, & sold under the name of anodyne necklaces, & tied round the necks of children to facilitate the growth of their teeth: add to this that in Price's History of Cornwall, a book published about ten years ago, the Virga Divinatoria, or Divining rod has a degree of credit attached to it. This rod is of hazle or other light wood, & held horizontally in the hand. & is said to bow toward the ore whenever the Conjuror walks over a mine. A very few years ago in France, & even in England, another kind of divining rod has been used to discover springs of water in a similar manner, & gained some credit. And in this very year, there were many in France & some in England who underwent an enchantment without any divining rod at all, & believed themselves to be affected by an invisible agent which the Enchanter called Animal Magnetism. (Bot. Garden

Class 5. Order 2.

Apocynum. A. Androsemifolium. Amy. Dog-bane.

Gen. Desc. Corol bell-form: stamens alternating with five filamentous horned nectaries: stigma broad, almost sessile. Follicles long linear. Androsemifolium, corol spreading. Green, red flower.

This is a fly catcher. In the Apocynum Androsemifolium, one kind of Dog bane, the anthers converge over the nectaries, which consist of five glandular oval corpuscles surrounding the germ; & at the same time admit air to the nectaries at the interstices between each anther. But when a fly inserts its proboscis between those anthers to plunder the honey. They converge close & with such violence as to detain the fly, which thus generally perishes. This account was related to me by R. W. Darwin Esqr. of Elston of Nottinghamshire, who shewed me the plant in flower, July 2nd 1788, with a fly thus held fast by the end of its proboscis, & was well seen by a magnifying lens, & which, in vain repeatedly struggled to disengage itself, till the converging anthers were separated by means of a pin: on some days he had observed that almost every flower of this elegant plant had a fly in it thus entangled: & a few weeks afterwards, favoured me with his further observations this subject.

"My Apocynum is not yet out of flower. I have often visited it, & have frequently found four or five flies, some alive & some dead, in its flowers; they are generally caught by its trunk or proboscis, sometimes by the trunk & a leg: there is one at present only caught by a leg. I dont know that this plant sleeps, as the flowers remain open in the night; yet the flies frequently make their escape. In a plant of Mr. Bradyne's, an ingenious gardener at Newark, who is possessed of a great collection of plants, I saw many flowers of an Apocynum with three dead flies in each: they are a thin bodied fly, & rather less than the common house fly; but I have two or three other sorts of flies arrested by the plain

Bot. Gard.

Class 8th Order 1.

Tropaeolum. T. Majus. Eng. Nasturtion. Greater Indian Cress

Gen. Desc. Calyx 4 or 5 cleft, coloured, spurred: petals 4 or 5, unequal; nuts leathery beate. (Nagus) leaves peltate. perenn. fl. yellow. Exotic.

Miss E. C. Lynnes first observed the Tropaeolum Majus to emit sparks of light or flashes in the morning before sunrise in the months of ~~May &~~ June or July. & also during the twilight in the evening. but not after total darkness came on; these sin-gular scintillations were shewn to her father & other philosophers; & Mr. Wilcke celebrated electrician, believed them to be electric. Nor is this more wonderful than the electric eel & torpedo should give shocks of electricity; & in this plant as in those animals, perhaps, it may be a mode of defence, by which it harasses & destroys the night flying insects which infest it; & probably it may emit the same sparks during the day, which must be then invisible. This curious subject deserves fur-ther investigation. The ceasing to shine of this plant after twilight might induce one to conceive that it absorbed & emitted light like the Bolognian phosphorus, or calcined oyster shells. The light of the evening, at the same distance from noon, is much greater as I have repeatedly observed, than the light of the morning. This is owing I suppose, to the phosphorescent quality of almost all bodies in a greater or less degree which thus absorb light during the sun shine, & continue to emit it again for some time afterwards, tho. not in such quantity as to produce apparent scintillations. The nectary of this plant grows from what is supposed to be the calyx; but as this supposed calyx is coloured; & perhaps from this circumstance of its bearing the nectary, should rather be esteemed a part of the corol. - Ibid. See My Nat. No. 1. page 121

Class 19. Syngenesia. Ord. 2. Frustanea

Calendula. C. Officinalis. ~~Eng.~~ Eng. Marygold.

Gen. Desc. Recept. Nudum. Papp. 0. Calyx Polyphill. aequalis. Sem. disci membranac.

In Sweden a very curious phenomenon has been observed on certain flowers, by M. Hagjom, Lecturer on Natural History. One evening he perceived a faint flash of light repeatedly flash from a Marygold: surprised at such an uncommon appearance he resolved to examine it with attention. & to be assured that it was no deception of his eye, he placed a man near him, with orders to make a signal the moment the

I observed the light. They both saw it constantly at the same moment. The light was most brilliant on marygolds of an orange or flame colour; but scarcely visible on pale ones. The flash was frequently seen on the same flower two or three times in quick succession, but more commonly at intervals of several minutes. & when several flowers in the same place emitted the light together it could be observed at considerable distance. This phenomenon was observed in the months of July & August, at sun set. & for half an hour after, when the atmosphere was clear; but after a rainy day, or when the air was loaden with vapours, nothing of it was seen. The following flowers emitted flashes more or less vivid in this order.

1. The Marygold (Calendula Officinalis)
2. Garden Nasturtion (Tropaeolum Majus)
3. Orange lilly (Lilium bulbiferum)
4. African Marygold (Tagetes patulae & erecta)

Sometimes it was also observed on the Sun flower (Helianthus annuus). But bright yellow or flame colour, seemed in general necessary for the production of this light; for it was never seen on the flowers of any other colour.

From the rapidity of the flash & other circumstances, it might be conjectured, that there is something of electricity in this phenomenon. It is well known that when the pistil of a flower is impregnated, the pollen bursts away by its elasticity, with which electricity may be combined. But M. Hagen, after having observed the flash from the orange lilly, the anthers of which are a considerable space distant from the petals, found that the light proceeded from the petals only; hence he concludes that this electric light is caused by the pollen, which in flying off is scattered upon the petals. Ibid.

Malva. M. Sylvestris. Ang. Common Mallows. Class 16. Order 13.

Gen. Desc. Calyx double, outer one 3. leaved, inner one 5 cleft: capsules many: 1 seeded (sylvest) Stem erect. leaves with seven sharpish lobes. perm. Sl. Blue-

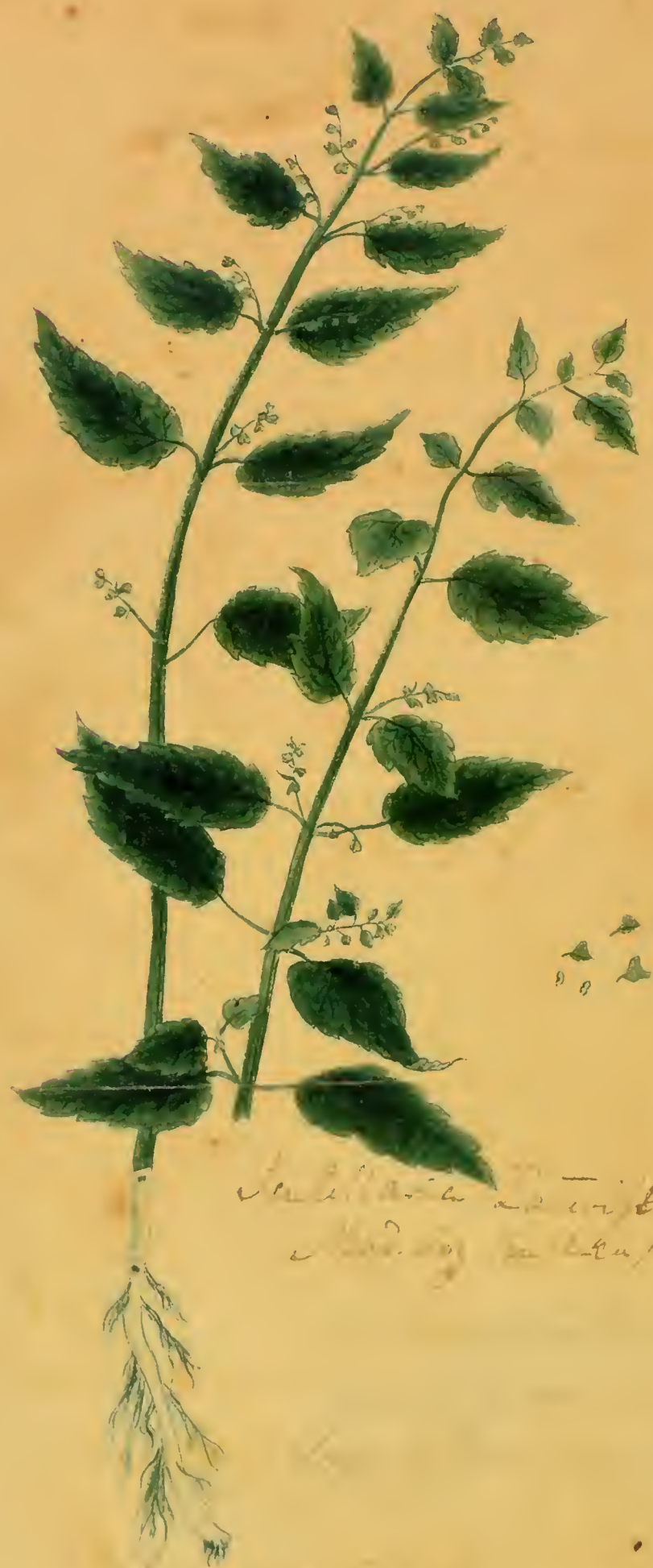
Use. The leaves of the common Mallow possess a mucilaginous, sweetish taste, & were formerly often used in food, with a view to prevent costiveness. At present decoctions of this plant are sometimes prescribed in dysenteries, & urinary complaints. Tho. it is usually employed in emollient cataplasms, clysters & fomentations. The flowers are eagerly visited by bees, which obtain from them an abundant supply of honey. — All the species of mallow both indigenous & exotic are beautiful plants, well calculated for ornamenting gardens, & affording grateful food for cattle; as they may easily propagated by seed. Dom. Inc.

Class 3. Order 2.

Poa. P. Pratensis. - Ang. Meadow Grass-

Gen. Desc. Calyx 2. valved, many flowered: corol ovate; valves 2. coloured, acutish, scarious at their margins; spikelets of the panicle ovate, awnless. (Pratensis) panicle diffused spikelets 4 flowered- perm-

Use. It grows on dry banks, & even on walls: it flowers in the months of May & Jun This plant thrives better in dry than in moist situations; whence it retains its ver dure during hot & dry seasons longer than any other vegetable. Its root spreads along the ground almost as rapidly as the couch grass, & is nearly as difficult to eradicate: it ought therefore to be introduced with great caution, where the pasturage is not intended to be permanent. Though eagerly eaten by cattle, & esteemed to be one of the best grasses for hay, its value decreases as its quantity every year diminishes in dry soils; & it at length produces very indifferent crops. This diminution is occasioned by its roots matting together, & exhausting the land: which effects however, may be prevented by manuring the soil, & are not perceptible on moist ground, where the plant will flourish, tho. not so luxuriantly as in dry situations- Ibid-



Class 14th Didynamia. Order 1st Gymnospermia.

Scutellaria. S. Lateriflora – Eng. Skull-cap. Hooded Willow Herb. Mad-Dog-Weed.

Gen. Desc. Calyx with an entire mouth which is closed with a lid after the corol falls. cont. tube of corol bent. (Lateriflora) branching. leaves smooth with a rough keel, racemes lateral & leafy. perm. flower blue.

A native perennial plant growing on the banks of rivers & the borders of woods. flowering in the months of July & August. Its square stem is branched & attains the height of two feet. The leaves are heart shaped, narrow-rounded on short footstalks & scallopped. The flowers are blue in pairs on pedicles from the alae of the leaves & handsome. The herb is bitter & has a garlic smell; it is eaten by cows & sheep & goats; but is refused by horses & hogs. (Thacher)

Use. This plant has recently & deservedly come into much repute for the cure of the bite of a mad-dog, or Hydrophobia. The virtues of it were first discovered by Jesse Lewis of West-Chester in the state of New York, & by him after successful trial in upwards of three hundred cases both in men & animals who were bitten by rabid animals, communicated to the world. The method in which the Lewis's used the plant was to make a strong decoction or tea of it & let the patient drink of it constantly for forty days, omitting every third day for the purpose of taking some cathartic laxative. They used for this purpose flowers of sulphur. Care should be taken to wash the wound frequently in the day with a strong decoction of the plant. Nothing is said with regard to excision, or cutting out the bitten part, yet this is a practice which ought never to be dispensed with, it should be done as early as possible, & afterwards use the plant as above directed. Perhaps we cannot be justified in asserting that any thing will cure the complaint after the symptoms have commenced, yet we have full & decisive evidence from physicians & others in all parts of the country in favour of its preventive effects in warding off this most terrible of all human maladies; & the Editor of the Evening Post, Wm Coleman Esq. has mentioned instances of its performing a cure even after the symptoms had commenced. Its virtues are now completely established, & we may as well deny the efficacy of vaccination towards preventing the Small-pox, as this

Dr. Mott a celebrated Professor of Surgery in the University of New York, in a letter to me, upon the subject of Hydrophobia, says, "After excision I most certainly would take freely of the Scutellaria, tho' we have no proof of its having the disease when it actually had invaded, yet the evidence is strongly presumptive of its having prevented it. If it were my own person, after excision I most certainly would take it." — For further information on this subject see Thacher's Dispensatory (S.W. Williams) not to be published)

Cartheuser a German writer informs us, that the whole of this astringent vegetable may be employed for dying black, with the addition of green vitriol. (Thacher)

Class 6. Order 3. Nat. Ord. Asparagi.

Medeola. M. Virginica. Eng. Indian Cucumber. Cucumber root.

Gen. Desc. Calyx 0. corol deeply six parted, revolute: berry 3-seeded (virginica) leaves in distant whorls. perm. Fl. white.

Obs. A genus of plants containing two species one of which Virginica is a native of the United States. It is called Indian Cucumber. The root is eaten by the Indians & the Editors of the Medical Repository call it the Delicate Cucumber Root. Dom. Inc. It is highly diuretic, & is used in dropsies.

Class 17. Order 10.

Melilotus. M. Officinalis. Eng. Melilot. Trefoil. Melilot clover.

Gen. Desc. Flowers racemed: calyx tubular, 5-toothed: keel simple, shorter than the wings & banner: legume ovoate, longer than the calyx (officinalis) stem erect stipules lanceolate. Fl. white.

Obs. An exotic plant growing on a stiff soil; on ditch banks; in thickets, hedges, corn fields & meadows, flowering in the months of June & July. This plant is eaten by sheep, goats, cows, hogs, & particularly by horses, which devour it with great avidity. Its fragrance increases when dry, & if its flowers be distilled they yield a water, which, tho' possessing little odour in itself, imparts a very grateful flavour to other substances. — Bechstein remarks that the common

Melilot is frequently covered with mildew which renders it extremely pernicious to cattle. Thus in Thuringia, a distemper prevailed lately among sheep great numbers of which died of a putrid fever. because this & other species of clover were thrown the whole summer affected with the mildew; nay even the hays were then uniformly in a state of putrefaction. Ibid.

The Melilot is a principal ingredient in Ruthredge's bone ointment (S. W. M.)

Class 3. Order 2.

Milium. M. Effusum. Arg. Millet. Millet-grass.

Gen. Disc. Calyx 2 valved, flowered, ventricose: corol 2 valved, very short: stigmas pencil form (Effusum) panicle awnless. exotic.

Use. Millet grass is a native of Britain grows from 5 to 6 feet in height in moist shady woods, & flowers in the months of May & June. This plant is very beautiful. & tho' it has no useful property to recommend it to the industrious farmer, yet it deserves to be cultivated in shady gardens on account of its fragrant flower. Its seeds are eaten with great avidity by linnets.

Besides its utility for feeding poultry, millet is highly esteemed for making puddings. & by many preferred to rice. As an article of food, however, it is by no means equal either to blanched oats or barley. & ought not to be eaten by persons whose organs of digestion are weak, or impaired. Dom. Lac.

Class 14. Order 1.

Leonorus. L. Cardiaca. Arg. Mother Wort.

Gen. Disc. Calyx 5 angled, 5 toothed. corol with the upper lip villous, flat, entire, lower lip 3-parted, middle division undivided. (Cardiaca) upper leaves 3-lobed, entire. stem. flower white.

Use. It grows in hedges, rubbish, on dung hills, & calcareous soils; flowering from June till August. The leaves of Motherwort possess a strong, disagreable, & a bitter taste. Dambourney dyed woolen cloth of an excellent dark olive colour, from a decoction of this plant. (Dom. Lac.) It is said to cure convulsions, from obstructions of the viscera, & to kill worms: some account it excellent in diseases of the spleen. &c. Brooks.

Class 18. Order 2.

Artemesia. A. Absynthium. Common Wormwood.

Gen. Desc. Calyx imbricate, with scales rounded, converging: egret 0: receptacle somewhat villous or naked-ish (Flowers mostly rounded) Leaves Pinnatifid. (Absinthium) divisions of radical leaves obtus. of stem leaves acutish. perenn. Exotic.

Use. It grows on road-sides, rocky places, & on rubbish; it flowers in August. The herb is extremely bitter; & if it be infused in wort in the room of hops, it renders the ale very pernicious to health, on account of its intoxicating effects. On distilling the leaves & flowers they yield a considerable quantity of essential oil, which is used both externally & internally for destroying worms. If the leaves be put into sour beer they speedily correct its acidity; & being excellent antiseptics they are often employed in fermentations to resist putrefaction. According to Withering, an infusion of the leaves is a good stomachic; & with the addition of fixed alkaline salts, proves a powerful diuretic in some dropsical cases. This ashes produce a purer alkali than most other vegetables. The infusion of the same herb given to a suckling woman, renders her milk bitter, & if the plant be eaten by sheep, it also imparts a bitterness to mutton. Altho. turkeys are fond of it (on the authority of Mr. Wolfear) yet it is not relished by horses & goats, & it is refused by cows & swine. If the plant be macerated in boiling water, & repeatedly applied to a bruise, by way of cataplasm, it will not only speedily remove the pain but also prevent the swelling & discoloration of the part. In dyeing, a decoction of the common wormwood produces, with the addition of alum &c. various shades of yellow; & if such liquor be applied to bedsteads, chests of drawers & similar articles it prevents the generation of vermin. The smoke arising from the lighted bundles of this herb, expels bees from their hives, when honey is to be collected without destroying these useful insects. B. Enc.

See my M. M. vol. 1. page 51.

Class Cryptogamia. Clandestine Marriage.

Osmunda. O. Regalis. Ang. Royal Osmund. Flowering Fern, or Royal Moonwort.

"The fair Osmunda seeks the silent dell,
The ivy canopy, & dripping cell;
Where hid in shades clandestine rites approves,
Till the green progeny betrays her loves." (Darwin,)

This plant grows on moist rocks; the parts of its flower or its seed are scarcely discernable; whence Linnaeus has given the name of clandestine marriage to this class. The younger plants are of a beautiful varied green... It grows in moist places & boggy marshes; bearing flowers in the months of July & August.... It is remarkable that impressions of the leaves of this vegetable are frequently met with in the nodules or small masses of iron stone found in the mines of Colebrook Dale. The root of the Osmund Royal, boiled in water, affords a thick mucilage, which, in the North of Europe, is employed as a substitute for starch, to stiffen linen. On account of its viscid, not astringent nature it was formerly used in the gout, as well as in the rickets. It appears, however, to be better calculated for external applications, in contusions & bruises, of which it is said to be a powerful discutient;... as it moistens & softens the skin, it makes a tolerable cosmetic; & is reputed for its property of dispersing freckles, & other pimples from the face. Dom. Lec.

Class 18th Order 2.

Chrysanthemum - C. Leucanthemum. Ang. Ox. eyed Daisy. White Weed, Moon flower.

Gen. Des. Calyx hemispherical, imbricate, with the scales membranous at the margin: receptacle naked: egret none, or a narrow margin. (Leucanthemum) leaves clasping, obtuse cut pinnatifid radical ones obovate, flowers fl. white - Dry meadows, pastures, & walls flowers in July & August.

Use. The young leaves of this vegetable may be eaten in salads. Horses, goats, sheep eat this plant; but it is refused by cows & swine. ... Bradley recommends the cultivation of this elegant flower by dividing the roots, & planting them on the edges of borders of gardens three inches deep; as it grows quickly in any soil, but must

or watered as soon as planted — Dioscorides informs us that the leaves of the fi white or daisy, when bruised afford a good application to cold scirrous tumour & that a decoction of them, if taken by persons subject to the jaundice, im mediately after coming from the tepid bath, will tend to restore their natural colour; (we have had no experience of its medicinal effects. Ibid.)

See my M. M. vol. 1. page 64 —

Class 20th Order 16th

1 Pinus. P. Abies Americana. Eng. Common hemlock tree.

Gen. Desc. Staminate flowers. calyx four leaved: stamens many: anthers naki Pistillate flowers — Calyxes in strobils or cones, scales 2. flowered: pistil 1: nut with a membranaceous wing (perhaps more properly a samara) woody — (Canadense) leaves flat denticulate, 2 ranked.

Use. It grows to a great height & size, especially in swampy ground, & is very straight. Its grain is coarse, & is not easily split, but is sawed into planks, joists & laths. It holds a nail well, but if put in a house unseasoned, & exposed to alternate moisture & dryness, it rots in the course of two years. This fact was mentioned when treating of houses but it was also stated that young, well seasoned hemlock was as durable as most other timber. The bark is used for tanning; it communicates a reddish appearance to the leather. The Indians dye their splints for baskets of a red colour with it. The balsam of the hemlock is used in medicine but is sparingly collected. Ibid. — The leaves & branches boiled in water make an excellent fomentation for acute pains & bruises. (S. W. W.)

2. Pinus. P. Abies Balsamea — Eng. Balm of Gilead fir tree —

Gen. Desc. As above — Leaves flat, emarginate.

Use. This balsam exudes spontaneously from the trunk of the tree. It is of a light yellow colour, tenacious & inflammable. By keeping, it becomes thicker; its smell is agreeable; its taste pungent. It is soluble in alkohol, & oils & affords an essential oil by distillation.

The medicinal virtues of this balsam seems to be the same as those of copaiba, & it is used for the same purposes. Its dose is from thirty to fifty drops. Thacher.

Class 6. order 3.

Alisma. A. Plantago. Aug. Water Plantain - or Thrum - Wort.

Gen. Desc. Calyx 3-leaved: petals 3: capsules numerous, 1 seeded (plantago) leaves heart-ovate. perm. fl. white - Watery places. & on the banks of pools & rivers. flowers July. Aug.

Use. This acrid & poisonous vegetable is extremely deleterious to sheep & cattle; hence it ought to be carefully eradicated in the spring or summer, before it can be farther propagated by its seed. Dom. Inc. See page 164.

Class 8. Order 3.

Polygonum. P. Persicaria - Aug. Spotted Polygonum or Heartcase

Gen. Desc. Calyx inferior, 5 parted, coloured: corol 0: seed 1. angular, covered with the calyx (stamen & pistils vary in number. the calyx in some species might be taken for a corol) (persicaria) stamens 6, styles 2. peduncles smooth. stipules ciliate - annual. flower white - purple -

Use. A native & common plant of the United States. Dr Danar of Jamaica asserts upon the authority of Mr. Felsted of Jamaica, that an infusion of the dried plant, or a decoction of the fresh plant, is a powerful promoter of urine, & very useful in the gravel. Ibid - See page 129

Class 13. Order 1.

Papaver. P. Somniferum. Aug. White or Wild Poppy -

Gen. Desc. Calyx 2. leaved, caducous. corol 4. petalled. capsule 1 celled, dehiscent by pores under the permanent stigma (somniferum) leaves clasping, annual. fl. w. exotic.

Use. It grows in gardens; flowers in the months of July & August. The juice which after making incisions, exudes from the heads of this species, is suffered to inspissate by the heat of the sun, & thus afford the drug called Opium. The extract is prepared from their seed-vessels; which being less powerful than the foreign opium, is given in double quantity to produce similar effects. The seeds are very nourishing; are divested of the narcotic property of the flower, & yield on expression mild sweet oil, little inferior to that of almonds; hence they are often employed

as an article of diet -- Linnaeus counted in one poppy-head 32.000 seeds, & as there are white & blue grains, we understand from an experienced gardener, that the former, when found in heads, the capsule of which is of a bluish cast, are most successful for propagating the species, & likewise afford a larger proportion of ~~the~~ meat oil than the blue seed. Ibid

Class 6. Order 1.

Prinos. P. Verticillatus. Fry. Black alder. Winter berry -

Gen Dec: Calyx inferior. 6 cleft: corol wheel form. 6 cleft, berry 6. seeded: verticillatus leaves obovate lanceolate, acuminate (Berries red, permanent) woody, white flower.

Use. It grows in moist places, generally sending up several slender stalks, to the height of ten feet... The inner bark of this tree applied as a poultice, is much used for promoting suppuration in tumours; & a decoction of it for preventing mortification in wound fractures & ulcers. Joined with the bark of the Liriodendron (poplar) or Sassafras root, formed a fashionable & successful remedy in the country for the intermittent fever. The virtues of this medicine certainly deserve attention from physicians. Dom. Enc.

Dr. Amos Gregg of Bristol Penn. has used the Prinos Verticillatus in intermittent & other fevers with great success. He generally gives three drams of the powdered bark in six ounces of water, which prevents a return of the fever. He observes:- "When it is exhibited in powder, I am disposed to believe that it is nearly equal to the celebrated bark of Peru. When the stomach would retain the powder, I did not fail in a single instance; & in one case only was it rejected. as Like the Peruvian bark it succeeded best when it was given immediately after the sweating stage. In general I gave it alone but to prevent diarrhoea, an effect it occasionally produced (though less commonly than the Peruvian bark), & to prevent pain, I sometimes added a few drops of laudanum. - In one instance only I applied it to the skin One of my patients, a child while using the decoction of Prinos, discharged Worms. It is no uncommon thing to see worms discharged during fevers, & future experiments must decide whether, in this respect the Prinos is supe-

or to the other bitter tonics. The bark of this vegetable makes an agreeable
tincture with proof spirits."

The bark is manifestly astringent. It is likewise considered by bitter & pungent.
The berries, which are of a fine red colour, greatly partake of the bitter quality; & of infusion
in wine or brandy might be advantageously employed in cases where bitter tinctures are exhibited. In intermittent fevers it is both given internally, & employed
externally as a wash. On many occasions, it appears to be more useful than Peruvian bark. It useful in mortification, united with the root of sassafras
decoction. &c. Care must be taken to distinguish our prinos from the swamp
alder or candle alder. Thacher. See my Mat. Med. vol. 1. page 107.

Class 6. Order 2.

Juncus. J. Effusus. Eng. Common or soft Rush. Bath Rush.
Gen. Desc. Glume 2. valved: calyx 6 leaved. permanent: stigmas 1 or 3 cleft, 3 valved,
many seeded. (Effusus) culm round, smooth, panicle lateral. Perm. Wet meadows
& pastures. Flowers from June to August.
Use. It is eaten by horses & goats. it is also used for rush lights, & sometimes
manufactured into slight baskets. The common rush is cut about midsummer
in the vicinity of Fareham, & dried in the same manner as hay; after which it
is formed into a kind of mow, & sheltered till the succeeding spring, when on account of its toughness it is usually employed for band or tie, in fastening
hops to the poles... In a fresh state it is farther converted into brooms or
besoms for blacksmiths, & other artisans working in metals. Dr. Eric

Class 2. Order 1.

Salvia. S. Officinalis. Eng. Sage.
Gen. Desc. Calyx tubular 2, lipped, under lip 2, toothed: corol ringent: filaments
transversely affixed to a pedicle. (officinalis) leaves ovate. Perm. Flow. Dec. perpe-
tual.
Use. There are several varieties of this species, namely the common green sage, the
wormwood sage, the green & red sage, both with variegated leaves; & a peculiar kind
with red or blackish leaves. the last of which is most commonly cultivated together
with the wormwood sage. This flowers furnish bees with honey & wax. The whole
plant is exceedingly grateful to sheep, & imparts a delicate flavour to the flesh

flesh of these animals — In a medicinal view, sage moderately warms & strengthens the alimentary canal; hence in cold phlegmatic habits it excites appetite & may be of service to persons labouring under nervous debility. The best way of taking it, is by an infusion of the dry leaves used as a common tea; or a tincture or extract, made of rectified spirit & given in proper doses. These preparations contain the whole virtues of the sage, while the distilled water & essential oil possesses only the warmth & aromatic quality, without any of its bitterness or astringency. Watery infusions of the leaves, with the addition of lemon juice, form an useful drink in febrile disorders & are very grateful to the palate. Ibid.

Class 14. Order 1.

Satureja. S. Hortensis. Eng. Summer Savory.

Gen. Disc. Calyx tubular, striate: corol with divisions nearly equal: stamens distant: (Hortensis) peduncules axillary. 1 or 3 flowered. leaves lanceolate: annual. Fl. Obs. exotic.

Use. This plant is propagated from the seed which ought to be sown in the open bed of light earth. If the plants are intended to remain in the same situation, the seed should be sparingly scattered: but if they are designed to be transplanted it may be sown more closely.

Both the summer & winter savory have long been cultivated in the British gardens for culinary & medicinal purposes. Their warm, aromatic & pungent leaves are much esteemed in salads: formerly they were employed medicinally with a view to attenuate viscid humours, to dispel flatulency & to increase the appetite. According to Professor Bradley, this herb when dry & put into a bed, possesses the remarkable property of expelling fleas. Ibid.

Class 8. Order 3.

Acer. A. Striatum. A Canadense. Eng. Striped or Canada Maple.

Gen. Desc. Polygamous. Calyx 5 cleft. corol 4 or five petalled. samaras 2 united at the base 1 seeded. woody.

Use. It is of a middling growth. The bark is beautifully variegated or striped. The leaves are divided into three very sharp pointed lobes, & finely ~~pointed~~ sawed on their edges. The flowers are produced on solitary bunches with short foot stalks & are of a greenish yellow cast. Vid.

Class 20. Order 13.

Arum. A. Triphillum. Eng. Indian Turnip.

Gen. Desc. Spatha cucullate: spadix not entirely covered with the fructification; being more or less naked above, with hermaphrodite flowers beneath & staminate in the middle: (~~[illegible]~~ sometimes a few are staminate beneath:) berry mostly 1 seeded; generally circular. glandular beneath (Triphillum) leaves ternate, with ovate entire leaflets, naked part of spadix very long clavate. perenn. flow. purple, yellow, greenish.

Use. A fine sago is prepared from the root of this plant. The following letter from Edwin L. M'Call, student of medicine in the University of Pennsylvania, to Benjamin S. Barton, M.D. shews the method of preparing it:- "Like all the Aroa, this species contains a very acrid juice, which may be separated by repeated affusions of cold water. By experiment, I have ascertained that the proportion of fine sago to the aggregate is one to four; two ounces of the root freed from the exterior coat, yielding half an ounce of the fine, white & delicately flavoured powder--- The process for obtaining it is very simple, consisting, 1st, In peeling off the outer coat of the roots. 2ndly By reducing them to a pulp, by bruising, scraping, or grating. 3dly by placing the pulp in a strainer, adapted to a tub, or any convenient vessel, & pouring cold water thereon, which passes through carrying the sago & acrid juice along with it. 4thly separating the mild powder from & leaving the parenchyma on the strainer. 5. pouring off the water, & drying the acrid juice by repeated ablutions. And 5. pouring off the water, & drying the

powder which is now fit for use." ~ The acrimony of the recent ~~plant~~ root of this plant is well known. By drying much of its Acrid Part. It has been very beneficial in asthma, especially in old people; in croup, & hooping cough. The recent root boiled in lard has been found useful in Tinea capitis. The dried root boiled in milk, in the proportion of one root to half a pint, has been advantageously employed in consumption. Some acrimony should be perceptible to the tongue & throat in its exhibition. It never affects the general circulation, says Dr. Mead. but acts wholly on the parts just named; to the glands of which it is a powerful stimulus, causing a copious secretion of mucus. (Thacher

See my M. M. Vol. 1. page 52

Class 18th Order 1.

Perenanthes. P. Alba. Eng. White Perenanthes. White Lettuce. Gall of the Earth.

Gen. Des. Corolls in a simple series (or in one circular row.) calyx calicled: receptacle naked: egret simple. sub-sessile. (alba) flowers numerous, leaves angular & halbert form. toothed. flowers nodding. seven. flowers white.

Use. It is the famous Indian cure for the bite of venomous reptiles, & is called in Savannah the Gall of the Earth. Its alkali appears to be extricable in the tobacco state. Its leaves are lactescent & every part of the plant is intensely bitter. (J. Bostock.)

Class 18. Order 2.

Tanacetum. T. Vulgare. Eng. Common Tansy.

Gen. Des. Calyx imbricate, hemispheric; scales acuminate; rays obsolete 3-cleft: egret somewhat marginal: receptacle naked: (Flowers corymbed) (Vulgare) leaves doubly pinnate seven. fl. yellow: exotic.

Use. This plant possesses a warm bitter taste: it is deobstruent, not unpleasant to the palate; & may be used as a substitute for hops. The tender leaves are sometimes employed to impart a colour & flavour to puddings, according to Withering. its seeds are an excellent vermifuge; & if any animal substance be rubbed with this herb it will effectually preserve

on the attack of the flesh fly. Tansy tea is recommended as a preventive of the gout. From the expressed juice of this vegetable the Finnish women obtain a green dye. The plant is eaten by cows & sheep, but refused by horses, goats & hogs. Bom. Enc.

Class 18. Order 1.

Carduus. C. Lanceolatus. Ang. Spear Thistle.

Gen. Desc. Calyx ovate, imbricate, with prickly scales: receptacle villous: pappus filose.—

Ure. According to Withering this species vegetates on ground newly turned up, where no other weed will thrive; under the shelter it affords, new plants will speedily appear, & the whole become fertile. Its flowers like those of the artichoke, possess the property of curdling milk. It is not relished by horses, cows, or goats; & is totally refused by sheep & swine. ~~We must not~~

Carduus Benedictus, or Centaurea Benedicta. Ang. Blessed Thistle

Gen. Desc. As above — Ure. This is an annual exotic cultivated in gardens. It flowers in the months of June & July, & produces ripe seed in autumn. Its leaves possess a penetrating, bitter taste, & an ungrateful flavour, which by keeping them, for some time is mostly dissipated. A decoction of this nauseous plant is sometimes used to excite vomiting; & likewise a strong infusion to promote the operation of the emetics. Good effects have occasionally been derived from the Blessed Thistle, in loss of appetite, or where the stomach was impaired by irregularities. A strong infusion either in cold or warm water, drank freely, occasions copious perspiration & promotes the secretions... All the species of this neglected vegetable, may be usefully employed for various purposes. Thus the seed-vessels of the thistle afford both a valuable material for manufacturing paper & a kind of strong cloth: the ashes obtained by burning the whole plant are of great service in glass houses, & the young, tender, fleshy stalks may be dressed & eaten as substitutes for Asparagus. Ibid.

Class 13. Order 13.

Clematis. C. Virginiana. C. Vitalba. Eng. Virgin's-bower. Traveller's Joy.

Gen. Desc. Calyx 0: petals 3. 4. 5. or 6: seeds compressed: style permanent becoming long tails (some species are dioecious) (virginiana) dioecious climbing, leaves alternate with climbing petioles. Perm. flow. white. Calcareous soils. Fl. jun. jul.

Use. It is easily propagated by layers or cuttings. The fibrous stalks of this vegetable may be converted into paper. The whole plant is very acrid to the tonch; on which account it is frequently employed as a caustic for cleansing old ulcers. Both leaves & branches may with advantage be used in dyeing & Damboroney obtained from the latter alone a yellow decoction. Buchstein observes that the hard, compact, yellow & odoriferous wood of this shrub furnishes an excellent material for veneering. Ibid. See my Mo. B. p. 6.

Class 18. Order. 3.

Achillea. A. Millefolium. Eng. Common Yarrow. Nat. Ord. Corymbifer.

Gen. Desc. Calyx imbricate, ovate: egret 0: receptacle chaffy: florets of the ray 4 to 10 dilated. (flowers corymbed) (millefolia) leaves doubly pinnatifid, stem grooved. Perm. white.

Use. The flowers of this vegetable yield an essential oil which possesses an aromatic odour, a bitter taste & is similar to that of chamomile. A decoction of its leaves with chamomile flowers is said to form a corroborant diet drink for children who on account of their rapid growth are unable to retain their water during the night: but for this purpose from one to two pints of such preparation ought to be taken in the course of 24 hours. Linnaeus observes, that the Delecarlians have a practice of throwing the flowers & leaves of the common yarrow into beer, while in a state of fermentation with a view to increase its intoxicating effects. Baatsch in Germany, has usually employed the whole herb in the process of tanning. Ibid.

Eupatorium. E. Perfoliatum. Eng. Thorough-wort. Bone-set.

Eupatorium that is below Class 18. Order 1. The following description by Gmelin.

Desc. Calyx imbricated (rarely simple) oblong: style long, cloven half way down: egret silky or rough. Receptacle naked: Flowers 6 or more. Leaves connate-perfoliate, downy, green. Flower white.

This is a native annual plant, flourishing abundantly in wet meadows & other moist places. The stalk is hairy & rises from two to four feet, perforating the leaves at each joint, from which it is sometimes called Thoroughwort. The flowers are white & appear in July or August, forming a stalk or stem. The flowers are white & appear in July or August, forming a corymbus at the termination of the branches. The leaves at each joint are horizontal, serrated & rough, from three to four inches long, & about one inch broad at their base, gradually lessening to a very acute point, of a dark green & covered with short hairs. Thoroughwort certainly possesses active properties, & deserves the attention of American physicians. It acts powerfully as a sudorific & emetic, & sometimes as a purgative, & has been successfully employed in intermittents & other fevers, either in decoction, or the leaves in powder. Every part of the plant may be advantageously employed though the flowers appear most active. A watery infusion of the leaves, is a powerful & not disagreeable bitter, & the flowers are deemed superior in this respect to those of camomile & ought to be kept in the shops. The dried leaves in powder, or made into pills, with limitive electuary, given in doses of 12 or 15 grains are of excellent effect as a mild laxative, obviating costiveness without inducing debility or heat; correcting bile & promoting perspiration. This plant is frequently employed in the country as a domestic in diseases of cattle. There are several species in the United States. In anasarcous affection of the extremities, & in ascites when it may be considered a disease of debility, the alcoholic tincture of eupatorium may be safely recommended as an excellent tonic; & in addition to its tonic effects, the properties of a diuretic render the employment of it still more advantageous in cases of this description. (Thacher

Class 18. Order 1.

Arctium. A. Lappa. Eng. Burdock—

Gen. Des. Calyx globose, with scales hooked at apex: egret chaff-bristly: receptacle chaffy (Lappa) stem-leaves cordate. biennial. flow. purple. Flower. July. August.

Use. This is a common plant about way sides, sufficiently known from its scaly heads, or burs which stick to the clothes. The seed have a bitterish sub-acrid taste: They are recommended as very efficacious diuretics, given either in the form of emulsion, or in powder, to the quantity of a drachm. The roots are esteemed aperient, diuretic, & sudorific; & are said to act without irritation, so as to be safely used in acute disorders. Decoctions of them have of late been employed in rheumatic, gouty & venereal disorders, & are by some preferred to sarsaparilla. Ibid.

Class 19. Order 5.

Asclepias. A. Decumbens. Eng. Pleurisy root. Butterfly-Weed. Swallow-wort.

Gen. Des. Follicles 2. nectaries 5. concave, containing a little horn: petals reflexed.

Use. This species of swallow wort is one of the most beautiful perennial plants, flourishing best in a light sandy soil, by the way-side, under fences, & near old stumps in rye-fields &c. It abounds in the Northern states, but with us it is not so frequently found. There are sometimes fifteen or twenty, or more stalks, the size of a pipe-stem proceeding from one root, rising from one to two feet in height, & spreading to considerable extent, generally in a decumbent position. The stalks are round & woolly, of a reddish brown colour on the sun-side; the leaves stand irregularly, & are spear, or tongue shaped, with a short footstalk, & covered with a fine down on the under surface. The umbels are compact at the extremities of the branches, & formed like the common silk weed, but differing from it in the colour of the flowers, being of a beautiful bright orange colour, while those of the silk-weed are of a pale purplish hue. The flowers appear in July & August, & are distinguished by their size & brilliancy from all the flowers of the field. These are succeeded by long slender pods, containing the seed, which have a delicate kind of silk attached to them. This is probably the only ~~kind~~ variety of asclepias that is destitute of a milky juice. The root is spindle or carrot-shaped, of a light brownish colour on the outer surface, white, coarse, & striated within. The root of this plant is a valuable addition to our Mater

Indica, having been found to possess medicinal virtues of no inconsiderable importance. It has long been celebrated in Virginia & the Carolinas, as a remedy in pleurisy, & of pneumonic affections in general. It is said to display a remarkable power of affecting the skin, inducing general & plentiful perspiration without heating the body. In the form of decoction it often induces a diaphoresis, when other medicines have failed to produce that effect. We have the testimony of Professor Barton in favour of the great efficacy of this medicine in pulmonic affections — After the loss of some blood & the use of an antimonial emetic, Dr Thomas Mason of Virginia, who has used this root in pleurisy sufficient to establish its reputation, he gives his patients about half a drame of the root, finely powdered in a cup of warm water, & repeats the dose every two hours, until the patient is perfectly recovered, which happens frequently in three days. Dr. Mason asserts that by this simple means he has cured hundreds, & never failed in a single instance — The powdered root frequently acts as a mild purgative, but it is particularly valuable for its virtues as an expectorant, diaphoretic, & febrifuge, & in this respect its efficacy is amply confirmed by the testimony of Dr. Benjamin Parker, of Bradford, Massachusetts, from his own observation during an extensive practice in Virginia. From the successful employment of the pleurisy root for twenty-five years, this respectable physician has imbibed such confidence that he extols it as possessing the peculiar, & almost specific quality of acting on the organs of respiration, powerfully promoting suppressed expectoration, & thereby relieving the breathing of pleuritic patients in the most advanced stage of the disease; & in pneumonic fevers, recent colds, catarrhs & diseases of the breast in general, this remedy has in his hands proved equally efficacious — He directs it to be given in the form of strong infusion, a teacup full every two or three hours. By many families in the country this root has been long esteemed as a domestic medicine, resorted to for the relief of pains in the stomach, from flatulence & indigestion, hence the vulgar name of wind root, by which it is ~~named~~ known in some parts of the country, & from its colour it is by some called white root. It is said that by a perseverance for several weeks in the use of about one drachm of the powdered root every day, the tone of the tone of the stomach, & digestive powers has been restored — Third —

Class 10. Order 1

Cassia. C. Marylandica. Eng. American Senna.

Gen. Des. Calyx 5 leaved: corol 5-petalled: anthers 3 lower ones beaked: legume membraceous. (marylandica) pinnate leaflets 8 paired. perennial. yellow.

Use. This plant is abundant in America, & known by the name of senna of the shops. & possesses nearly the same virtues as the eastern species. It is used as a purgative. in different parts of the United States, & from the high price of foreign senna, deserves to be attended to. It is easily cultivated from the seed, & ought to be generally introduced into our gardens. Ibid.

Class 3. Order 1.

Crocus. C. Sativa. Eng. Garden Saffron.

Use. Saffron is a bulbous rooted perennial plant, very generally cultivated in gardens in Russian countries. The smell of saffron is pleasant & aromatic, but narcotic; the taste a fine aromatic bitter, & immediately gives a deep yellow colour to the saliva when chewed. The active matter is equally extracted by alkohol, water, proof spirit & vinegar. Saffron is ~~the~~ remarkably fragrant & is highly esteemed, as it exhilirates the spirits when taken in small doses; but if used in too large portions, it produces immoderate mirth, & all the consequences resulting from the abuse of spirituous liquors. This drug was formerly considered an excellent remedy in hysteric disorders, & in those originating from spasms, or in obstructions of the uterine secretions; but in modern practice it is seldom employed, though it enters into several medicinal preparations. The best saffron is that raised in England: it ought to be of a deep red or orange colour, fresh, & tough, though neither too dry nor too moist, & of a strong but pleasant aromatic odour. The common saffron of our gardens if properly prepared by moistening with brandy & pressing into cakes, will be found a tolerable substitute for the imported drug. Ibid.

Class 13. Order 1

Genus. G. Urbanum. Eng. Avens, or Herb Bennet.

Gen. Des. Calyx 10 cleft 5 alternate divisions smaller: corol 5 petalled:

with a Bent awn: receptacle columnar, villous —

e — This plant grows by fences & borders of fields the blossoms are white or yellowish
July. According to Dr. Willich the root of avens has lately been employed with
ular efficacy in the cure of obstinate agues. A strong tincture of the root given
the quantity of half an ounce, or the decoction ~~of the~~ powder, in doses of one drachm
eral times a day, has seldom failed to cure intermittents where the Peruvian bark
proved ineffectual. The root has also afforded an excellent remedy in several
onic disorders as a general strengthener & astringent, & its antiseptic power is
d to be superior to the best Peruvian bark. Dr. Withering says the roots gath-
d in the spring & put into beer give it a pleasant flavour & prevent its grow-
sour. Infused in wine it is a good stomachic says Dr. Cutler. When it grows
warm dry situations, its taste is mildly austere & aromatic. (Thacher)

It is a good febrifuge & is really an excellent substitute for the jesuits
k in the cure of intermittent fevers, dysentery, chronic diarrhoeas, wind colics, af-
tions of the stomach, asthmatic symptoms, & cases of debility.

Preparation. After the patient has taken a puke of the American ipecac-
nha, & the fever is off, a tea-spoonful of the powder may be administered every
r until the fever is broke. & use my stomach bitters mentioned in this work. Henry
rical Botany, in order to prevent a relapse.

The following is Mrs. Shaws preparation of Indian chocolate, which is strong
recommended as an effectual cure of consumptions:— Take of avens root two
ces: arum root half an ounce: in powders; ginseng & mastwort, each half
ounce: sugar candy one ounce. Mix one table spoonful of these powders
boil them in one quart of rain water, & one pint of New Milk for an hour.
all debilitating complaints, or beginning consumptions, the patient may
k two tea-cups of this chocolate, morning & evening sweetened with loaf sugar
ride out every day for two hours before dinner. Thus I have made known
valuable public secret, with some valuable additions which will be
great utility to the community. (Henry's Medical Botany)

See my Mat. Med. vol. 1 page 82

Class 3. Order 1.

Iris. I. Virginiana. I. Pseudacorus. Eng. Water Flag. Flower de luce. Blue flag.

Gen. Desc. Calyx spathe 2 valved: corol 6 parted, divisions alternately reflected. stigmas petal like.

Use. This plant is perennial, & grows in great abundance by the brinks of rivers, & in other watery places. It blossoms in July; its flowers are blue, variegated with white, yellow & purple; its leaves are sword shaped. The root has an acrid taste, & when fresh are highly cathartic. The expressed juice of the root recently gathered given to the quantity of sixty or eighty drops, every hour or two, & occasionally increased, has been productive of very copious evacuations, after jalap, gamboge & other strong purgatives had proved ineffectual. —— Thacher

Class 5. Order 1.

Lobelia. L. Inflata. Eng. Indian Tobacco. Emetic weed.

Gen. Desc. Corol irregular, often irregularly slitted: anthers cohering & somewhat curved. Stigma simple: capsule 2. or 3 celled. (inflata) capsules inflated. biennial. fl. white, blue.

Use. The lobelia inflata is indigenous & ~~annual~~ rising one or two feet, with branched stems. The leaves are oblong, alternate; slightly serrated & pubescent. The blossoms are solitary, in a kind of spike, of a pale blue colour. It is found common in dry fields among barley & rye stubble, & flowers in July & August; its capsules are inflated & filled with numerous small seed... The leaves chewed are at first insipid, says Dr. Cutler but soon become pungent, occasioning a copious discharge of saliva. If they are held in the mouth for some time, they produce giddiness & pain in the head, with a trembling agitation of the whole body; at length they bring extreme nausea & vomiting. The taste resembles that of tartar emetic.

It was employed by the aborigines as an emetic, & also by those empirics who affect to deal in Indian remedies only. It has been found to operate as a speedy & active emetic, & it often induces a most profuse perspiration immediately after having been received into the stomach. It has proved serviceable in cases of colic where emetics were indicated. In a variety of instances it has been administered as a remedy in asthmatic affections, & on competent authority in

assured, that it has in general manifested considerable efficacy & some
has proved more beneficial in this distressing disease than any other medicine
from some of its effects, says an eminent physician, lobelia seems to be related
to some of the narcotic plants; to the mouth & first passages it proves acrid & high
stimulant; its stimulus seems to be of the diffusive kind, as Dr. Cutler on taking
it experienced an irritation of the skin over the whole body. It is probably one of the
most powerful vegitable substances with which we are acquainted & our rational
practitioners will have recourse to it but with the greatest precaution. It has
proved fatal in the hands of a noted empiric. The dose in which he is said usually
to prescribe it, & frequently with impunity, is a common teaspoonful of the pow-
dered seed or leaves, & often repeated. If the medicine does not puke, or evacuate
powerfully, it frequently destroys the patient, & sometimes in five or six hours.-
Even horses & cattle have been supposed to be killed by eating it accidentally.-
Dr. Cutler, who had been affected for years with "a convulsive asthma from pulmon-
ary irritation of effused serum", says, I had a tincture made of the fresh plant & took
care to have the spirit fully saturated, which I think is important. In a few
minutes which perhaps was as severe as I ever experienced, the difficulty of breathing
became, & after it had continued for a considerable time, I took a table spoonful.
In three or four minutes my breathing was as free as it ever was, but felt no nausea
at the stomach. In ten minutes I took another spoonful which occasioned nick-
ness. After ten minutes I took the third, which produced sensible effects upon
the coats of the stomach, & a very moderate puking, & a kind of prickly sen-
sation thro. the whole system even to the extremities of the fingers & toes. The
urinary passage was perceptibly affected by producing a smarting sensation in
passing urine, which was probably produced by stimulus upon the bladder. But
all these sensations very soon subsided, & injour seemed to be restored to the con-
dition, which I had not experienced for years. I have not since had a paroxy-
sm, & only a few times one small symptom of asthma. Besides the violent
attacks, I had scarcely passed a night without more or less of it, & often so as not
to be able to lie in bed. Since that time I have enjoyed as good health, as, per-

hops before the first attack. — A particular case has been related to me of an effectual cure of the hydrophobia, in the last stage of the disease by the use of this plant. — With the view of establishing a uniformity of strength in the preparation, the Essex district medical society have agreed that the proportion for the tincture of lobelia shall be two ounces of the dried plant to one pint of diluted alkohol. — In numerous instances of asthma it has procured the most essential relief, though in general its effects were only temporary & palliative. As a pectoral it has been found useful in consumptive & other coughs depending on mucus accumulated in the bronchial vessels by exciting nausea & expectoration. From its very speedy operation as an emetic, & its stimulating effects upon the mouth & fauces, beneficial effects might be expected from its use in croup & hooping cough; & on some trials our expectations have been realized in this respect. It may perhaps be anticipated to supersede the use of senka as a remedy in the former, & antimonials in the latter affection. — The leaves should be collected in August when the plant is in blossom, & carefully dried & preserved for use. From ten to twenty grains of the powdered leaves will in general be found a suitable dose as an emetic for an adult, or it may be repeated in smaller quantities. As a pectoral it may be given in powder or in pills alone, or combined with other remedies, repeated in small doses till an evident good result is observed. Of the saturated tincture, twenty, forty, or even sixty drops may be safely given to children one or two years old, increasing as occasion may require. (See Thacher's Dispens. 2nd edition)

Class 10. Order 10.

Phytolacca. P. Decandra. Skoke, American Nightshade. Garget. Poke.

Gen. Desc. Calyx 0. corol 5 petalled, calyx-like in fruit: berry 10 celled, 10 seeded — (Decandria) leaves ovate, acute, racemes simple. Rem. Fl. white, berries red.

Use. This is one of the most common North American plants, well known in New England by the name of cancum, skoke, or cockum. In the south

is it is called ~~coakum~~ pokeweed. It has a thick, fleshy, perennial root as large as a parsnip. From this rise many purplish herbaceous stalks about an inch thick in or seven feet long; which break into many branches irregularly set with large, sharp pointed leaves, supported on short foot stalks. These are at first of a fresh green colour, but as they grow old they turn reddish. At the joints & divisions of the branches, come forth long bunches of small, whitish coloured flowers consisting of five concave petals each, surrounding ten stamina, & ten styles. These are succeeded by round depressed berries, having ten cells each of which contains a single smooth seed. The young stems when boiled are as good as asparagus, but when old they are to be used with caution, being a plant of great acrimony, operating both as an emetic & cathartic. A tincture of the ripe berries in Brandy or wine is a popular remedy for rheumatism, & similar affections, & it may be given with safety & advantage in all cases where guaiacum proves. The extract of the juice of the ripe berries has been employed in some cases of scrofula; & cancerous ulcers have been greatly benefited by its application. The juice of the leaves, however is said to be more effectual.

Dr. George Hayward of Boston has found by experiment, that the root contains the most active principle of the plant, & this he gives in substance. He gives it doses of a scruple of the finely powdered root, which has always operated as an emetic & cathartic. It generally commences its operation in an hour & rarely continues longer than three or four. It excites little or no nausea previous to its operation; & tho. it makes a powerful impression on the system, it never has produced any disagreable or unusual symptoms. I have never noticed, says the Doctor, any dizziness, vertigo or stupor from it, & I have always been particular in my inquiries to ascertain if any such effects took place. In one case of the commencement of fever, it was administered with decided advantage; it continued to operate for six hours as an emetic, & entirely removed all the febrile symptoms. The root should be dug late in November, after the leaves & stalks are killed by the frost. It must then be cut into thin slices, dried with a very moderate heat & powdered for use. An ointment may be prepared by mixing one or two ounces of the powdered root of Phytolacca with a pound of hog lard & simmering them together. I have often used this lard with success in cases of itch, where the ointment of sulphur

& mercury have had no effect. It is apt to produce after the first or second application, a great heat & burning over the whole surface on which it is applied; when this is the case it should be immediately washed off. & I never knew the same effect to follow the renewed application of it. I had the satisfaction of curing a boy with this ointment who had tinea capitis for twelve years, which had been treated in various parts of Europe & in this country, & had resisted all the ordinary applications. The hair was kept short, the head was washed night & morning, & the ointment was then ~~washed~~ rubbed all over the parts affected. He never complained of any pain or smarting, though the surface was considerably excoriated. — [Hayward] It is affirmed by a physician of eminence the leaves of Phytolacca have been found an admirable remedy in hemorrhois. A strong infusion is given internally & if it does not speedily relieve, the same infusion is injected into the rectum. This method will in general effect a perfect cure. — According to the experience of Drs Jones & Kollock, of Savannah, this plant may be relied on as an effectual remedy for syphilis in its various stages, even without the aid of mercury; & they employ it with confidence both internally & & externally in rheumatisms & in cutaneous eruptions. One ounce of the dried root infused in a pint of wine, & given to the quantity of two spoonfuls operates kindly as an emetic. The roots are sometimes applied to the hands & feet of patients in ardent fevers. Many country peoples use the extract with great confidence in its efficacy in dissuasing indolent tumours & in healing various kinds of ulcers. It is found to operate as a mild vegetable caustic, cleansing & healing foul ulcers better than most other remedies of the same class. In three cases of apparent fistula lachrymalis, it is reputed to have performed cures, by being applied to tumours twice a day, for two or three weeks. This root has also been employed in compounds as an article of dyes. [Flasher]

That noted Quack, Dr. Henry of New York, in his American Herbal, says "The root which is large, bulbous & white, is an emetic, cathartic, & discutient

berries are stimulative, sudorific & pectoral.

Preparation. Infuse one ounce of the coarse powdered root in a pint of Ma-
ga wine for a week, & you will have an excellent emetic wine: dose two table
spoonfuls which operates mildly, & work it off with camomile tea. Several
wonderful cures in chronic rheumatism have been effected by the following
tincture: to one pint & a half of the expressed juice of the berries add half a pint
of brandy: dose from one to two table spoonfuls night & morning, diluted
in half a pint of prickly ash tea. The root roasted & mashed with vin-
egar discusses hard glandular tumours, by applying it twice a day.

The following is the method for making my famous cancer ointment
which has been purchased of me by a great number of physicians, & always
proved effectual: take the fresh leaves & roots of young poke weed, bruise
them well in a mortar & express the juice: to one pound of fresh butter,
run it in a frying pan till it is of a black colour, stir in half a
pint of pulverized gun powder, & hold it over the fire until it flashes once
or twice: then pour the butter thus burnt into a quart of the poke juice,
mix it well, & let it stand on the hot coals in an earthen pot until
it is boiled to the consistence of an ointment. This ointment if spread on
linen & applied over the cancer every other day, will kill the roots & fetch
them all out. Wash the cancer with a decoction of yellow dock root, boiled
in four quarts of water down to three, & drink half a pint of it daily twice
a day. After the roots are dead apply a poultice of bruised yellow dock
leaves, & heal the sore with the elder salve." Henry. (If any thing cures the cancer
it is the yellow dock root. See page 44. P.W.W.)

Class Cryptogamia.

Polypodium - P. Filix Mas. Aug. Male Fern.

Gen. Char. Disc - Capsules disposed in round scattered dots, on various parts of the lower surface of the frond.

Obs. The fern is perennial, & grows in great abundance in almost every part of Britain, where the ground is not cultivated. The root when chewed is somewhat

mucilaginous & mucl. & afterwards astringent & bitter. The vermifuge powers of fern are well known. It appears to be particularly active in expelling the tape worm. Dr. G. Jones relates the case of a lady in New York, who after taking many worm medicines, with partial good effects, drank a decoction of fern in water, a pint per day, until some gallons were taken, when a dose of castor oil brought away the remnant of the worm, measuring forty five feet.

The fern is the famous remedy of Madame Nafffer of Switzerland, for the tape worm. She acquired the knowledge of the remedy from her husband, who was a surgeon, & obtained a great price for the secret from Louis 15th of France, by whose order it was published.

The powdered plant was generally prescribed by Mad. N. & may be given in doses of from sixty grains to two drachms. (Thacher)

Olney says: "The day before the patient was to take the fern powder, he was purged with a dose of calomel & jalap, & after its operation he must take a very light supper. The next morning he was to take three drachms of the powdered fern root, & two hours afterward take another dose of calomel & jalap, & drink a tea cup full of of the skunk cabbage root tea every hour, till the tape worm is expelled, taking care to set on a close stool & not break the worm but pull it gently. In case the worm is not expelled the first day, the medicine is to be repeated the next. The tape worm has come away from a patient after taking a drachm of the powder without any purge."

Class 20. Order 16

Ricinus. R. Communis. Eng. Palma Christi. Castor oil plant.

Gen. Desc. Staminate flowers – calyx 5 parted: stamens numerous. Pistillate flowers – calyx 3 parted: styles 3. 2 cleft: capsules echinate, 3 celled, 3 seeded. Common. Leaves palmate, peltate. Annual, exotic.

Use. This plant grows in both Indies, Africa, & the south of Europe. It also grows luxuriantly in the southern states of America, where it is now becoming an article of export. It is of speedy growth, & in one year arrives at its full size, which seldom exceeds twenty feet. The capsules are prickly & triangular, & con

under a thin dry gray & black marbled husk, a white silky kernel. The skin
extremely acrid & one or two of the seeds swallowed entire operate as a drastic purga-
tive or emetic. — The kernels yield almost a fourth part of their weight of a bland
fixed oil, commonly called Castor oil. It is obtained from them either by expression,
or by decoction with water. The former method is practised in Europe, the latter in
~~America~~ Jamaica. To increase the produce it is common to parch the seed over
a fire before the oil is extracted from them: but the oil thus obtained is infe-
rior to that prepared by cold expression or simple decoction, & is apt to become
rancid. — Genuine castor oil is thick & viscid of a whitish colour, insipid or sweet
to the taste, & without smell.

As a medicine it is a gentle & useful purgative: it in general produces its
effects without griping & may be given with safety where acrid purgatives are
improper, as in colic, calculus, gonorrhoea &c. Some likewise use it as a purgative
for worm cases. Half an ounce or an ounce commonly answers with an adult,
a drachm or two with an infant. — With many the aversion to oil is so
great, that this purgative cannot be taken without great reluctance, &
accordingly different modes of taking it have been proposed. Some prefer
taking it swimming on a glass of water, of milk or peppermint water, or in the
form of emulsion, with mucilage, or with the addition of a little rum. Cooke
See my M. M. vol. 1. p. 110.

Class 13. Order 12.

Rosa. R. Gallica. Eng. Red rose.

Gen. Des. Calyx con. form, 5 cleft, fleshy, contracted towards the top: petals 5.
and numerous, bristly, fixed to the sides of the calyx within.

Use. The Gallica, French or common red rose, has large, spreading, half
double, deep red flowers. It has not the fragrance of the damask rose, but
the beautiful colour of its petals, & their pleasant astringency has rendered
them official. It must however be remarked, that this odour is increased
by drying, while that of the damask & moss roses is almost des-
troyed. Thacher

Ruta. R. Graveolens. Eng. Rue. Class 10. Order 1. Nat. Ord. Rutaceae.

Gen. Desc. Calyx 5 part.: petals concave: receptacle surrounded by 10 nectariferous dots: capsule 5 lobed. (petals sometimes 4 & stamens 8) (Graveolens) leaves decompound or more, petals entire.

Use. This is a small shrubby plant, met with in gardens, where it flowers in June & holds its green leaves through the winter. It has a strong ungratefull smell, & a bitterish penetrating taste; the leaves when in full vigour are extremely acrid insomuch as to inflame & blister the skin if much handled. Some writers on Materia Medica have entertained a very high opinion of the medicinal virtues of this plant, & it is still retained in the Massachusetts & other Pharmacopeias. It has been considered as powerfully stimulating, attenuating & detersive. & hence in cold phlegmatic habits it quickens the circulation, dissolves tenacious juices, opens obstructions of the excretory glands, & promotes the fluid secretions. Boerhaave is extravagant in his praises of the essential oil & distilled water of rue for their efficacy in promoting sweat & perspiration, & for the cure of the hysteric passion, & of epilepsies, & for expelling poisons. In modern practice rue is not regarded as possessing much power as a remedy. Ibid

Class 18. Order 2.

Anthemis. A. Nobilis. Eng. Chamomile.

Gen. Desc. Calyx hemispherical, nearly equal: egrets 0, or a membranous margin: florets of the ray more than 5: receptacle chaffy, the chaffs flat with a rigid acuminated tip (nobilis) receptacle chaffy, leaflets 3 parted linear subulate. perm. exotic.

Use. Chamomile is a perennial plant indigenous to the south of Europe but cultivated in most gardens for the purpose of medicine. The flowers have a strong, not ungratefull aromatic smell, & a very bitter nauseous taste. These are so very generally employed in medicine as to render their very extensive cultivation in the United States, well worthy of attention. — Their active constituents are bitter extractive, & essential oil. To the latter is to be ascribed their antispasmodic, carminative, cordial & diaphoretic effects. To the form

to be ascribed their influence in promoting digestion. As Chamomile
lits the peristaltic motion it is useful in dysentery. But is not ~~antispas-~~
~~modic~~ admissible in all cases of diarrhoea. From its stimulating & somewhat anspas-
t essential oil. Chamomile is also capable of exciting vomiting, especially
en given in warm infusion; & in this way it is often given to assist
action of other emetics. Externally Chamomile flowers are applied as a di-
tient, in the form of clysters, or embrocation, in colic, dysentery, & strang-
lated hernia. — Chamomile flowers are exhibited. 1. In substance,
the form of powder, or rather of electuary, in doses of from half a
achm to two drachms, either alone or combined with Peruvian bark as
r the cure of intermittent fevers. — 2. In infusion in form of tea. This may
the be drunk warm, for promoting the action of emetics, or cold as a
omachic. — 3. In decoction or extract. These forms contain only the
xtractive, & therefore may be considered as simple bitters. — 4. The es-
ential oil may be obtained by distillation. This possesses the antispas-
modic powers in a higher degree than the simple flowers, but on the
ntrary does not possess the virtues depending on the presence of the
ther extractive. It is a most agreeable addition to many pills. — Coxe

Class 10. Order 1.

Cassia. C. Marylandica. Eng. American Senna.
Gen. Desc. Calyx 5 leaved: corol 5 petalled: anthers 3 lower ones beaked: legume membrana
ous. (maryland.) pinnate leaflets 8 paired. flowers yellow.
e. This plant which is abundant in America is of the same genus with the senna
the shops, & it possesses nearly the same virtues as the eastern species. It is used as a
ngative in different parts of the United States, & from the high price of foreign sen
e certainly deserves to be attended to. — Coxe. See my Mat. Med. Vol. 1. page 61

Class 10. Order 2.

Dianthus. D. Caryophillus. Eng. Pink.

Gen. Desc. Calyx inferior. cylindrical. 1 leaved. with 4 to 8 scales at the base: petals 5 with claws: capsule cylindrical. 1 celled. dehiscent at top (caryophillus) petals crenate lobed. scales of calyx ovate acute. perenn. Fl. red. exotic

Use. This species of pink is a native of Italy. but is cultivated in our gardens. By cultivation its varieties have increased to a very great number. & they form one of the greatest ornaments of our gardens. Most of these are termed carnations. but the variety which is officinal surpasses all the others in the richness of its smell. & is also distinguished by its colour, being of a uniform deep crimson. Its only use in pharmacy is to give a pleasant flavour & beautiful colour to an officinal syrup (Coxe).

Class 18. Order 2. Nat. ord. Corymbiferae

Erigeron. E. Philadelphicum. Eng. Philadelphia. or Blue Flea bane.

Gen. Desc. Calyx imbricate: egret pilose: receptacle naked: florets of the ray linear. very narrow numerous (philadelph.) stem leaves half clasping lanceolate subserrate only florets as long as those of the disc. stem many flowered. perenn. Sup. the

Use. This is one of the most common plants in many parts of the United States. It has been used in decoction or infusion in Philadelphia. for gouty & gravelly complaints. & in some instances with much benefit. It operates powerfully as a diuretic & sudorific. It is known by the name of Skewish in Pennsylvania, which Dr. Barton suspects to be a corruption of the word Scabious. This plant is employed by the Cochin-Chinese. according to Father Lurreiro; who speaks of it as an active emmenagogue — Ibid See page 152

Class 2. Order 1.

Gratiola. G. Officinalis. Eng. Hedge Hyssop.

Gen. Desc. Calyx 5 leaved. the two outer ones spreading: corol 4-cleft. 2 lipped. reversed stamens 4. 2 of them barren) stigma 2 lipped. capsule 2 celled. (officinalis) leaves slightly toothed (This is the acme of Muhlenberg) annual. Fl. yellow — cost.

Use. This is a native of marshy situations in the south of Europe. & in the U. States It is gathered for use when in flower. It has no smell but a very bitter nauseous

nscous taste. It is a drastic purgative & emetic & a very powerful anthelmintic, but its use requires caution. In substance it may be given to the extent of half a drachm, & in infusion to three drachms. Ibid

Class 20. Order 16.

Liquidambar. L. Asplenifolium. Eng. Sweet Gum.

Gen. Desc. Staminate flowers. ament conic, surrounded with a four leaved involucre filaments numerous. Pistillate flowers. ament globose, surrounded with a 4 leaved involucre: calyx 4 leaved, pitcher form, 2 flowered: styles 2: capsules 2, surrounded at the base by the calyx, called many seeded.

Use. This is useful in diarrhoea. The Indians are said to chew the root to stop hemorrhages of recent wounds. Ibid.

Class 10. Order 1. Nat. Ord. Fabacea.

Podalyria. P. Tinctoria. Sophora Tinctora. Eng. Wild Indigo. Indigo Weed.

Gen. Desc. Calyx 5 cleft, somewhat 2 lipped: corol papilionaceous, wings of the length of the banner: legume inflated, smooth, many seeded (tinctoria) stipules obsolete leaves wedge form. Peren. yellow.

Obs. This vegetable is indigenous, & supposed to be exclusively American. In Dr. Thos catalogue it is called indigo fera. & it is sometimes known by the name of rroom, but more commonly indigo weed. It is perennial growing in great abundance in almost every barren pasture & in woods. The stalk rises to two feet or more sending off numerous branches. The leaves are small, ternate, inversely heart shaped & hairy. In July & August all its branches display butterfly shaped golden coloured blossoms, which render the plant very conspicuous. The seed vessels are inflated containing numerous seed. The root is ligneous, rough & irregular in shape of a dark brown colour externally, & sending off many long slender branches. Its taste is unpleasant, nauseous & nauseous, very similar to that of ipecacuan. The particular medical properties of indigo weed are yet to be ascertained. That it possesses great activity is unquestionably true. Those who in the spring season have made the young shoots substitute for asparagus experienced its drastic evacuating powers. In the hands of some physicians it is found to operate in a large dose with much severity as an emetic & cat

 thartic. But a weak decoction of the bark of the root has, it is said, been made known by an empiric experienced in its use, as a remedy in scarlatina anginosa. & its employment has been extended in a few instances to typhus or putrid fever with such good effects as to encourage farther trials. An experienced physician considers it as an excellent antiseptic & febrifuge, preferring it in some fevers to Peruvian bark.

As an external application, its antiseptic qualities ought to be more extensively known. In the form of fomentation or cataplasm, it has proved eminently beneficial when applied to phagadenic & gangrenous ulcers, especially if the decoction be administered internally at the same time.

A liniment prepared by simmering the cortical part of the root in cream has been found an efficacious application to sore nipples & ulcerated breasts. A violet or pale blue colour has been prepared from the leaves & small branches of this plant, & used as a substitute for indigo. The leaves turn black when dried. Thacher, See my Mi. Bot. vol. 1. page 109.

Class 14. Order 2.

Orobanche. O. Virginiana. Any Cancer root, Buck drops, ~~Broomrape~~

Gen. Dec. Calyx of 2 lobed entire leaflets: corol ringent: capsule 1 celled, 2 valved many seeded glands under the base of the germ. Virginiana, stem branched ft. my. Use. The following is a letter from Dr. George Bensell, of Germantown Penn. to Dr. Barton: "In the year 1798 a friend of mine who had found the benefit of this root (in Kentucky) in the cure of an old & painful ulcer of the leg, gave me a small quantity of the powder. I applied to a confirmed cancer situated in the face, which it completely cured. Having found in my neighbourhood, the same plant, which attaches to itself the remarkable peculiarity of growing under no tree of the forest but the water beech, I have upon various occasions used the powdered root of it in foul & cancerous ulcers, frequently with success, & generally to the great ease of the patient. It is difficult to say in what manner this vegetable acts, indeed by certain qualities it possesses of neutralizing the cancer

ers; for in no instance have I found it to excite the smallest degree of
pain. The powder should be mixed with a solution of gum arabic, thickened
to consistence of ointment, & laid on thin leathers, which may be left upon the
sores as long as any adhesive quality remains. This in proportion to the dis-
charge, will sometimes last two or three days."

Lemon says the Buck Hoops are a powerful astringent, & cancers have been
effectually cured by the application of the fresh bruised root frequently ap-
plied. It is very beneficial in the cure of St. Anthony's fire, & the can-
ker in the throat. — Preparation. In four quarts of water put
eight ounces of Buck Hoops: boil it down to two quarts, strain the decoc-
tion, & sweeten it with loaf sugar. After proper evacuations, patients
subject to the rose, or erysipelas, may take a tea spoon full of this
four times a day, & keep linen rags wet with the decoction before it is
sweetened, over the inflamed parts, until perfectly well.

N.B. To every quart of the decoction you may dissolve half a tea
spoonful of White vitriol, & use it occasionally. Omit the tea &
when you expect your courses, & when they are down. In Children
subject to gallings in warm weather, may be cured by wetting the
parts frequently ~~in warm~~ with a linen rag dipped in the decoction
made weaker by adding a table spoonful of rose water to a pint
of the above lotion. — This is supposed to have formed a part of Dr. Martin's
Cancer powder. Core.

Class 6. Order 3.

Trillium - T. Rhomboideum. Ang. Beth Root.

Gen. Desc. Calyx 3 leaved, inferior, spreading: corol 3 petalled: berry 3 celled, many
seeded (Rhomboideum) flowers peduncled, erect or erection. Var. erectum, album &
grandiflorum. Fl. p. or white.

Use. This root is powerfully astringent. I have found this root of great
efficacy in violent uterine hemorrhagia, hematuria, or bloody urine, in
arresting gangrene, & in curing carbuncles. I have been instrumental on

long since, in saving the life of a sailor who was taken with a violent pain in his penis, & made bloody water continually. After proper evacuations, my prescription was to take a teaspoonful of the powder of this root, four times a day. Two or three days afterwards, I had the happiness of finding him entirely well. — <u>Preparation</u>. In all immoderate flow of the catamenia, spitting, or discharge of blood, the patient may take one teaspoonful three times a day, in a teacup full of the tea made of yarrow or St. John's wort, after bleeding & using cooling laxatives. This is always effectual. —

For the benefit of gentlemen of the college, & the medical society, as well as private individuals, I will insert the following new discovery, which obviates the gangrene, & quickly cure carbuncles.

A case. I was called to visit a French lady living in Roosevelt street New York, who had a carbuncle on her arm as large as a crown piece. It was of a fiery red colour, & sharp watery ichor or watery running. I made a poultice of equal parts of bith & blood root, powdered fine & mixed with honey, & bound it over the carbuncle, with directions for renewing it every two hours, & taking a purge. When I called the next day, I found to my great satisfaction, that the carbuncle was killed, & only a brown mark left, & has never returned.

This poultice is also a certain cure for old putrid ulcers, obviates the gangrene or mortification, & will prevent the cutting off many limbs in our hospitals, & on board ships of war. Henry.

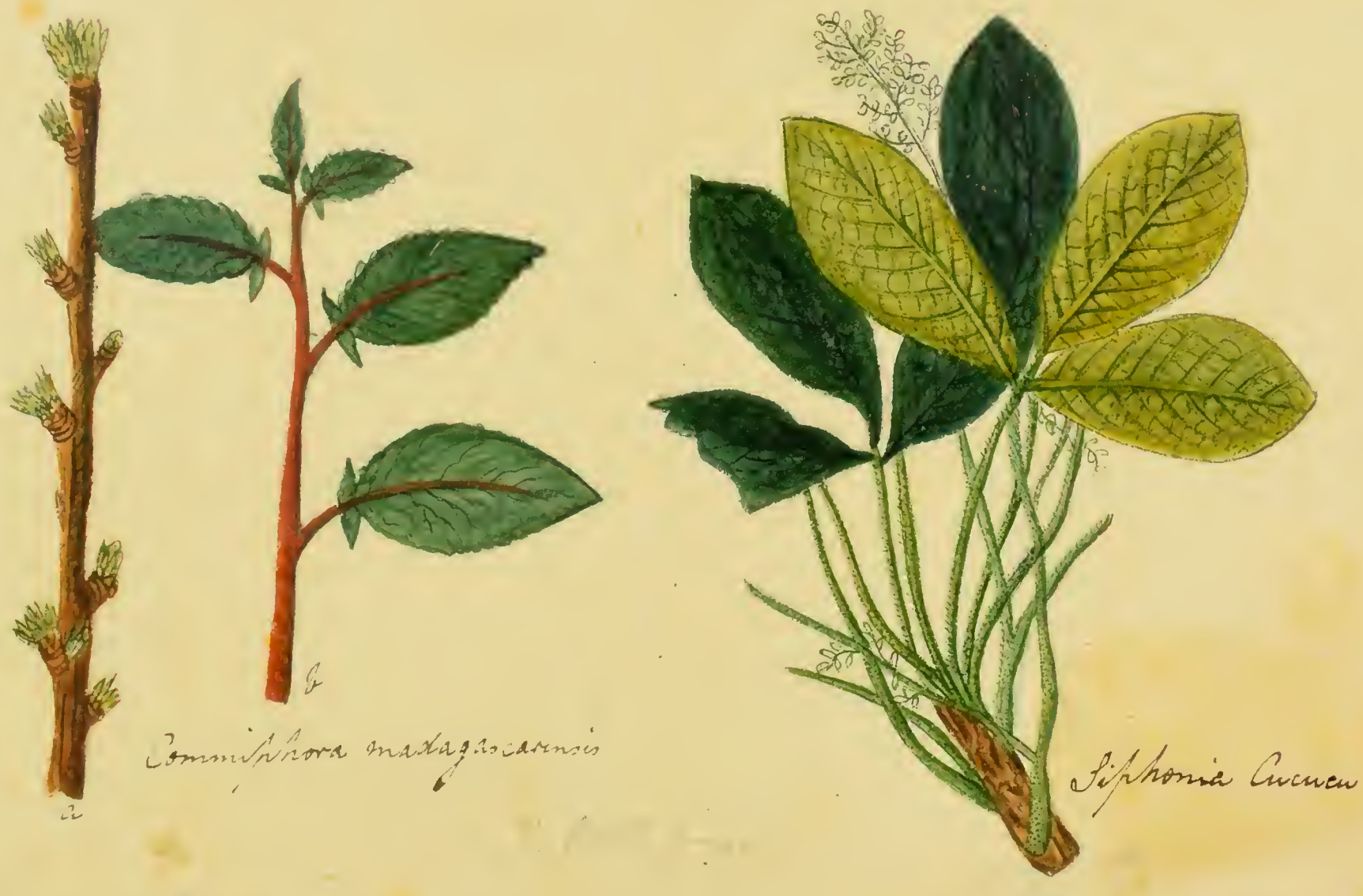
Class 13. Order 1.

<u>Chelidonium</u>. <u>C. Majus</u>. Eng. Celandine.

<u>Gen. Desc.</u> Calyx 2 leaved: corol 4 petalled: siliqua like capsule, called linear: seeds erected many (majus) leaves pinnate lobed, umbels axilary. Perem. fl. yellow —

<u>Obs.</u> This plant rises two feet in height with many tender round green stalks, with large joints than is common in other plants; very brittle & easy to break. Leaves large, serrated, & very tender: the flowers consisting of four leaves are yellow

which come long pods with blackish seeds therein. the root is long at the
head shooting forth many long roots with small fibres, red, white externally &
low within, & full of yellow sap. — This plant grows wild along the sides of mead-
& by running brooks. — It is acrid, stimulant, aperient, diuretic & sudorific.
juice rubbed on warts extirpates them, cures ring worms & cures old ulcers. It has
found useful in dropsy, cachexy, & green sickness. A poultice made of this plant
ed in milk has cured the hooping cough. Infusions of the plant in vinegar
mote perspiration. — In order to take a film off the eye, take half an ounce
the expressed juice of the leaves, & one gill of the fresh juice of the leaves of ground
called alehoof, dissolve a teaspoonful of salt in it, & keep it in sand in a
lass for use. The film must be wet with a small hair brush dipped in this juice
ven times a day, & afterwards wash the eye with a little milk & water. To cure
above complaint the patient may take twenty or thirty drops every morning
evening of the expressed juice of this plant in a gill of new milk twice a day
eraising the dose occasionally. Twenty drops of the juice mixed in an ounce of
se water makes an excellent eye water which will cure the most inveterate
ore eyes, by wetting them morning & evening. A poultice made of the roasted
ots mashed in vinegar, & applied to scrofulous tumours on the neck, quick
dispersses them. An ointment made of the roots boiled in hog's lard cures the
iles, by anointing them with it every night before the fire, & taking daily
teaspoonful of cream of tartar & flowers of sulphur in honey. I find —
Professor Wendt recommends the chelidonium majus as a substitute for mercury in the venereal
ease. He says in summer I generally give the juice of the radix & herba (succus expressus) with
ey & diluted with water, first in the dose of a teaspoon, gradually increasing it to a tablespoon
which dose I order to be continued till the cure is completed. In autumn & spring I employ the
ecus expressus radicis chelidonium, & in winter the extract which is made of the whole plant. Ma
most persons dislike taking expressed juices I generally give the following pills. ℞. succ. recent. ex
is herb & rad chelid. maj. aa ℥ss. inspissentur calore, gradatim ad consistent. mellis, dein adde pulver rad
lid. maj. q. v. satis ad consistentiam massae pillularis; ex qua formentur pil. pond. gr. 2. conspers
lv. lycopodii pro usu. — Of these pills I order two to be taken in the morning & evening da
eraising the dose by one pill till I have raised the dose to ten pills which I continue till
cure is completed. I have often employed the herb & root each separately, & the latter appeared to
ort efficacious. If it be intended to quicken the cure I prescribe the pills to be taken every three hours —


a
b
Commiphora madagascariensis
Siphonia Cucucu

Class Monoecia. Order Monadelphia.

Siphonia. S. Cachuca. Adic. Elastic Gum resin tree.

The remarkable substance known by the name of elastic resin or caoutchouc is imported in great quantities from South America in various forms; generally in the shape of bottles, & is employed in Europe for several medical & chirurgical purposes for making catheters, tubes, syringes &c. & also for rubbing out Black pencil marks. It was long known to be a vegetable production, & the inspissated juice of a tree, but it was a long time before it was botanically described. Linnaeus thought the elastic gum to be prepared from a tree to which he gave the name of cecropia peltata, & he firmly believed that this was the only tree from which the substance was obtained. It has however since been ascertained by the modern botanists, that there are several trees which yields elastic resin, but especially that the caoutchouc which is imported into Europe, is never taken from cecropia peltata, but from a far different plant. It appears moreover from the researches of modern chemists, that this substance is likewise contained in several European plants, namely in the berries of the viscum album, though it is never to be met with, in any European plant in so pure a state as it is observed in several trees in hot climates. The younger Linnaeus takes the Jatropha elastica to be the true elastic resin tree which he learnt from Ahlbitswork, who found this tree only with fruit: & Linnaeus concluded from the form of the latter, that the elastic gum tree which Aublet calls hevea guianensis, belonged to the genus Jatropha. Prof. Richard however discovered the same tree during his travels in Guiana, in flower, & at the same time in fruit, & from his accurate examination of both it appeared to make a new genus which is now called Siphonia. Mr. Richard found but one species which bears the systematic name of Siphonia cachuca, of which a branch is represented in fig. 1. on a smaller scale from a branch in my collection. Siphonia cachuca / siphonia elastica. Woodville medical botany. tom. 4 / belongs to the Linnean class Monoecia, Monadelphia. It is a large tree growing to the height of sixty feet & more; the bark of the branches is smooth & grey brown. Leaves on long footstalks, & very close together. Leaflets half a foot long, elliptical, pointed, entire, coriaceous, on the upper side smooth, & on the under side whitish, with very short, fine, close hairs. From the axilla of the leaves arises a panicle of small white flowers

 longer than the leaves. Male flowers have a monopetalous, campanulate calyx with five ovate anthers. Female flowers cleft in teeth which are reflexed & deciduous; germen roundish & a little conoid, style none, stigmata three, emarginated, depressed, capsule woody, three parted, three celled, in each cell one seed of the size of a sweet almond, elliptical, spotted, & covered with a thin & brittle epidermis. The seed are said to be eagerly sought for by the Americans, & to be a very palatable food. The manner of obtaining elastic resin from this tree is by making incisions in the trunk of the tree, from which a milky juice issues which is received into earthen vessels. On exposure to the air this juice gradually inspissates into the known elastic resin. In America it is employed for different purposes, & they make of it bottles, boots, flambeaux, &c. +

Class Dioecia

Commiphora Madigascarensis – Besides the above tree, which is now pretty well ascertained another has been discovered in the Island of Madagascar, yielding a substance which perfectly ~~represents~~ resembles that of the Siphonia, & said to be obtained by similar proceedings; & it is to be expected that several other lactescent trees may produce such a substance. This tree is called by Mr. Jacquin, Commiphora Madigascarensis. On table 2. (a) a branch with flowers is represented in natural magnitude; & in (b) a branch reversed by half. It belongs to the class of Dioecia, & the male flowers are only as yet known. Mr. Jacquin gives of it the following description. Young branches are round covered with a yellowish bark which adheres loosely, leaves oblong obtuse, finely serrated, having at their base two small foliaceous appendages. Flowers yellowish, small, appearing before the eruption of the leaves; they are deciduous. Calyx bell shaped, cleft into four short teeth. Corolla consisting of four lanceolate petals which surround eight subuliform filaments, four of which are shorter than the rest. Anthers erect & oblong. Pistillum & fruit unknown. Medical Mid & Phys Jour. vol. 11. P. 385. & 398.

Class 1. Order 1.

Calyx. C. Asperifolium. C. Officinalis. Stam. Pointed Chives - Goose Grass

Gen: Char. - Calyx 5 toothed: corol flat: fruit dry: seed 2 roundish (leaves stellate) spreading

solo in sizes. stem decumbent. flower. white -

Obs. This plant grows from four to six feet in height, climbing round the bushes near it:

the leaves are eight in a whorl. Lanceolate. & the upper side is white with sharp prickles.

the square, the angles being guarded with sharp prickles bent down: flowers small, in-

spicuous. & divided into four segments. these change into a fruit rather large, composed

two berries, slightly adhering together. & covered with hooked prickles containing two red-

It grows in hedges on low ground, beside meadows, near brooks. & is known by people

the country, by the name of poor robins plantain, from its efficacy in curing the gravel

I have found it an excellent & speedy medicine in all suppressions of the urine &

worthy complaints. & it is a powerful diuretic. It has also been found beneficial

the cure of scurvy, hemorrhagia of the nose, & spitting of blood. A tea made of

the infusion of an handful of the leaves has cured the epilepsy & the gout.

In order to remove tumours in the breast, mix the expressed juice of this plant

with oatmeal to the consistence of a poultice, & apply it cold over the tumour three times

day. keeping the bowels open in the mean time by castor oil, & taking a table-

ful of the juice every morning. By this treatment very violent tumours have

been dispersed in a few days. In suppression of urine & the gravel let the patient

follow this prescription: after taking a dose of castor oil or oil glauber, put two

handful of the dry leaves of the plant into three quarts of rain water, & boil it down

two. strain the decoction & sweeten it with honey: let the patient take a tea-

full warm every hour until relieved. A particular case. I was called to see an el-

ly lady labouring under violent pain & suppression of urine. After necessary evacuations

took a large handful of the leaves of the goose grass, which was gathered fresh from the

meadow & poured three pints of boiling water on them. & ordered a tea cupful, sweetened with

every half hour until I returned from visiting a patient near by. In about three hours time I

returning, her husband came to meet me, & with the greatest satisfaction declared that the life of his wife

been saved by drinking the tea. Henry

Class 18th Order 2.

Tussilago. T. farfara. Eng. Colts foot.

Gen. Disc. Calyx simple, scales equal, & equalling the disk, membranaceous: receptacle naked: pistillate florets ligulate or without teeth: seeds simple sessile (sometimes polygamous) (farfara) scape, flowered scaly at length come out radical, heart angular leaves. (round & W. W.) p. 4.

Use This plant rises about eight inches in height. The scape is covered with small points & purple leaves like scales: leaves very large, serrated, irregular toothed: of a bright green colour on the upper, & downy & white on the under side, standing upon large, long radical footstalks; large yellow flowers. Those in the rays of the sun are very visible. It grows on high moist clay ground, the roots are pleasant to the smell & aromatic. The yellow flowers generally appear before the leaves in spring. (filium antepatrum) that is the son before the father; because the flowers appear before the leaves.

The juice or decoction of the dried leaves has been found efficacious in the nephritic. The leaves powdered fine & a small pinch taken at bed time, removes giddiness & all obstructions of the head, nose, megrims &c. It is a good medicine in coughs, asthmatic complaints, pain in the breast & promotes expectoration. Put one pound of the dried roots & leaves of colts foot in six quarts of rain water, boil it away to three quarts, strain the decoction & use it as follows: for kings evil take half a pint three times a day, & roast pond lilly root in wet brown paper under the hot ashes: mash the root & apply it warm every night over the lumps or tumours on the neck, which will either disperse, or bring them to a suppuration in a week. Continue the use of the decoction daily until cured. In case of the hooping cough, the child may take half a teacup of tea sweetened with honey four times a day, made by putting one ounce of the dry roots & leaves into a tea pot, & pour a quart of boiling water on them. — For consumptive coughs the patient may take a gill of the above decoction four times a day. (Ibid) — See my M. M. vol. 1. p. 122.

Class 13. Order 1.

Cistus. C. Canadensis. Eng. Canadian Cistus. Rock rose.

Gen. Des. Calyx five leaved 2 of them smaller, cordate & petaled: capsule 3 valved: open at the top. (Canadensis) stamens bent back on the petals, leaves alternate, Canada flower, yellow. Late in autumn this plant sends off curved icicle crystals from near the root of a very singular structure. We should like to know what that structure is. Rafinesque

This plant rises two feet in height: leaves numerous, ovate, very small, of a whitish colour like frost, & grow on small purple stalks: flowers of a pale colour inconspicuous, which terminate in a small pod containing very small seed. This new discovered plant grows in the woods on Long Island, & plentifully in New Jersey & is known by the name of frostwort, from its colour.

It has been found effectual in the cure of scrophula, or kingsevil. Take one handful of the dry leaves, a quart of rum, & a table spoonful of black pepper. Put this in an earthen pipkin, & let it stand on the hot embers for two hours to simmer: strain it & put in a handful or two more of the dry leaves into liquor, & let it simmer for half an hour. Then thicken it by stirring in two ounces of the powdered leaves, & apply a poultice over the lumps, twice a day. Let the patient drink the following infusion three times a day: put four ounces of the dry leaves into a tea-pot filled with boiling water, & wash the sores three times a day with a rag dipped in the tea. Numbers have been cured in this city (New York) by the above prescription. Ibid.

Class 17. Order 8.

Fumaria. F. Officinalis. Nat. Fumatory.

Gen. Desc. Calyx 2 leaved, caducous: corol irregular, spurred at the base: filaments each with 3 anthers: capsule dry, 1 celled, 1 seeded, not opening by valves, seed affixed to the side of the cell (officinalis) leaves more than decompound with the segments edge lanceolate gaped. stem with spreading branches. annual. fl. red.

Spec. This plant rises a foot in height: leaves pale green, compound, doubly pinnate, the smaller pinnae three lobed. flowers of a reddish purple & grow in spikes which arise from the axilla of the leaves: the corolla has the appearance & is in reality an ent. This plant grows common in corn fields & along the fences. Flowers in June & July.

It is a tonic bitter, & antiscorbutic, & has been found efficacious in the cure of lepra & other cutaneous eruptions. The virtues are chiefly contained in the dry plant. Pour two quarts of boiling water on two ounces of the dry leaves of fumatory: in all foulness & scaly eruptions let the patient take a gill three or four times a day & wash the parts with a tea twice a day. As a tonic or stomachic one

 icine. infuse two ounces of the dry flowers & tops of the plant in three pints of Madeira wine, rum, or brandy: a wine glass full of the wine infusion may be taken twice a day on an empty stomach, & a table spoonful of the brandy with a spoonful of spring water, which will strengthen the stomach & create a good appetite.

Class 18. Order 2. Nat. Ord. Asteraceae

Solidago. S. Ciliari. S. Virga Aurea. Eng. Goldenrod.

Gen. Char. Calyx scales imbricate, closed: egret simple: receptacle naked: furrowed with slots or punctures. ray florets about five.

Use. This plant is perennial, & rises about two feet in height: small brown round stalks, divided at the tops into small branches, with many long green leaves: flowers small & yellow on every one of the branches, all of which are turned one way, & when ripe they become as down & are carried away by the wind.

It grows in woods, meadows, & along the fences in every part of the United States & produces its flowers in July.

The flowers are aperient, corroborant, & the leaves are gently astringent. The flowers have been found beneficial in removing obstructions of the urinary organs in gravelly complaints, ulcerations of the bladder, are good in cachexies & in the first stage of dropsies. The leaves are good in debility & laxity of the viscera or bowels, & all disorders proceeding from that cause.

Pour two quarts of boiling rain water on two handfuls of the flowers; put them in an earthen vessel covered, & set it on hot ashes for an hour: strain the infusion through a clean linen cloth & sweeten the liquor with loaf sugar. Let the patient labouring under obstructions of urine, & gravelly complaints take a tea cup full of this infusion three or four times a day till he finds relief. In all complaints of the bowels as well as fever, observe the following prescription: Pour a quart of boiling water on a handful of the dry leaves & flowers of the golden rod & let the vessel stand near the fire covered for an hour close a tea cupfull taken every two hours through the day, sweetened with sugar, complaints of the bowels. In fevers after proper evacuations, the patient may take a full every hour, sweetened with lump sugar, together with a teaspoonful of lemon juice, till he recovers

Jerith

Class Cryptogamia. Order 1.

Lycopodium. L. Obscurum. Eng. Ground pine.

Gen. Desc. Capsules mostly kidney form or roundish, 2 or 4 valved opening elastically. They are placed under separate scales in a spike or sometimes in the axils of the leaves. (very hairy their stems being generally covered with 2, 3, or 4 rows of narrow muffle entire leaves (obscurum) leaves scattered 6 rowed, shoots erect, branches radically forked, spikes nearly sessile cylindric, solitary, terminal.

Use. This small & useful plant grows plentifully in low woodland, in rocky places, on the sides of mountains, & near running brooks.

The leaves are aperient, corroborant, nervine, attenuant, diuretic, & emenagogue. They are beneficial in gout, rheumatism, suppression of urine & urinary obstructions.

Take half a pound of the bruised leaves & flowers of the ground pine & pour two quarts of Madeira wine upon them, shake the vessel often & let it remain for one week, when it will be fit for use. A wine glass of this infusion may be taken three times a day on an empty stomach, in any of the above complaints. It has also removed rheumatic pains, after necessary evacuations. Ibid.

Class 2. Order 2.

Collinsonia. C. Canadensis. Eng. Horse weed. Horse balm. Stone crop.

Gen. Desc. Calyx tubular, 2 lipped: corol unequal, underlip many cleft. capillary. no perfect seed (canadensis) leaves heart ovate, green yellow. Tuber knotty flat & as hard as a stone. hence it derives the name of stone weed or root. It grows on the sides of hills & on the borders of high meadows, both in New Jersey & West Florida (& in Deerfield Mass.)

Use. This root is carminative, diuretic, corroborant, aromatic, & has cured the dropsy. Dig up the root in the spring, & cut it into thin slices, dry it sufficiently in a baker oven over a slow fire, stir it constantly, & when dry pulverize it, & put it into vials for use. — Boil two ounces of the powder in two quarts of rain water, strain the decoction & in dropsical swellings the patient after taking a pint of it emerges

ipecacuanha may take a teacupfull of the decoction six times a day increasing the dose according as they may find benefit. & likewise they may take a spoonful of the powder four or five times a day until they find their strength restored. In all debilities & flatulent complaints of the bowels, a teaspoonful may be taken in a spoonful of brandy & water, three times a day on an empty stomack. In the cure of fevers after necessary evacuations, the patient may take for his constant drink, when the fever is on, half a pint of the infusion of the dry tops of the weed, made by taking a handful of the dry tops of the hore weed & pour a quart of boiling water on them. Ibid.

#

Class 5. Order 2.

Apocynum. A. Cannabinum Amer. Indian Hemp.

Gen. Desc. Corol. bell form: stamens alternating with 5 filamentous pointed nectaries. stigma bread. almost sessile: follicles long. linear. (cannabinum) panicled. corol erect. green. yellow. green. — This useful plant rises three feet in height, the stalk is bare for a foot, then spring many branches: leaves numerous & ovate, hanging on footstalks: flowers whitish. similar to buckwheat, which terminate in seed pods resembling a cucumber. the stalks & roots are lacteseent —

It grows in meadows & in low wood on the borders of meadows on Long Island, & in New Jersey, as well as in other parts of the United States, & is sometimes vulgarly called wild buckwheat.

Use. It is emetic, cathartic, sudorific, diuretic, & is an excellent pectoral. I have found it beneficial in curing rheumatisms, dropsies & asthmatic coughs. —

Dig the root in April, & hammer it on a stone until you can take off the bark, which you must dry & pulverize: dose from thirty to thirty five grains, which will generally work the patient both up & down. which may be used as an emetic in intermittent fevers. As a sudorific six grains may be taken three a day in a spoonful of cold water. As a pectoral take one ounce of the fine powder, & an ounce of the powder of skunk cabbage both, mix it with tar, & make it in a mash for pills. of the size of a large pea, which I have found of great ben

in Asthmas: dose, take two pills every night & morning for a week, after which take three twice a day & drink a tea cup of the infusion of skunk cabbage root, three times a day. I have found it effectual in curing rheumatism & immoderate flow of the menses, by taking every night half a teaspoonful of the powder of Indian hemp, in a tea cup of prickly ash tea: & as a pectoral five grains may be taken night & morning. A spoonful of the infusion taken occasionally is good in the hooping cough: & prevents straining & the breaking of blood which I have observed among children labouring under that complaint, & should recommend changing from the city to the country, children afflicted with this dangerous complaint. Ibid.

Class Cryptogamia. Order 1.

Adiantum. A. Pedatum. Asp. Maidenhair.

Gen. Char. Capsules disposed in oblong spots arranged along the margin of the frond. Involucre is formed by turning back the margin of the frond over the capsules, & it opens inward (the lines of oblong spots are generally along that margin which may be considered the end of the leaf (pedatum) frond pedate, branches pinnate, leaflets halved.

This plant rises to seven or eight inches in height: leaves very fine & soft, on short footstalks, diversely cut on the edges, thickest on the upper part, & spotted finely underneath: stalks of a dark purple colour. It grows in swamps & low grounds, & on the sides of stony mountains.

Use. Maidenhair is expectorant, mucilaginous, & not astringent. It has been found beneficial in tickling coughs, hoarseness from acrid effluvia, in obstructions of the viscera, obstinate coughs, pleurisy, asthma, jaundice, promotes the menses & fluid secretions, & strengthens the tone of the fibres.

Pour three quarts of boiling water on a pound of the dry herb, & two ounces of liquorice root bruised. a tea cup of this infusion may be taken every hour in all tickling coughs. As a pectoral boil two pounds of the dry herb & four ounces of sliced liquorice root, in eight quarts of rain water, & the consumption of one gallon: strain the decoction & put three quarts of molasses, or six pounds of loaf sugar to the strained liquor, then boil it away to the consistence of honey, a table

 spoonful or two may be taken every hour, & is an excellent remedy in coughs & asthmas. Boil three pounds of the herbs & root of maiden hair, in two gallons of rain water down to four quarts; strain it, & take a tea cup full or half a pint, four times a day in order to promote the menses, & cure the jaundice. I cured a man of the jaundice in West-Florida, by this decoction some years ago. Ibid.

Class 2. Order 2.

Monarda. M. Allophylla. Ang. Rose Balm. Mountain Mint.

Gen. Dec. Calyx cylindric, striated, 5-toothed: corol ringent, upper lip linear, involving the filaments. (allophylla) leaves acute serrati. peren. blow.

This beautiful plant rises two feet in height; leaves heart shaped with a sharp point serrated, in pairs opposite each other on tender reddish stalks. flowers of a purplish red, which appear in July.

It is indigenous to the United States, & grows plentifully on the borders & banks of low meadows in New Jersey. Long Island &c.

Use. This plant is an excellent febrifuge, antiseptic, diuretic & sudorific. & is beneficial in all inflammatory fevers, pleurisies, piles, & ardour of urine.

On one handful of the dry tops & flowers pour a quart of boiling rain water, cover the vessel & set it on hot ashes for an hour. After all necessary evacuations in fevers, pleurisies &c. the patient may take a tea cup full of this tea every hour with a little lime juice in it, & sweetened with lump sugar, & in order to raise the perspiration, the patient may bathe his feet in warm water for fifteen minutes, & dry the feet with a cloth. Let him drink a tea cup full warm in bed every half hour, with ten or twelve drops of spirits hartshorn in each tea cup full of tea, until it has caused a plentiful diaphoresis. He must avoid the cold after this for fear of a relapse. The rose balm is more aromatic, & more effectual in fevers, than the garden balm, or melissa officinalis, of the shops. Ibid.

Class 7. Order 1

Rumex. R. Acetosella. Ang. Sheep Sorrel.

Gen. Dec. Calyx 3 leaved: petals 3. converging; stigma many cleft. seed 1. naked three sided (acetosella) leaves hastate, perennial.

ries one or two feet in height: leaves are radical, & arrow shaped, of a bright
n colour, & stand upon long foot-stalks: flowers produced upon terminal spikes.
ed. of a reddish colour. The seeds of are single & of a triangular shape.
t grows in old pastures, & in corn fields &c. throughout the United States.
e. The infusion of the leaves are refrigerant useful in all inflammatory habits
well as in the scurvy.
With the leaves of sheep's sorrel I cured a large soft wen, which a man had on
scrotum for twenty years which hung down as big as the egg of a goose.
Being called by one William Comfort, in Orange county to examine his case
walked with him in the field, & found it to be a soft wen without arteries &c.
ered him to pull up a few bunches of the sheep sorrel, growing in his cornfield, & to
rap them in wet brown paper, & roast them under the ashes, when done to mash
em into the consistence of a poultice, & to sift a spoonful or two of ashes into the pool
& apply it over the wen warm every two hours. In a few days he called upon me
finding by applying my finger, that there was pus or matter formed, I opened it
with a lance & after evacuating the matter, I probed out a coagulum resembling
ed. I then ordered him to apply an emollient poultice &c. & in two weeks it was
ed. Ibid. See page 124

Class 5. Order 5.

Aralia. A. Racemosa. Am. Spikenard.
Gen. Desc. Umbellets imbricated: perianth 5. toothed, superior: petals 5: berry crowned
cellid: cells 2 seeded. Leaves ternate. (racemosa) stem branching. perm. fl. white
This plant grows to three or four feet in height: leaves are many, small ovate, on
y branches, from a thick purplish stalk: flowers inconspicuous very small, of a
nish colour, producing berries much resembling elder berries, of a sweetish pleasant, aro-
matic taste. This large grows in low rich grounds & among rocks. The roots run
nder ground very long, about the thickness of your finger, & have a very fragrant
mell & pleasant taste.
Use. This plant is much used by the Indians. The roots have been found effectual
gouty complaints. The berries are balsamic, cordial, & anodyne, & when infused in
ed in an equal quantity of brandy & water, make an excellent cordial, very pal-
table, anodyne, & highly beneficial to persons afflicted with the gout. The seed-

 medicine has cured a man afflicted with the gout in his stomach, when other medicines had been tried to no purpose.

Pour a pint of brandy on a pint of the fresh berries, & let it stand for a week near the fire; then pour a pint of rain water on them. Keep this medicine by you as a speedy cure for gout in the stomach. Dose a wine glass of this cordial twice a day. This is a disorder which has proved mortal to my neighbor who went to his bed seemingly well, but was suddenly seized with the gout in his stomach, which carried him off in a few minutes: but had he taken a glass of this cordial I make no doubt, but his life might have been prolonged.

For wounds a poultice of the fresh root will cure without any other medicine, & is good for ulcers in the leg &c. Ibid.

#

Class 10. Order 1

Pyrola. P. Rotundifolia. Eng. Round leaved Wintergreen. Shin leaf.

Gen. Des. Calyx 5 parted: anthers with two pores: capsule 5 celled, dehiscent at the angles (rotundifolia) racème many flowered leaves round. peren. w. n. This plant rises about three or four inches high: leaves numerous on small reddish stalks, heart shaped, thick; remains green all winter, produces small red berries, of a delicious aromatic sweet taste. flower small, of a pale purple colour. This small plant grows in abundance in pine woods where the land is good. In some places in New Jersey the woods are full of it, & the ground is green all winter, from whence it derives its name.

Use. It is refrigerating, desiccative, diuretic, astringent, consolidating, & vulnerary, both internally & externally. In fevers, suppression of urine, coughs & debility the following infusion is excellent: pour two quarts of boiling rain water on two handfuls of the leaves & roots of wintergreen, & let it simmer on hot ashes for two hours: a tea cup full of this infusion may be taken four or five times a day in fevers, suppression of urine & the gravel. For weakly consumptive habits, pound the fresh leaves in a mortar until you can express the juice, which must be put in a pipkin & kept over a fire until it boils. after it is cool decant the clear juice from the sediment, & to every pint of this clarified juice, add half a pint of Madeira wine or old Holland gin, as the patient likes. Dose, a wine glass full may be taken every morning, before dinner, & at lying down; the dose

increased as they find benefit. — There is a most delicious essential obtained from this herb, which answers every intention of the herb itself in its fresh state: dose from four to ten drops on sugar thrice a day. The water of wintergreen is made by pouring one ounce of the essential oil to a pint of alkohol, rectified & shaking the mixture. Dose of the essence from two to sixty drops in any kind of tea. Ibid

Class 5. Order 5.

Aralia. A. Nudicaulis. Eng. Sarsaparilla.

Gen. Desc. For this see page 125.

Use. The roots are used as a substitute for foreign sarsaparilla. A decoction is used in the country for that eruptive complaint called the shingles. It is also esteemed a remedy to restore the tone of the stomach. Dom. Enc.

Class 18. Order 1.

Cynara. C. Scolymus. Eng. Garden Artichoke.

Gen. Desc. Receptacle bristly: calyx dilated, imbricate; scales with fleshy base, marginate, pointed: corolla flosculous, sessile (scolymus) leaves prickly or unarmed, pinnate & undivided: calyx scales ovate.

This plant though an exotic plant well known. There are four species, but only two are reared for use viz. the scolymus or garden artichoke, & the cardunculus or cardoon both of which are propagated by slips or suckers, arising in spring from the roots of the old plant. The slips should be taken from good plants in March, or the beginning of April, & set in an open quarter of the kitchen garden, in rows at the distance of five feet from each other. By this process artichokes may be produced in the autumn of the same year. The size of this fruit will gradually diminish after the third or fourth year, though the roots continue sound for several years. — Artichokes flourish best in a rich & moist soil, but if it be too wet the roots are apt to decay in a severe frost. They have been used with advantage in the making of soda; & the leaves of scolymus, prepared with bismuth impart to wool

 a fine & permanent gold colour.

Artichokes succeed very well in this state (Pennsylvania) if left exposed in the winter months. When covered with straw in the autumn they rot. The only precaution necessary to take, is to dig a ditch around the plants to prevent the water from injuring them. For this very useful information the editor is indebted to Mr. Legaux, of Spring Mill. His artichokes were eight or nine inches diameter. The seed was imported from Holland. Ib. See page 143.

Class 11. Order 3. Nat. ord. Capparides.

Reseda. R. Odorata. Eng. Mignionette. Bas. Rocket.

Gen. Desc. Calyx 1 leaved. 4 to 6 parted: petals in many divisions: capsule 1 celled, dehiscent at the top: seed uniform (stamens 11 to 15: styles 3. 5. or none (odorata) leaves entire & three lobed. calyx long as petals. styles often. green. yellow.

Use. This is an indigenous plant, growing in meadows, pastures, & corn fields, chiefly in a calcareous soil; though it is sometimes found on walls; where its pale yellow flowers appear from July to August. This neglected vegetable may be eaten in the same manner as Kale. & it was formerly reputed to possess anodyne properties. Ibid.

Class 5. Order 1.

Campanula. C. Rotundifolia. Glomerata. C. Perfoliata. Eng. Clasping Bell-flower.

Gen. Desc. Corol. bell form. closed at the bottom by valves bearing the stamens: stigma 3 to 5 cleft: capsule 3 to 5 celled. opening by lateral pores. (perfoliata leaves clasping) annual. fl. blue — It grows on high calcareous lands, & blossoms in July & August. Altho. bees frequently frequent the flowers of this species, yet it should be carefully extirpated from meadows & fields as being a pernicious food for cattle. Ibid.

Class 18. Order 4.

Centaurea. C. Cyanus. Eng. Blue Bottle

Gen Desc. Calyx various. mostly imbricate. roundish: egret simple. various: receptacle bristly: corols of the ray funnel-shaped. longer. irregular (Cyanus) leaves linear entire lower ones toothed. annual. blue. Exotic.

vegetable is considered as a weed, but besides the property of affording a valuable
ent. (A fine blue colour equal to ultramarine may be made by collecting the
e corn bottle flower or Centaurea Cyanus, which abounds in almost every corn field
has two blue tints; the one pale in the larger outward leaves, the other deeper
hich lies in the middle of the flower; by rubbing the last while fresh, so as
express the juice it will yield a beautiful, unchanging colour. On the same
y that the flower is gathered, the middle should be separated from the extreme
s. & when a quantity of the juice is obtained, a small addition of alum will pro-
ce a permanent clear blue, which in the opinion of many persons is not inferior
ultramarine.) it is also much frequented by bees. A decoction of the flowers with
alls & copperas afford a good writing ink; & it may also be employed with suc-
h in the dyeing of linen & cotton. Ibid.

Class 3. Order 2.

rinus. B. secalinus. Avg. Brome Grass. Chess
er. Desc. Calyx 2 valved; spikelets oblong, teeth 2 ranked; valves awned below the
(secalinus) awnless. panicle spreading.
ce. Flowers in July. Cattle are fond of this grass, the seeds of which are prevalent
rong rye, in a considerable proportion, & when ground with the latter for bread, not
ly renders it blackish, but produces a narcotic or stupifying effect. From its flower
indles as Bechstein informs us a beautiful green dye may be easily extracted
ird.

Class 8. Order 3.

ygonum. P. fagopyrum. Avg. Buck wheat.
er. Desc. Calyx inferior 5 parted, coloured: corol 0: seeds 1. angular, covered with the calyx
mens & pistils vary in number. (the calyx in some species might be taken for a corol)
opyrum) stem smooth. branching. exotic.
e. Buck wheat is in flower throughout the summer, & would yield much larger crops
all the grains would uniformly ripen, & could be collected at the same time. About
f a bushel is sown on each acre in this country. & the Germans calculate sixty pounds
ight to every square rood of land (from seven to eight weeks only are required for bring-
it to maturity. & it produces from twelve to twenty fold. In this state it affords

an excellent manure for vines. It is affirmed that the German farmer obtains at less expense than by mowing & drying the whole, in the usual way, ten times the quantity of corn. One of the principal uses of buckwheat in this country is that of feeding horses. Mr. Fare advises it to be mixed with bran, chaff or grains either whole or broken in a mill. Hogs feeding upon this vegetable are very liable to scabby eruptions. Buck wheat should be sown thin, because the top blossoms are very apt to burn by the sun, in which case the smaller ones will be saved as they spread out, & protect one another from the sun. If sown thick, the plants cannot throw out under branches. The straw of buckwheat is but little esteemed. Sheep however feed on it. It also makes good manure when thrown into the farm yard.

For culinary purposes, also the grain of the buckwheat is used in various forms & affords a nutritious meal, which is not apt to turn sour on the stomach. Buck wheat reduced to flour, mixed with water & a little yeast, will rise in the course of two hours, if placed near a fire; & being then baked upon a hot iron, previously greased forms very pleasant cakes, which when buttered, constitute part of the diet of many persons in the United States during the winter. By depriving the grain of its husk before grinding, the flour is rendered white & is much esteemed. From the fresh blossoms of these plants, Dambourney dyed wool prepared with bismuth & tin, of a beautiful brown colour, & from the dried flowers bundles different shades of green. Those of Siberian species, in particular, yielded a fine yellow, which on boiling the wool still longer in the dye, changed into a golden tint, & at length assumed a brilliant yellow.

See Dom. Enc. page 421 & sequents. See my Mat. Md. vol. 1. page 105.

Class 20. Order 5.

Hanthium. H. Strumarium. Eng. Sea Burdock.

Gen. Desc. Staminate flowers. common calyx imbricate. corol 5-cleft, funnel form receptacle chaffy. Pistillate flowers. involucre 2-leaved, 1 flowered: corol 0: dry, muricate, 2-cleft: nut 2 celled (strumarium) stem marked, leaves cordate, nerved, fruit an oval burr.

Use. This is a native plant growing on dung, & ground highly manured. The thick stem is a foot & a half high, thick, often spotted. The leaves heart-shaped, lobed on long footstalks. Flowers from June to September. The leaves are bitter & astringent. They are eaten by horses & goats, & refused by cows, sheep, & swine. A decoction

— whole plant yields a bright yellow colour, which however is more lively — the ~~whole~~ flowers alone are employed. Ibid

Class 20. Order 3.

Lariarium. L. Ramosum. Eng. Bear Berry.

— Desc. Staminate flowers — Ament roundish: calyx 3 leaved: corol 0: Pistillate flowers — calyx 3 leaved: corol 0: stigma 2. cleft: drupe juicelessness, 1 seeded (ramosum) — 3 sided at the base, common peduncle branched, green, greenish white.

— This is an indigenous perennial, growing in ditches, marshes, & on the banks — where it flowers in July. This plant though refused by sheep & horses, is — greedily eaten by cattle while in a green state, but when dry it produces a hard — This shrub seldom rises more than three or four feet high, sending out branches on every side from the ground upward. The branches are very slender, & are garnished with oval pointed leaves, having three longitudinal veins, running from the — footstalk to the point, & diverging ~~from~~ in the broad part of the leaves from each — other: the leaves are placed opposite & deciduous, & of a light green colour. At the extremity of each shoot the flowers are produced in close thick spikes, & are composed of — five small petals of a clear white. Flowers appear in June.

During the revolutionary war the leaves of this shrub were dried & used as a substitute for common tea. The plant is said to dye wool a fine strong nankin cinnamon colour. Ibid.

Class 5. Order 1.

Celastrus. C. Scandens. Eng. Climbing staff tree. Waxwork. Bittersweet.

— Desc. Calyx flat: corol spreading: capsule 3 angled, 3 celled, berry like: stigma 3 cleft: — 3 valved — (scandens) climbing: fruit berry like, red, permanent, opening with 3 valves, wood

Use. Three species are found in the United States. C. bullatus. C. scandens, or climbing staff tree. C. myrtifolius. The second species possesses all the powers of sarsaparilla. Bom. Lin. This by the common people is called the bitter sweet. But it is a mistake. The Solanum dulcamara is the bitter sweet. An ointment is made by simmering the bark of the root, or the berries in lard which is efficacious in sprains bruises & wounds of cattle & horses. I. W. W.

Class 12. Order 13.

Potentilla. Arg. Cinquefoil.

Gen. Desc. Calyx 10 cleft, 5 alternate divisions smaller: corol 5 petalled: seed down. Lip. roundish, rough. fixed to a dry small receptacle.

This is a genus of plants comprising 35 species, of which only eight are indigenous to the United States.

Use. This plant has been usefully employed on the Continent of Europe in tanning calf skins: & it is also eaten by cows, horses, goats, & sheep; but it is refused by hogs. Bom. Lin. See my N. H. Vol. 1. page 107.

Class 10. Order 3.

Dianthus. D. Caryophyllus. Arg. Clove Pink - Carnation

Gen. Desc. Calyx inferior, cylindrical, 1 leafed, with 4 to 8 scales at the base; petals with 5 claws: capsule cylindrical, 1 celled, dehiscent at the top / caryophyllus petals crenate-lobed, scales of calyx ovate, acute, perm. Fl. red.

This genus comprehends 28 species, of which six only are natives of England. The carnation in its wild state grows on old walls, & is found among the ruins of ancient castles. It usually flowers in the month of June & July.

All the clove pinks will thrive in almost any garden soil yet they delight most in a light loamy nature. They are propagated chiefly by seed, in March or April. & generally come up in a month after sowing. When properly weeded & watered till July they will be fit for transplanting into nursery beds, which should be about three feet wide, & in an open situation. In these beds the plants are to be pricked during moist weather, at the distance of four inches from each other, & moderately watered; which should be occasionally repeated until they have taken good root. In September they will be fit to be finally

ms planted into other beds of good earth, about three feet wide in rows a
t nine inches asunder. Here they are to remain till spring; but if the win-
prove very severe, they should be sheltered with mats. In the vernal season
ing ought to be carefully weeded with a hoe, & the flowerstalks must be tied
h to sticks, in order to prevent their drooping, by which their growth would
retarded.

Clove pinks have a pleasant aromatic odour, & are said to be car-
iac, & alexipharmic. A decoction of their flowers has been successfully used
malignant fevers, & as Paulli asserts they raise the animal spirits,
uench thirst, & powerfully promote both perspiration, & the secretion
urine, without occasioning great irritation. Ibid.

Class Cryptogamia. Order 1.

Lycopodium. L. ~~Clubmoss~~ Complanatum. Eng. Flat Club Mos.

Gen. Desc. See page 121. Article Lycopodium.

The common club mos grows in dry mountainous places, heaths & woods. It is gen-
erally found in the North of England; produces a prostrate, creeping stem, from one
to three yards in length. Flowers from July to August & bears seed, which, if infused
in rosy wine, will, in a few days restore it. When thrown into a fire then seed
emit a bright flash & also possess the peculiar property of being almost impervious
to moisture, so that if they are scattered on a basin of water the hand may be
immersed to the bottom, without being wetted... In the north of Europe they
are pulverized & applied externally for curing chaps in the skin & other sores.
Beautiful mats, or summer carpets are manufactured of the stalks of this
plant in Sweden. Ibid.

Class 10 Order 5.

Agrostemma. A. Githago. Eng. Corn Cockle

Gen. Desc. Calyx 1 leaved, coriaceous: petals 5 with claws border obtuse, entire: capsule 1
celled, many seeded. (Githago) Bristly, petals entire. annual. Fl. red.

Obs. It grows in cornfields & bears reddish purple flowers in the month of June or July.
It is very prolific, & produces a great number of pods, each of which contains, from seven
to thirty seeds, somewhat resembling those of the turnip; they impart a strong taste to

 the bread baked of corn mixed with them: such grain ought therefore to be employed in the distilleries for the manufactory of starch. There is a variety of this species, which produces similar but smaller seeds than the former, & exhibits a peculiar mode of vegetation, being found within the wheat ear, one side of which is filled with good grain, & the other with a spurious one, produced by this weed. Hence husbandmen have given it the significant name of ear cockle. It is by no means so common as the former variety, but is generally attributed to bad husbandry, by which the land is exhausted of its nutritious qualities, & weakened to such a degree as to be prevented from bringing the wheat to perfection; because this plant is never found on lands that are well cultivated & properly managed. It is eaten by horses, goats, & sheep. Ibid —

Class 14. Order 2.

Melampyrum. M. Americanum. M. Pratense. Eng. Cow Wheat.

Gen. Desc. Corol with the upper lip compressed. the margin folded back. capsule 2 celled obliquely dehiscent on one side: seeds 2 gibbous - (linear pokeweed Americanum) leaves linear - lanceolate. the upper ones toothed, bristled at the base. flowers axillary. annual yellow white.

Use. It grows in woods & thickets, especially on clayey soils. Its blossoms are of a yellow colour with white tubes, & appear in July & August. Hogs eagerly eat the seeds, but reject the plant, which is also refused by horses. It is however eaten by sheep & goats & particularly by cows, which are extremely fond of it. Where this plant abounds the butter is yellow & uncommonly good - Ibid.

Class 20. Order 16.

Pinus. Pinus Balsamea. Eng. Spruce fir.

Class 3. Order. 1

Scirpus. Eng. Bull-rush.

Gen. Desc. Glumes chaffy, scales imbricated every way. seed single naked, surrounded with hairs or bristles. In ponds & rivers.

Use. When properly cured it makes very neat bottoms to chairs; but they will be much stronger mixed with the leaves of the cat tail flag. though somewhat coarser.

Cutler,

Class 6. Order 1. Nat. order Narcissi

porus. H. Erecta. Eng. Yellow Bethlehem Star.

. Desc. Glume like spatha 2 valved: corol superior. 6 parted, permanent: capsule clon-
ed, narrow at the base: seed roundish. (erecta) scape 2 to 4 flowered. peren. fl. yellow
mon in grass land & amongst bushes.

se. The bulbous roots are nutritious & wholesome. It makes beautiful edgings for
ders in gardens. Ibid. It is culinary & febrifuge. The roots are vomitive,
tic. They are used in lung & tan dangerous. & agues.

Class 8. Order 1.

Oenothera. Oe. Biennis. Eng. Scabish. or Tree primrose.

Gen. Desc. Calyx 4 cleft, tubular, caducous, divisions deflected: petals 4 inserted
the calyx: stigma 4 cleft: capsule 4 celled, 4 valved: seeds not feathered. Biennis,
aves lance ovate stamens shorter than corol. Large. biennial. yellow. Common in
d fields. This plant is generally known by the name of Scabious, & seems to have
en mistaken for the Scabiosa arvensis of Linneaus. No species of Scabious has been
found native in this part of the country. Ibid.

Class Pentagynia.

alis. O. Stricta. O. Dillenii. O. Acetosella. Eng. Upright wood sorrel. Low trefoil.
how broad. In rainy weather the leaves stand upright, but in dry weather
y hang down. Blossom yellow. In shady places. fl. May. August.

se Dr. Withering says, the expressed juice depurated, properly evaporated
set in a cool place affords a crystalline acid salt in considerable quantity
hich may be used wherever vegetable acids are wanted. The London colly-
rium a conserve to be made with the leaves beaten with thrice their weight
fine sugar. This juice is gratefully acid. An infusion of the leaves is an
eeable liquor in ardent fevers. Ibid.

Class Polygynia-andric

osa. R. Canina. Dog. Rose Wild rose.

Blossoms red. Berry pale red. Common in moist land.

e blossoms gathered before they expand, & dried are astringent, but when full

 blown are purgative. This species is generally preferred for conserves. A ~~di~~ fragrant water may be distilled from the ~~[illegible]~~ blossoms. The pulp of the berries beat up with sugar, makes the conserve of hips of the London Dispensatory. The dried leaves of every species of rose have been recommended as a substitute for every species of India tea, giving out a fine colour, a substringent taste, & a grateful smell. Ibid. See my M. M. vol. 1. p. 111.

Class Polygynia.

Rubus R. Strigosus. Aing. Red Raspberry.
Blossoms white. Berry pale red. Common by stone walls. June.
Use. The fruit is sub-acid, cooling & extremely grateful. If it be made into sweet-meat with sugar, or fermented with wine the flavour is improved. Dr. Withering says, it dissolves the tartarous concretions of the teeth. But for this purpose it is inferior to the strawberry. Ibid.

Class 13. Order 1. Stat. Ord. Hydro Shandes.

Sarracenia. S. Purpurea. Aing. Side saddle flower. Sarracene. Hollow leaved plants.
Gen. Desc. Calyx double, 3 & 5 leaved: corol 5 petalled: stigma peltate, covering the stamens: capsule 5 celled. (purpurea) leaves cup form with bordered mouths: radix perennial, purple. — The leaves are tubular, somewhat resembling the horn of an ox inverted. The aperture at the top is horizontal & circular, with a broad, patent, foliaceous appendage, extending two third of the way round it. A similar appendage runs down the concave side to the root. The cavities of the leaves are large & generally contain a quantity of water. They seem to be designed by nature for reservoirs, from which the plants may constantly be supplied with moisture. The stems are erect & naked. Blossoms single, terminating & reclining: petals red: the stigma which covers the disc reddish green. In moist land, especially in fens & quagmires. May, June. Ibid.

How greatly the flowers of the yellow Sarracenia resemble a silken canopy. The yellow pendent petals are the curtains, & the hollow leaves are not unlike the cornucopia or Amalthea's horn; what a quantity of water a leaf is capable of containing, about a pint! taste of it — how cool & animating — limpid as the mor-

dew: nature seems to have furnished them with this cordated appendage 3rd
d, which turns over, to prevent a too sudden & copious supply of water, from heavy
ers of rain, which would bend down the leaves never to rise again; because their straite
ralel nerves, which extend & support them, are so rigid & fragile, the leaf would
vitably break when bent down to a right angle; therefore I suppose the waters
ich contribute to their supply, are the rebounding drops or horizontal streams
ffed by the winds, which adventitiously find their way into them, when a
t of wind shifts the lid: see then that stiff hair they all point downwards,
ich direct the condensed vapours down into the funnelum; these stiff hairs also
vent the varities of insects, which are caught from returning, being invited
n to sip the mellifluous exudation, from the interior surface of the tube,
ere they inevitably perish; what quantities there are of them! these latent
aters undoubtedly contribute to the support & refreshment of the plant; pre-
ps designed as a reservoir in case of long continued droughts, or other casualties.
ce these plants naturally dwell in low savannahs liable to overflows, from
ain waters. for altho: I am not of the opinion that vegetables receive their nou
hment only through the ascending part of the plant, as the stem, branches,
aves, &c; & that their descending parts, as the root & fibres, only serve to hold
r, retain them in their places; yet I believe they imbibe rain & dews through
eir leaves, stems, & branches, by extremely minute pores, which open on both
e surfaces of their leaves, & on the branches, which may communicate to little
milliary ducts or vessels; or, perhaps the cool dews & showers, by constricting
ese pores, & thereby preventing a too free perspiration, may recover & again
vigorate the languid nerves of those which seem to suffer for want of wa-
r, in great heats & droughts; but whether the insects caught in their leaves
which dissolve & mix with the fluid, serve for aliment & support to
ese kind of plants, is doubtful. All the Sarracenias are insect
atchers, & so is the Drosera Rotundifolia. (Bartram—)

Class 5. Order 1.

Viola. V. Pubescens. Ang. Yellow Violet.

Gen. Desc. Calyx 5. leaved: corol irregular, with a horn behind (sometimes the horn is wanting) anthers attached by a membranous tip: capsule 1 celled. 3 valved: (Pubescens) leaves cordate, hairy. Corol. Blossoms yellow. In shady places. May.

It is said the Indians applied the bruised leaves to boils & painful swellings, for the purpose of easing the pain & producing suppuration. Cutler.

Class 20. Order 4.

Urtica. U. Pumilla Ang. Stinging Nettle. Richweed Urtica dioica ? gen.

Gen. Desc. Staminate flowers – calyx 4 leaved: corol 0: nectary central cyathiform. Pistillate flowers – calyx 2 leaved (2 valved) corol 0: seed 1. glossy. (Pumila) leaves opposite, ovate, racemes 2 parted, shortish, subcorymbed, annual.

Use. The young shoots early in the spring are a good pot herb. A leaf put upon the tongue & pressed against the roof of the mouth, is said to be efficacious in stopping a bleeding at the nose. The parts affected in paralytic cases have been recovered by stinging them with this plant. Dr. Withering says the stings are curious microscopic objects. They consist of an exceeding fine pointed, tapering hollow substance, with a perforation at the point, & a bag at the base. When the sting is pressed upon it readily punctures the skin; & the same pressure forces up an acrimonious fluid from the bag, which instantly squirts into the wound, & produces an effect which almost every one has experienced. The stalks are dressed like flax for making cloth or paper. The leaves cut fine & mixed with dough are very good for gingerbreads. Ibid.

Urtica Pumilla vel Adenia. Ang. Water Nettle.

Class. Order & Generic Discription as above.

The footstalks of the leaves, & the stem of the plant is filled with water so as to make them transparent. Bruised the leaves upon scrofulous sores & they allay their irritation. They are said to be excellent for fresh Wounds &c.

Class 20 Order 5.

Amaranthus. A. Melancholicus. Ang. Love lies bleeding. Prince's feather.
Gen. Desc. Staminate flowers. calyx 3 or 5 leaved: corol 0: stamens 3 or 5. Pistillate flowers. Calyx & corol as the staminate; styles 3: capsule 1 celled, opening transverse: seed 1. (melancholicus) glomerules axillary pedunculed, leaves lance ovate coloured. annual. ord. exotic.
Use. A decoction of this plant drank freely has been found efficacious in obstinate hemorrhagies, when other powerful styptics have failed. Cutler

Class 11. Order 3. Nat. Ord. Euphorbiaceæ

Euphorbia. E. Maculata. Ang. Spotted Euphorbia. Spurge
Gen. Desc. Calyx 1 leaved, inflated: petals 4 or 5, standing on the calyx: capsule 3 grained. (maculata) stem prostrate, forked, leaves hairy. spotted, annual. fl. white. This is said in the Transactions of the Philadelphia Agricultural Society to produce the slobber or slaver in horses which eat it. It grows in corn fields. S. W. W.

Class 5. Order 2.

Sanicula. S. Marylandica. Ang. Sanicle.
Gen. Desc. Flowers of the disc abortive: umbels crowded into head-like heads: seed prickly. (marylandica) forked, leaves about 7 lobed. biennial. fl. white.
Use. The root is warm & aromatic. & is is said to be good for pain in the breast. W. W. A decoction of the Sanicula Marylandica, or Maryland Sanicle is said to be employed with good effect by some of the country practitioners, as a diuretic in cases of dropsy. This plant grows very abundantly in many parts of the United States. Baton.

Class 8. Order 1.

Epilobium. E. Spicatum. Willow herb. Wickaup.

Calyx 4 cleft, tubular: corol 4-petalled: capsule oblong, & of great length: seeds feathered. - flowers reddish purple.

Use. It is very mucilaginous. Infused in hot water, it renders it as ropy as slippery elm. A decoction of it has frequently proved highly serviceable in the dysentery - S. W. W.

#

Class 18. Order 1.

Cnicus. C. Arvense - Arg. Canada Thistle.

Root perennial, round, almost the thickness of the little finger, of a dirty white colour: penetrating deeply, & creeping far & wide.

Stalk three or four feet in height, upright, somewhat branched at the base, round & somewhat woolly, above angular & smooth -

Leaves sessile, alternate lanceolate, cut in so as to be somewhat pinnatifid, the sides somewhat forced together, sinuated, waved, & curled, spinous, above smooth, green, beneath pale, scarcely villous, & the uppermost one almost entire -

Flowers middle sized, of a pale purple colour, very fragrant.

Flower stalks leafy, one or two flowered, above somewhat woolly.

Calyx common to all the florets, ovate, contracted at top, imbricated the scales numerous, pressed close lanceolate, sharp at the back, terminated by a pointed appendage, purplish, points turning a little back, & mild.

Corolla compound, tubular uniform, all the florets hermaphrodite, near equal, monopetalous, funnel shaped, the tube very slender, the limb divided into four, linear, reflexed segments one more deeply divided than the rest.

Stamina: five capillary filaments, very short & white; anthers united into a cylinder, shorter than the corolla, the mouth five toothed, the teeth white at the tips —

tillum: Germen ovate, compressed: style filiform, longer than the stam-
a, of a British red colour: stigma obtuse, finally bifid.
ds linear, slightly four cornered: down feathered sessile.
Receptacle hairy, hairs glossy. Curtis's Flora Londiniensis—
After this minute description of the plant, Mr. Curtis makes the following observa-
ons on the method of destroying it.

We have bestowed on this plant the harsh name of cursed with a view to awaken
the attention of the agriculturalist to its nature & pernicious effects; repeated obser-
ation has convinced us that many husbandmen are ignorant of its economy, &
hile they remain so, they will not be likely to get rid of one of the greatest
ests which can affect their corn fields & pastures.

Of the thistle tribe the greatest part are annual or biennial, & hence
easily destroyed: some few are not only perennial, but have powerfully creeping
roots, & none so much as the present; in pulling this plant out of the
ground, we draw up a long slender root which many are apt to consider
the whole of it, but if those employed in such business examine the roots so drawn
up they will find every one of them broke off at the end, for the root passes
perpendicularly to a great depth, & then branches out horizontally under
ground.

To give an idea of its astonishing increase, we shall subjoin from
the memoirs of the Bath Agricultural society an experiment made for
the very purpose of ascertaining it.

April 1st 1778. I planted in a garden a piece of the root of this
thistle, about the size of a goose quill, & two inches long, with a small head
of leaves, cut off from the main root just as it was springing from the ground:
by the 2nd of November following this small root had thrown out shoots, several
which had extended themselves were about six inches under ground, others had
penetrated to the depth of two feet & a half, the whole together when dug
up & washed from the earth weighed four pound. In the spring of 1779, contra-
ry to my expectation, this thistle again made its appearance, on & about
the spot where the small piece was originally planted; there were between

 fifty & sixty young heads, which must have sprung from the roots, which had escaped the gardners search, tho' he was particularly careful in extracting them: When this paper was delivered to the society from experiments then made, I was of opinion that repeated mowing or spudding would not destroy this thistle. I have since had cause from further observation & experiments to think differently; no doubt however does it penetrate, that these operations are the only ones which can well be applied to its destruction, & if they do not effectually overcome, they will greatly enfeeble it. This species is seen every where by road sides, too frequently in corn fields, & more rarely in pastures; it flowers from June to August.

In the Flora Rustica of Dr. Martin, Professor of Botany in the University of Cambridge, you will also see a figure & description of the same plant, under the Linnean name of serratula arvensis. After describing the plant he observes: This thistle is known every where by road sides, too frequently in corn fields & more rarely in pastures, flowering from June to August.

It has the habit of the thistle, & is universally called so in English though Linnaeus makes it a serratula. It is the worst pest of arable lands, having strong creeping roots, striking down to a great depth, & then branching out horizontally, so that it is very difficult to root it out when it has once got possession. Frequent & deep ploughing in dry weather will destroy it in arable land. In pastures it should be pulled or forked out when the ground is well soaked with wet.

To us mowing has always appeared to make it run more at the root.

The goat & ass will eat it; horses will sometimes crop the head when tender but ors & other cattle seem to touch it. It is said to yield a very pure vegetable alkali when burnt."

Such is the information to which I have been led in the examination of the Canada thistle. In addition to the practice of frequent mowing & spudding, as the best means of destroying this weed, I would suggest the following mode of culture:

1st After deep & frequent ploughing to occupy the ground with corn, potatoes or some other crop which will require frequent hoeing & cleaning.

2nd In the autumn after taking off the crop, again to give the land another deep ploughing leaving it the rough state, so as to expose the roots of the thistle to the frost of the ensuing winter. This process will also the better prepare the soil to be laid down in grass the following spring. In doing this I would also suggest the propriety of —

by sowing a much greater quantity of grass seed to the acre than is usually done? 4?
by pursuing the practice recommended by Lord Kames, of sowing from twenty to twenty four
pounds of clover seed to the acre. I have remarked that the grounds at the Elgin Botan
garden are much more free from weeds than those of my neighbors, at the same
time that the grass is much more delicate for feeding. It is apt to be thrown down
by the storm, & makes a less succulent hay, both more easily cured, & better preserved
when it is more thinly spread, but of stronger growth. How far these may prove
additional means of counteracting the growth of the thistle in question, I submit to
you & other practical farmers. David Hosack — Hon. Saml. L. Mitchill —

Class. Order.

Physalis. P. Alkekengi — Eng. Winter cherry —
The berries of this the only part of it ever in use are not known in the present prac
tice & I have never seen them employed, but I have some reports of their being em-
ployed by others without effect: & if their diuretic powers had ever been remarkable, we
may presume that they would still have continued in use. I cannot dismiss them with-
out an observation, that as it is allowed that the berries often take a taint
from the leaves of the plant, it will always require some caution in employ-
ing any part of a plant which is taken from an order of a very poisonous kind. Cullen

Class 18. Order 3.

Helianthus. H. Tuberosus — Eng. Jerusalem Artichoke —
~~Fragment description~~ See page 127 — Artich Cynara Scolymus —
Gen. Des. Calyx imbricate, subsquarrose, leafy: receptacle flat, chaffy, egrete-
ed, deciduous (tuberous) lower leaves heart ovate. root tuberous. perenn. fl. yellow —
Use. The Jerusalem artichoke is a plant of the same genus as the sun flower. It pro-
duces bulbs at its roots, has been long cultivated in gardens as an esculent vegetable,
except that it is watery & of a softer consistence, in many respects resembles the
potato, but is not in such general esteem. This root is however much valued for
feeding hogs, & store pigs. Mr. Peter, the author of "Winter Riches" published in the
year 1792, asserts that from one acre of ground he obtained between seventy & eighty
tons of this root. He is of opinion that seven acres will yield three hundred & nine-
ty tons, which will keep one hundred swine for six months, allowing each head sup-

ty six pounds per day. at an advance of value from ten to fifteen shillings, especially if they be boiled with meat hog wash.

When these roots are given to horses. they should be washed, cut, & ground in an apple mill; the proportion given at each time is eight pounds, with two ounces of salt & a bite of hay thrice daily.

J. Nottes celebrated cultivator found the produce of this root to be about Four hundred & eighty bushels, Winchester measure, per acre. without any dung. Its chief recommendations are the certainty of a crop; its flourishing almost upon any soil: but not requiring manure, & being proof against the severest frosts.- The culture is the same as that of potatoes. Dom. Enc.-

If this plant could be propagated by seed it might make an useful product in agriculture. as horses are very fond of the leaves, & some of the roots both of which are produced in great quantity; & as the latter contain much sugar they must be very nutritive; & in respect to their culinary use are remarkably grateful to most palates, as well as nutritive when cut into slices, & baked in beef or mutton pies; but are said to be flatulent in the bowels of those whose digestion is not very powerful; a property which might be worthy of attention, where the propensity to fermentation is required, as in making bread with potatoes, or in the distillery. — Darwin's Phytologia.-

See vol. M. M. vol. 1. page 84.-

Class 18. Order 2.

Gnaphalium. G. Uliginosum. Hay. Cudweed

Gen. Des. Calyx imbricate, with the marginal scales rounded, scarious, shotish, glossy, coloured: receptacle naked: egret filose, or plumose. (Flowers often all perfect) (Uliginosum)- stem much branched, leaves lanceolate linear tapering to both ends. racemes crowded terminal. annual. white-

Use. It has a root that creeps every way, & the leaves that proceed from it lye on the ground; these are oblong with a roundish point, of a light green colour, & hoary on the under side; among which arise the stalks to near a foot in height which are covered with a sort of down or cotton; & the leaves are long & narrow. The flowers grow on the top of the stalks, which consist of flowers in the form of a star, which are placed on an embryo & comprehended in a scaly, shining cup. This turns to a seed with downy threads thereon. It is cooling in gargling, & astringent, & has been recommended in disorders of the lungs, as well as for stopping catarrhs. & there has been a considerable in the shops for these purposes- Brooks —

Class 20. Order 2.

Lemna. L. Minor. Ang. Duck's meat.

Gen. Desc. Staminate flowers - calyx 1 leaf: corol 0: Pistillate flowers - calyx 1 leaf: corol 0: capsule 1 celled, 2 seeded (minor) leaves oval flat both sides coloring at this bases, root solitary.

Duck's meat is generally seen on the top of stagnating waters, where it forms a green moss & the whole surface is covered with small leaves that are of a green, round, & compressed like a lentil. They are greenish above but blackish below, & they are tied together with very slender white filaments from which as root, they derive their nourishment. They have neither flowers nor fruit, at least none that are yet discovered. Ray looked upon the infusion of duck's meat as a secretaire against the jaundice. When six ounces of it are taken in white wine for nine days together in a morning fasting. Some have used as a cataplasm against the gout, & to ease the pain of the piles. It is called duck's meat because ducks are very fond of it. Ibid.

Class 13. Order 13.

Hepatica. H. ~~Nobilis~~ Triloba. Ang. Noble Liverwort.

Gen. Desc. Calyx three leaved: petals 6 to 9: seeds naked.

This has a fibrous perennial root, composed of several heads or knots, from each of which the flowers proceed, & then the leaves, which consist of three lobes growing on a pedicle that arises from the root; the pedicle of the flower is naked & single, & the calyx consists of one leaf cut into three segments. The flowers are racemous, & are composed of six or eight blue petals, & many stamina with three pistils; the pistil is globous & warty, & turns to a head containing several sharp seeds. There are other kinds with flowers of different colours by which they are distinguished from each other. It is accounted a vulnerary, but is now of little or no use among us, though many affirm it is cooling, gently astringent, & an excellent strengthener when the fibres are lax. Ibid.

Class Cryptogamia. Order 1.

Polypodium. P. Vulgare. Eng. Gen. Polypody.

Gen. Desc. Capsules disposed in round scattered dots, on various parts of the lower surface of the frond. (vulgare) frond pinnatifid with oblong obtuse subcreate lobes, root with chaffy scales—

It has a root six inches in length, & almost as thick as a man's little finger, that creeps along the surface of the ground; it is full of tubercles or warts & is easily broken. It sends forth leaves, which are like those of male fern, but much less, & they are deeply cut almost to the rib, into long, narrow segments which are covered on the back part with a sort of reddish powder. This examined through a microscope appears to be spherical, membranous shells, which open, & let fall small yellow seeds, in the form of a kidney. It is a capillary plant, & consequently bears no flowers; it grows in forests, valleys & among stones covered with moss, as well as on the trunks of old trees. The root only is used in medicine, & that is accounted best that is found upon oaks. It is green all the year, & in April it sends forth fresh leaves. The ancients accounted this root to be purgative, but it does not so much open the belly, or at least very weakly. Some affirm that it opens obstructions of the viscera, but the best authors are not agreed in its virtues, though it has been much used in medicine— Ibid.

Class 18. Order 1.

Carthamus. C. Coeruleus. Eng. False Saffron. Ladies Thistle.

Gen. Desc. Calyx ovate imbricate with scales; ovetish. hairy at apex: egret chaff hairy or none: receptacle chaff bristly. (coeruleus) egret hairy, leaves thorny toothed, pern. branch. This has a long thick fibrous root, & long, broad, sinuated leaves, covered on the edges, with many hard, shining, smooth, stiff prickles, of a light green colour, & variegated with lines or stripes of white. The stalks are about as thick as ones finger, streaked, & covered with a hairy down, & are branched, & are two or three cubits high. The flowers grow on the head of the branches, & consist of many purple tubulous florets, divided into five parts at the top, each of which are placed on an embryo in a scaly, prickly calyx. Each embryo turns into a smooth

al seed. a little flattish & furnished with down. It grows in uncultivated places 47
by the way sides. The tender leaves after the prickles are taken off, are eaten b
some as a salad, & they are said to have the same virtues as carduus benedictus.
e seed is excellent for the pleurisy, rheumatism, & pains of the breast. & is given
- emulsion from one dram to two. Ibid. See my M. M. vol. 1. page 61.

Class Cryptogamia. Order 1.

Asplenium. A. Rutamararia. A. Trichomanes. Eng. Spleenwort.

Gen. Desc. Capsules in lines parallel to each other situated exactly upon the seconda
y veins of the frond: involucres opening inwards. (By the secondary veins is meant those
of the middle part of the disc, not the larger ones at the margin or midrib. The
parallel lines of capsules may stand obliquely with respect to the midrib, but their di-
rection must be parallel to each other.) (rutamararia) frond only pinnate at top.
With other Defects.

This is a small plant, six or eight inches in height: leaves upright sin-
uous & pinnated, the ribs are blackish, pinnae in pairs annexed, gradually di-
minishing towards the top.

It grows in bunches in low wood, near moist meadows & among rocks.

Its leaves are pectoral, aperient & diuretic, they open obstructions of the viscera
promote expectoration, assist urine by cleansing the kidnies, allay pain in
the urinary passages by gently carrying off sand & gravel, & has cured the ve-
nereal disease.

Put an handfull of the dry plant into a quart mug, & fill it up with
boiling water. dose a teacup full taken four times a day, sweetened with
honey. In the cure of hypochondriac affections, the patient may take
a spoonful of the extracted juice of the plant twice a day, beginning
the first day to take but half a table spoonful at a time. Idiots have
had their reason restored by drinking the juice of this plant. — I have been
credibly informed of a countryman who came down the river Delaware with
a raft as far as Trenton, who had there the misfortune of catching the
venereal disease. & that on his return he met with an Indian squaw,
who by the use of this plant cured him in a few days. Henry.

Class 18. Order 1.

Vernonia. V. Noveboracensis. Eng. Devil's Bit. quer.

Gen. Desc. Calyx imbricate, ovate; egrets double, exterior chaffy, & short, interior capillary; receptacle naked; stigma a cleft thatch. This is called Scabious by some. It has a perennial short root, that seems to be bitten off in the middle, & it is furnished with long fibres. It sends forth oblong pointed leaves like those of common Scabious, but they are whole & not cut, except those on the upper part of the stalk, which are crenated on the edges, & are greener above than below, as well as rough & covered with such short hair that they seem to be smooth. Late in the season, there arise from among the leaves several stalks, that are round, firm, reddish, branched, & have two small leaves at each joint, which flowers at the top like those of the common Scabious; but the heads are thicker & of a bluish colour, though sometimes they are purple or white, there are succeeded by several round furrowed seeds. It grows in uncultivated places & in meadows, & pastures, & it flowers in the autumn. It has been looked upon as an alexipharmic, & vulnerary, & has been by some reckoned excellent in the quinsey, & in venereal ulcers of the mouth, & throat. Boorhs—

Class 12. Order 1.

Eugenia. E. Caryophyllata. Eng. Clove-tree.

Gen. Desc. Cal. 5 part. superum. petals 4. bacca 1. loc. 1 sperma.

Use. This is a beautiful tall tree, a native of the Molucca Islands. Cloves are the unexpanded flowers, which are dried by fumigating them & then exposing them to the sun. They have a strong aromatic odour & a pungent taste. This afford to water their flavour principally; to alcohol their taste. By distillation with water they yield a fragrant essential oil not very pungent. The oil of cloves commonly met with is sometimes sophisticated by certain additions.

Cloves are among the most stimulating aromatics; the dose of them does not exceed from five to ten grains. They are employed principally

adjuvants, or correctents to other medicines. The essential oil is used with the same intention, & likewise as a local application in tooth-ach; but from its pungent nature, it is apt to corrode the gums & injure the adjacent teeth.

Clas 16. Order 10.

Robinia. R. Pseudo-acacia. Eng. Locust-tree.

Gen. Dec. Calyx 4 cleft. upper division 2 partid: banner large, reflexed, roundish. legume gibbous, elongated. (pseudo-acacia) racemes pendulent. legumes smooth. stipules spinous. woody. Fl. white.

The locust tree is a native of the United States, but was not known north, or east of the river Potomac, before the white settlers brought it from thence. It is the robinia pseudo-acacia of Linnaeus with a white & fragrant blossom. It has superior advantages for beauty or use to most trees of foreign or domestic growth. The delicacy of its green shade is most pleasant to the eye, & so agreeable to vegetation, that the earth beneath a locust grove, or within the umbrage of a single tree is covered with a luxuriant foliage of tender grass. The odour of its leaves is pleasant, but that of its papilionaceous blossoms is delightful. As an ornamental tree it is not excelled by any forest tree of our own country. When in full foliage no tree has a more delicate appearance to the eye of the beholder, or a more agreeable shade to man or beast. Some admire the dogwood (cornus florida) some the bean tree (bignonia catalpa) others the horse chestnut (aesculus hypocastanum) some the white wood or tulip tree (liriodendron tulipifera) all natives of our own forests; but none of them can compare with the locust either for beauty or utility. It therefore appears of importance to inquire into its properties, & point out some means of cultivating it to advantage.

The locust tree is of quick growth, the wood of which is hard, durable & principally used in ship building. In a country situated like the United States with an extensive line of sea coast, penetrated by numerous bays, & giving rise to so many great rivers whose banks are covered with forests of extraordinary growth, whose soil is fertile rich & variegated, whose climate is agreeable & diversified by a gradation of temperature; to such a country inhabited

In an industrious & enterprising people, commerce both foreign & domestic must constitute one of the principal employments. As long as this country possesses the necessary timber for ship building, & the other advantages which our situation affords, the government will continue to be formidable to all other powers. We have within ourselves four materials necessary for the completion of strong & durable naval structures. These are the live oak, locust, cedar & pine, which can be abundantly supplied. The former is best for the lower timbers of a ship, while the locust & cedar form the upper works of a frame. The pine supplies the timber for decks, masts, & spars. A vessel built of live oak, locust & cedar will last longer than if constructed of any other wood. The locust a native of Virginia & Maryland is in such demand for foreign & domestic consumption, that it is called for before it can attain its full age. It has been cultivated as far eastward as Rhode Island, but begins to degenerate in quality in that state. Insects attack it there which are not found in New York or its native situations. These give the timber a worm eaten appearance, & render it less useful. The locust has been extensively raised in the southern parts of New York, but the call for it has been so great, that few trees attain any size before they have been wanted for use. Since they are in great demand & ready sale, & no ground can be appropriated for any kind of timber with so much advantage as locust. Besides its application for ship building it is extensively used for fencing; & for posts no timber will last longer in or out of ground. On Long Island, where wood is scarce, & fencing timber in great demand, the locust becomes of much local importance from this circumstance alone, independent of its great consumption in this city among the carpenters. In ship-building it is not exclusively applied to the interior or frame. In many places where strength is wanting locust will bear a strain which would break oak of the same size. There an oak tiller has been known to break near the ~~tiller~~ head of the rudder in a gale of wind which has never happened with a locust one. Tillers for large vessels are now uniformly made of locust in New York. It is the best timber for pins or trunnels, & preferable to the best of oak. The tree generally grows straight with few or no large limbs, & the fibres are straight & parallel which makes it split well for making trunnels, with little or no loss of substance. These are made in considerable quantities for exportation —

The locust tree does not bear transplanting in this part of the country, & in all
probability this arises from the custom of cutting off the roots when taken up for that
purpose. Most of the roots of the locust are long, cylindrical, & run horizontally
not far under the surface. In transplanting, so few of them are left to the body
of the tree removed, that little or no support is given to the top, & it consequently
dies. If care was taken not to destroy so much of the roots, a much larger proportion
of those transplanted would live & thrive. So great has been the difficulty
of raising the locust in this way, that another method of propagating has been
generally resorted to. Whenever a large tree is cut down for use, the ground for some
distance around has been ploughed, by which the roots near the surface have been
broken & forced up. From these roots suckers shoot up, & the ground soon becomes
covered with a grove of young trees. These, if protected from cattle & fenced
in, will grow most rapidly & the roots continuing to extend new shoots arise
& in a few years a thrifty young forest of locust trees is produced. The leaves of
the locust are so agreable to horses & cattle, that the young trees must be fenced in
to preserve them. When growing in groves they shoot up straight & slender
as if striving to outstrip each other, to receive the most benefit from the
rays of a genial sun.

Another difficulty has arisen in propagating the locust from inability to
raise it from the seed. The seed does not always come to perfection in this state, & if
it does, it will not sprout unless prepared before planting. The method best adapted
to this purpose has been long ago proposed by Dr. Bard, but it is not generally
known, or if known is not usually attended to. When this shall be well
understood & practised the locust will be easily propagated, & then instead of raising
groves of them, the waste ground along fences & places where the useless Lombardy
poplar encumbers the earth, should be selected to transplant them separately
single, there will be an economy in using the soil, & the trees will grow much
finer & stronger timber.

Dr. Bard's method of preparing the seed was to pour boiling water on
them & let them stand & cool. The hard outer coat would thus be softened, & if the
seed swelled by this operation, it might be planted & would soon come up. This
has been followed with success on Long Island, & on a late visit to North Hampton
I was led to admire Judge Mitchell's nursery of young trees planted this spring.

The Judge took a quantity of seed ~~planted~~ collected on the island, & put it in an earthen pitcher & poured upon it water near to boiling. This he let stand for 24 hours, & then decanted it & selected all the seed that were any way swelled by this application of heat & moisture. To the remainder he made a second libation of hot water & let it remain also 24 hours, & then made a second selection of swelled seed. This was repeated a third time on the unchanged ones, when nearly all were affected, & then he prepared the ground & planted them. He planted the seed in drills about four feet apart & in eight or ten days they were all above ground, & came up as regularly as beans or any other seed that are cultivated in gardens. When I saw them the middle of July, they were about a foot high, & thrifty & of a good colour.

It is the Judge's intention to leave them in their present situation about three years, & then transplant; & provided he does not mutilate the roots in removing them they will bear transplanting, live, & thrive, & be the most productive tree that a farm can have. This method of preparing the seed, & planting the locust, cannot be too warmly recommended to the farming interest. Samᵘ Akerly. American Monthly Mag. vol. 1. p. 363.

Class 18. Order 2. Nat. Ord. Corymbiferæ

Erigeron. E. Canadense. Eng. Canad Flea-bane.

For Generic Description see page 108. Art Erig. Philadelph.

Recept. nudum. Pappus pilosus. Corol. radii linearis angustissimae

The Erigeron Canadense is an annual plant. It appears to seek a dry, gravelly & somewhat elevated soil. I have known to arrive at perfection on the roof of a house where the roots found only sufficient ground to support its weight. Its usual height is about four feet, though it sometimes grows to six feet. The stem is hairy, & has sometimes branches near the top in the form of a cone. The specimens which I have examined, had the lower leaves subbolneate agreeing with the account of Scopoli in his Flora Carniolica "Foliis imis dentatis" but a gentleman informed me that in the vicinity he has sometimes seen the upper leaves dentate, which reconciles the authority of Scopoli with that of Pathering, who says "the leaves above with distant serratures. The calyx is short linear & inner scales longest. It flowers from the beginning of August to September. The flowers are very small, on slender peduncles; yellow in the centre; in the circumference white with a tinge of red.

manner in which Lamoni expresses the colour of the full blown flower (Clove Pinks) is not sufficiently definite; the pale ground has a tinge of yellow. Diffuse into every part of the plant as Clayton observes is odoriferous, & diffuses an agreeable flavour through the field when the flowers are in full bloom.

Medical Use. This plant has been reputed as an antidote to the bite of serpents, poisonous reptiles, & as efficacious in resolving tumours.

The Erigeron Canadense was first introduced into the practice of the New York Alms House in 1812 by Dr. Gilbert Smith, the attending physician. It was recommended to him by a medical gentleman who had witnessed its efficacy in cases of diarrhoea, after the usual remedies had failed to afford relief, & was speedily cured by a decoction of this plant, under the direction of a female acquaintance. The decoction & infusion were administered in the Alms House with decided advantage in diarrhoea. Several distressing cases were cured & others relieved by a few doses. But it also sometimes disappointed our expectations, & what at first appeared in some instances unaccountable, evidently aggravated the complaint. This was owing to the preparations spoiling in warm weather before the quantity allowed was taken. I then prepared the extract & tincture, both of which succeeded in curing a great majority of cases in which they were taken. After proper evacuations, a few doses were generally sufficient in ordinary cases that had not become very inveterate. It was sometimes intentionally given in some instances of recent diarrhoea without any previous evacuations, though they were obviously indicated; in almost every case of this kind it averted the complaint as speedily as when evacuations had been premised. A friend of mine was attacked with a troublsome & debilitating diarrhoea, during a visit to the city. He was anxious to be immediately cured — two doses of half an ounce of the tincture had the effect. But is manifestly improper to restrain diarrhoea when the contents of the bowels are irritating, before they have been thoroughly evacuated — fatal may be the consequence. I have known this to follow such premature use of the Erigeron Canadense. I was unable to try its efficacy in many cases of chronic diarrhoea in consequence of the small quantity of flowers which I had gathered; but in some cases of long standing were completely cured & others were much relieved by a few doses which were given only to

 observe its operation. Six doses consisting of only one grain of the extract completely cured one patient sixty years old, of a distressing diarrhoea, with which she had been afflicted for two months, & by which she was very much debilitated.

Whilst it lessened the frequency of the alvine discharges, it generally though sometimes but temporarily, quieted the pain & griping attendant on diarrhoea. The tincture & extract almost uniformly increased the quantity of urine, & it not unfrequently operated as a powerful diuretic. In Cases where diarrhoea depended on affections of the liver, as might be expected, received at best but temporary benefit from the use of the Erigeron.

~~Present dysentery~~ It is worthy of remark that the Erigeron Canadense was, in no case, accompanied by those auxiliary means which we find it sometimes advantageous, & even necessary, to combine with those more active remedies on which chief reliance is usually placed. The increase of urine which was uniformly observed to attend the use of the tincture & infusion, induced me to prescribe the latter in a case of Ascites, in which the quantity of urine was considerably less than natural. The patient was directed to take a pint of the infusion daily; his ordinary drinks were so regulated as not to interfere with the result. The quantity of urine amounted the next morning to twenty four ounces. The same quantity of the infusion was continued, & the secretion increased until the fifth day, when it amounted to sixty seven ounces; the swelling had evidently subsided. He now objected to continue the use of it, on account of the taste being unpleasant to him, & was ordered to take calomel & squills by the attending Physician.

I once gave the tincture in a case of Dysuria, in a patient subject to spasmodic stricture, accompanied by painful contraction of the bladder, & violent scalding in the urethra; the relief it gave him was so speedy & complete, as to induce him to accompany his thanks with the most lively expressions of gratitude.

It has already been shewn that the infusion & tincture operated more powerfully on the kidneys than the other preparations, which makes it probable that its diuretic quality depends on the aromatic property or essential oil it contains. The tincture may be made by digesting one ounce of the leaves in a pint of brandy or diluted alcohol, & filtering it after eight

ys; this possesses the pleasant flavour of the plant, & is an eligible prepa-
ration as it possesses all the qualities of the plant in a small compass —
The volatile is dissipated in making the decoction & extract; but the latter is
a convenient & powerful preparation if carefully made. If the decoction be
preferred it should be made with milk — one ounce of the leaves to a quart of
milk, makes rather a pleasant drink which is rarely objected to by children
?. De Rey. Transactions of the Phys. Med. Society N.Y. Vol. 1. p. 249 —

See my M. M. vol. 1. page 75

Chimaphila umbellata. Class Decandria. Order Monogynia. Nat. Ord. Ericae.
attired from Pyrola —

Pyrola. P. Umbellata. Eng. Umbelled Wintergreen. Pipsissawa —

Gen. Disc. Calyx quinque partitus. Petala quinque. Capsula supera, quin-
quelocularis, angulis dehiscens, polysperma. Antherae, poris duobus.
Specific character. Floribus subumbellatis —

In Dr. Rees. Cyclopedia the following description of the Pyrola umbellata
is to be found. Umbelled signifies that the flower opens broad at the top, like
an inverted bell. "It is a native of the woods in the northern parts of Europe, Asia
& America. Mr. Pursh found it frequent in dry woods from Canada to Vir-
ginia. Of the twelve different sorts, Dr. Sims asserts this to be the most beauti-
ful of the genus. The stem is woody a span high, somewhat branched, re-
gular & rough. Leaves crowded together into something like whorls, stalked,
narrow, obovated, bluntish, strongly serrated, dark green & veiny above; paler
beneath about an inch & a half long. Flower stalks terminal, solitary, three inches
long, reddish, bearing about five imperfectly umbellate, simply, partial stalks,
each an inch long, spreading rough with glandular pubescent. Flowers larger than
the other kinds & drooping. Petals orbicular, concave, cream coloured; crimson at
the base. Stamens short, red, all regularly inflexed. Anthers short, purple with
white tubular pores, dilated & lobed at the orifice. Germen globose, green.
Style thick & very short, but certainly present. Stigma orbicular, convex
with five slight notches. The American specimens are usually less umbellate,
more racemose than the European."

Use. The highly respectable character & reputation of Mr. Cooper, precludes every doubt of the truth of the following statement, which is extracted from the New Gloucester Farmer, a valuable paper printed in New Jersey. Boston Intelligencer.

Cure of Cancers. In looking over one of your papers I observed an extract (I think from an eastern paper) which mentioned that Pipsissaway would cure the cancer but made no mention of the manner of using it. I have been troubled with something on the side of my face, which I feared was of the cancer kind, as its progress & appearance was similar to several I had seen in the early stages which proved fatal. I shewed it to Dr. Bowman Hendry, who advised Lead water, which I tried as he directed, but it continued to increase in size & uneasiness, so that I could not shave myself on its account. But on one of Dr. Logan's visits, I showed it to him, & related what I had seen in your paper. He said he had seen the same, & no direction how to use it; but advised making a strong decoction of the herb, & with a soft rag wet it as often as convenient, & drink freely of the tea. I followed his advice, & often held the wet rag to the part affected several minutes at a time, & frequently wet it when I awoke in the night. The lump soon began to decrease after the commencement of the above treatment, & in less than three weeks totally disappeared.

I had several scurvy places about me, one near one of my eyes, which had been troublesome for several years past. I tried the decoction of them as to the other, with the like success. As the Cancer is one of the greatest calamities that ever afflicted the human frame, & prevention is preferable to cure & the above method perfectly safe & easy I think it my duty to recommend & advise all persons, who may apprehend occasion, to make trial. Yours Joseph Cooper.

P.S. This is said to be a remedy not only for the Cancer but also for the Dropsy & may be drunk as a substitute for Chinese tea, & in this manner has been used by a physician of very high standing in this Country.--

An account of the diuretic effects of the Pyrola umbellata of North America, was read at the late meeting of the Medico-Chirurgical Society. This plant has been long since used by the Indians, in cases supposed to arise from defective secretion of urine, & promises to be a valuable acquisition to the materia medica. It has the property of

creasing the appetite, & has been been found serviceable in some cases of dropsy. 15
New Eng. Jour. of med. & surg. p. 193-

A Case. Mr. Carter hospital surgeon at Fort William Henry in a letter to Wm. Sommerville M.D. states that having a patient, private John McCan of the 49th regiment, labouring under ascites, & after administering digitalis, chrystals of tartar, & other diuretic medicines to no effect, the water in the abdomen continued to increase rapidly. I was resolved previously to any making use of the trocar to try the effect of the herb de Chaigne (the Indian name for the Pyrola umbellata) he commenced taking a strong infusion of the plant on the 15th instant (April 1811) The next morning when I visited the hospital, I was agreeably surprised, when he informed me, that he had voided more water in the night than he had done in three nights & days previous put together, which I believe to have been the case from the quantity he shewed me he had made in the night. The colour of his water was entirely changed from that of brick dust to the colour exactly of the infusion of the herb he had drunk. The water in the abdomen continues daily to decrease, & I have the most sanguine hopes of his speedy recovery-

The herb does not appear to possess any narcotic qualities, being perfectly innocent in its operation-

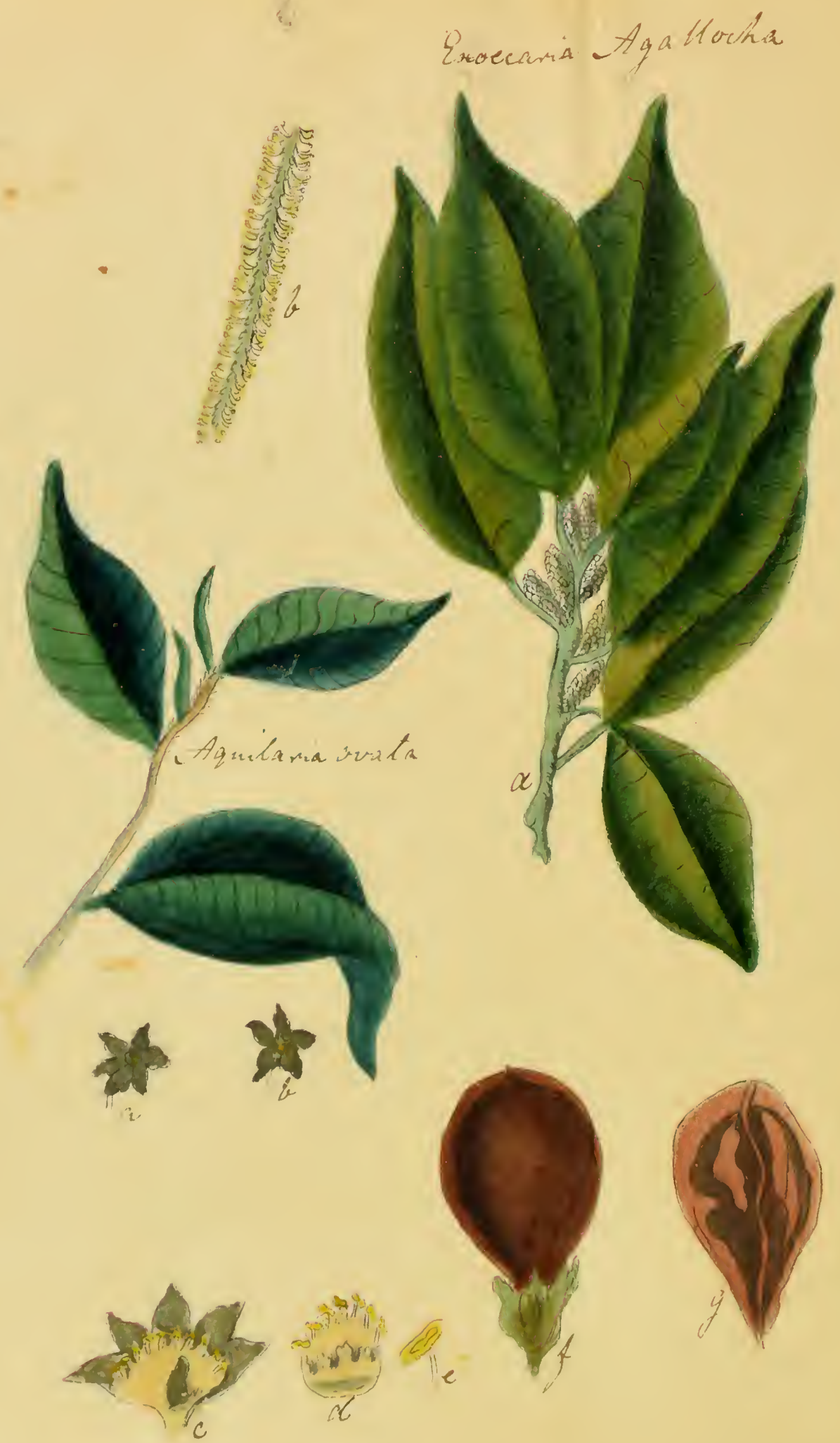
Dr. Sommerville says:- With a view of ascertaining the power of the medicine I ordered a pint of the infusion to be drunk by the young man who had fractured his arm, but who was in perfect health in all other respects. He was not prepared to look for an increase in the quantity of his urine. He informed me next morning that he should have slept well, if he had not been constantly waked by calls to make water.

The herb is called by the Indians de paigni, & by the Canadians l'herbe a fisser, is the pyrola umbellata of Linnaeus-

I have generally found the good effects of the pyrola upon the stomach, as far as my own experience or information extend no circumstance has occurred to forbid the use of it in any form, or to limit the dose. The surgeon of East York militia was cured of dropsical symptoms by the extract of Pyrola.

Dose a pint of the strong infusion of the pyrola in twenty four hours — Med. Chirg. Transactions

See Dry Med. Med. vol. 1. page 64


Erioccaria Agallocha
b
Aquilaria ovata
a
a
b
c
d
e
f
g

On the aromatic Wood of Aloe, with a Botanical description of the Loureiria Agallocha, & the Aquillaria Ovata:— By Professor Wildenow of Berlin.

The agallochum which is known by the name of aloe wood, or the aromatic aloe, is one of the most valuable spices imported from the East, & has been held in the highest estimation even in the earliest ages. According to the different species of the plant, it is called lignum aloes, agallocha vera, aquilac, & calambac, all of which differ remarkably in their sensible properties. It is however very difficult to ascertain the botanical character of these various species.

The aromatic wood of aloe is properly a resin, which has pervaded the pores of the tree. The genuine sort of this ~~precious~~ resinous wood is as precious as gold, & is used only by the great & affluent in the East Indies, China & Japan, as an agreeable perfume, with which they fumigate houses; hence it is but rarely imported into Europe. It is black & variegated with grey veins, swims on water, & if strongly rubbed on glass, leaves behind resinous particles, which neither water, saliva, expressed oils, nor an alkaline lye, but spirit of wine only, will dissolve & remove. Its odour is very grateful.

This substance has in former times been much used as a medicine, not only in biliary complaints, diseases of the liver & stomach, & dysentery, but likewise as a remedy for the maw-worm; but at present it is entirely neglected:— a revolution to which several of the ancient remedies have been subject, & which is likely to take place with many of the modern.

Father De Loureiro assures us, that he discovered in the province of Cochin China the tree which affords the true aloe. This aromatic wood is found in resinous masses, only in old, half decayed, hollow trees. According to this writer the tree belongs, in the system of Linnaeus to the first division of the tenth class, the Decandria Monogynia: he called it the Phocylum Agallochum. It grows in the highest mountains in Cochin China, on the banks of the river Lay which flows thro' the whole of that province. Loureiro had no opportunity of seeing the blossoms on the tree; he could only once obtain them dried, & transmitted to a friend; that the parts of fructification were much bruised & lacerated on a long journey he could with difficulty give the following description:—

Alocxylum Agallochum. Differ. spec. Aloe. foliis lanceolatis, alternis, pedunculis polyfloris, terminalibus. — Hab. Arbor magna. Trunco & ramis erectis, altissimis. Cortice cannabino, fusco, glabro, nec crasso. — Folia lanceolata, octo polycis longa, integerrima, plana, glabra, subcoriacea, alterna, petiolata. Flos terminalis, pedunculis polyfloris. Usus. — Ligni hujus fusimenta inter omnia maxime aestimantur, apud nationes Orientales. Ex arboris cortice fit vulgaris Charta in qua Cochinchinenses scribunt, sicut in Japonia ex cortice Mori. Virtus medica. Excitans, corroborans, cephalica, cardiaca. Suffitus valet contra vertiginem & paralysim. Pulvis cohibet vomitum & fluxus ventris, praecipue lientricos, quod non proprie astringendo, sed corroborando agit.

This tree is not of a poisonous nature, & yields no milky sap when perforated. With respect to the genuine wood of aloe, Loreiro maintains that the various species differ remarkably, both in colour & flavour. By some botanists this aromatic wood has been confounded with the Lignum Aquilae, which is likewise esteemed for its agreeable odour, & like the Agallochum verum, Calambac, & Garo de Malacca, affords the different species of perfume.

Aquilaria Ovata.

Gen. Desc. Calyx turbinatus, coriaceus, semiquinquepartitus, laciniis ovatis acutis patulis persistentibus. — Corolla nulla. — Stamina: nectarius calyci imo adhaerens, monophyllus, quinquepartitus, laciniis crassis tomentosis profunde bifidis, adeo ut decem videntur apparent. Ex singulis divisionibus solidum adsurgunt filamenta brevissima squamulis breviora: antherae decem, oblongae versatiles. — Germen in squamulorum centro & fundo calycis, ovatum, coronatum stigmate brevi simplici erecto: capsula pyriformis lignosa, bivalvis, bilocularis: dissepimentum, bipartibile innascens valvis medio septiferis: septum ambiente membranula brevi. — Semina solitaria nigra corpore spongioso circumdata; alterum saepe abortivum. — Habitat in Malacca montibus.

Differ. spec. A. foliis alternis, ovatis, mucronatis. — Garo de Mattacca. — Arbor, cujus rami constant ligno albicante luteo, cortice griseo tecti; villosique teneorimis mutatibus. — Folia alterna, petiolis mutantata brevibus, foliis ovata terminata mucrone, integra, glaberrima, uninervia, nervo ramoso, denique

bilissimus — Stipulae oxillae. — Florum situs & numerus mihi ignotus —

Of this plant we have given our readers an accurate copy taken from the work
we quoted: & it is remarkable that Loureiro describes probably the same plant in
his "Flora Cochinchinensis" under the name of Ophispermum Chinense; as it differs
from the former only by a long filiform style, & a bipartite stigma. Perhaps this
apparent difference arises from the flower of the plant described by Cavanilles hav-
ing been injured by being dried & compressed between paper. He has given no de-
scription of the Calyx, & is of opinion that it does not exist. Professor Wilde-
now however supposes that the specimen in question is in this respect incomplete
The fruit is a compact, ligneous, oviform, compressed, two-celled capsule. Each
cell contains a seed with a fungous edge. According to Linnaeus this plant
belongs to the first order of the tenth class, the Decandria Monogynia —
Sonnerat & Kaempfer assure us, that the genuine wood of aloe, which is so
highly valued, is obtained from this tree; & it is nevertheless probable, that
several trees afford that precious drug; for all writers on the subject observe
that the difference among them, both in scent & odour, is remarkably great
For the same reason Professor Wildenow is inclined to believe that the
Excoecaria Agallocha of Linnaeus yields a similar drug, which has been in-
troduced into commerce, under the specious name of aromatic aloe. — The
reader will find a sprig of this tree, with male flowers, on the annexed
plate; & as the work of Linnaeus is generally known, we shall, instead
of transcribing his description, translate that given by Professor Wildenow
in German.

This tree (says he) grows wild in the East Indies, & belongs to third order
the twentysecond class of Linnaeus, the Dioecia Triandria, that is the male &
female flowers grow on distinct stems, & the male flowers have three filaments.
The trunk of this tree is of a very considerable size. The bark on the smaller bran-
ches is of a light brown colour, smooth, & somewhat cracked. The leaves come out
alternate, are petiolate, ovate, sharp-pointed entire, coriaceous, of a deep green
colour, & glossy on the upper surface. The flowers are disposed axillary, on several
ziklets. The male flowers are green, & in their growing state short & co-
lumnar. The filaments are gradually developed, become progressively longer

 & have yellow anthers. Linnaeus asserts that the male catkins are composed of nine filaments, three of which uniformly stand together. But, on the male flowers (which only the Professor had an opportunity of examining) he observed a roundish pointed scale, a small corolla of two petals, & three anthers.

The female flowers are green, arranged in catkins, & formed like the male flowers. The germ is round, & has three styles. The fruit is a three celled capsule. On cutting the tree, a quantity of milky sap flows from the orifice of the wound, & if it be brought in contact with the eye, occasions blindness. In very old hollow stems, there is a resin which has penetrated thro' the brittle wood, & is likewise known in commerce, by the name of lignum aloes.

From this account we may conclude, that the best & most valuable wood of aloe is contained in the Alexylum Agallochum; next to that one of an inferior quality from the Aquillaria Ovata, & the most indifferent kind, from the Excoecaria Agallocha.

Explanation of the Plate.

Excoecaria Agallocha: a. A branch of the natural size, with the catkins just opened.
b. A catkin in full blossom.

Aquillaria Ovata: c foliated branch
a. b. two flowers of the natural size.
c. The flowers represented full blown, but somewhat magnified to display the nectary, with the stamens & the pedunculus.
d. The nectary magnified with the filaments.
e. A filament with the anthers much magnified
f. The fruit with the calyx of the natural size.
g. The same dissected.

We are indebted to a correspondent whose paper is signed Philo & is dated August 26th for the following communication, which we presume will not be overlooked by our botanical readers. — Ex Junge

Class 3. Order 1.

Eriophorum. E. Cyperinum. Eng. Cotton Grass. Hare-tail rush.

Gen. Desc. Glume chaffy, imbricated every way: seed beset round with very long dense woolly hairs (cyperinum.) panicles three compound one growing from the top of another. perm.

Use. Spring in March & February. Sheep are remarkably fond of it, not only of the leaves, but of the roots; working in the ground up to the eyes to get them. Shepherds assert that sheep reduced by hunger will recover faster & thrive much better upon this plant than turnips. It is a valuable plant for three or four weeks; but after it has flowered the sheep totally neglect it. Wicks of candles are made of it by the poor. Grows naturally on moors & bogs. Rushes & sedge are mown for litter & for fodder. (Gleanings of Husbandry)

Class 12. Order 13.

Spiraea. S. Trifoliata. ~~Ale~~ Eng. Meadow sweet. Bowman's root, or Indian physic

Gen. Desc.

Class 18. Order 2.

Artemisia. A. Vulgaris. Eng. Artemisica.

Gen. Desc. Calyx imbricate, with scales rounded, converging: equal o: receptacle somewhat villous or naked ish (Flowers mostly rounded (vulgaris) divisions of leaves attenuate & toothed. perm.

Use. This as a fetid & antispasmodic, seems to be the weakest of the whole set, & justly omitted in the London ~~not~~ list; & tho. retained in Edinburgh, is not known in our practice. This plant has led the learned Professor Murray to give us a valuable compilation on the subject of mona; but this does not seem to me to belong to this place, as it seems to me to be a general & not a particular remedy. Cullen's Mat. Med.

Class 19. Order 5.

Class 2. Order 1.

Veronica. V. Virginiana. Eng. Culver. Callistachia Virginiana.

Gen. Desc. Calyx 4 parted: corol 4 cleft, lower division smaller. capsule 2 celled.

Use. A decoction of the leaves & flowers of Culver is said to operate as a cathartic. It is used in the jaundice. S. W. W.

Class 6. order 3. See page 85.

Alisma Plantago. Eng. Water Plantain or Thrum-Wort.

From the Liverpool Advertiser of Feb. 23d 1818. Effectual cure for the hydrophobia. Of the long catalogue of those distempers with which it has pleased the Supreme Being to chasten or afflict humanity. the most violent, the most awful & detestable, is hydrophobia. This frightful malady, which bereaves of reason, distorts the frame, & humiliates the species by a change from human to brutal nature, whose paroxysms increasing with their succession in their torture rendes the miserable sufferer too terrible for sight, almost too hideous for sympathy. This malady which hitherto no skill could controul, no force restrain, no medicine relieve, at length yields to a simple of the vegetable world — a quick but effectual antidote, the complete & general discovery of which, Providence in its wisdom, has reserved for the present time.

The following communication on this important subject, is made by a Paris correspondent: — A Russian peasant of Simbirsk, on the Volga possessed a celebrity in the cure of this worst of all human distempers. From the state of Russian simplicity, & the tardiness of communication in that empire, owing to the paucity of the means, this celebrity was for a length of years, exclusively confined to the province in which he lived. He was not the discoverer of the root that cured, but he was the sole depository of the secret. The renown of his extraordinary cures bursting at length, beyond the circle of his government, their number increased with his practice, & his celebrity along with them. Travelling to a distant village on the borders of the Saratowska, he tarried to refresh at an intervening hamlet, where a case of hydrophobia, in its awful stages overwhelmed the peasantry in grief. Unprepared for the event, shocked at the terrific spectacle before him the convulsive agonies of the afflicted being, he hesitated; it was only for a moment the conflict in his breast was between humanity & interest. The feelings of

one however, soon overpowered all considerations of the other; he directed 165
search to be made for the Alisma; he described it; it was known - it was sought
for by all the inhabitants, each taking a different direction, & was immedi-
ately procured. Here the secret was divulged - a preparation was made, & the
antidote administered. On being intreated to tarry in the hamlet till morning,
the peasant replied that his presence was no longer necessary - that the man
was cured. Satisfied of the efficacy of the remedy, he resumed his habit, & taking
his leave resumed his journey.

And the distempered man was cured. He felt a temporary exhaustion, but
was at once freed from the torture of the malady. The circumstance thus
related quickly transpired. Communications on the subject reached to Moscow.
The physical world made enquiry & research. Throughout Russia, all Germany,
the reputed wonderful properties of the Alisma Plantago in the cure of hy-
drophobia induced experiments - successful experiments; they increased its fame;
in those empires, is now established a perfect confidence in its unfailing efficacy.

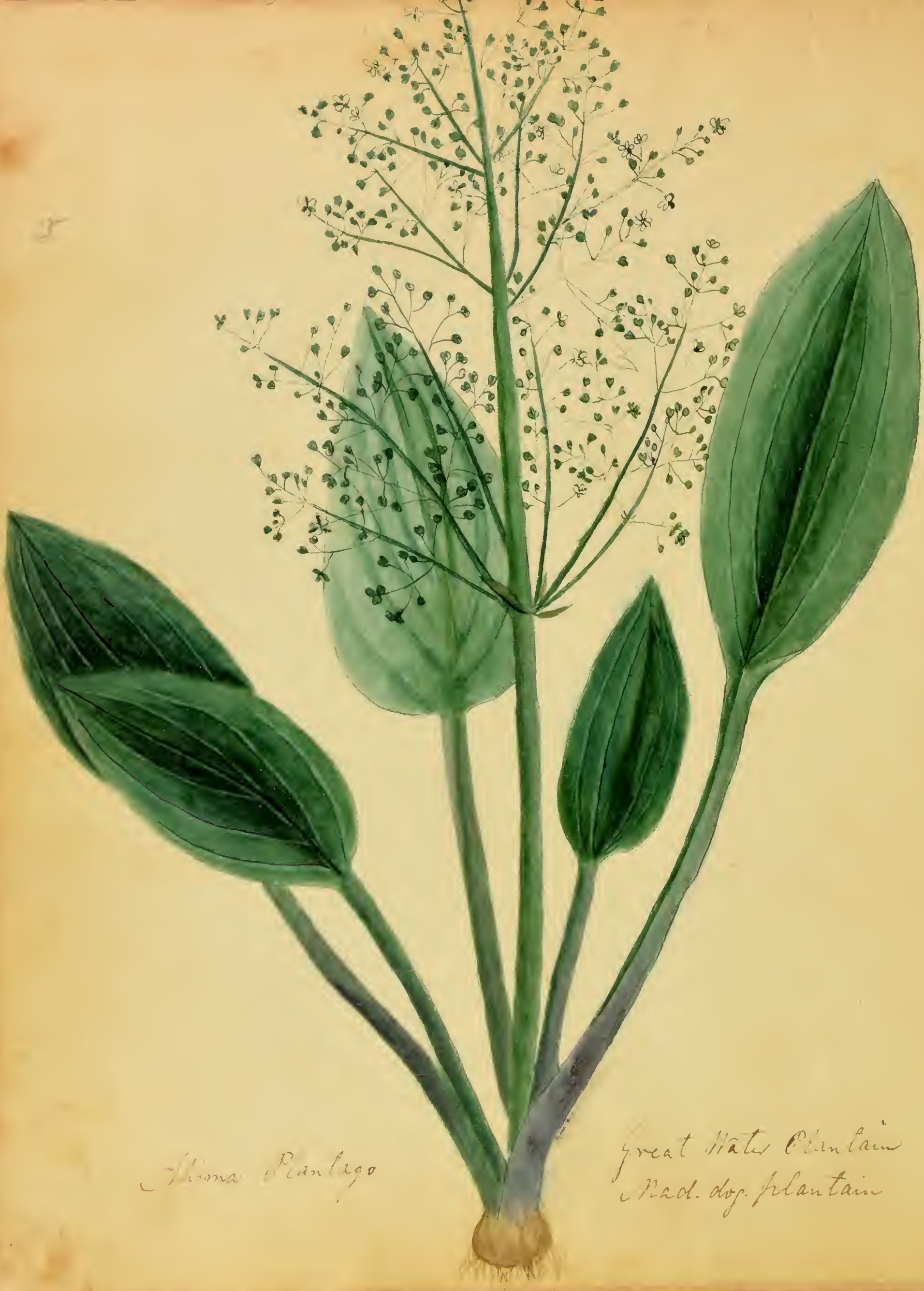
From the London Literary Gazette of Saturday week, we take the subjoined
article on the same subject:- We must call the attention of the public & of the
faculty to the Alisma Plantago, of which a drawing is annexed, & which is at
present the subject of a general investigation upon the continent as a specific
for the cure of hydrophobia. Whether it possesses the qualities attributed to it in
Russia & Germany, or not, we have discharged our duty, in producing not only
a written description of it, & the assertions with regard to its healing powers,
but also a picture of the plant itself, for which we are indebted to a correspondent,
whose letter we subjoin.

To the Editor of the Literary Gazette. Sir, I send you for acceptance a drawing of the re-
nowned valuable plant, Alisma Plantago. It grows, I may venture to say, in most parts
of Suffolk, certainly with us in great abundance, to the height of two feet above the
surface of ponds & ditches, bearing white flowers in shining more or less to a purplish
hue, from the middle of June to August. I have endeavoured to express the form
of the seed vessel so that the plant may be known after the flower has ceased to exist.
I am acquainted with no species of Alisma that at all resembles this in hab-
it, therefore it must be known at a glance. For specific minutiae, you can re-
fer to Dr. Smith's "Flora Britannica" or to "Withering's English Botany." You will
receive information from either. I am &c.:- Lowing Port.

Hydrophobia. Recent accounts from Russia & Germany state that the Alisma Plantago, or water plantain, is now in those countries regarded as an infallible cure for hydrophobia. An experiment recently made by M. De Saint Do, ~~Curatelier~~ Curate of Chevrollier (in the department of the Lower Loire,) to confirm its virtues. About the 15th of last December, two young cows were bitten by a mad dog; one in particular was wounded in a severe way. The Alisma Plantago was immediately applied as a remedy. M. de Saint Do succeeded in administering to the cow which had been most severely bitten, a certain quantity of the dried root; the other, which could not be brought to swallow a very small dose, died of the hydrophobia a few days after. The former animal has not to this moment, manifested any symptoms of disease. — This experiment seems calculated to remove every doubt respecting the advantages arising from the use of the Alisma Plantago as a cure for hydrophobia among the human species. Montreal Herald.

Great praise we think is due to one of our contemporaries for the zeal with which he has so heartily introduced to the notice of the public the discovery made by a Russian peasant of Simbirsk of a plant which is reputed to be a never failing cure for the bite of a rabid animal or dog. This specific is the bulbous part of the plant called by botanists, Alisma Plantago or the great water Plantain. By a gracious ordination of Providence the antidote never is far from the poison & the cure is in every part of Europe. It vegetates in wet marshes, lakes, & stagnant pools, & we believe is to be found in most situations in almost every district in England. In the end the season of flowering is in the month of July & September. It may be gathered any time but it is best when it is found. In Germany as well as in Russia, the extraordinary properties of the Alisma in the cure of the hydrophobia is said to have been established by the physical world; & we hope the physicians of our country will, without delay, assay its qualities, & give it a fair & full application. The discovery of this antidote is a glorious consolation, & we hope it will be fully published & made known to the subject which he bears a strong testimony to its efficacy & particularly the mode of administering it. The root, which is the diuretic

[illegible] resembles an onion must be [illegible]
[illegible] be treated on a plan of heat & [illegible] & given to the patient as cat. [illegible]
[illegible] dose. It is said have always been found insufficient to effect a cure, even [illegible]
hydrophobia is declared in the patient. Whether or not & [illegible]
In a letter from St. Petersburgh dated May 8th. mention an instance that
occurred in the vicinity of Cherson where a mad dog bit four individuals [illegible]
[illegible] animal. The antidote is administered as an antidote. The [illegible]
[illegible] several of the animals died, but none of the persons who were bitten were
killed at the highest [illegible] of madness. This, we think is a decisive and
satisfactory proof of the efficacy of the plant as a preventive of the effects of the
[illegible] (Liverpool Intelligencer) from 10th 1820. Vide plate on the other side of the leaf)



Alisma Plantago

great Water Plantain
Rad. dog. plantain

Class 2nd Order 1.

Veronica V. Beccabunga Anagallis Aquatica. vulg Ang. Brooklime.

Gen. Desc. Blos. border four-cleft. lower segment narrowest. caps two celled

Spec. Desc. Leaves egg-shaped flat serrated without glands. Stem creeping. Bosom blue inches lateral: germen sitting on a thick yellowish-green glandular substance. In shallow streams & near springs that seldom freeze. The whole plant smooth & succulent.

Blos. June

Obs. This plant was formerly esteemed as an external application to wounds & ulcers, & as used in many diseases. it is now valued only for its antiscorbutic virtues as a mild refrigerant juice. it is preferred in that disease which has been called the Rot scurvy. To derive the advantage from it the juice ought to be used in large quantities or the green plant eaten as food. Woodville The leaves are mild & succulent & are eaten in sallads early in the spring. Cows, goats, & horses eat it; it is refused by swine. Mud & Dry pour.

Class 3. Order 2

Cynosurus C. Cristatus. Gramen canninum. Gramen Dioscoridis. Ang. Dog's grass couch. grass squitch grass quitch grass. couch wheat.

Gen. Desc. Calyx two-valved. solitary. mostly three flowered. floret awnless.

Spec. Desc. Calyx four flowered and shaped tapering to a point; leaves flat. There are four varieties differing in the number of flowers of the calyx & awns. See Bot. Ar.

Use. The root is the grass-root used in medicine; it is diuretic & attenuant. Pine Gatfort. Boerhaave recommends the juice of these roots, drank liberally in obstructions of the viscera, particularly in cases of schirrous livers & jaundice. Cattle are frequently found have schirrous livers in the winter. & then are worn thin when turned out to grass in the spring. Dogs eat the leaves of this grass to excite vomiting. At Naples, the roots are collected in large quantities & sold in the market for the food of horses, they have a sweet taste, something approaching to that of liquorice; when dried & ground into meal they have been made into bread in years of scarcity. (Withering) It is a most troublesome weed in arable lands & can only be destroyed by fallowing in a dry summer; but Mr. Pitt observes, that though this is the most common weed of squitch in gardens that which is chiefly prevalent in arable lands consists of the roots of grasses. as the agrostis the holcus mollis & the avena elatior. (Staff. Rep.) [illegible] young leaves | & leave them when fully grown. Cows, sheep, & goats eat them. Ind.

Class 4. Order 1.

Dipsacus. D. fullonum. Eng. Teasel, manured teasel.

gen. Desc. calyx common, many leaves; proper superior; receptacle chaffy.

~~Spec. Desc. calyx common, subtenuate, spiny to a point leaves lead~~

Spec. Desc. leaves sitting, serrate; shaft dint bay knawels; scales very hard.

Use. This plant is cultivated for the use of clothiers, who employ the heads of the crooked awns to raise the knap upon woolen cloths. For this purpose they are fixed round the circumference of a large broad wheel which is made to turn round, & the cloth is held against them. The plant flowers in the month of July & June, & the heads are gathered in the ist. Within. The leaves of this plant are a good stomachic, but they are not much known as such. (Hill. —

Class 4. Order 1.

Galium. G. Boreale. Eng. Cross wort madder. cross leaved goose grass

gen. Desc. Blossom one petal bell shaped, short; seeds two, nearly globular, smooth.

Spec. Desc. leaves four in a whirl, egg shear shape, smooth, three ribbed; stem upright;

Blossoms numerous beautifully white, but when dried turning to a dirty yellow. Blos. July. Aug.

Use. The roots afford a good red dye for woollen cloths. —

Class 4. Order 1.

Plantago. P. Major; P. Vulgaris. P. latifolia vulgaris. Eng. Common great plantain. Eng. bread.

gen. Desc. Blos. 4-cleft, permanent, corolla broken back. cal. 4 cleft; stamens barely

long; caps 2 celled, cut round, inferior.

Spec. Desc. leaves egg shaped, smooth with 7 or 9 ribs. Stalk cylindrical nearly two edged

2 to 18 inches high. Spike tied with flowers, rather rough with short hairs. Roots

perennials very common. Blos. July. Aug.

Use. This plant tho. omitted in the London is retained in the Edinburgh Pharmacopoeia, in which the leaves are mentioned as the pharmaceutical part of the plant. They are said to be refrigerant, alternative, astringent & diuretic. It was formerly reckoned amongst the most efficacious of vulnerary herbs, & by the praise the green leaves are now commonly applied to cuts & other fresh wounds, & cutaneous sores; sometimes made into an ointment. Inwardly they have been made use of in phthysical complaints, spitting of blood, & in various fluxes, both bilious & hæmorrhagic. The seeds, however, seem better adapted to relieve pain

ronary diseases than the leaves, as they are extremely medicinal. The
ots have been recommended for the cure of tertian intermittents; & from the
perience of Bergius not undeservedly. A oz or two of the expressed juice
of a strong decoction of plantain may be given for a dose; in agues
double that quantity taken at the commencement of the fit. (Woodville)
Plantain has been alleged to be a cure for the bite of a rattlesnake, prob-
bly with little foundation tho it is one of the principal ingredients in
the remedy of the Negro Caesar for which he was rewarded by the Assembly
of S. Carolina. (Duncans New. Ed. Bigelows) See my medical recipes Vol. 2nd page
5 where will be found Caesar's Recipe for the bite of Rattlesnakes — Sheep, goats, &
swine eat it; horses & cows refuse it.

Class 4. Ord. 1.

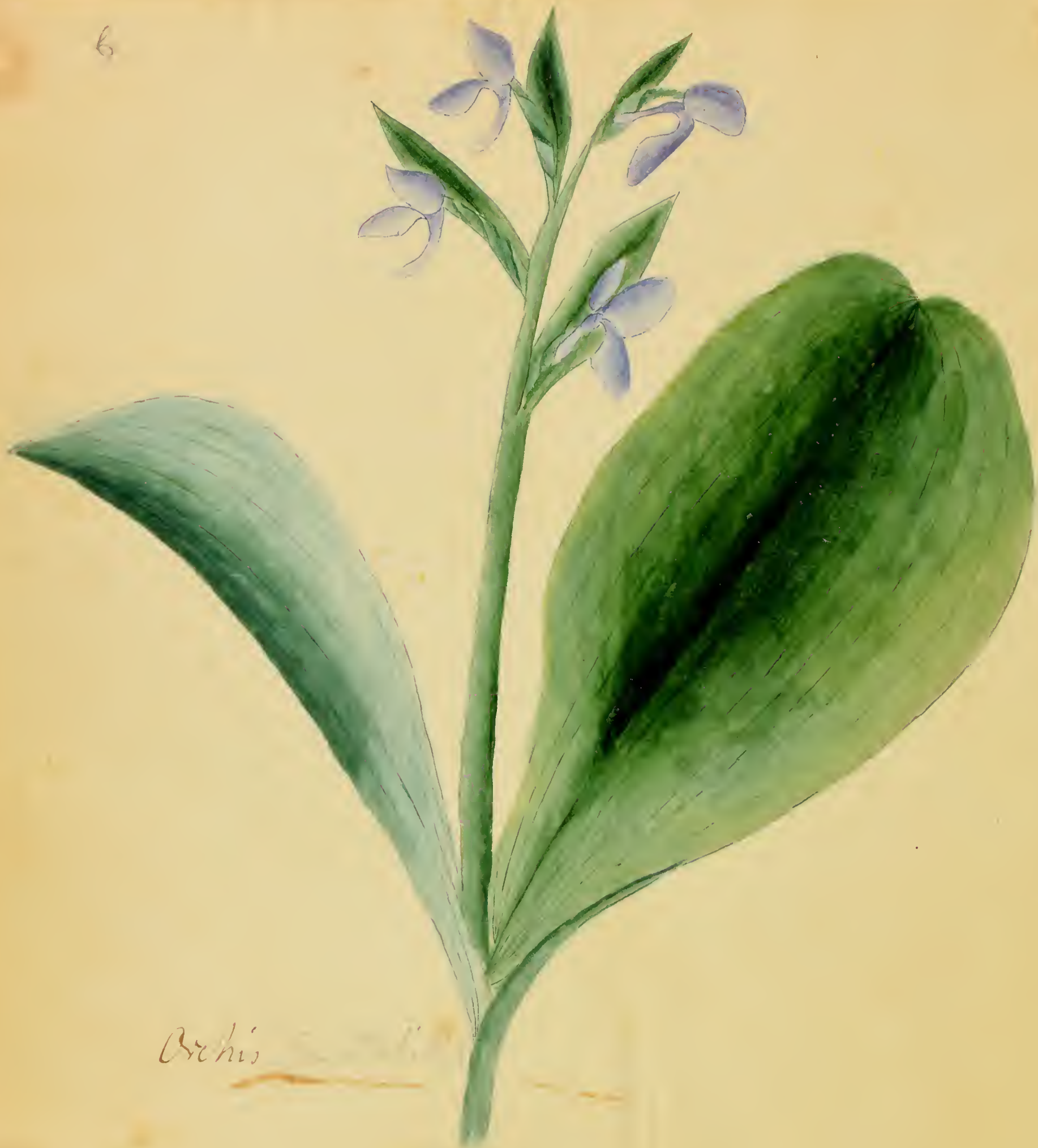
Cornus. C. Sanguinea. C. foemina. Ang. Dog-berry tree. Hound-tree, Hound-berry
ickwood. Prick timber. Gatten tree. Female Dogwood. Female cornel. Red osier
Gen. Desc. Involucrum general 4 leaved; petals 4, superior; drupa succulent, bi-
a th. 2. celled, hard, solitary.
Spec. Desc. Stem 4 or 5 feet high, dark brown. Branches straight; shoots; leaves
g-shaped, with strong nerves green on both sides; tuft of flowers flattened
- five divisions, then subdivided: flowers white. Hedges & woods. Blos. June.
Use. The berries of this tree have a styptic quality & are bitter to the taste. They
re also to dye purples. The wood is white & very hard & smooth, fit for the
shows of the turner. The leaves change to a bloodred in autumn. Horses, sheep
goats eat it; cows & swine refuse it.

Class 4. Ord. 1.

Betula. B. Pumilla. B. Nana. Ang. Dwarf birch tree.
Gen. Desc. Male & female flowers separate on the same plant; calyx one leaf
ree or five cleft. Blossom 4 div. male cal. 3 flowered. female cal. 2. flowered. Seeds 2 or 3.
Use. The leaves afford a fine yellow dye, than that of the Betula alba or common birch
is shrub supplies the Laplander in the summer when he lives in the mountains, with
el for the fires which he is obliged constantly to keep in his hut to defend him
om the gnats: & covered with the skins of rein-deer it forms his bed. (Linnaeus)

172

6



Bechis

rchis. Ang. Orchis. Spectabilis. Class 1. Order 1.

en. Desc. Calyx ringent like, the upper leaflets vaulted: lip dilated, spur long: anthers terminal adnate.

Spec. Desc.

Class 3. Order 2

Festuca. F. Fluitans. Ang. Floti fescue grass.

en. Desc. Calyx two valved; spikelets oblong, roundish; husks tapering to a point terminating in an awn.

Spec. Desc. Panicle branched upright, very long, issuing from a long two edged sheath; spikelets nearly sitting cylindrical awnless: blossom awnless, mostly ten-flowered; straw striking root at the joints; leaves floating flat on the water. In wet ditches & ponds, common. Blos. June September.

Use. The seeds though small are very sweet & nourishing. They are collected in many parts of Germany & Poland, & even brought to the table of the great, under the name of manna seeds, as an agreeable & nourishing food, & are esteemed a delicacy in soup & gruels, on account of their nutritious quality & grateful flavour. (Lightfoot Withering.) When ground to meal they make bread very little inferior to that in common use, of wheat. The bran separated in preparing the meal is given to horses for the worms, but care should be taken that they are kept from water for some hours afterwards. Geese are very fond of the seed, & will know how to seek them (Withg.) It is a good grass to sow in wet meadows, of a succulent nourishing quality, & cattle are extremely fond of it, so much so that horses & swine will run great risks to get at it.

Class 5. Order 1.

Primula. P. acaulis. P. Vulgaris. P. Sylvestris. Ang. Primrose

en. Desc. Blos. tube cylindrical, mouth open, stem within the tube; caps. ovalled cylindrical, many seeded, opening with ten teeth; summit a knob.

[illegible] Leaves [illegible] round; border of the blossom flat; leaf stalks when fully grown longer than the leaves. Woods. Hedges. Thickets. Heaths. Blos. April, May.
Use. Of the roots taken up in autumn, & dried, a dracham & a half, according to Gerard. Operates as a strong, but safe emetic. Silk worms may be fed with the leaves of the primrose. Trans. Soc. of Arts. Sheep & goats eat it; horses & swine refuse it. Linn.

Class 5. Order 1.

Rhamnus. R. Alnifolius. R. frangula. Alnus nigra ~~nigra et~~ baccifera. Ang. Black alder, black berry bearing alder; alder buckthorn. Dwarf alder.
Gen. Des. Cal. tubular; scales protecting the stamens. Bloss. Fruit a drupa.
Spec. Des. Without thorns. Flowers hermaphr. on pistil. Blos. five-cleft. Leaves very entire. Summit notched. Berry four-seed, sometimes two. Inner bark yellow; outer, sea green; middle, blood-red. Woods, wet hedges. Blos. April, May.
Use. The inner bark from a quarter to half an ounce, boiled in small beer, is a sharp purge. In dropsies, & constipations of the bowels of cattle, it is a very certain purgative. The berries gathered before they are ripe, dye wool of a green colour. The bark dyes yellow, & with preparations of iron black. The wood of this shrub is preferred for charcoal used in the manufacture of gunpowder. The flowers are particularly grateful to bees. Goats devour the leaves voraciously, & sheep will eat them. (Withering.)

Class 5. Order 1.

Viola. V. Odorata. Eng. Violet. Sweet violet.
Gen. Des. Cal. 5-leaved, adhering to the blossom above the base. Bloss. 5 pet. irregular with a spur behind; anthers cohering, cap. called their valve.
Spec. Des. Stemless. Leaves heart-shaped, sucker-creeping. Leaf stalks nearly smooth. Footstalks channelled on the upper side. Flowers with, or without petals, producing perfected. Blos. purple, blue, or white; very fragrant. Warm hedges, most warm banks in clay or marl. Blos. March, April.
Use. The violet was used by the ancients in various inflammatory diseases, & was alluded to by the poets as a vulnerary. (Ovid. Met.) The recent flowers are now only admitted into the Materia Medica; they have an agreeable smell, & a mucilaginous bitter taste; to water they readily give out their virtue & flavour, & even difficultly to rectified spirit. Taken in the quantity of a dracham or two, is a gentle purgative: & according to Bergius & some others, [illegible] an anodyne

ral quality. The officinal preparation
ung children answers the purpose of an agreeable purgative. ed are said
strongly diuretic, & useful in gravelly complaints, & the root, powdered
dose of a drachm proves both emetic & cathartic - (Woodville) Both the
ers & seeds are said to be mild laxatives. (Withg.) The flowers, & also the
s are cooling & emollient. (Lightfoot). The syrup of violets, which receives
colour from the petals, is very useful in chemical enquiries, to detect an acid
an alkali; the former changing the blue colour to a red, & the latter to a
en. For this purpose the violet is cultivated in large quantities about Stratf-
d upon Avon. Slips of white paper, stained with the juice of the petals, & kept
n the air & light answers the same purpose (Withg.). The Turks make
iolet sugar of the flowers, & this dissolved in water constitutes their favorite
or called Sorbet. - (Lightfoot)

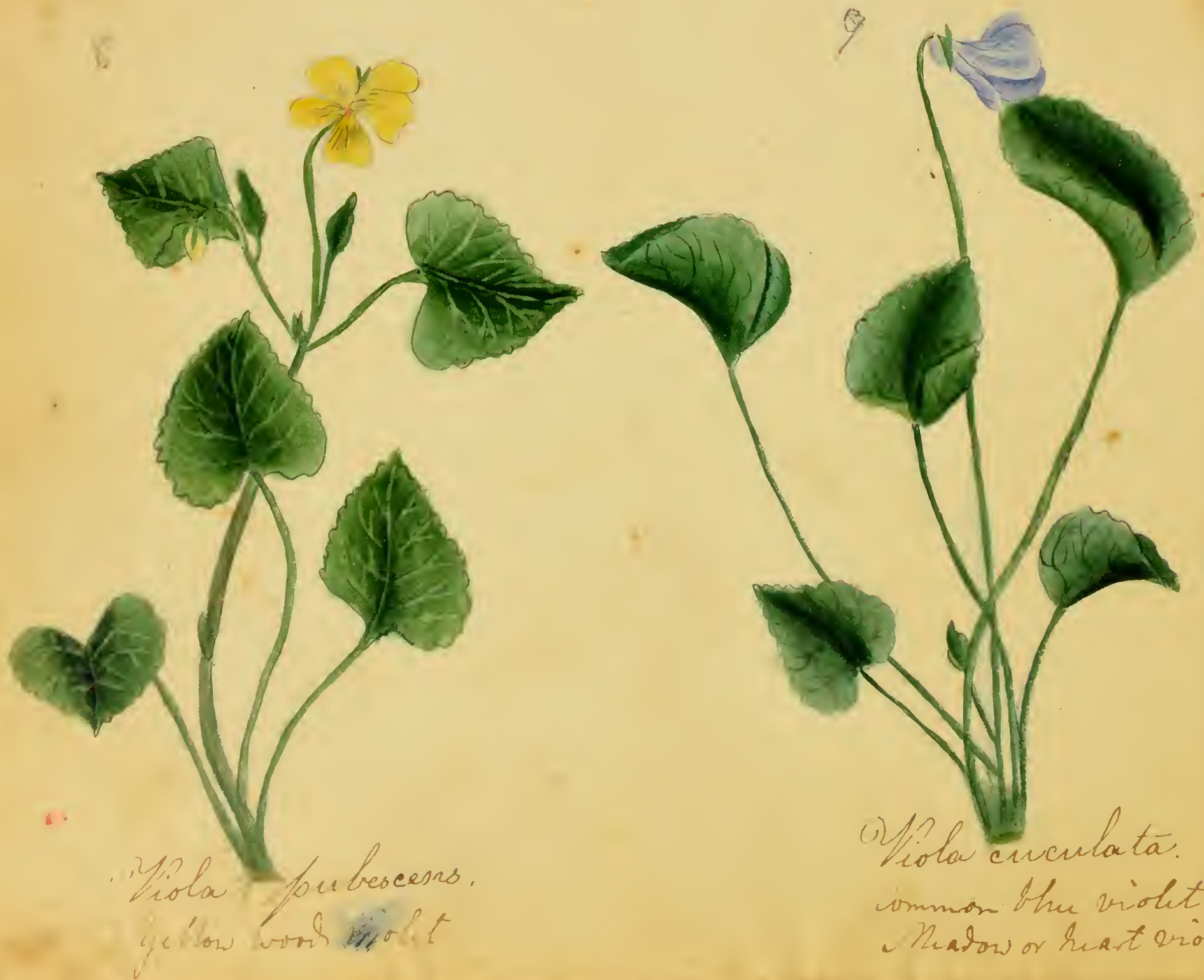
Viola Tricolor

Garden Violet
Heart-ease

a Tricolor. Fra. Pansies. Heart's ease. Ros. racis under a root. rose in clump. Wheat. ...
gate. Call one to you. Herb. trinity. Short replaced. garden viol.
Desc. as above.
Gen. With a stipule wing cut, terminating at the end of the leaf stalk; summit ...
anched. weak. leaves egg. shaped, toothed. Floral leaves two on each footstalk halberd shaped ...
half the size of the blossom - Summit open. bottom, finger on the lower part. Blossom ...
variety of colour, white, yellow, blue, purple, two or more of these. Corn fields, ...
Bot. Man. Gin. ...
weak stem of the plant in little cases the seeds ripen in summer ...
... root. ... or half a leaden of the Arid leaves in half a common

7. 176 – [illegible] morning for some weeks. Med. Jour. vol. 2. p. 188.

By some of the old writers on Materia Medica the plant is represented as a powerful medicine in epilepsy, asthma, ulcers, scabies & cutaneous complaints. But by modern authors it has been recommended chiefly as a remedy for the crustacea lactea. In addition to the above recommended bread with this decoction is also to be formed into a poultice & applied to the part. By this treatment it has been observed that the eruption during the first eight days increases, & 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, & the skin recovers its natural purity. Haase administered the root in various forms & in large doses, extending its use to many chronic diseases & from the numerous instances of its success, it seems well deserving of further trial. (Woodville)



Viola pubescens.
yellow wood violet

Viola circulata.
common blue violet
Meadow or heart violet

ibes. R. Rubrum. Arg. Currant. Red Currant.

on. Desc. Petals five they and the stamens fixed to the calyx. It is cloven. Berry venea
y called. many seeded.

ce. Desc. Without prickles. Bunches smooth, pendant; flowers flattish; leaves segm. round-
h. cal. spreading. Blos. greenish white. Berries red, sometimes white. In woods in the northern
unties banks of the Tees. Blos. May.

se. The fruit of this plant is universally acceptable, either as nature presents it, or va-
ously prepared by art with the addition of sugar. Its medicinal qualities are similar to
ose of other subacid fruits which are esteemed to be moderately refrigerant, antiseptic, at-
uant, & aperient. Hoffman & Boerhaave had great confidence in the efficacy of
ese fruits in obstinate visceral obstructions. They may be used with advantage to
lay thirst in most febrile complaints; to lessen an increased secretion of bile; & to
rect a putrid & scorbutic state of the fluids, especially in sanguine constitutions; in
ns of a contrary kind, they are apt to occasion flatulency & indigestion. The juice of the
d currant is a most agreeable acid in punch; & at Paris mixed with sugar, it is a com-
n beverage, generally preferred to orgeat or lemonade. (Woodville) - Red currants make
excellent wine, prepared in the following. To every quart of currant juice, add three
arts of water, & three pounds of sugar. Let it stand a year before bottling. —
ows sheep & goats eat the leaves; horses are not fond of them. (Lint.

#

Ribes ~~Nigrum~~ Nigrum. Arg. Black currant. Gooseberry berries.

m. Des. As above.

ce. Desc. Bunches hairy. Flowers odorous, woolly; floral leaves woolly as long as the little
ipe stalks. Buds glandular. Cal. segm. of a rich brown colour. Petals sometimes
ange into stamens. Wet hedges, rivers banks. May.

se. The berries have a very peculiar flavour which many reckon disagreeable, but together
th the properties which they possess in common with other subacid fruits, they are be-
icially useful in sore throats especially those of the inflammatory kind; for this pur-
se the juice is boiled down to an extract, with the addition of a mucilage, in the
lled way. There is little doubt that, in cases of inflammatory angina, it may be
ployed, usefully and to answer the same intention as gargles. They are said to pos-
ss a diuretic power also to a considerable degree, but this seems to want confirmation.
As common black currant jelly is domestic use for the sore throats, it may
be said, loses much of its efficacy by having too great a proportion of sugar in its
paration. These berries by some people are put into brandy, for the same purpose as
ck cherries, & more commonly in Ireland into whiskey. The tender leaves are sometimes

100 common liquor to 10 lb. to resemble brandy; the leaves are said to be an infusion to have a taste of green tea, & when young, are thus to some peculiarly agreeable. The leaves are extremely [illegible], & have likewise been recommended for their medicinal virtue which Bergius states to be sudorificans, pellens, diuretica. The infusion of the young roots is useful in fevers of the eruptive kind, & in the dysenteric fevers of young cattle. Haller says, that of this fruit a wine may be made equal to any produced from the grape. Woodville. Hall. Goats & horses eat the leaves.

Class 5. Order 2.

Triandria. Fl. Hermaphr. Pentandria. Ang. Wild oracle. Sat. nat. Lamiginales

Gen. Des. Blos. O. Flowers, some hermaphrodite some female, on the same plant; hermaphrodite cal. five leaved. seed solitary, upright. Female cal. two leaved. seed compressed

Spec. Des. Stem herbaceous upright or trailing. angular, furrowed. Calyx valve of the female flowers large, trowel shaped, indented. Leaves, trowel or halbert shaped, indented, indented or entire. Varies much. Pubbish dunghills. Blos. Aug. Sept.

Class 5. Ord. 2

Triandria. Fl. imperfect. Lupulus mas & femina. Ang. Hop.

Gen. Des. Male & female flowers on different plants. Blos. O; male cal. five leaved. female cal. one leaved, with a slanting opening, entire, bud one, with a leaf like calyx.

Spec. Des. Stems climbing. Leaves lobed serrated. Flowers greenish yellow. in hedges. Blos. July.

Use. The flowers of the female plant are the common hops used in brewing ale or beer. They grow wild in the hedges, but the value of the female flowers renders it worthy of being carefully cultivated. Soil & cultivation occasion some varieties, but for the purposes of brewing they are commonly distinguished by the name of the Kentish or Worcestershire hop. Hop-yards might be preserved from the honey dew which is the excrement of a species of aphis & from the other moth, by being covered with stones. The assertion is not correct that the honey dew is the excretion of the aphis. It is the exudation of wax, sugar &c. &c. from the leaves of plants. S. W. P. A decoction of the young shoots is esteemed a powerful antiscorbutic. Lightfoot. A bag of hops placed under the pillow is an excellent soporific. Dr. Addington. A decoction of the roots or from twenty to thirty grains of the extract is said to be sudorific & to answer the purposes of sarsaparilla. The young shoots boiled & eaten as asparagus early in spring are esteemed a delicacy; they are sold under the name of hop tops

with dye wool yellow. Strong cloth is made in Sweden from the nettles which for that purpose are gathered in Autumn, soaked in water all the winter in March after being dried on a stove, dressed like flax. Horses, cows, goats deer & swine eat it. (Withering)

What is that electrical murmur like very distant thunder when hop poles are shaken by the wind? Linnaeus. For, in the particulars respecting the humulus lupulus see Med. Jour. Vol. 13. p. 432.

Class 5. Order 2.

Ulmus. U. Americana. U. campestris. U. sylvestris. Any. Common Elm.

Gen. Des. Cal. 5 cleft. Bloss. 0; caps. 1 superior. one called leaf-like, compressed; seed pitary;

Sp. Des. Leaves doubly serrated, unequal at the base; flowers almost sitting; bunched into a kind of corymbus. Flower buds beneath the leaf buds. Bark cracked wrinkled. Hedges. Hedgerows. Blos. April.

The inner fresh bark, which is directed for use by the Pharmacopoeias has a bitter taste, but no peculiar smell; it abounds with a shining juice, recommended in nephritic cases, & externally as a useful application to burns. This bark on the branches is more bitter than on the trunk. The outer bark has neither taste nor smell, & contains but little mucilage. The complaints for which this medicine has been used are chiefly those of the cutaneous kind, called herpes & lepra. Lysons mentions five cases of inveterate eruptions successfully treated by decoction of this bark prepared from 4 oz. taken fresh & boiled in two pints of water to one. of this half a pint was given twice a day. But as nitre was added, & used frequent purgatives, it may be doubted whether the cure should be wholly ascribed to the elm bark. It was found efficacious by Dr. Ritson in the lepra ichthyosis, of Sauvages; & in the lepra vulgaris in a remarkable instance, by Banau; who knows the use of it in rheumatism, fluxes, old ulcers, cancerous & scrofulous affections, tinea capitis, scurvy &c. (Le Pain, p. 88.) An obstinate perseverance for some months is necessary. (Hill) This decoction, drunk freely has been known to carry off the water in dropsies. The bark, dried & ground to powder, has been mixed with meal in Norway to make bread in times of scarcity. The inner bark boiled in water, makes an excellent gargle used in sore throats & fevers. (Hill) The flowers have a violet smell. The wood being hard & tough, is much used to make axletrees, mill wheels, boat keels, coffins &c. This tree bears transplanting; loves an open situation; & blows

or crayon oil, & does not destroy the grass under it. If grafted on the U. glabra it will throw out suckers, with which it is apt to overrun the ground. Horses, cows, goats, sheep & swine are fond of the leaves. (Pitt. g.) & the tender leaves are devoured with avidity by silk worms. Tr. Soc. Arts ii. 157

Ulmus. U. Pedun. Eng. Slippery elm. Red elm

Gen. Desc. as above.

Spec. Desc. Branches scabrous & whitish: leaves ovate oblong, acuminate, nearly equal at the base, unequally serrate, pubescent both sides very scabrous: buds tomentose, with very dense yellow wool: flowers sessile. May always be known by chewing the bark, which is very mucilaginous. Hill places. Flow. April. Perennial.

Obs. The red, or slippery elm, on account of its many valuable properties deserves particular mention. It rises to the height of thirty feet with a pretty strong trunk, dividing into many branches & covered with a light coloured rough bark. The leaves are oblong, ovate & sharp pointed, unequally sawed on their edges, unequal at the base, very rough on their upper surface, & hairy underneath. The flowers are produced thick upon the branches upon short collected footstalks, & are succeeded by oval compressed, membraneous seed vessels, with a thin margin, containing one oval, compressed seed. The inner bark by infusion, or gentle boiling in water, affords a great quantity of insipid mucous substance, that is applicable to a variety of important uses. Dr. Mitchell says it has been beneficially administered in catarrhs, diarrhoeas, & pleurisies: it has been applied as a poultice to tumors, & as a liniment to chaps & sorres. Amer. Mus. vol. 7.

In the war of our revolutionary army, & also those of general Wayne's army, in 1794 defeated the Indians in the west, experience the most happy effects from the application of poultices of the elm bark to gunshot wounds, which were soon brought to a good suppuration, & to a disposition to heal. It was applied as the first remedy. When the tendency to mortification was evident, this bark, bruised & boiled in water, produced the most surprising good effects. After repeated comparative experiments with other emollient applications as milk & bread & linseed poultice, its superiority was firmly established. In old ill conditioned ulcers, & in fresh burns, equal benefits were seen from it. The infusion of the bark was used with advantage as a drink in pleurisy & catarrh, also in diarrhoea & dysentery. Many of the above facts are communicated relative to the virtues of the medicine & its medicinal qualities, says the editor of the Domestic Encyclopedia by Dr. Joseph Story of Newburyport, who as they were in the western army; & adds as a proof of the sentiment it

...es. That a soldier who lost his way in a forest found upon this mucilage ...
...ofras. The editor of the above mentioned work vol. 2. p. 44. proceeds to observe
...t the red elm tree may be considered as a highly valuable addition to our
...medicines exclusively American, & ought to be carefully reserved for by the
...dical gentlemen in the country, & preserved from the indiscriminate axe.

The inner bark of the slippery elm, or its mucilage has been found by recent experience to be especially beneficial when applied to chilblains, cutaneous erup-
...ns, & various kinds of sores & ulcers; & there is much reason to believe, that its in-
...nal use in dysentery, consumption &c. may be attended with greater advantage
...an is generally imagined. This tree certainly may be recommended to the particular regard of medical practitioners, as a new & domestic article of our Materia Medica, whose medicinal virtues will probably be found to merit a large share of confidence. Rachel.

Class 5. Order 2.

...ucus. D. Carota. D. Sylvestris. D. Vulgaris. D. Polygamus. Eng. Carrot. Field. carrot
...di rect.

...n. Dec. Bloss somewhat radiated: flowers hermaph. in pits of the involucr. divided; seed
...h membranaceous toothed ridges.

...c. Dec. Angles of seeds 4. distant, hispid; leaf stalks fibrous underneath, umbel con-
... when in seed. flowers white or reddish. Meadows pastures, & cultivated in gardens Bot. ...
... — There are several varieties of this species. see Bot Arrangement.

... The seed have a light aromatic smell, & a warm acrid taste, they possess in no small
...ee a considerable degree the aromatic qualities common to those of most of the um-
...iferous plants & since they have long been deemed carminative & emmenagogue but
...are chiefly esteemed for their diuretic powers & for their utility in calculous & urethral
...complaints; in which an infusion of three ounces full of the seed in a pint of boiling water
...been recommended; or the seeds may be fermented in malt liquor, which receives
... then an agreeable flavour, resembling that of lemon peel. Carrots have been
...n to children as a vermifuge. The expressed juice, or a decoction of the roots, has
... recommended in calculous complaints, & as a gargle for infants in aphthous affection
...ceration of the mouth. & a poultice of scraped carrots has been found useful, applied
... hepatic ulcers, & to cancerous & fistulous sores, as well in mitigating the pain
... abating the smell. This plant in its cultivated state is the well known garden carrot
...n, as it possesses a large proportion of saccharine matter, affords consequently much
...ment, but it is found to be difficult of digestion. Woulfe the infusion of the seeds in a lo
...ers been found to give immediate relief in the fits of the gravel. L. W. The roots are a contain
... kinds of calculi, & worthy of attention, but if given too long they are apt to occasion bloody urine. ...

Iris Versicolor. – The common blue flag or flower de luce which is found in wet meadows, from Maine to Carolina is the Iris versicolor of Willdenow & Muhlen. & the Iris Virginica of Michaux. The root of this plant possesses active medicinal powers. It is considerably used in the southern states of the United States. The plate of the plant, on the opposite page was executed by Mrs. Harriet G. Williams, from a plate in Dr. Bigelow's Medical Botany. For an account of the uses of this plant see p. 98 of this vol.

Class 5. Order 2.

Sacleum. H. Lanatum. H. Sphondylium. Ang. Cow-parsnip. Madnep. Hogweed. Parsnip hogweed.

Gen. Char. Involucr. wheeling. Cbof. irregular. Petals bent inward notched. Seed compressed. Ridge. mouth encompassed by a membranaceous border.

Spec. Char. Leaflets ovate. cleft even. Flowers radiated. Leaf stalk at the base like a sheath. membranaceous woolly at the edges. Stem leaves winged. hairy: leaflets three jagged, indented; odd one three cleft. Outer flowers radiated, the central nearly equal. Flowers white. Seeds with three ridges on each side. Habitat meadows, pastures, July.

Use. In Poland & Lithuania the poor prepare a liquor from the leaves & seeds of this plant which, after undergoing a fermentation, is used as a beverage like beer. The stalks, peeled, are eaten by the Kamschatdales. The Russians prepare from this plant an eatable which they esteem a great delicacy; they pick off the leaf stalks of the root leaves, peel them & hang them in the sun to dry a little. They then tie them up in little bundles, & hang them up again till they become yellow. In this state they are put into bags, & a mealy substance, like sugar forms upon the surface of them; this is carefully shaken off, & served as a treat to the guests. They likewise distil an ardent spirit from it. Smelin. The peelings of the stalk are acid. The leaves are a favourite food of rabbits, hogs, & hares: cows, goats & sheep eat them. Withe. The plant has been found useful in hydrophobia. H. B.

Class 5. Order 2.

Angelica. A. Triquinata. Ang. Wild Angelica.

Gen. Char. & Spec. Char. See Eaton's Manual of Botany.

It is a warm acrid bitter & aromatic, possessing all the qualities of that cultivated in our gardens. But as the latter possesses them in a higher degree this has been long neglected. Cows, goats & sheep eat it. Horses refuse it.

medicinal virtues of angelica has made it an object of cultivation to the gardener for more than two centuries. The stalks leaves, seed, but more particularly the root have a fragrant agreeable smell, & a bitterish pungent taste: on being chewed they are at first sweet, afterwards acrid & leave a glowing heat in the mouth. The fresh root wounded early in the spring yields from the inner part of the bark an unctuous yellowish odorous juice, which gently exsiccated retains its fragrance, & proves an elegant aromatic gummy resin. Linnaeus says the Lapplanders entertain a very high opinion of the utility of this plant as food & medicine, which is natural, as few aromatic plants inhabit the polar regions. Bergius thus enumerates its virtues: Alexipharmica. Stomachica. Sudorifica. Carminativa. & it has been recommended in female diseases; yet though it must be allowed to possess aromatic & what are called carminative powers it is in this, qualities surpassed by other simples, & therefore seldom employed in the present practice. It is commonly used for a confection for sweetmeats, & employed in some distilled waters.

Class 5. Order 2.

Fam. 5. Umbel. Genus Florum. Ang. Creeping water parsnip, or skewet.

Use. The efficacy of this plant was proved by Dr. Withering: "A young lady, 20 years old, was cured of an obstinate cutaneous disease by taking three large spoonfuls of the juice twice a day." Dr. W. has repeatedly given it in doses of three or four ounces morning in similar complaints with the greatest advantage: it is not nauseous, & children take it readily if mixed with milk. In the doses given by him it affected neither the head or stomach, or the bowels. Withering has also been advised to use the Nat. Med. of the London college, in the cases of an anticorbutic, rather in a course of strong humours, especially when manifested by cutaneous eruptions, or humours in the lymphatic system on the testimony of Bevil & Ray.

Class 5. Ord. 2.

Coriandrum. C. Sativum. C. Majus. C. Vulgare. Ang. Common Coriander.

Use. The leaves & every part of the plant, when fresh have a very offensive odour, like bugs, but when being dried, the seeds have a strongly grateful smell, & their taste is moderately warm & slightly pungent. These seeds, it was asserted by Dioscorides to have in a considerable quantity, produce deleterious effects; & in some parts of Spain & of Egypt, where the fresh herb is eaten as a cordial, instances of fatality have been observed to occur very frequently (Hoffmann). but these properties seem to have been

justly ascribed to the coriander; & Dr. Withering says, the [illegible] 187
been considered as suspicious if not deleterious he has known six drachms
them taken at once without any remarkable effect. These seeds, like those of most
the umbelliferous plants, possess a strong aric & carminative power; but they
principally of use, according to Dr. Cullen, as correctors of the bitter in fu-
ion & the flatulence of senna, nothing so powerfully covering its disagree-
le odour & taste & being equally efficacious in obviating the griping that
ma is very ready to produce. The seeds covered with sugar are sold by con-
ctioners, under the name of coriander comfits.

—

Class 5. Ord. 2.

Laserpitium. C. Claytonii. C. Sylvestre. Myrrhis. Ang. Wild Cicely. Cow wed.
w. Sharley. Cow-weed Chervil. Poison cicely. Blos. May, June.

c. In some parts of the Kingdom, in times of scarcity, this plant is eaten as a root
b. Curtis) The roots have sometimes been eaten as parsnips, but they have been
und poisonous. The umbels afford an indifferent yellow dye; the leaves & stems a
utiful green. Its presence indicates a fruitful soil. Neither horses, sheep, goats
swine, are fond of it; rabbits eat it greedily; & cows are very fond of it, so much
that when, as often happens about Dudley, a pasture is overrun with it, cows are
ed it to eat it up. (Withg.)

Class 5. Ord. 2.

Peratoria. 1. Obstruthium. Artantia vulgaris. Napistantia. Ang. Common
terwort. Blos. June.

. The root has a fragrant smell & a bitterish pungent taste, leaving for some time
ing warmth in the mouth. This plant was formerly as its name imports, thought
of singular efficacy. It was preferred to most of the other aromatics for its alexi-
mic & sudorific powers. In some diseases it was employed with so much success
be distinguished by the name "divinum remedium". (Hoffman). At present, how-
this root being considered merely as an aromatic is superseded by many of inferior
of superior character. Half a drachm of the root in substance, & one drachm
infusion, is the dose directed. (Woodville) The root is warm & aromatic, it
a diuretic, & is also given recommended in dropsies, & debility of the vis-
bowels. An infusion of it in wine is said to have cured a [illegible] & kidney

the back. It has been observed it excites a copious flow of saliva exciting a warm & not disagreeable sensation to the gums. & frequently cures Rheumatic toothache. It should be dug up in winter, & a strong infusion made in wine as it works.

Class 5. Ord 2.

Pastinaca. P. Sativa. Fam: Wild Parsnip. The garden parsnip is a variety altered only by culture. Blos. June July.

Use. The roots of this plant are more sweet than carrots, & when when improved by garden culture, are an excellent vegetable for the table. & much used by those who abstain from animal food in Lent. They are highly nutritious. In the north of Europe they are brewed instead of malt, with hops & fermented with yeast; the liquor thus obtained is agreeable. The seeds contain an essential oil; & will often cure intermittent fevers. Hogs are fond of the roots, & quickly grow fat upon them (Withe)

Class 5. Ord. 2

Smyrnium. S. Atrum. S. Olusatrum. & Hirsutum. Ang. Alexanders. Common Alexanders. Blos. May. June.

Use. Alexanders was formerly cultivated in our gardens, but it is now better supplied with celery, & consequently neglected. It is boiled & greedily eaten by sailors, who happen on this section from long voyages to land on the southwest coast of the Isle of Anglesea, where it grows in profusion. (Pennant)

Class 5. Ord 2.

Anethum. A. Foeniculum. Foeniculum Dulce. Ang. Fennel. Fennel dill. Dill. Blos. July. Aug.

Use. This plant was highly esteemed by the ancients for promoting the secretion of milk, an opinion which the experience of some modern authors has tended to confirm. The seeds, though termed one of the greater hot seeds, & supposed to be stomachic & carminative, are inferior in their effects to those of dill, anise & caraway. The seeds used in medicine are usually imported from more southern countries; they give out their virtues very imperfectly in infusion, but by evaporation plentifully yield a bound with an essential oil which is carminative, diuretic but no inducing (Withe). The root Aiton says, may be called alimentum medicinum & it was thought by Bergius to possess all the virtues of ginseng, but it is now wholly disused as a medicine; to the taste it is sweet, with very little aromatic warmth, & it is said to be pectoral & diuretic. A similar

ates is directed to be kept from the [illegible] (Woodville) [illegible] in
ness boiled are used in sauce for [illegible] al kinds of ~~sauce~~ fish & they are ea[illegible]
w with pickled fish. The tender buds are used in sallads. In Italy the
tops are blanched, & eaten in sallads. (Withe.)

Class 5. Order 2.

[illegible]rum. C. Carui. Cumin. Carum. Carvon. Eng. Caraway. Bot. May, June

[illegible] seeds are well known to have a pleasant spicy smell & a warm aromatic taste, & are on
[illegible] account used for various oeconomical purposes. They are esteemed to be carminative, [illegible]
[illegible]stomachic, & are recommended in dyspepsia, flatulency & other symptoms [illegible]
[illegible]hondriacal complaints; they are likewise reported to be diuretic, & to promote the
[illegible]ction of milk; they are less frequently employed than formerly. (Woodville) The seeds
[illegible] used in cakes, & often put into bread especially at Christmas-time. Inserted with
[illegible] they are sold by confectioners; & they are often distilled along with [illegible]cous
[illegible]cous for the sake of the flavour & heat which they impart. These seeds were for-
[illegible] recommended by Dioscorides to pale faced girls, & in more modern days, this
[illegible] in those cases is not forgotten. They are no despicable remedy in tertian agues
[illegible] abound with an essential oil which is antispasmodic & carminative. (Withe
[illegible]rison says, that the roots of this plant when young are a better esculent than
[illegible]nips. The tender leaves may be boiled with pot herbs. Sheep, goats, & swine
[illegible] it: horses & goats are not fond of it. Ibid

Class 5. Order 2.

[illegible]num. A. Graveolens. A. Petroselinum. Oleoselinum Petroselinum. Eng. Smallage. Parsley.
[illegible] in Kitchen, Celery. Bot. May.

[illegible]. The root in its wild state, when it grows near waters, is fetid, acrid & noxious,
[illegible] when cultivated in dry ground, it loses these properties, & the root with the lower
[illegible]t, the leaf-stalk & stem, blanched by being covered with earth are eaten raw,
[illegible] in soups, or stewed. In this state of cultivation in the garden it is known by
[illegible] name of celery. It is said to be useful to those subject to nervous complaints.
[illegible] it is certainly a good antiscorbutic. The seed yield an essential oil. Sheep &
[illegible] eat it: cows are not fond of it: horses refuse it. Withe.

[illegible]num. A. Petroselinum. A. Hortense. A. Sativum. Eng. Common Parsley. Garden
[illegible]y. Hors June. July

[illegible]. This plant is a native of Sardinia, but it has been so long cultivated in our ga-

[illegible] are [illegible] in many purposes as to be more familiar to us than most of our indigenous [illegible]. Both the roots & seeds are directed by the London College for medicinal use: the former have a nauseous taste, accompanied with a slight warmth or flavour, but not like that of a carrot: they are said to be aperient & diuretic & have been employed in apozems to relieve nephritic pains & obstructions of urine. The seeds are in taste warmer & more aromatic than any other part of the plant & also manifest a considerable bitterness: like those of many other umbelliferous plants they possess a share of aromatic & carminative powers, but this being but inconsiderable they are now but seldom employed. They have been used externally with advantage for destroying cutaneous insects in children. The bruised leaves have been successfully employed as a discutient & [illegible] in various kinds of tumours, & it said by Lange that this application has succeeded in scirrhous tumours where cicuta & mercury had failed. Tho' parsley is in so common use at table, it is remarkable that facts have been adduced that in some constitutions it occasions children, or at least in those subject to them, aggravates the fits: It has been supposed also to produce inflammation in the eyes. (Woodville)

Class 5. Order 3.

Viburnum. V. Lantanoides. Aug. Sangiulgs. Hobble bush. Wayfaring tree. Plant[illegible] May.

Use. The berries are drying & astringent. The bark of the root is employed for the management of bid-lime. (Withering)

Sambucus. S. Canadensis. S. Nigra. S. Vulgaris. S. Arborea. Aug. Black berried Elder. Common black elder. Blos. Apr. May. N.B. Parsley leaved elder is only a variety of this species.

Use. The whole plant has an unpleasant narcotic smell, & some authors have represented it as unsafe to sleep under the shade of elder. The inner bark, flowers, & berries are the parts used in medicine, & admitted into the pharmacopoeias: the former are strongly cathartic, & on this account were much used by Sydenham & Boerhaave who have recommended it as an effectual hydrogogue. Sydenham directs three handfuls of it to be boiled in a quart of milk & water, till only a pint remains of which one half is to be taken night & morning, & repeated for several days: it operates upwards & downwards, & on the evacuations produced its efficacy depends. Boerhaave gave the expressed juice in doses from a drachm to half an

smaller doses it is said to be an useful aperient & diuretic & in cutaneous
al disorders. The flowers have an agreeable flavour in infusion, when fresh they
the laxative when dry. They promote particularly menstruation & are service-
ble in erysipelatous & eruptive disorders. Externally they are used in fomentations, &
the form of an ointment. The berries in Earth are sweetish, & on exposure yield
some purple juice which is a useful aperient & resolvent in recent colds & various
venereal disorders gently loosening the belly & promoting urine & perspiration. (Woodville M.M.) This juice made into a rob is a safe & useful aperient. (Lightfoot)
The inner green bark which is an acrid purgative is in smaller doses diuretic & has
one eminent service in glandular obstructions & dropsies if sheep which have the
rot be placed in a situation where they can get at the bark & the young shoots
they will quickly cure themselves. The inner like the bark are purgative but more nau-
seous. They are an ingredient in several cooling ointments. A decoction of the flowers taken
internally is said to promote expectoration in pleurisies; externally they are used in fomen-
tations to ease pain & abate inflammation; they are used frequently to give a flavour
to vinegar. The inner bark is an ingredient in the black dye. The berries are poisonous to
man, & the flowers to snakes & pea-fowl. If turnips, cabbages, corn or fruit trees are
subject to blight from a variety of ~~caterp~~ insects be whipped with the green leaves
branches of elder, the insects will not attack them. (Withy. Ex. Phil. Tr. v. 62. p. 340.)
The leaves bruised are sometimes applied outwardly in a cataplasm in erysipelatous
swelling & are said to be very relaxing. (Lightfoot) The wood is hard, tough & yel-
low. It is commonly made into sheaves for butchers, tops for angling rods, & shuttles
for weaving nets: it answers well for turning in the lathe. The pith being exceedingly
light is cut into balls used in electrical experiments. (Withy.) Sheep & cattle refuse
it, or force it down. Others say cows are fond of it.

Class 5. Order 5

Syn. a. Distatissimum L. Provense L. Sativum Eng. Flax. Bot. July

This valuable plant came originally from those parts of Egypt that are ex-
posed to the inundations of the Nile; & it said there to rise with a strong stem to the height
of seven feet; but it is now a native of Britain, & its utility in arts, manufactures & do-
mestic have rendered the cultivation of it an object of particular encouragement.
The seeds have an unctuous mucilaginous smell, & yield, by expression, a
quantity of oil, which when carefully drawn without the application of

heat ~~[illegible]~~ has no particular taste or flavour, & is an excellent pectoral. Boiled in water they afford a large proportion of thin flavourless mucilage; infusions & decoctions of them, like other vegetable mucilages are used as emollients or demulcents in hoarseness, coughs, & pleuretic symptoms, which frequently prevail in catarrhal complaints: they are also recommended in nephritic pains & strangury: for these purposes a spoonful of the seeds unbruised is said to be sufficient for a quart of water. The seed are also much used externally in emollient & maturating cataplasms, & make an easy & useful poultice in cases of external inflammation. The expressed oil is supposed to be of a more healing & balsamic nature than other oils of this class: & has therefore been very generally employed in pulmonary complaints, also in colics & constipation of the bowels: in some of its properties it differs considerably from most other oils of this kind; not congealing in winter, nor forming in a solid soap with alkaline salts; & acting more powerfully than any other as a menstruum on sulphurous bodies. When heat is applied during the expression it gets a yellowish colour & peculiar smell. & in this state it is used by painters & varnishers. Linseed appears to afford but little nourishment & when taken as food has been found to embarrass the stomach & produce flatulency: these facts are noticed by Galen, & have since been confirmed by the experience of regular during a season of scarcity in Zealand, where boiled linseed was used as food, & occasioned a remarkable distention of the hypocondria, swellings of the face, & other parts which in some instances proved fatal. But the farinaceous part which remains after the oil is expressed called oil cake is given to oxen with advantage & has been fattened upon it. The longitudinal fibres of the bark, separated by maceration in water from the glutinous matter which connects them together, dried, beaten & combed, are spun & manufactured into linen. of this linen when worn to rags is made paper. The water in which flax has been macerated is poisonous to cattle, & therefore the practice of steeping it in any stream of running water or common pond is prohibited by statute. Sec 33 Geo 3 C. chap. 1. — Woodville. Withering.

Class. Order.

Allium. C. Sativum. Ang. Garlic.

Use. The ~~[illegible]~~ plant commonly cultivated in our gardens, which is a native of Sicily, is much used in medicine. It is an excellent in vinous asthmas, &c: as a diuretic in dropsies; as a febrifuge in preventing the recurrences of intermittents & even in the plague: as an anthelmintic, a powerful lithontriptic, & an antiscorbutic. It has been applied externally to tumours & cutaneous diseases & has been used successfully in certain cases of hydrophobia. (Woodville. See Hoffman, Cullen, Lettsom, &c. &c.)

Class 6. Order 1.

Ornithogalum. O. Luteum. Yellow Star of Bethlehem. Ang. Yellow Bethlehem Star. Star of Bethlehem. Blos. April. Moist places, sandy; wet woods.

Use. The bulbous roots of the whole genus are nutritious & wholesome, & those of this species have been employed for food in times of scarcity of provisions — Horses, sheep & goats eat it; swine are not fond of it: cows refuse it. (Withering.)

Class 6. Order 1.

Convallaria. C. Majalis. Ang. Lily of the valley. May Lily. Lily Solomons seal. Berries red. Woods, heath. Bl. May.

Use. The flowers, tho highly fragrant, have when dried a narcotic scent. Reduced to powder they excite sneezing. An extract has been made from the flowers or from the roots & stalks of the bitterness, as well as of the purgative properties of aloes: the dose from twenty to thirty grains. — By the assistance of lime a beautiful & durable green colour may be prepared from the leaves. Sheep & goats eat it; swine, cows refuse it. (Withering.) —

Class 6. Order 1.

Convallaria. C. Multiflora. Ang. Giant Solomon's seal. Common Solomons seal. Berries black. Woods. [illegible] June.

Use. The roots of this species have been used for making bread, & its young shoots are eaten by the Turks as asparagus. Is this species the root used in medicine so generally referred to in writers on the Materia Medica. (Withering.) The root prepared in the following manner is very efficacious in the piles. Take one pound of the green root, or one quarter of a pound of the dried. Boil in two pints of water to one; add of strain one pint of sugar or dates. Take two tablespoonfuls of the syrup thrice a day —

Class C. Order 1.

Acorus. A. calamus. Aro. Myrtle flag. Sweet smelling flag or calamus. The myrtle flag grows. Banks of rivers with a muddy bottom, stagnant waters M. May, jun. Use. The root in its dried state has a moderately strong aromatic smell, & a warm pungent bitterish taste. Heat is found to extract the bitter, & rectified spirit the aromatic matter. From a root resembling like spices, this root manifesting to the taste considerable pungency & a moderate share of bitterness, has been, therefore, deemed useful as a warm stomachic, & was formerly much used here in combination with the more simple bitters, which by this addition, were rendered more grateful & carminative. It has been recommended in vertigo proceeding from a vitiated stomach & in intermittent fevers, which are said to have been cured by this root, after the bark had failed. It is said to be efficacious in scorbutic & haemorrhagic complaints; but to this little credit will be given, & still less to its supposed alexipharmic powers. (Woodville). This plant grows wild in moist places in Japan, where it was considered, on account of its strong aromatic taste, to be a medicine of great powers; but they do not know there its true & proper use (Mr Pinckney) It is the only truly aromatic plant which is a native of the northern climates (Linn). The root powder might supply the place of foreign spices; it has cured agues when the Peruvian bark has failed; the flavour of the root is greatly improved by drying. The root is commonly imported from the Levant, but those of our own growth are fully as good. The Turks candy the roots, & think they are a preservative against contagion. Neither horses, cows, goats, sheep nor swine will eat it (Withering).

Class C. Order

Berberis. B. Vulgaris. B. Dumetorum. Aro. Barberry. Pipperidge bush. Bleary. Use. The berries which are gratefully acid & gratefully astringent, are said to be of great use in bilious fluxes & in all cases where heat, acrimony & putridity of the humours prevail. The Egyptians are said to employ them in pestilential fevers & fluxes with great success. J. Paulli relates that he was cured of a malignant fever, accompanied with a bilious diarrhoea by using these berries conformably to the Egyptian practice, viz. macerating the fruit for a day & night in twelve times its quantity of water, to which the addition of a little fennel seed. The liquor strained & sweetened, was used as a common drink. These berries do not seem, however, to possess any peculiar advantages over other acid fruits. (Woodville) - The inner bark steeped in white wine

gative & has often been found serviceable in the jaundice. The root
ewise & good to quench thirst in fevers, for which it is generally made into a
ssere. Lin. & Fort. An infusion of the bark in white wine is purgative. The leaves
e gratefully acid. The flowers though offensive to the smell when near, afford, at a
ne distance, an odour extremely fine. The berries are so acid that birds will
t eat them. But boiled with sugar they form a most agreeable rob or jelly: they are
ewise used as a dye over inmeat & in sugar plums. The roots boiled in lye, dye cool
low: in Poland, with the bark of the root, leather is dyed of a most beautiful yel-
w. The inner bark of the stems, with the assistance of alum, dyes linen a fine
low. This shrub should never be permitted to grow in corn lands, for the ears of
heat that grow near it never fill, & its influence in this respect has been
own to extend as far as three hundred or four hundred yards across the field.
f this, though denied by Mr. Brownrigg (see Eng. Bot. p. 47) Dr. Withering has
ssured the truth (Wells).

H

Class 3rd. 3

Hypolapathum. Lapathum aquaticum. R. Aquaticus. Arsp. Water
ock. Yellow Dock. Rivers. July. August.

se. The root, which is the part directed for medicinal use, has a strong austere &
adily strikes a black colour to a solution of ferrum vitriolatum; it is strongly
ringent & has been much employed both externally & internally for the cure of
ing; especially when the gums are spongy & frequent hemorrhages supervene. It
recommended also in various cutaneous affections, dysoudations, & in arised et
ations. The leaves, which manifest considerable acidity, are said to possess
ratives qualities, & have been used to obviate costiveness. Many of this genus
ere formerly officinal herbs, but this species has been esteemed the most effica-
ous, & is still retained in the Materia Medica of the Edinburgh college, the
e great virtues ascribed to it are now held in doubt. (Wells) This is a medicine
considerable efficacy, both externally applied as a wash for putrid spon-
y gums, & internally for some species of scurvy. In rheumatic pains & chron-
al diseases, owing to obstructed viscera it is said to be useful. The root has some
ue vid. it tinge, but soon changes to a dark brown on being exposed to the air.
powdered root is one of the best things for a dentrifice that can be used. Murray.

Class 8. Order 1.

Vaccinium. P. Vitis-idaea. Eng. Red whortleberries. Bilberries. Dry heaths, woods, mountain tors. Fl. March. Fruit

Use. The berries of this species are acid & not very grateful, but they are eaten by the inhabitants of Lapland & by the rowing people, & they are sent in large quantities from St. Botrynia to Stockholm for the sake of pickling. (Linn.) They are also made into tarts, rob, jelly &c. Goats eat the leaves; cows, horses & sheep refuse them. (Withg.)

Class 8. Order 2.

Populus. P. tremula. Eng. Ash. Aspen. Aspen-tree. Trembling Poplar. Soft wood, hedges, woods. Fl. March. Apr.

Use. The wood is extremely light, white, & smooth, woolly, soft, & durable in the air. The bark of the young tree is made into torches. The bark of the tree is the principal food of beavers. It will grow in every situation & in all soils, but worst in clay, it impoverishes the land; its leaves destroy the grass, & the numerous shoots of its roots spread near the surface of the earth that nothing else can grow there. It is easily transplanted. Sheep & goats eat it: horses & swine refuse it. (Withg.)

Class 8. Order 4.

Polygonum. P. hydropiper. Eng. Water Pepper. Arse-mart. Lakeweed. Biting Arse-mart. Water pepper. Bl. July Sept.

Use. The whole plant has an acid burning taste. It cures little aphthous ulcers in the mouth. The juice of this plant, mixed with soap, is a nostrum in a few hands for dissolving the stone in the bladder; but it may be questioned if this it has any advantage over other acrimonious preparations of the vegetable kingdom. Its acrimony mixed in infusion & the distilled water drank to the amount of two or three pints daily have been found effectual in some nephritic cases. It dyes wool yellow. It cattle refuse it. (Withg.)

Class 8. Order 3.

Polygonum. P. Aviculare. Eng. Knot grass. Snake weed. Road sides paths, streets, &c. Fl. Bl. June Sept.

Use. The seeds are useful for every purpose in which those of the buckwheat are employed. A great number of small birds, especially sparrows, feed upon them. (Withering.) The seeds in Sweden are purified over for this plant. (Linnaeus)

Polygonum. 1st convolvulus. Polygonum convolvulus minor. Ang. Black bindweed. Climbing buckwheat. Common buckwheat. Fagopyrum esculentum.

Use. The seeds are perfectly as good for use as those of the buckwheat of the preceding genus, but they are produced in greater quantity. The flour is not less cold better. Hogs and goats eat it. Sheep refuse it. Horses refuse it. Cows eat it. (K.)

Class 8. Order 1.

Quercus. 2. Robur. 2. Cerris. 2. Lanuginosa. 4. Ilex. Oak. Wood of acorns. Blossom April.

Use. The bark is the part directed for medicinal use; (by the ancients various parts of the tree are used); it manifests in the taste a strong astringency, accompanied with a moderate bitterness; its universal use and frequency in tanning of leather is a proof of its great astringency, and in other astringents it has been recommended in lues, and for restraining hemorrhages, alvine fluxes and other immoderate evacuations. A decoction of it has likewise been advantageously employed as a gargle and as a fomentation or lotion in procidentia oculi et ani. Dr Cullen has frequently used the decoction with success in light inflammations of the mucous membrane of the fauces and in prolapsus uvulae, and cynanche tonsillaris, which some are liable on the least exposure to cold; in many cases the decoction early applied has served to prevent the disorder. Dr. Cullen constantly added a portion of alum, but he tried also a solution of alum alone, and it was not more so effectual. M. M. says this bark has been found not less efficacious than that of cinchona, but this opinion now claims little credit. There can be no doubt that oak bark may have the power of arresting intermittents. Dr. Cullen gave it in doses half a drachm every two or three hours during the intermission of a fever, and both in substance and powder the chamomile flowers, prevented the return of the paroxysms of intermittents. Galls, which are found on the leaves of this tree are the most powerful of the vegetable astringents. It is a dark black when mixed with a solution of ferrum vitriolatum and therefore preferred to every other substance for the purpose of making ink. As a medicine they are to be considered as a radical in the same indications as the bark of the tree, and by possessing a greater degree of astringent and tonic power are to be preferred to external use. The acorn is a fine powder and made into a fine powder, and made into an ointment they have been found of great service in hemorrhoidal affections. Oak wood is the principal indigenous vegetable used in dying [illegible] all the various shades and different kinds of brown are made with oak wood variously managed and compounded. The bark and galls are likewise used in dying, as a substitute for galls. The bark is universally used to tan the skins of it, with a small quantity of copperas is used by the common people to dye woollens of a dark blue. The color, tho not bright is durable. The wood is hard tough, [illegible] and does not easily splinter; it is therefore preferred to all other timber for [illegible] buildings; it is adapted to almost every [illegible] purposes; but to enumerate all its uses would be superfluous and tiresome. Hogs, cows, sheep and deer feed on the acorns. - Withering.

Saponaria officinalis. Class 10. Order 2.

Trivial name. Soapwort.

Use. Its medicinal effect, which must be considerable, have not yet been sufficiently ascertained. The Linnaean Society recommend it for gout, rheumatism & jaundice, but not with its use may be not availing for a fancied resemblance to those of Sarsaparilla seems to have led physicians to class them similar in their effects, & hence they have both been administered in the same affections particularly in fixed pains & general eruptions. Pepin says:- "In a word, the mercurial & nutritive actions are not!" However, according to several writers, the most inveterate cases of syphilis were cured by a decoction of the plant without the use of mercury. Boerhaave & Van Helmont entertained a high opinion of its efficacy in jaundice & other visceral obstructions. The whole plant is bitter. A decoction of it applied externally cures the itch. The Germans use it instead of Sarsaparilla in venereal complaints. M. Andry of Paris cures violent gout by giving daily half an ounce of the inspissated juice. By the use of the extract & a decoction of the leaves & roots, M. Giraud cures old venereal complaints such as ulcers, pains & emaciations, which resisted the use of mercury.- Bruised & agitated in water it raises a lather like soap, which washes greasy spots out of clothes. It was used by mendicant monks for washing their clothes; & Berzelius believes that it has all the effects of soap itself, but that this saponaceous quality is not imparted by acids like that of common soap.

Class 10. Order 5.

Fedum. S. Telephium. Ang. Orpine. Live forever. Orpine stone crop. Only house leek.

Use. A decoction of the leaves in milk is a powerful diuretic. It has been given with success to cure the piles. Cows, goats, sheep & swine eat it; horses refuse it (Linn.)

Class 10. Ord. 3.

Lemnerivum. S. Tectorum. Ang. House leek. Houseleek. Ang.

Use. A person of respectable character has published in a Boston paper a singular fact. It is well known that the house leek has been successfully used against corns. This gentleman states that being one day attacked with a violent pain in one of his toes, that were in a fit of the gout, he applied the house leek; the relief he experienced encouraged him to continue the experiment; he mentioned it to several of his friends, who were subject to the gout; the result has always answered his expectation. It calms pains. He does not say it cures this cruel disorder, with which so many of the feeble

[illegible] & the ingenious gentleman of the faculty to examine & see if he cannot
has not procured him the honour & helping of making a discovery which may prove
useful to the world.

The house leek is concluded after having the thin outside taken off, your
Dr Commerce 1818. The house leek by many is considered to be the same with the
sedum telephium described in the preceding article.

Class 1. Order 2.

Cupulifer. C. Americana. C. Betulus. Eng. Hornbeam tree. Hard beam tree. Horse or iron
wood tree. Wood. Hedges. Blos. May.

Use. The inner bark is much used in Scandinavia to dye yellow. The wood burns like a
candle: it is very white, very tough, harder than hawthorn, & capable of supporting
a great weight; it is useful in turning & for many implements of husbandry:
it makes cogs for mill-wheels, even superior to yew. Cattle eat the leaves, but sa
tyrage will not flourish in its shade. It loves a poor stiff soil on the sides of hills:
it is easily transplanted & bears lopping. (Vitis)

Class 13. Order 1.

Nuphar. N. Lutea. Nymphæa lutea. Eng. Yellow water lilly. Water cam. Flow
ers. Blotches. Pools. Bl. July. Aug.

Use. An infusion of one pound of the fresh root to one gallon of water, taken in doses
of a pint night & morning cured a leprous eruption of the skin. May a fomen
tation of the flowers smell like brandy (Withy) The roots rubbed with milk destroy
crickets & cockroaches. Swine eat it; goats are not fond of it; Horses, cows & sheep
refuse it. Linn.

Class 13. Order 2.

Potentilla. P. Tormentilla minor. Eng. Barnet. In dry calcareous
soil. Bl. Apr. May.

Use. The leaves & seed are mildly astringent, & have been used in dysenteries, & have
chaces-devil. The young leaves are frequently used in sallads & cool tans. Hard
when bruised they smell like the cucumber. It has of late years been cultivated
by farmers as affording food for cattle early in the spring; & from its ver
[illegible] growth allowing of three mowings during the summer; but it ca
[illegible]

[illegible] answer the expectation formed of it [illegible] the [illegible] is not to be found of it. & its produce is not sufficient to answer the purposes of its culture. Cultivated on Salisbury plain it ~~grow~~ covers almost the whole surface of the ground over a great extent of that most excellent sheep walk. It is kept close sheared by the large flocks which graze there, & appears to be a most valuable plant in such pastures. By some it is preferred to clover; but not by sheep or horses. Mr Pitts says it appears only to love a calcareous soil. It may have failed in cultivation from want of attention being paid to that circumstance; & when fully grown it may be disliked by cattle, tho when close bitten, so valuable to sheep. (Pitts)

Cla. 13. Ordo 13.

Trifolium. T. Dorium. T. Pratense. Eng. Shadow-me. Hort. grass. Bl. June. It is a plant concerning which very little has been known, tho very little in practice. The root dyes wool yellow. Horses, cows, sheep & goats eat it: swine are not fond of it. Linnaeus

Cla. 13. Ordo 13.

Ranunculus. R. Flammula. Eng. Spearwort. Less spearwort. Bot. Upper meadows. Bl. Sept. It is very acrid; & its acrimony resides in its distillation. The distilled water operates like vitriol as an instant emetic: & Dr. Withering says, from his own experience, that in cases of poison, or other circumstances, where it is necessary to make the patient vomit instantly, it is preferable to any other medicine yet known; & does not create those painful contractions in the upper part of the stomach which are sometimes occasioned by white vitriol thereby indicating the intention for which it was given. Applied externally, it inflames & blisters the skin. Horses eat it; cows, goats, sheep & swine refuse it. (Pitts)

Ranunculus. R. Sceleratus. Eng. Crowfoot. Water crowfoot. Celery leaved crowfoot. Yellow water. Bl. May. June.

The whole plant is very corrosive. It is said to be made use of by beggars, for the purpose of ulcerating their feet, which they then expose to the public to excite compassion. Goats eat it: horses, cows & sheep refuse it. (Pitts)

Ranunculus. R. Ficaria. R. [illegible]. Eng. Butter cups. Butter flower. Celandine. Pilewort. Pilewort. Pilewort. Meadows & hedges. Bl. June. July.

[illegible] readily & easily raising a blister without causing strangury or the like inconvenient. It is very acid & blisters the skin easily. The acrimony of this & many species of R. is so great that on being applied to the skin they excite itching, redness & inflammation, & even produce blisters, mortification & ulceration of the part. If chewed they corrode the tongue, & taken into the stomach, bring on all the deleterious effects of an acrid poison. It is observed by Mr. Curtis that even by pulling up this plant, & carrying it to some little distance, a considerable inflammation was excited in the palm of the hand in which it was held. This species is one of the most acrid, & one of the most common in England of the tribe. The acrimonious quality may be completely dissipated by heat; & when thoroughly dried, the plant becomes perfectly bland; & its virulency depends much on the situation in which it grows, & is greatly diminished in the cultivated plant. For medical purposes this, & the other species of the R. have chiefly been employed as a vesicatory, & are said to have the advantage of a common blistering plaster in producing a quicker effect, & not causing strangury. On the other hand, it is said to be less certain in its operation, & sometimes occasions ulcers, which prove very difficult & troublesome to heal. Therefore this seems to be applicable only to certain fixed pains, & 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. For cases of its necessity in chronic rheumatism, & other complaints see Chymer. in v. Sherard. The manner of using the plant is to bruise it in a mortar, & to apply it to the skin as a poultice or plaster. Woodville. Sheep & goats eat it; & we have it entered in their pastures be ever so bare. (Withering) —

Synonymes. R. Bulbosus. Gr. Butter cups. Butter flower. Gold cup. Bulbous crowfoot. Bog flower. Meadow hartwort. Bl. Ma.

Obs. The whole plant is extremely acrid, & corrosive especially the fresh root, which will readily raise blisters as easily as can Cantharides, notwithstanding this when dried becomes so mild as to be eatable. Lin. Tour. The bulb is formed above the bulb of the last year when the flower withers. The old bulb in a dry soil, may be found in a state of decay, under the new one, & surrounded by fibres, but without the least appearance of buds. (Withering) —

Meadows plant. Naturalized. Perennial. Flowers in June & July. Stalk.
ve. The flowers gathered before they expand, & preserved in salted vinegar are a good sub-
stitute for capers. The juice of the petals boiled with a little alum, stains the ha-
r yellow. The remarkable yellowness of butter in Holland has been supposed to be caused
this plant. But cows will not eat it and it would be extreme folly. It seems
we have observed it occasions a great inflammation; that they generally die. In May
the Dutch have a custom of strewing its flowers before their doors.

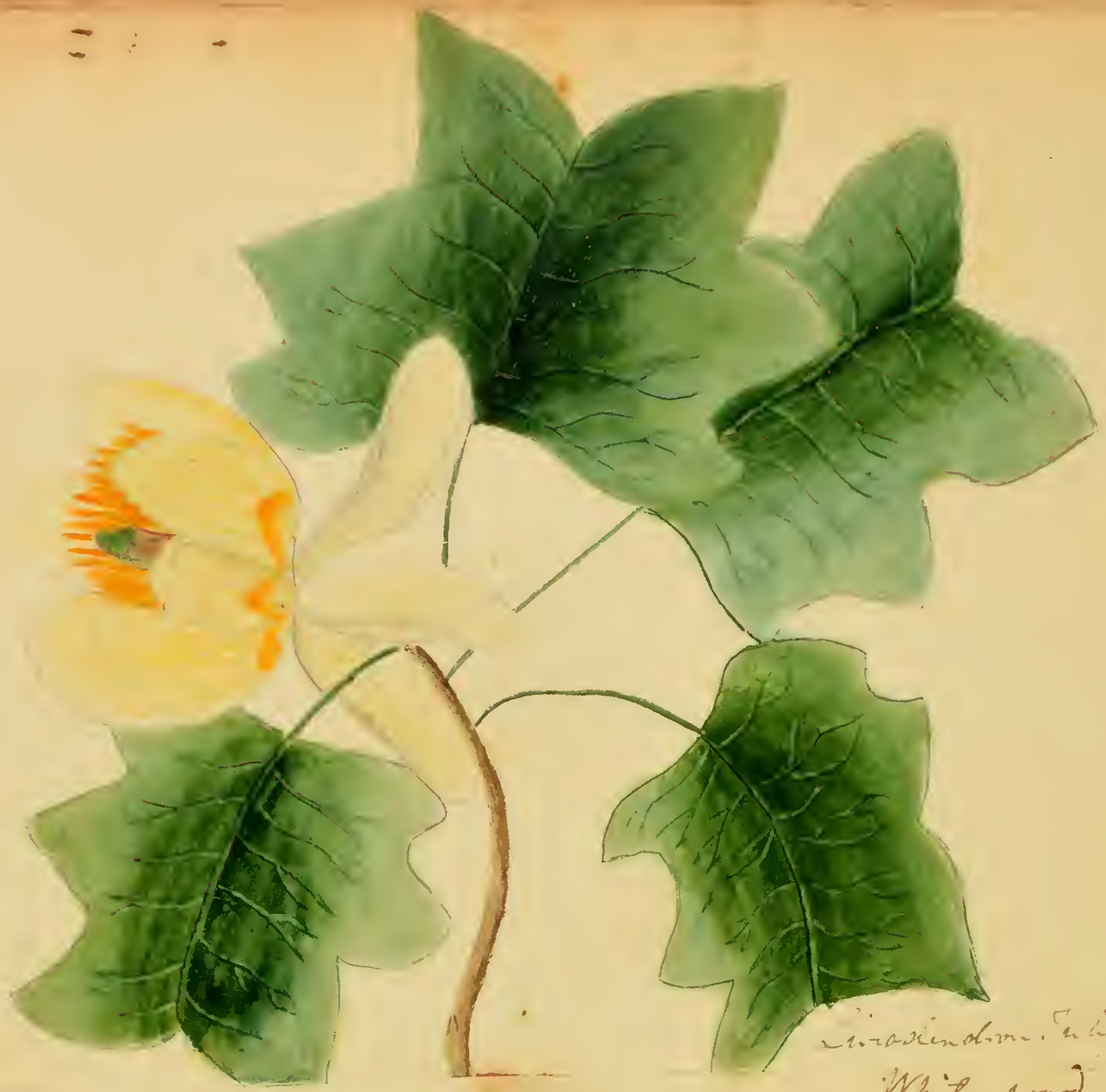
Class 15. Siliq. 1.

Cochlearia. C. Armoracia. Orig. Horseradish. The Harseroot
ve. An indigenous perennial plant growing on the sides of streams, the banks of rivers &
damp places, also in gardens. Flowers in the month of May. For medicinal & culinary
s it is also cultivated in gardens. Horseradish root has a quick pungent smell, & pun-
ting acid taste; it never fails contains in certain vessels a sweet juice which sweat-
s out upon the surface. By drying it loses its acrimony; but if kept in a cool place
wed in the sand it retains its qualities for a considerable time.

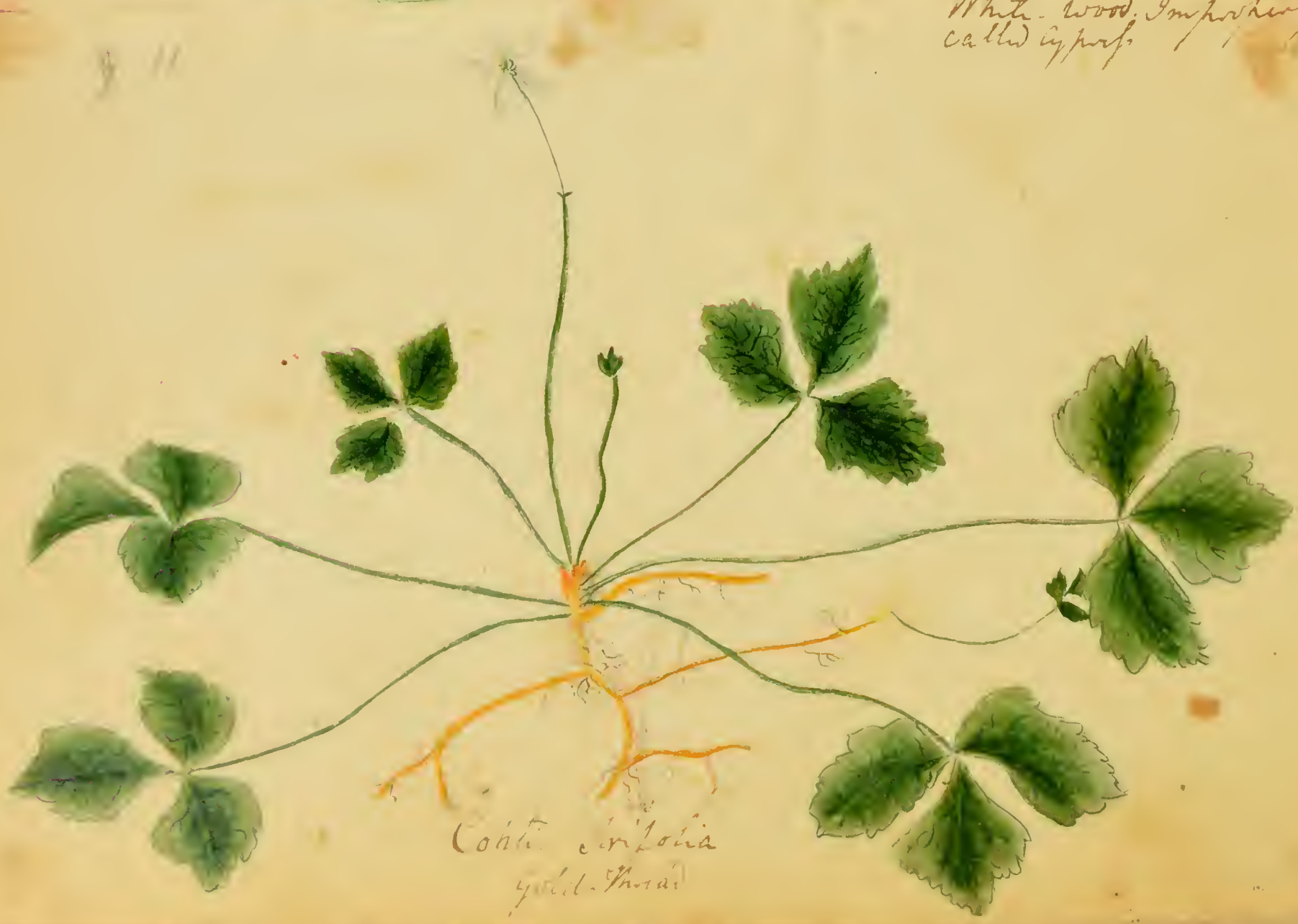
The medicinal effects of this root are to stimulate the solids, & promote the secre-
tions; it seems to extend its action through the whole habit & affect the minutest plexus.
It is greatly recommended by Sydenham in dropsies, particularly such as succeed intermit-
tents. In paralytic complaints horseradish has been sometimes applied with advantage as
a stimulating remedy to the parts affected. When steeped in vinegar during a fortnight
its root is said effectually to remove freckles in the face. A syrup made by boil-
ing scraped horseradish in brown sugar, is an excellent remedy in the decline of colds
& pleurisies to promote expectoration, & remove hoarseness (Pouches.)

Cochlearia. C. Officinalis. This is an annual plant growing on the seashore & in moun-
tainous situations & is sometimes cultivated in gardens. It possesses a considerable degree of
acrimony, & by distillation it affords an essential oil the smell of which is so strong
as to the eyes water.

The Scurvy plant is a gentle stimulant & diuretic & is used for the cure of the sca-
rvy. It is employed externally as an gargle in sore throat, & in other affections of the
gums & mouth. It may be eaten in substance to any quantity or the juice may be ex-
pressed from it, or it may be infused in boiling water, or its virtues may be extracted
by fermentation. Dr. Withering says it is a powerful remedy in the pituitous asthma & in what
he calls the scorbutic rheumatism. The juice is prescribed along with the juice of oranges &
of inspissated juice. (Ibid.)



Liriodendron Tulipifera
White-wood. Improperly called cypress



Coptis trifolia
gold-thread

Order. Salicineae. Gen. Populus. Sal. Poplar. Sal. Tree. The bark. The root.

A native of both Hemispheres in the United States, called also American poplar, white wood, & in some parts of New England embowhels called cottonwood tree. It attains to a very large size, rising as high as any forest tree, & makes a noble & beautiful appearance when in flower about the middle of May. This tree is remarkable for the shape of its leaves, having a middle lobe of the leaf truncate or cut transversely at the end. The flowers are large bell-shaped; calyx, three leaves, six petals to the corolla, marked with green red & yellow spots, & many linear shaped reds, lying one over another, & forming a sort of cone. The bark of the roots has long been employed by medical men in the United States, as a tonic when joined with various preparations of Peruvian bark, & cornus florida, has afforded a remedy of equal efficacy with Peruvian bark. It is a strong bitter, & considerably aromatic & astringent. It has been found particularly beneficial in the last stage of dysentery. The powdered root combined with steel dust is an excellent remedy in relaxation of the stomach. According to Dr. Barton the bark is used in some parts in gout & rheumatism. A decoction of it is said to be a common remedy in Virginia for bots in horses. Dr. S. Brown gives the following account of the use of this tree. "The best time to procure the bark for medicinal purposes is the month of February, as the sap at this time being most confined to the root increases its virtues: it possesses the qualities of an aromatic & bitter aromatic, & an astringent; the bitter quality is greater & the astringent less than in the Peruvian bark. It likewise possesses an aromatic quality. Hence I infer it is highly antiseptic & powerfully tonic. I have prescribed the poplar bark in a variety of cases of fever in which it has, I can declare from experience, it is equally efficacious as the Peruvian bark if properly administered. In the phthisis pulmonalis with hectic sweats & diarrhoea, when combined with laudanum it has frequently abated the alarming & troublesome symptoms. It effectually cured a Mr. Rives fifty years of age, who was afflicted with a catarrh & typhoid symptoms for five years which baffled the attempts of many physicians, & the most celebrated remedies, by proving in the use of the poplar bark for two ~~[illegible]~~ weeks.

I can after from experience there is not in all the Materia Medica a more certain, speedy & effectual remedy in the hysteria, than the poplar bark combined with a small quantity of laudanum. I have used no remedy in the chlorosis so much as the poplar, after clearing the primae viae, for these two years. It appears to be an

[illegible] known it fail in a single case of worms which has come under my observation. I prescribed it to a sick child in convulsions, his second case of fits the king's evil, several hundreds of which had ascarides were discharged with the stools. The dose of the powder to an adult is from a scruple to two drachms, it may be given in tincture, infusion or decoction, but its virtues are always most exert when given in substance."

The following is part of a letter addressed to Governor Clayton of Delaware in 1792 by Dr. J. T. Gross, of Philadelphia (American Museum vol. 2) In his reply the governor observes:" During the late war the Peruvian bark was dear & scarce. I was at that time engaged in considerable practice & was under the necessity of seeking a substitute for the Peruvian bark. I conceived that the poplar had more aromatic & bitter than the Peruvian & less astringency. To correct & amend those qualities, I added to it nearly an equal quantity of the bark of the root of dogwood (cornus florida or boxwood) & half the quantity of the inside bark of the white oak tree. This remedy I prescribed for several years, in every case in which I conceived the Peruvian bark necessary or proper with at least equal if not superior success. I used it in every form of intermittent, gangrene, mortification, & in short in every case of debility. It remains to determine whether the addition of those barks to the poplar increases its virtues or not; this can only be done by accurate experiments in practice."

A further account of the analysis & virtues of this medicine is given by Professor Rush in the transactions of the college of Physicians of Philadelphia & in a paper published in one of the volumes of Tilloch's Phil. Magazine.

Class 13. Order 13.

Cortis C. Trifolia. Yellowroot. Hydrastis. Syn. Gold thread. Root the root. (Lytle).

Use. Golden thread is a very small plant found in wet swampy situations. The stems are erect & naked. The leaves grow by threes at the termination of the stems, & are cordate & toothed. The white butterflower blossoms appear in May. The roots appear ropelike being thread shaped, running, & of a bright yellow colour. They possess a considerable degree of astringency & bitterness, & have been employed by the people in the country as a remedy in aphthas & cankerous sores in the mouths of children with considerable benefit. From the bitter property possessed by these roots they are esteemed by some to be useful as a stomachic bitter. Headaches, with relaxation of the in-

Nat. Ord. M. Viridis. Hort. Spear mint. Mint. Water places. Banks of rivers. July. Aug.

Obs. To spearmint are to be ascribed the same medicinal qualities which belong to peppermint; but the preparations of it, tho' pleasant, are less efficacious than those of the latter. It contains much essential oil, but of an odour somewhat less agreeable than that of lavender or marjoram. It is therefore less employed as a cephalic; but it acts very powerfully upon the parts to which it is immediately applied, & therefore considerably on the stomach invigorating all its functions. It acts especially as an antispasmodic & therefore relieves pains & colic depending upon spasm. It will also stop vomiting depending upon such a cause. But there are many cases of vomiting in which it is of no service; & in those cases arising depending upon inflammatory irritation in the stomach itself, or in other parts of the body, it exasperates the disease & increases the vomiting. Practitioners have thought, & justly according to the opinion of Dr. Woodville, that the infusion of mint in warm water, agrees better with the stomach than distilled waters which are often somewhat empyreumatic (Cullen ii. 149). Mint, according to Linnaeus possesses a strong & emmenagogue power, that a woman, by the frequent use of it, became subject to menorrhagia. Lewis observes, "that it is said by some to prevent the coagulation of milk, & hence it has been recommended to be used alone with milk diets, & even in cataplasms & fomentations for removing coagulated milk in the breasts; upon experiment the curd of milk digested in a strong infusion of mint, could not be perceived to be any otherwise affected than by common water; but milk in which mint leaves are set to macerate did no coagulate near so ~~much~~ soon as an equal quantity of the same milk kept by itself. The officinal preparations are an essential oil, a conserve, a simple water, & a spirit. (Woodville.) The flavour of this species being more agreeable than that of others, it is generally culinary & medicinal purposes. A conserve of the leaves is very good, & the distilled waters both simple & spirituous are universally taught. Hence the leaves are used in spring sallads, & the juice of them boiled up with sugar forms into tablets. The distilled waters & the essential oils, are used in stomachics & frequently with success. Dr. Lewis says "that alone or with rectified spirits of wine, gives out a tincture, which appears by daylight

o, a fine dark green & by candlelight of a bright red colour. — The fact is that a small quantity of the tincture is green either by daylight or by candlelight but a large quantity of it seems inclined to common daylight; however when held between the eye & a candle or between the eye & the sun it looks red. When if put into a flat bottle it appears the green & red as it appears thus the flat side & thus the edge of the bottle. Mr Young

Men the. M. Piperita. Fam. Peppermint. Watery places. Bl. Aug. Sept. —

Obs. The nauseous smell of this plant is not so agreeable to Linnæus, but for medicinal use its cultivation has now been extended over Europe. It has a more penetrating smell than any of the other mints, a much stronger & warmer taste, pungent & pleasing like pepper, sinking as it were into the tongue, & followed by a sensation of coldness. By maceration or infusion it readily & strongly impregnates both water & spirit with its virtues. In distillation with water, it yields a considerable quantity of essential oil, of a pale greenish yellow colour, growing darker coloured by age, very light, subtle & pervasive in a high degree, the specific smell & penetrating pungency of the peppermint. Rectification, Dr. Cullen observes is particularly necessary & proper for this oil which has been called essence of peppermint seems to be no other than the rectified oil dissolved in spirit of wine. (One or two drops of the oil is sufficient for one ounce of alcohol. — Its stomachic, antispasmodic, & carminative qualities render this plant useful in flatulent colics, hysterical affections, retching, & other dyspeptic symptoms, acting as a cordial, & often producing immediate relief. Camphor is to be obtained from this plant. (Woodville.) Peppermint water is well known as a carminative & antispasmodic. The stems & leaves of the plant are beset with numberless very minute glands, containing the essential oil, which rises plentifully in distillation. The essence of Peppermint is an elegant medicine, & possesses the most active properties of the plant. (Withering.)

Class 14. Order gynospermia —

Stachys S. Sylvatica. Fam. Hedge Nettle. Woods & hedges. Vol. Sept. —

Obs. The plant smells very fetid. Has a bitterish smell. Used as food by the inhabitants of Kamtschatka. Sheep & goats eat it. Horses, cows & swine refuse it. (Withering.)

Class 14. Order 1st Genus 1st

Abbreviations. A. Angiosp. A. Arum. Ang. White flowered. Bordies, edition. 3d. pub. Sept.

Ang. The leaves have a strong aromatic and disagreeable smell which they imparted, & a bitter, penetrating, aromatic taste, lasting in the mouth. It was formerly much extolled for its efficacy in removing obstructions of the lungs & the viscera: & has been highly employed in humoral asthmas, obstinate coughs, pulmonary consumptions. instances are also mentioned of its successful use in various affections of the liver, jaundice, cachexia, & mental impressions. It either powers, though it does possess some medicinal powers, are not clearly ascertained. & it is now rarely prescribed. A drachm of the dry leaves in powder, two or three ounces of the expressed juice, or an infusion of half a handful of the fresh leaves have been thought a dose. The last mode is universally preferred by the common people, with whom it is a favorite remedy in coughs & asthmas. Bergius describes it as tonic, emmenagogue & diuretic. Dr. Cullen denies it either as a pectoral & says that in several cases, it was judged useful. When in considerable quantities it is said to loosen the bowels. (Wordsworth).

It has a strong musky smell, & a bitter taste; it is reputed a stimulant & re-solvent: an infusion of the leaves in water sweetened with honey, is recommended in asthmatic & phthisicky complaints, & most of the diseases of the lungs. Ang. Work is a principal ingredient in the Negro Cuba remedy for vegetable poisons. A young man who had taken mercurial medicines was thrown into a salivation which lasted more than a year. Whatever method taken to remove it rather increased the complaint; at length Linnaeus prescribed an infusion of this plant, & the patient was restored in a short time. Flores, cons. rhus & prect. operat. (Pitkins).

Class 14. Order 1st. Gynandria.

Genus. O. Vulgare. O. Sylvestre. O. Americanum. O. Majorana. Ang. Wild, or Old marjoram. Sweet marjoram. Thickets hedges, in calcareous soils, gardens. Bl. pale

It has an agreeable aromatic smell, & a pungent taste, much resembling thyme, which it is more nearly allied than any other of the verticillatae, & therefore ought to be emmenagogue, tonic, stomachic & of the same effects. However, an only indirectly, & the aromatic & stimulant powers which all the parts of this vegetable possess

[illegible] in water it yields a moderate quantity of very acrid penetrating essential oil, which has been much used for easing the pain of a carious tooth, by dropping it on cotton, & inserting it in the cavity. The dried leaves instead of tea are extremely grateful. They are also employed in medicated baths & fomentations. (Woodville) The whole plant is a warm aromatic: the essential oil of it is so acrid, that it may be considered as a caustic & is much by farriers with that intention. & with cotton wool moistened with it, & put into the hollow of an aching tooth frequently relieves the pain. The country people use the tops to dye purple. Goats & sheep eat it. Horses are not fond of it: cows are fond of it. (Withering)

The medicinal qualities of the garden marjoram, or sweet marjoram whose nat. is not known, agree with those of its congeners above, but being more fragrant the sweet m. is deemed more cephalic, & better adapted to those complaints known by the name of nervous; & may therefore be employed with the same intentions as lavender. In its recent state, it is said to have been received in application to scirrous tumours of the breasts. (Woodville)

Class 14. Order 1. Angiospermia.

Pedicularis. P. Sylvatica. P. Canadensis. Eng. Lousewort. Common louseworts. Pl. perennial. Fl. Jun. July.

Use. The expressed juice or a decoction of this plant has been used with advantage as an injection for inveterate ulcers. It is said that if the healthiest flock of sheep be fed with it they become scabby & scurfy in a short time; the wool will get loose & they will be overrun with vermin. Cows & sheep refuse it. (Withering)

Class 14. Ord. 1. Angiospermia.

Digitalis. D. Purpurea. Lin. in Fuchs major. Eng. Foxglove. Fingers, &c. in the woods, but oftener in the ground. Pl. Jun. July.

Use. The leaves which have a nauseous bitter taste, have long been used externally to scrofulous tumours with considerable advantage. Internally this plant has been received efficacious in epilepsy, apoplexy, & palsies; but from its great & cautious it was found a dangerous remedy. It was discovered by Dr. Withering to be a powerful diuretic, & has been successfully used by him, & by succeeding practitioners in the cure of the dropsy; in which, under certain precautions it is a valuable & important medicine. Dr.

[illegible] the Jour. for June 1785.) But [illegible] it was proved either in Edinburgh or Edinburgh. Jour. Med. Sci. Vol. 2. It has a remarkable power of lowering the pulse. Probably it is certainly a very active medicine. Lately it has attracted more attention than modern practice was accustomed to bestow on it. (See Beddoes on Pulmonary consumption. Ferriar on Dipsalysis &c.) Some specimens of the decoction of the leaves are violently emetic & cathartic. It is said to be useful in scrofulous cases taken inwardly for some time; & the bruised leaves, or an ointment made of them applied outwardly, are strong.

Volumes have been written upon the efficacy of this valuable medicine. Without subscribing to any one of them, I shall only refer to Beddoes & Ferriar, & add the [illegible] to the various communications in the Medical & Phys. Journal upon this medicine & to the 2nd vol. of Thacher's Dispensatory. [illegible] Digitalis. J.W.W.

Class 15. Order Siliculosa.

Cardamine. L. Virginianum. L. Latifolium. Amer. Wild pepper-grass. Bittander. Spice wort. Poor man's pepper. Common Bittander. Meadows & pastures. Fl. June July. Use. This is one of the acrid anticorbutics, & was formerly used in the place of horseradish. An infusion of it is emetic. Wahr.

Class 15. Ord. Silicula.

Thlaspi. L. Bursa pastoris. Amer. Shepherd's purse. Shepherd's pouch. Pickpurse. Roadside, walls &c. Fl. March. Sept. Use. It is insipid to the taste; but it is recommended by many writers in haemorrhagies of all kinds, both as an internal or external application, either in man or beast. Light foot.

Class 15. Ord. Siliquosa.

Sinapis. L. Officinalis. C. Nigra. C. Rotundifolia. Amer. [illegible] grass. Scurvy grass. [illegible] Apr. [illegible]

[illegible] has an unpleasant smell & a warm acrid taste. It [illegible] the essential oil, which is in very small quantity in its distillation with water & [illegible] is to be met in the aqueous fluid in a great [illegible] & [illegible]; on

[illegible] on sugar communicates to a quart of wine or
other liquor, the [illegible] of Scurvy grass. (Lewis) Scurvy grass is an tiseptic, alte-
rant, aperient & diuretic & is said to chear the contraction of the viscera & remove flatu-
lence without heating or irritating the system. It has long been considered the most active
of all the anticorbutic plants, for which we have the testimony not only of phy-
sicians but of the most celebrated navigators who have experienced its beneficial
effects at sea. And it is worthy of remark that it grows most plentifully in the
high latitudes in the hemisphere where the scurvy is most obnoxious. Its sensible
qualities are sufficiently powerful to confirm this opinion. In rheumatic cases
called by Sydenham sarbutic rheumatism, consisting of wandering pains of long con-
tinuance accompanied with fever, this plant combined with acrimonious rad. rorac is
highly recommended both by Sydenham & Lewis. A remarkably volatile & fugent
spirit, perhaps from the stalk & known by the name of Sp. anticorbuticus, & mixtura sim-
plex anticorbutica drawing, found by Ker, to be a useful remedy in cases of the
[illegible] requiring an active powerful stimulant, given in the dose of thirty drops two
or three times a day. Cullen M. M. But as an anticorbutic neither this nor the conserve
promises so much benefit as the plant eaten in the way of salad or the ex-
pressed juice, as directed in the Pharmacopoeia. (Cullen). There are instances of
whole ships crews having been cured of the scurvy by the use of this plant; & it
abound with acid salts. There is no doubt but it exists in satisfaction. The best mode
of taking it is raw in salad. It is also diuretic & useful in dropsies. The Ship's cook
esteem it a good stomachic. (Lind Journ.) [illegible] as an anticorbutic are universally
known. & it is a powerful remedy in the spasmodic asthma. & in what Sydenham
calls the sarbutic rheumatism. It possesses a considerable degree of acrimony which
seems to reside in a very subtle essential oil; a distilled water & a conserve are
prepared from the leaves, & its juice is preserved along with juice of oranges in the
form of anticorbutic juice. It may be eaten in salad. Notwithstanding it is a
native of the sea coast, it is cultivated in gardens without any loss of the active
of its properties. Cows eat it, horses, swine & sheep refuse it. (Withe). In Iceland
it is a great deal eaten by people, & fatten every growth upon it. But this
occasions from it a very nauseous flavour.

[illegible] C. Horseradish. C. Raphanus. Nat. Ord. [illegible]. Syn. Horse radish. Fr. Raifort. Ger. Meerrettich. Ital. Ravanello.

The root has been received into the Pharm. Lond. & exists in the shops. It is a quick penetrating pungency, but in certain useful it retains a most pleasant flavor. It sometimes exudes in little drops from the surface; its pungent matter is a very volatile oil, wholly dissipated by drying. (Lewis). The root affords one of the most acrid substances of this order, & therefore proves a powerful stimulant, whether externally or internally employed. Externally it readily inflames the skin, & proves a rubefacient that may be employed with advantage in sciatica & rheumatism; & its application, if long continued, produces blisters. Internally it may be used with advantage in the cure of dropsy which proceeds from an interrupted secretion of urine; one drachm of the root, freshly scraped down, is enough for four ounces of water, to be infused in a close vessel for two hours, & made into a syrup with double its weight of sugar. Of this syrup a tablespoonful or two should be taken twice daily, or at least repeated two or three times, has been found very suddenly effectual in relieving hoarseness. This syrup is a substitute for the juice of the cochlearia when the latter is not at hand. (Cullen M. M. ii. 167.) Received into the stomach, it stimulates & promotes digestion, & therefore it is a proper condiment for animal food. A portion of its infusion taken with a large draught of warm water readily proves emetic, & may be either employed as such by itself, or to assist the operation of other emetics. Infused in water & taken into the stomach it proves stimulant to the nervous system, & is thereby useful in palsy: employed in large quantities it is heating to the whole body; & hence is often useful in chronic rheumatism, whether arising from debility or other causes. Cut down without bruising into very small pieces, & mixed without skimming, in a large quantity of the amount of a tablespoonful every morning for a month, it is said to have been extremely useful in arthritic affections; but these were probably of the rheumatic kind. Employed in this manner it may be, the unbruised root passes entire in the stomach, its acrid volatile parts, not stimulate without inflaming. It is also a powerful diuretic, & therefore useful in the dropsy. In this manner in scorbutic complaints & perhaps in other cases it has been known as one of the most powerful antiscorbutics. The root scraped is in every more use at our tables, as a condiment for fish, roast beef &c. & at and for many

214 [illegible] [illegible] may be [illegible] in scorbutic & [illegible]ical cases it is an useful [illegible]
[illegible] & diuretic. a strong infusion of it [illegible] [illegible]. an infusion of it in cow
milk makes one of the safest & best cosmetics; [illegible] cows [illegible] [illegible] & none
[illegible] it. With.

Clas 15. Ordo Siliquosa.

Sisymbrium. S. Nasturtium. S. Amphibium. Nasturtium Aquaticum. Eng. Water Cresses. Springs & brooks rivulets.

Use. The leaves have a moderately pungent taste & a quick penetrating smell. Their antiscorbutic qualities have been long generally acknowledged by Physicians. They are also esteemed to purify the blood & humours & to open visceral obstructions. they are nearly allied to scurvy grass but more mild & pleasant & are therefore frequently eaten as sallad. The juice of this plant is directed in the Pharm. with that of scurvy grass & seville oranges. Woodville.

This plant is an excellent antiscorbutic & [illegible] with less acrimony than the scurvy grass: it is an ingredient in the antiscorbutic juices. It is very universally used as an easy & wholesome spring sallad. With. It is said to useful in jaundice & other visceral obstructions. (Lightfoot) —

Clas 15. Ord. Siliq.

Erysimum. E. Officinale. i. Vulgare. Sis. vulg. Eng. Hedge mustard or [illegible] seed. [illegible] cresses. Scrambling rocket. Road sides, rubbish &c. Bi. May June.

Use. The leaves of this herb, somewhat acrid [illegible] the [illegible] the flowers makes. Its seeds are considerably pungent & appear to be nearly of the same quality with those of the mustard, though weaker. This plant is said to attenuant, expectorant & diuretic; & has been strongly recommended in chronical coughs & hoarseness. It is mentioned by Rondeletius that a hoarseness occasioned by loud speaking was cured in three days by means of it. other medical writers also have borne testimony to its good effects in this disorder, & Dr. Fuller for that purpose recommends the juice mixed with an equal quantity of honey or sugar; in this also it is a useful remedy in ulcerations of the mouth & throat. In most cases of disease perhaps its seed, as more pungent, should be preferred to its leaves. Woodville. Hedge mustard is beyond any thing in ulcers of the throat. This was found by experience by the Hon. Hans Gray Esq. when all advice of Doctors & Surg

called nothing; this from his own mouth. Mr. not a copy of Parkinson.
which formerly belonged to Mr. Saunders, surgeon at Stourbridge. It is very hard to
taste; & when cultivated, is under a strong pot herb. Birds are fond of the seed. Sheep
goats eat it; cows, horses & swine refuse it. (Withg.)

pinum. L. Barbarea. Eng. Winter cresses. Winter rocket. Rocket wound red.
Wells river banks watery places. H. May. October.
se. The leaves are used by the common people in Sweden in sallads early in spring
later in the autumn: they are also boiled as kale; & is sown in gardens for an early
ing sallad. Linn. In England also it is cultivated for the same purpose by the name
French cress. Cows eat it. Sheep & goats are not fond of it. Horses & swine refuse it.
Withg.

Class 15. Ord. Siliq.

Brassica. L. Napus. Eng. Wild Navew. Nape. Nape. Nape cabbage. Dutch bank cow.
ilis. H. May.
se. The roots of the cultivated variety may be eaten like turnips may be eaten like turnip
but they have a stronger taste, its seeds which are small colored afford a large quantity of
excellent oil & is known by the name of Rape oil. What remains after the expression
of the oil is called oil cake & is used for fattening oxen. In Norfolk these cakes are used
as manure broken in pieces & strewed upon the land it is thought to be very efficacious
is sold for 1£ 1s 6£ per ton. Rape cake is laid on an acre. Woodward. Cows goat & swine
eat it. (Withg.)

Brassica. L. Rapa. Eng. Turnip cabbage. Var. Turnips. Rhodes. Cow field. H. Apr.
se. The roots are either eaten raw boiled or roasted, pepper is commonly used with
them. They relax the bowels & are supposed to sweeten the blood; they are hurtful
to pregnant women or to hysterical persons & to those who are subject to flatulence
the juice well fermented affords by distillation an ardent spirit. It renders acrimonious.
The roots kept in sand or in a cellar during the winter, send out white shoots
flowers like leaves. which being rather sweet & not unpleasant to the palate are used
sallad when other culinary herbs are not to be had. But the greatest use of turnips
is feeding oxen & sheep in the winter. Withg.

Brassica. L. Oleracea. Eng. Sea colewort. Sea cabbage. Common cabbage. Cliffs on the coast

Use. [illegible] the cabbage is preferred to the cultivated kinds, but when gathered in the season it must be boiled in two waters to take away the saltness. The root may be eaten like those of the preceding species, but they are not so tender. The different varieties of the cultivated garden cabbage which are much in use are derived originally from this. The red cabbage is chiefly used for pickling; in some countries the white cabbage when full grown in autumn is buried, & thus preserved from the winter. It is a common practice in Germany to cut them to pieces & along with some aromatic herbs & salt, to press them close down in a tub, where they soon ferment. They are eaten under the name of sour crout. Cabbage is a dish to be infested early in the year with an insect called the Chrysomela saltatoria, & afterwards the Papilio Brassicae: it may be preserved from the former by strewing the ground with soot, & from the other by whipping the plant with the green worms of a dove. Cabbages sowed or planted for several years together in the same soil become smaller in the head, & the roots knotty, which is occasioned by the larvae of flies.

Cap. 15. Orb.

Sinapis. S. Nigra. S. Arvensis. S. Rapifolia. The common mustard. Black mustard. Corn. Yellow rocket. Bastard. June.

Use. The seeds of this plant & those of the S. [illegible] are preferred on the table, as they impart no remarkable difference in the taste nor in their general effects, & therefore answer equally well both for the uses of the table & the purposes of medicine. They have an acrid pungent taste; & when bruised this pungency shews its volatile nature by powerfully affecting the organs of smell. Mustard is considered to promote appetite and digestion, attenuate viscid juices, & by stimulating the fibres it proves a general remedy in paralytic & rheumatic affections. When in considerable quantity, it is found rather stimulating, & therefore apt to disagree. For a dinner table spoonful of the undiluted seed is not active in the stomach, but stimulates the intestinal canal, & commonly proves laxative. Dose ℞. ʒ. It has been recommended as an anticorbutic: the seed bruised & mixed in the white wine cured an inveterate & total decay which had arisen during the confinement of a siege. Though it is said by Galen, that the use of mustard has force the humours to putrescency & injure the stomach, an opinion into which we are probably led by the common notion that it contains volatile alkali,

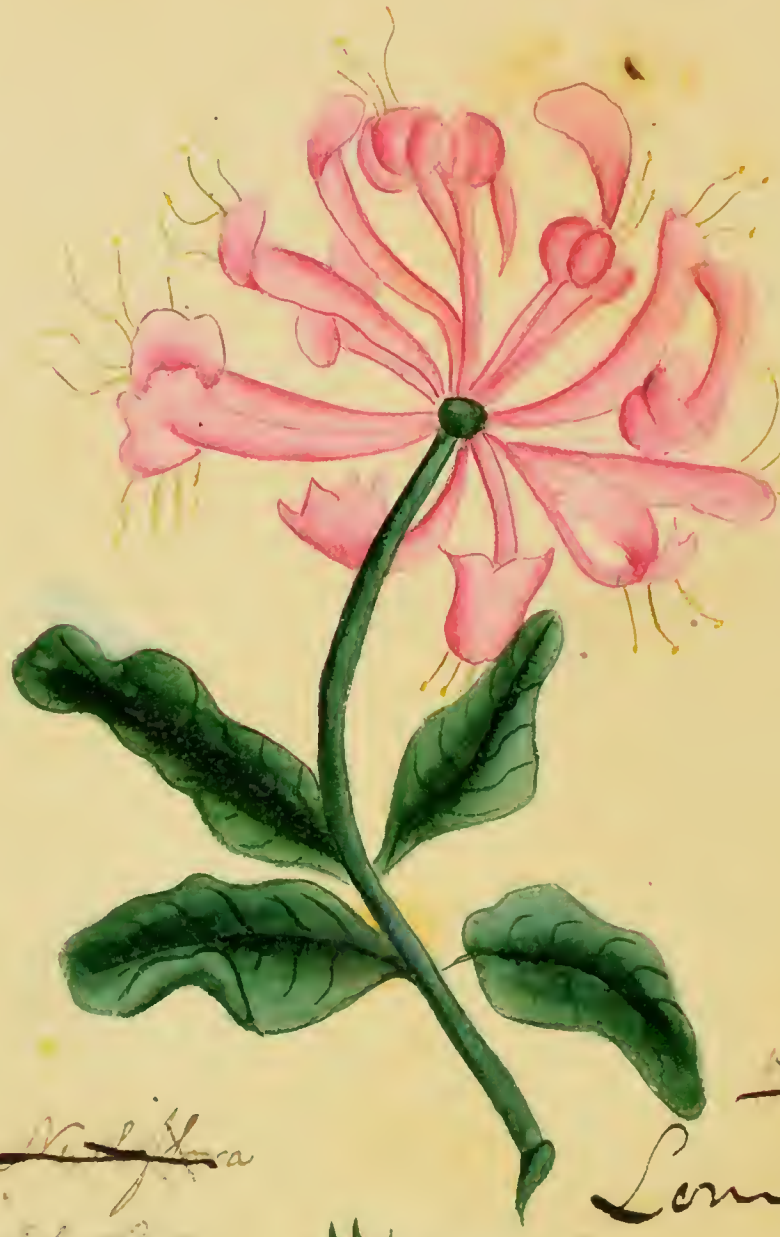
great pungency is to be ascribed ~~to~~ not to a volatile [illegible]
contained. Religious formerly made use of great use in medical treatment: a spoonful of
whole seed taken three or four times a day during the paroxysm. When the disease was
virulent, he added flowers of mustard to the cake. Externally the seed and the
plant, or meal from, when moistened with vinegar & kept for a day, forms a powerful
medicine more acid which should be attended to in its external use. (Willan). It may
not commonly be given in bulk to the quantity of a spoonful, or half an ounce
for a dose. (Woodville). The seed reduced to powder, make the common mustard so much
in request at our tables. They yield a considerable quantity of expressed oil, which is
acrid, but little of the acrimony of the plant. Taken inwardly in the quantity of a
great spoonful or more, they gently move the bowels, & are of service in asthma, chron-
ic rheumatism, & palsy. The powdered seeds curdle milk, & give a strong impregnation to
boiling water: the infusion taken in any considerable quantity is emetic; in smaller doses
a cordial aperient & diuretic. Cataplasms formed with the powdered seeds, crumb of bread
& vinegar are very commonly applied to the soles of the feet, as stimulants in fevers & in
eg[illegible] medical treatment; they are used with advantage topically applied in fixed rheu-
matic & sciatic pains. Whenever a strong stimulus is required, that acts upon the nervous
system without exciting much heat there is none preferable to mustard seed (Mitty

Note. The S. alba & white mustard with rough pods is commonly sowed for cas-
salading. The seeds have the same properties as the above.

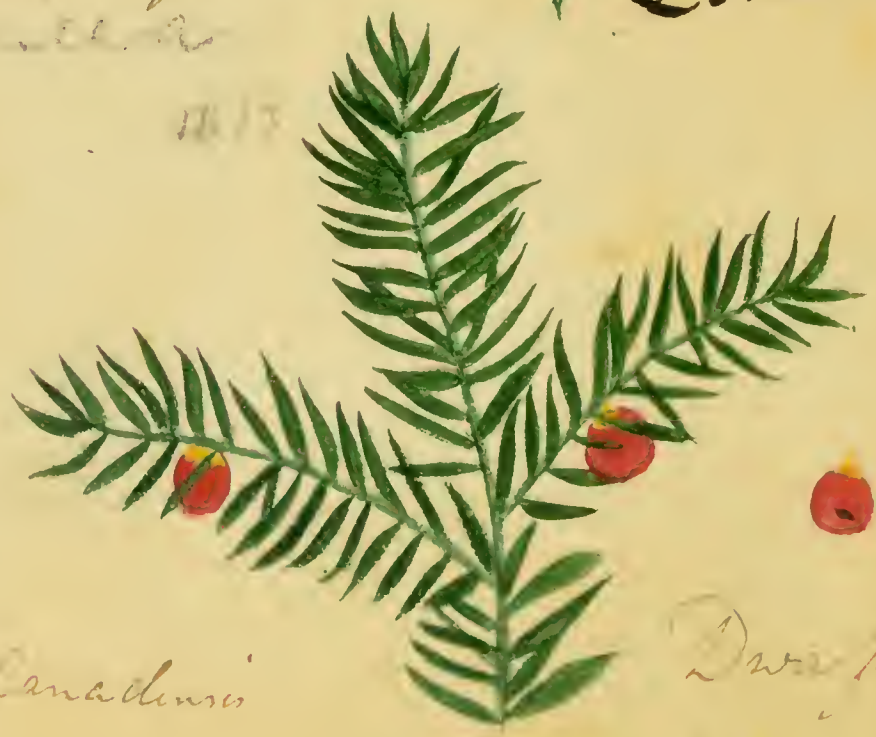
Class 15. Ord. 1st.

Yarkhams. R. Nasturtium. Eng. White flowered shalock. Wild radish.
Amo: corn. Ist. June. July.

Use. In wet seasons it grows in great quantity amongst the barley in Sweden, & it
deserves to be remarked that in those provinces & in those seasons wherein this plant
bounds the common people who eat barley bread are afflicted with very violent con-
vulsive pains. (Amen. acad. vi. 430). Horses eat it: cows are fond of it. (Nothing).
This pernicious plant abounds in our north meadows & does great damage to
the crops of flax which grow there, & to our pease & oats. S. Dr. Mo.



Lonicera



Taxus Canadensis

Dwarf-yew

Kalm. T. Canadense. L. Maculata. Eng. Dwarf Laur. Pl. Lond. Jew tree. Mountain Laurel. Bl. March. April

Use. The berries are sweet & viscid: children often eat them in large quantities without any inconvenience: but the fresh leaves are fatal to the human species. Three children were killed by a spoonful of the green leaves. They died without any or any of the usual symptoms of vegetable poisons. The same quantity of the dried leaves had been given the day before without any effect. (Percivall Ess. iii). And though it is eaten by sheep & goats, there are instances of both being killed by it, branches having been found in their stomachs. (Gent. Mag. 56. 944). Sheep are said to have been killed by browsing on the bark: the suckings in a half dried state. Dr. Withering thinks the most detrimental to cattle. The wood is hard, smooth, & beautifully veined with red; it is converted into bowls, spoons, cogs for mill wheels, & floor gates for ponds which hardly ever decay. It grows best in a moist loamy soil: on bogs or dry mountains it languishes. It bears transplanting even when old; as it bears clipping, it is often used for hedges which from its secretion seems to keep off the cold winds from the tender plants. The berries are eaten by mice & gallinaces; the leaves by sheep & goats; horses & cows refuse them (Withering).

Class 5. Order 1.

Azalea. L. ..... Ang. Yellow wreath. Wild Honey-suckle

Gen. Des. Corol. tubular hat 5 cl. t. somewhat oblique: stamens on the receptacle: stigma obtuse usually ending with 5 short papillae.

Use.

Class 3. Order 1.

Actea. A. Spicata. L. Rubra. A. Alba. Ang. Red Christ's herb. Cohosh. Indian root.

Use. This vegetable is perennial, growing in woods & shady places. It attains to the height of about two & a half feet & flowers in the month of may or june, & produces black shining inky berries in autumn, about the size of peas which are considered poisonous. On account of its fetid smell this plant is said to be frequented by toads. There are two varieties of this plant in the United States; one of which is thus described by Dr. Cutter. "Christ's herb bamberries — Blossoms white, berry red. In woodlands or shady places. May. The berries are exceedingly poisonous. Dr. Withering says the plant is powerfully cathartic, & that the root is useful in some nervous cases, but it must be administered with caution." Actea racemosa, says Dr. Chase, (from the Blackman's root or cohosh) is a very beautiful plant when in flower. The activity of the root of this plant is well known. It is an astringent. & Dr. Barton says it was used in the form of a decoction as a gargle, with success in a putrid sore throat which prevailed in New Jersey, many years ago. A decoction of the root cures the itch. In North Carolina, it has been useful as a remedy in the disease of cattle called the murrain. (Thacher)

Class 7. Order 1.

Æsculus. Æ. Hippocastanum. Ang. Horse chestnut.

Use. This is a very common & well known tree. The fruit is principally farinaceous & produces excellent starch, & has been used for food for domestic animals, & even for men in times of scarcity. But its introduction into the Edinburgh Pharmacopoeia, was probably owing to its having been used & recommended as a sternutatory in some cases of ophthalmia & headach. With this view it was drawn up the nostrils in the form of an infusion or decoction. The bark has been proposed as an indigenous substitute for the very expensive & often adulterated Peruvian bark. Many successful experiments attest its effects, when given in intervals in intermittent & typhus fevers, & also

hid externally in gangrene, sufficiently [illegible]
powder it may be given to the extent of a scruple, & a half, or a drachm
a dose. It rarely disagrees with the stomach, but its astringent effects gen-
ally require the use of some aperient medicine. Some species of acacias
e cultivated in the United States, on account of the beauty & agreeable
ade of the tree. Medical knowledge might be promoted were practition-
rs to try the efficacy of the bark of our native species. (Ibid)

Class 5. Order 5.

Zanthoxylum Fraxineum. Fr. Prickly ash. Toothach tree. The bark, root, & berries.
re. This is a native of Virginia, & other southern states. The height to which this tree
ise grows, when the soil & situation wholly agree with it, is about twelve feet. It is
very ornamental shrub, & the stem which is a dark brown colour is defended by sharp
ickly spines. A decoction of its bark & roots has often succeeded when taken inte-
ally, in removing rheumatic complaints. It excites a gentle perspiration. The
ries are used to put into a hollow tooth when aching. A tincture of them is also
r the same purpose, both of which afford ease. In Virginia a spirituous infusion
the berries is much esteemed in violent colic. Ibid.

Class 10. Order 2.

Artemisia Ab-rotanum. Southernwood. A. Santonica Wormseed. A. Absinthium. Common wormwood.
re. The two forms of the several species of artemisia are still regarded as articles of the Materia
ia Medica, altho' no important effects are expected to result from any medicinal
ties they may ~~[illegible]~~ possess. The seeds of santonica have a faint disagree-
ble smell, & a very bitter taste. They have long been held in estimation as an thel-
intic; the dose had a drachm or a drachm of the powder for an adult. They are
ven to children in powder to the extent of ten grains or half a drachm in the morn-
g, when the stomach is empty, & when continued for several days a powerful cathartic
s administered. The absynthium or common wormwood is a perennial herb growing wild
the roadsides, & is cultivated in gardens. It flowers in August. The smell is very
strong & disagreeable. The taste extremely bitter. The active constituents of this plant
e bitter extractive & essential oil. It is used in stomach complaints, & of great

[illegible] in intermittent fever in carbonic & hydro[illegible] affections in [illegible]. A saint's [illegible] Recorded to Dr. Cutting, an infusion of the leaves is a good remedy & with the addition of fixed alkaline salts, proves powerful diuretic in some hydrical cases.

Their ashes yield a stronger alkali than most other vegetables. The essential oil is used both externally & internally, for destroying worms. The leaves, an excellent antiseptic, is often employed in fomentations to resist putrefaction; & if the plant be macerated in boiling water, & applied to a bruise, by way of cataplasm, it will not only speedily remove the pain but also prevent the discoloration of the part. (Cutting)

Class 12 Order 1.

Gen. P. foetida. Arum Americanum. Dracontium foetidum, Indian Turnip. Use. This singular plant abounds in the swamps & meadows throughout New England, & is common also in South America only. The vulgar name by which it is here generally known is taken from its very rank & disagreeable smell, nearly resembling that of the skunk or polecat, & from its leaves resembling those of the cabbage. It is considered a species of the arum. The roots & seeds, when fresh, excite in the mouth a sensation of pungency & acrimony. But according to Dr. Cutler the fructification is essentially different from all the genera of the order & must unquestionably be considered a new genus. This plant has no stem, & the flower is the first part which appears in April. The leaves next appear at a small distance from the flowerstalk in a conic form, as they are, in shorter footstalks. The calyx consists of a very large, permanent spatha, of a thick porous substance, approaching to an ovate form; open on one side & bulging out on the opposite. The margin is reflected at the base, & somewhat bent at the apex. The spadix with the spatha. The florets numerous, placed round the receptacle in an oval form; & are so compact as to appear like a solid, thick, with small regular ribbons on its surface. Corolla four-petal, very thick & porous, obtuse petals. Stamen four flesh filaments rising from the receptacle, longer than the corolla. Pistil three, oblong, germen convex, style cylindrical rather than the lamina. Stigma obtuse. Seed large, roundish, inclosed in the receptacle. The color of flowers is nearly of the color of the spatha, which is deep purple variegated with scarlet & yellow.

The volatile aromatic stick is found to be well deserving of a place in our Ca

dica & may be wanted [illegible]
ed have proved of excellent use in asthmatic cases & often afforded relief in the distressing
ease when other means have failed. It should be exhibited during the paroxysm, & repeated
as circumstances may require in doses of thirty or forty grains. It will be proper to persevere
in the use of it for some time after the paroxysm has gone off, or till the patient
perfectly recovered, which is said to have been the method pursued by the Indians for
re cure of this disease. The Rev. Dr. Cutler has announced his opinion of its efficacy as ex-
ienced in his own particular case after other remedies had disappointed his expecta-
ons. The antispasmodic powers of the scunk cabbage root have been displayed
en prescribed in other diseases. In one of the most violent hysteric cases I ever met
th, says a correspondent, where the usual antispasmodics, & even opium, had failed
ve teaspoonfull of the powdered root in spirits & water procured immediate relief
on repeating the trials with the same patient, it afforded more lasting benefit than
y other medicine. In those spasms frequently affecting the abdominal muscles in pa-
tients he adds, it produces the desired effect in doses of one teaspoonful repeated occasionally
numerous other instances of spasmodic affection, & also in chronic & acute rheumatism
is root either in powder or decoction has evinced its efficacy & performed important
ures, as attested by good authority in confirmation of my own experience. No instance
ve been stated in which this medicine has been unfavorable to be remarkably efficacious
the case of dropsy; two teaspoonfull of the powdered roots being taken every morning
ccasionally till the cure was effected. The seeds of this plant are said by some to af-
d more relief in asthmatic cases than the root. A caution is suggested by Dr. Cutler
st in collecting the roots, the white hellebore, or poke root, which some people
ll scunk weed, be not mistaken for this plant, as the consequences might be pe-
l. There is an obvious distinction; the hellebore has a stalk, but the scunk cabbage
none; & the roots of the latter are much larger than the former. (Ibid)

Cl. 3. Order. 2.

ena. Ex. Setaria. Eng. Oats

When deprived of their husks and formed into groats, oats are converted
to an excellent dish for the infirm and diseased. When ground into meal
ed in water, they afford a thick & nourishing mucilage, which with the addition
wrant is very wholesome, & produces a mild laxative effect. The infusion of the

[illegible] when cooled becomes a jelly, which is called [illegible]. In this form, oats are nutritious & easy of digestion. Gruels or decoctions of groats or oatmeal, either plain, acidified, or sweetened, form an excellent drink in febrile diseases, diarrhoea, dysentery, &c. & from their demulcent properties, prove useful in inflammatory disorders, hoarseness, coughs, & excoriations of the fauces. Ibid.

— 11 —

Class 5. Order 1.

Capsicum. C. Annuum. Ang. Red-Pepper. Cockspur Pepper.

Use. The species of pepper is a native of South America, & is cultivated extensively in the West India islands. The pods are long, pointed, furrowed, at first of a green colour, & afterwards of a bright orange red. The taste of capsicum is extremely pungent & acrimonious; setting the mouth as it were on fire. Its pungency is completely extracted by alcohol, & partly by water.

Cayenne pepper is the indiscriminate mixture of the powder of the dried pods of many species of capsicum. These peppers have been highly esteemed as a condiment. They prevent flatulence from vegetable food, & have a warm kindly effect upon the stomach. For abuse of them, however, give rise to bilious affections, especially of the liver. Of late also they have been employed in the practice of medicine. There can be little doubt, but they furnish us with the purest & strongest stimulant that can be introduced into the stomach; while at the same time they have nothing of the narcotic effects of ardent spirits. Dr. Adair Hutchison, who was perhaps the first that employed them as a medicine, directs them to be given to the extent of six or eight grains in the form of pills, or in tincture, made by infusing half an ounce of the pods in a pound of rectified spirits, & to be given from one to three drachms at a dose. He has found them useful in a variety of affections, particularly in that morbid disposition, which he calls cachexia africana, & which he considers as a most frequent & fatal predisposition to disease among the slaves. Dr. Wright says that in the cholera & other complaints, where cinchonas are indicated, a minute portion of powdered capsicum forms an excellent & recommend its use in lethargic affections.

This pepper has also been successfully employed, infused in vinegar, as a ca-

a species of cynanche maligna, which from [illegible] in the West Indies, resisting the Peruvian bark, wine & other cordials is commonly employed in practice, though accepted in the West Indies, it is said, is not without danger from the inflammation it is liable to induce.

In tropical fevers, coma & delirium are common attendants, & in such cases the claims of capsicum have a speedy & good effect. They redden the parts, but blister, unless kept on too long. In Ophthalmia, from relaxation, the diluted juice of capsicum is a sovereign remedy. (Ibid)

Class 4. Order 1

Cornus. C. Florida. Eng. Common Dogwood. Bois de vou.

Use. This is one of our most beautiful & useful shrubs, growing in almost every part of the United States. In New England it is well known by the name of Dogwood. It flowers early in the spring & with so much regularity that some of our northern tribes were accustomed to name the Spring season from its flowering. The flowers generally begin to make their appearance about the beginning of May in the middle of May & make a most beautiful appearance. The large white flowers form a fine contrast with the green of the forest, & are the ornament of our woods. These are succeeded by oblong berries or berries of a rich glossy crimson which ripen in September. They have a very bitter taste, & an infusion of them in rum or brandy is much used as an agreeable morning bitter. The bark both of the stem & root is considerably astringent & has long been employed in intermittent fevers. And as possessing properties closely allied to the Peruvian bark, this & the following article will be found excellent substitutes. See page 13. at. comm. service. where description of both these barks will be found.

Class 5. Order 2.

Gentiana. G. Lutea. Eng. Gentian.

Use. Gentian is a perennial plant which grows upon the Alps, Pyrenees, & other mountainous parts of Europe. The roots are long & thick, externally of a brown colour & internally spongy, & of a yellow colour, without any remarkable smell, but possessing all other known vegetables in bitterness. Alcohol dissolves only the bitter extractive, & leaves both the extractive & mucilage. Gentian possesses the purest bitter in an eminent degree, & is wholly devoid of astringency. Taken into the stomach

 it raises a powerful fever, & in large doses it evacuates the intestines. It is useful in debility of the stomach in general & bitter & in gout: combined with astringents it cures intermittents. The dose of this drug in powder is from 10 to forty grains: but it is more frequently taken as the chief ingredient in bitter waters, tinctures & infusions. There are several species of gentian in the U. States, Dr. Schoepf particularly mains a low species with narrow leaves, which has been found in the glades of Pennsylvania. Ibid.

Class 16. Orders 1.

Geranium G. Maculatum. Ang. Cranesbill. Vulg. Lovi-Pothe

Use. This is a common plant near Philadelphia, & in many other parts of the United States. It is commonly known by the name of "Crowfoot", & flows in the Spring. It is a powerful astringent & will stop very violent bleeding if applied to the wounded vessel. A decoction of this plant has also, on some trials manifested great efficacy in restraining internal haemorrhagy. The root boiled in milk is a common domestic remedy for the bowel complaints of children. Ibid.

Class 4. Order 2.

Hamamelis H. Virginiana. Eng: Witch-hazel

Use. This tree is a native of the United States. The leaves are nearly inverted & irregularly ovate. Blossoms yellow: stand three or four together on short footstalks. Grows in loamy land. Blossoms September & October. This singular shrub does not commence until its leaves are destroyed by frost, when its numerous blossoms make a gay & agreeable appearance; & continue until the weather becomes very cold & often until snow falls. The germen endures the severity of our winters unchanged; for the fruit does not ripen until the next September the time of its blossoming again, when the ripe fruit & blossoms will be found on the same tree. The Indians considered this tree as a valuable article in their Materia Medica. They employed the bark which is adhesive & astringent to punctured tumors & extended inflammations. The catechism of the inner rind of the bark

found to be very efficacious in removing painful inflammations of the eyes. The bark chewed in the mouth is at first somewhat bitter, very astringent & then leaves a pungent acrid taste, which will remain for a considerable time. The specific qualities of this tree seem, by no means to be accurately ascertained. It is probably possessed of very valuable medicinal properties. Mr. Barton informs that this shrub grows ten or twelve feet high, from a common root.

Class 3. Order 1.

Genus II. Oryza. H. Linnæan. Eng. Rice.

Use. Barley has from the earliest ages been considered as a wholesome & nutritious food. Pearl barley is prepared by grinding off the husk of rough barley, & forming the grain into little round granules which appears of a kind of pearl whiteness. In its state barley consists essentially of amylaceous matter & when boiled forms an excellent article of nourishment. In diseases of the kidneys & of the breast as well as in those of the body where it is said to abound in acrimonious humours, decoctions made of the grain sufficiently strong & acidulated with vinegar are eminently useful. A cooling & nutritious ~~vegetable~~ beverage, for it is rendering essential service to febrile patients, & in all inflammatory cases where preternatural heat & thirst prevail, it tends to promote other salutary effects. The grosser part which remain after the decoction should not be swallowed. Ibid.

Class 18. Order 2.

Genus I. Helenium. Eng. Elecampane.

Use. This is a very large down flowering plant, sometimes found wild in most parts of the world. The root, especially when dry, has a very agreeable aromatic smell, which, at first on first taste, is glutinous & somewhat acrid, quickly succeeded by an aromatic bitterness of pungency. The ancients entertained a high opinion of Elecampane, which is recommended for promoting expectoration in humoral asthma & coughs. It usually takes rise to excite vomiting & purge the bowels. In some part of Germany, large quantities of the root are candied & used as a stomachic for strengthening the tone of the intestines & for asthma in the humours. The dose is from half a dr. to 60 gr. powder, & this has been found by experience to possess considerable efficacy. Ibid.

Juglans. J. Nigra. Black walnut. J. cinerea. Butternut.

This tree is generally known throughout the United States & is now introduced into the Materia Medica of the Massachusetts Pharmacopoia. During the American war the extract made from the inner bark of the tree was the extract made use of by Dr. Rush & other medical men in our military hospitals & being frequently administered to patients under the operation of mercurial salts it was found to be an excellent substitute for jalap or other cathartics. It is now esteemed a valuable purgative in doses from ten to thirty grains, not occasioning heat or irritation; & is greatly commended in cases of dysentery. Combined with calomel it renders more active & efficacious exercised in bilious habits. The extract is often very carelessly prepared by the country people, & ought to be prepared by the apothecary or practitioner themselves; & as a domestic medicine of considerable importance it should be adopted by every physician. The bark of the root of this tree will excite a blister & the bark & shells of the nuts dye a good brown colour. A decoction of the inner bark is advantageously employed as a cathartic in the disease of horses called the yellow water. The extract should be made from the bark in the month of May or June.

Juglans. J. Nigra. Black ~~walnut~~ walnut. J. cinerea. Butternut.

Of the Juglans there are eight species in the United States. According to Mr. Michaux there are six sorts of walnuts & he notes the hickory or white walnut of Virginia to be distinct from our white walnut. According to Dr. Barton there are but two sorts, the one spontaneously in this country, the white walnut & the hickory bark so called. The first is a very hard tough wood, which our farmers find useful for many purposes. It will burn in a almost any form, without cracking especially the outer part of the body of a young tree. It is white & more like it, therefore much used for bows, oars & axe helves. But it soon decays when exposed to the weather. The heart of this tree has a thin more shell & is of very little value. The inner bark is useful for making a yellow dye. The hickory bark is so called on account of the roughness of its rough bark, which hangs in slips on the bodies & limbs. This has a small white nut inclosed in a very thick shell, but it is not esteem

its timber as the other sort. The nuts naturally [illegible] but the first hard frost causes them to drop. The black walnut tree is said to grow naturally in Virginia, & particularly on the banks of the Ohio; so it is on the Scottish it receives a good polish; is hard & heavy & is much prized for its beautiful brown colour, & used in all sorts of cabinet work. We have another sort not indigenous, but the only one that is much cultivated in this country, & is by the name of the English walnut. The nut is much larger & better than that of either of the other sorts. In its tender state it is used in pickles for sauce. But the trees are valued for their use when they have come to their full growth. — Sweet [illegible] sort seems to be the best situation for walnut trees. They are not well adapted to be cultivated in nurseries. They bear transplanting but poorly while they are very young. The roots should not be wounded, but it is not easy to prevent it in taking them up, as they naturally run deep. To be transplanted they are best for fruit. The grow short & bushy & are not fit for timber. Therefore he who wishes to cultivate a grove of them for timber should plant the nut in the place where he wishes the tree to remain. There is a considerable difference in the limbs of walnut trees, the [illegible] not admitting much bruising. The tree is apt to enter at a wounded limb & cause it to rot. (Deane's Dictionary.)

Class 8. Order 1.

Kalmia. 1. Latifolia. Lin. Broad-leaved laurel. Wild green. Calico bush.

Dim. The largest of the several species of Kalmia, growing to the height of seven or eight feet in swamps & moist rocky situations. Blossoms white tinged with red, in June & July. The wood is hard & compact, & the Indians are said to have made small dishes, spoons & other utensils out of the roots. They are also said to have used a decoction of the plant to dye themselves. The leaves are highly poisonous to sheep, but the pheasants eat them with impunity. The flesh of these birds is rendered poisonous by eating the leaves or berries in the winter, & occasions the death of some persons who eat of this flesh.

Barton's experimental inaugural dissertation published in Philadelphia in 1792 p. 27. Thomas says he finds that a decoction of this plant, made by the time one ounce of the leaves in eight ounces of water, boiling it down to four ounces, cured diarrhoea of eight years continuance. The root & bark was that of the

a day. [illegible] 20. it was diminished to four times a day. The
[illegible] was relieved by washing the parts with the decoction. The scalp head im
capitis was also cured by rubbing the head with an ointment made of the leaves
& tops. Dr. Barton bears testimony of the efficacy of this ointment in the time
[illegible] Tincture of the leaves of this plant in proof spirit is an active remedy.
Some kinds of rheumatic pains & other sciatic have been known to yield to the repeated
application of an infusion of Palmic leaves. (Ibid.)

Class 18 Herb.

Lactuca. L. Sativa. Aug. Common garden lettuce.

Obs. This plant ~~is perennial~~ is valuable as an article of diet abounds with
a milky juice which possesses all the characteristic properties of opium & may be
procured from it in sufficient quantity to repay any labour bestowed upon it for
this purpose. The Laudanum made from the opium of the lettuce increases the sus
in force & frequency. & produces generally the same results as the common la
danum. It has been used with advantage in allaying the pain of chronic rhe
matism & colic; in checking the frequent stools accompanying diarrhoea;
allaying cough &c. & the leaves of the plant may be advantageously cultivate
for medical purposes, especially as the opium is procured after the period in which
the plant is useful for the table. (Ibid.)

Lactuca. L. Elongata. L. Virosa &c. Wild lettuce. Wild or strong scented lettuce

Obs. This plant is biennial, growing spontaneously on rubbish & beside fences
flowering in August & September. The stem rises four feet, & is prick
on its lower end. & its leaves are nondescript & greatly indented; they are ob
ovate & their midrib prickly on the back part. Flowers branch expanded
floral leaves similar to the stem leaves but smaller. Corolla numerous ra
petals yellow, opening about seven & closing about ten in the forenoon
This plant afford a large quantity of milky juice which smells like opium or
acid & bitter. It resembles opium in some of its effects. Its narcotic powers sit
of the poppy head are lodged in its milky juice. The extract prepared from t
expressed juice of the leaves of this plant so that dried in flows, is
recommended in small doses in dropsy. In diseases of long standing, procedure

cal obstructions, it has been given to the extent of [illegible] ounce daily. It is said to agree with the stomach, to quench thirst, to be gently laxative, powerfully diuretic, & somewhat diaphoretic. Continued libations are found during its operation. Dr. Collin of Vienna asserts that out of twenty four dropsical patients, all but one were cured by this medicine. Ibid.

Class 9. Order 1.

Laurus. L. Sassafras. Ang. Sassafras.

Use. This tree is a native of North America, & is cultivated in Jamaica. The wood, root, & its bark are used. The leaves have a moderately fragrant smell & a mucilaginous aromatic taste. Sassafras is a warm aperient & strengthening medicine; it has often been successfully given in the form of infusion & decoction for improving the tone of the stomach & bowels, in persons whose humours are in a critical state. The essential oil is highly stimulating & heating, & must be given only in very minute doses, being a narcotic & diuretic remedy. The bark is used in decoctions. The oil is said to be efficacious, applied externally to worms. Ibid.

Pour boiling rain water, or spring water to the pith of sassafras & let it stand until becomes very mucilaginous or ropy, & it makes an excellent wash for chronic inflammations of the eyes. Ibid.

Class 14. Order 1.

Lavandula. L. Spica. Ang. Lavender.

Use. Lavender is a well known, small, shrubby, perennial plant, a native of the south of Europe but frequently cultivated in our gardens for the sake of its perfume. There are two varieties. The flowers of both have a fragrant agreeable smell & a warm pungent bitterish taste; the broad leaved sort is the strongest in both respects & yields in distillation thrice as much essential oil as the other; it is also the most specifically heating. Grows in the northern parts of France where both kinds are wild. This is only used for the distillation of what is called oil of spike. The narrow leaved is what is commonly met with in our gardens. Lavender is considered a warm stimulating cordial. It is principally used as a perfume. (See also

Leontodon. L. Dandelion. Eng. Dandelion.

Use. An indigenous perennial plant growing in meadows & pastures, on roadsides throughout Britain. It produces a yellow flower which blows from April to September, & has the remarkable quality of expanding early in the morning, & closing in the evening. The root, leaves & stalk contain a proportion of bitter milky juice which possesses considerable activity. Its more immediate operation is to remove visceral obstructions, & promote the urinary discharge; the dose prescribed by Boerhaave for this purpose is four ounces to be taken thrice or four times a day: & late experience has corroborated its great efficacy in chronical cases of the complaints connected with a disordered state of the first passages.

By modern writers Dandelion is highly extolled in the treatment of chronic inflammation of the liver & vicinity & recipient viscera of that organ & also in general chronic disorders of the stomach, in a dose of half a drachm of the extract twice a day. Either a strong decoction of the fresh expressed juice, in doses of from two ounces to four, two or three times within the twenty four hours, will however, be found the most active preparations. Ibid.

Class 20. Order 3.

Cyphe adipolia. Maranta Arundinacea. Eng. Cat tail flag. Indian arrow root.

Use. This plant was originally the production of the East Indies, & is now cultivated in Jamaica & the West India Islands, & in South America. Arrow root agrees with sago, salep, & tapioca, in its general nutritious qualities, but is reckoned to exceed them so far as to afford a much larger proportion of mucilage than any vegetable hitherto discovered. Hence it is of superior utility as an article of diet for the sick & invalid. Particularly in cases of cachexy, either in the general habit as in hectic fever & consumption, or in particular secretions as in affections of the urinary passages, cystitis, inflammation, stone or gravel; & also in affections of the bowels as in looseness & dysentery. It furnishes also an excellent vehicle for the bowel complaints which so commonly prevail in the United States, during the warm sea-

nutritious & easily digested food for convalescent patients. According to Dr. Wright of Jamaica, a decoction of the fresh root makes an excellent tisan in acute diseases. In a pamphlet published in 1796, by Mr. J. Pitts we find the culture of this valuable article highly recommended to the West Indian planters, & the new African colonists, as an object of commerce, & the most eligible substitute for starch made of wheat. By the best computation eight millions of pounds weight of starch are annually in Great Britain alone from that valuable grain. It appears also by the same authority, that the arrow root starch is of the finest quality, & that one pound of it is equal to two pounds & a half of that prepared from wheat. Lately the arrowroot has of late years been introduced into the states of South Carolina & Georgia, & by practical experiment it is ascertained that the soil of the southern seacoast is well adapted to it. John Cocke Esqr. on Hunting island & St. Simons & Campbell Wyatt Esqr. of Sapelo island, have, it is understood, succeeded in their attempts as to afford the most flattering encouragement. That this important article may be added to the numerous sources of wealth enjoyed by our southern fellow citizens. The letter gentleman states that a spot of land on his plantation yielded arrow root sago in the proportion of 1840 pounds to the acre. No production is presumed can promise a more durable remuneration to stimulate the planters to attempt its cultivation; & when it is considered that in proportion to the production the demand will be extended, its claims as a rival staple with cotton may perhaps be anticipated. Pitts

Cap. 13. Order 1.

Sanguinaria. S. canadensis. Eng. B. or Red Puccoon

This is a common plant in the United States & is called also, red root, India paint, turmeric. The leaves are round & deeply indented. stems naked, supporting single flowers. Blossoms white. It grows in rich woodland, & flowers in April. When the fresh root is broken a juice issues in large drops resembling blood. The Indians used it for painting themselves, & highly esteemed it for its medicinal virtues. It is emetic & cathartic & cathartic, but must be given with caution. An infusion of the root in rum or brandy makes a good bitter. If it be planted in rich shady borders, it flourishes well in gardens; & the large leaves & blossoms make an agreeable appearance soon after the frost is out of the ground. Cutter's Thesis an inaugural dissertation on Sanguinaria by Dr. Dorsey of Philadelphia 1803. the following useful information is obtained. The root is from one fourth to half an inch in diameter, from three to four inches long, sending forth numerous stringy fibres two or three inches long: a colored liquor is thrown out when the root is broken. The stalk is six or eight inches long, & the thickness of a quill. The leaves are cordate & lobate. There is but one leaf to a stalk; on each lobe, one large fibre, of a light yellow colour, may be seen running from the stalk, & many smaller ones branching from it in all directions. The powdered root in doses of 15 or 20 grs. is powerfully emetic. Eight grains is a mild dose, & is but little inferior to ipecacuan. It contains a large proportion of gum, some resin, & extractive matter. The first & last are the most active parts.

The leaves & seeds of the plant are powerful & diffusive stimuli; promote sweat, & are given in Maryland with that view to horses, to promote the shedding of their coats. A tincture of the roots is used to prevent the intermittent fever; & a decoction of the roots to cure the dysentery. In one case it operated powerfully upon the uterus, & produced abortion, hence it might be useful in female obstructions. ——— The seeds are said by Professor Barton, to possess nearly the same quality with those of stramonium. viz. they induce fever, delirium, dilated pupil &c. A deleterious property resides also in the leaves

Class 14. Ord. 1.

Nicotiana. Cl. Officinalis. Eng. Balm.

Balm is much cultivated in our gardens, on account of its aromatic smell, resembling the lemon. Its properties are very similar. It is principally employed in form of a watery infusion, which is drank in the manner of tea; and in acute cases when diluted with the juice of lemon it is an urgent diluent.

Class 5. Ord. 1.

Pentandria. Cl. Nicotiana. Eng. Tobacco.

The Tobacco plant is a native of America where considerable quantities of it are raised for exportation. Indians have a strong disagreeable, narcotic smell, and a very acrid burning taste. The active ingredient of Tobacco is an essential oil, native poison. Small animals are almost instantly killed when wounded by a needle dipped in it; and a few drops of this oil taken internally have operated as a fatal poison. Hence the pernicious effects of smoking the leaves of this noxious plant may be easily conceived. The effects of tobacco are those of a powerful narcotic. It occasions nausea & vomiting, it reduces the force of the circulation, occasions tremors, muscular debility, with insensibility & cold sweats. As a stimulant the smoke of tobacco thrown into the intestines was at one time employed in the cases of drowned persons, a practice now exploded as pernicious. It is employed with more advantage in ileus & incarcerated hernia, tho' it requires to be used with much caution. The watery infusion of the strength of two drachms of tobacco to one pound of water, is a more convenient mode of exhibiting it as an enema. The smoke received into the mouth relieves the pain of toothache by its narcotic power, or by exciting a profuse salivary discharge. Reduced to powder it proves an excellent errhine & sternutatory when snuffed up the nostrils. In infusion it is also applied externally for the cure of psora, tinea & other cutaneous diseases.

The inaugural dissertation by Dr. Bradford of South Carolina, published 1804, author asserts that the evident operation of tobacco on the system is that of a narcotic, emetic, a cathartic & a diuretic. Hence the benefit of it in a variety of diseases. In cases of cholera & other bowel affections, it ap-

[illegible] an immediate remedy. As a diuretic it is excelled by few of our indigenous plants. Dr. Fowler, by extensive experiments, has proved it to be a powerful diuretic in cases of dropsies & dysuria. He prescribes in the form of infusion; about eight drachms of which he considers is for the average dose for an adult, or to begin with sixty drops & increase the number by five, eight or ten at a time, to one hundred or till by their obvious effects on the system the proper dose shall be ascertained. The fittest time for administering the medicine, are two hours before dinner & at bed-time; it being observed to disagree the most with the stomach, in the morning fasting.

In cases of nephritic affections, or gravel, the infusion was given with astonishing effect. In many cases of asthma Dr. Fowler found the infusion to be a good expectorant, & to afford great relief. The decoction of tobacco exhibited in cases of colic, produced relief almost instantaneously after other medicines had proved ineffectual. One ounce of the infusion, in half a pint of milk or water, is the medium dose in the form of injection, & for an adult of an ordinary constitution: this is to be repeated, or the strength of it increased as occasion may require. —— In the iliac passion, & in hernia, both the infusion & smoke of tobacco have been employed in the form of injection with the happiest effects. In tympanites intestinalis, strong clysters of tobacco infusion have generally relieved the patients. As a vermifuge it is deserving of being held in high repute, either taken internally, or according to Professor Barton the leaves are to be pounded with vinegar & applied in the shape of a poultice to the region of the stomach, or other part of the abdomen. In consequence of this application worms are often discharged after powerful anthelmintics have been exhibited internally in vain. —— In cases of obstinate constipation of the abdominal viscera, the infusion of this medicine has been administered, & often with immediate relief, by occasioning a stool, or hastening the retarded incrustated feces. In the tetanus or lock jaw, injections of this infusion have been used with success: they not only produce evacuations from the bowels which are generally obstinately constipated, but from it

this remarkable power occasion a retrocession of the violent paroxysms
peculiar to this disease. Dr. James Currie of Liverpool has employed with
marked success a decoction of Cayenne pepper, nitre, & tobacco, applied to the
cervicalis & orbicularis about an hour before the expected accession of the
paroxysm. Both in epilepsy & obstinate intermittents, & in two cases of general
convulsion by means of the decoction in the pepper enema, he performed cures altogether surprising & unexpected. Ibid

Chap. 12. Bitters.

Genus. 1st. Cerasus Virginiana. Wild cherry tree. Rum-Cherry. Dog cherry.

The common wild cherry tree is often found in woods & hedges, & is associated with the trees of the forest, growing to the height of forty or more feet, & even large, &c. It is hardy — produced from the stones of the garden varieties dropped by birds. The timber is capable of receiving a fine polish, resembling mahogany, & is used by turners & cabinet makers, for many purposes. The gum which exudes from the tree is said to be equal to gum Arabic. The tree produces in autumn a small bitter cherry. Black Cherry water is in which leaves, or fruit are bruised, who frequently become intoxicated from eat of them. They are also infused in brandy by the common people on account of their pleasant aromatic flavour & kick they impart to the liquor. The bark of the wild cherry tree is powerfully tonic, & has been frequently substituted for the Peruvian bark, with great success. It is highly narcotic & commonly produces dozziness in those who take it. From the experiments of Mr. C. Morris of Virginia it appears that the bark of the root is more powerful than the bark of the trunk. It has been very useful in dyspepsia & in consumption of the lungs. The Indians, it is said, use the bark in the cure of syphilis. Very excellent effects have been produced by washing ill conditioned ulcers with a decoction of the bark. The same has proved an anthelmintic. The leaves of this tree are poisonous to certain animals. Which this vegetable tree abound in the United States we act unwisely, say Dr. Rush, in sending thousands of dollars out of the country for the Peruvian bark. — Cherries that are unbaked, are according to Dr. Watts, an

Use. A tea of domestic medicine in the true scurvy, in putrid fevers, & the dysentery; as likewise to those persons who are liable to obstructions in the alimentary canal. Nor will they be found disagreeable to constitutions whose bile is vitiated. Those stomachs troubled with foul eructations, & those who are affected with an offensive breath; all such persons should eat them freely, particularly in an empty stomach. For similar reasons they form an excellent article of diet in acute & in lammatory fevers, where they should be used both in substance & decoction which dissolves: when they should be used both in substance & decoction which are equally cooling & antiseptic. Ibid.

Prunus. P. Domestica. The French prune tree. Plum tree.

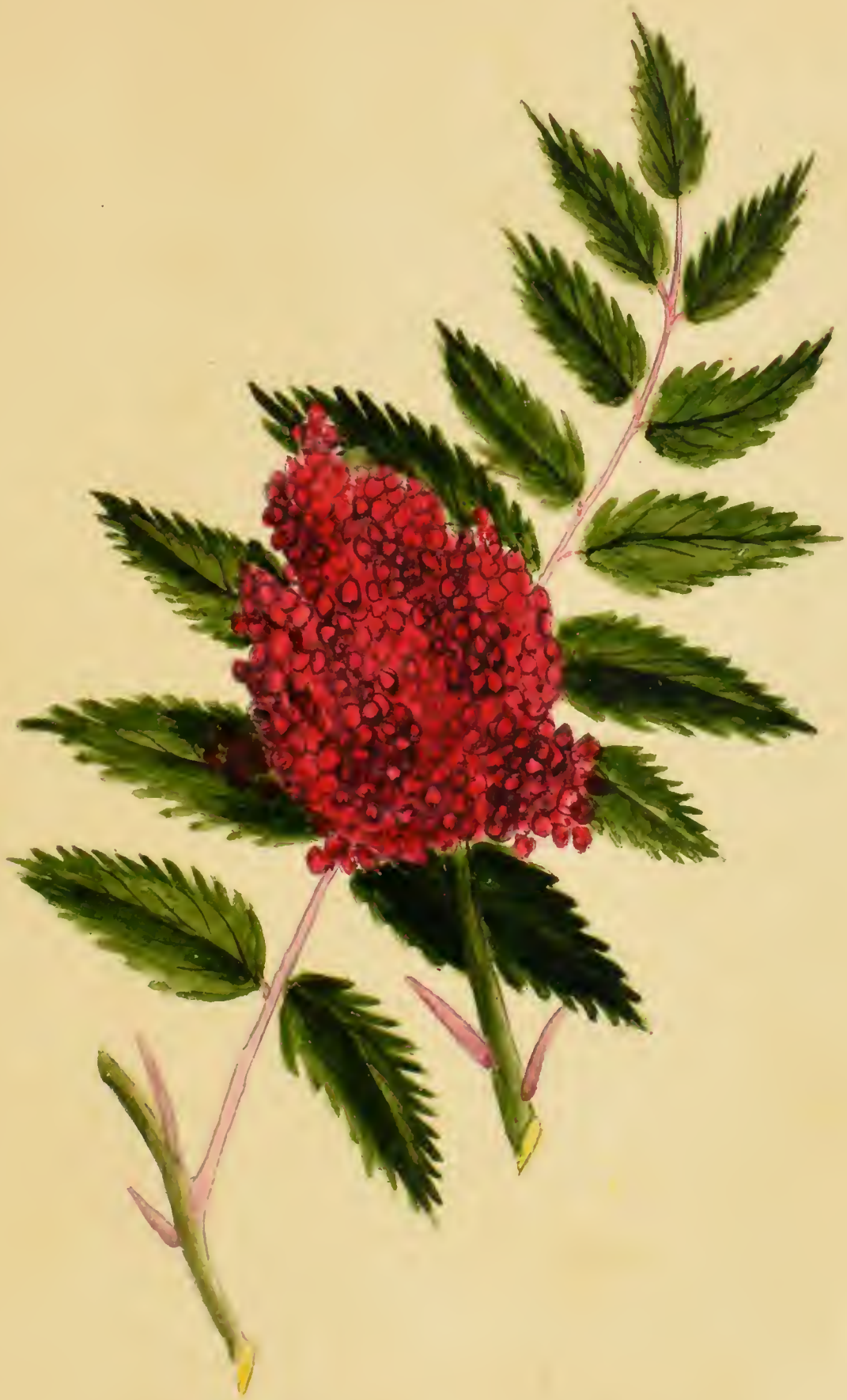
Use. Numerous varieties of prunes or plum trees, are cultivated for gardens the fruit of which when dried are called prunes. Great quantities of the dried fruit are imported from the continent of Europe, but the French prunes are now esteemed the best.

They contain much mucilaginous & saccharine matter &, hence medicinal effects are, to abate heat, & gently loosen the belly which they perform by lubricating the passages, & softening the excrement. They are of considerable service in costiveness accompanied with heat or irritation which the more stimulating laxatives would tend to aggravate. When prunes are not of themselves sufficient, their action may be promoted by joining with them a little rhubarb, or the like; to which may be added some aromatic ingredient to prevent their occasioning flatulency. Ibid.

Class 5. Order 3.

Plus. P. Capillaris. Eng. Narrow leaved Sumach.

Use. Narrow leaved sumach grows naturally in most parts of the United States owing to the light of, or fat in a dry gravelly soil. The berries are very acid & are sprinkled with a greyish powder of an agreeable acid taste. Ibid. —



I found in
Canada na-
rly. The
engraell

ion of the
chasing
of the ots.
e g o a-
gain very
ow ea tre-
ty st t.
the tops,
a tinge t
the tonils.

an m a c
t s sat

ep to the
long, the
n colour, t
discovered i
tain valu-
bled for use
s of the Rhu
after several
o in the

240

[illegible]

[illegible] the dyspe[illegible]

[illegible] the chi[illegible]

[illegible] who are a[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Gen. 12. Glabrum. Smooth Pent-leaved Cinquefoil

Ex. The Glabrum smooth Pent-leaved Cinquefoil, common in Maryland, reaches to the height of eight or ten feet. The leaves are pentadactyl and on both sides of a large to a beautiful red in autumn. The flowers in July. The seed are arranged like the flowers are red, & used in the wild parts of America.

The two species of Rhus are considerably astringent. A decoction of the inner bark with honey is sometimes used for a gargle in sore throats & for cleaning the mouth in fetid fevers. They are also recommended as useful in several of the acts. The leaves are found a valuable substitute for galls in dyeing & making ink. They give a deep & permanent black. The glutinous juice of the bark is used as a succedaneum for oak bark in tanning especially the white glove leather. The wood of this tree which grows wild in every part of the United States is very beautiful bright yellow colour, & has been made to supply the place of fustic in dyeing. The leaves, berries & seeds have an acid astringent taste, & are very efficacious in gargles for the cankers & inflammations of the mouth. The bark of the root, bruised & boiled in milk & water, & a little wine added, & strained into it, while cooling, makes an excellent application for burns, & is said to prevent an eschar. (Mitchell. Physician.)

Rhus. R. Radicans. Aug. Poison vine. Poison creeper.

Ex. Poison vine, has a slender ascending stem, & frequently climbs up to the top of our tallest trees. The flowers, which appear in June, are produced along the whole course of the malle branches. They are small & of a light yellow colour, & have a delightful odour. Thacher. Dr. Duponceau accidentally discovered in the rhus radicans of Linnaeus, or the toxicodendron of Tournefort certain valuable qualities. Having observed that a young man, who had been troubled for several years with a tetter on his wrist, was suddenly cured by the handling of the Rhus radicans he determined to try the effect of it in other cases, & after several experiments he has ascertained its efficacy in destroying ring-worms & in the rheumatic paralysis. Med. & Phys. Jour. vol. 10 p. 80 —

Rhus. R. Toxicodendron. Eng. Poison ivy. Poison oak. Swamp Sumach.

Use. Poison oak a low shrubby stalk; leaves trifoliate, with pretty large footstalks, lobate, entire, smooth & somewhat heart shaped. The flowers come out from the sides of the stalks, in loose panicles, are small & of an herbaceous colour. This plant sometimes called poison wood, is so acrimonious, that the touching of the leaves or rubbing them on the skin, occasions itching, inflammation & eruption. Dr. Alderson of Hull has given the leaves in four cases of paralysis, in doses of half a grain or a grain three times a day with marked success; all his patients recovered to a certain degree. The use of this herb, It has been given in large doses without convincing the same success. It was not, however, inactive. In one case the patient discontinued its use on account of the disagreeable pricking it occasioned; & in general it operates as a gentle cathartic, notwithstanding the torpid state of the bowels of such patients. (Thacher).

Rhus. R. Vernix. Eng. Poison Sumach. White Sumach. Swamp Sumach. Dogwood.

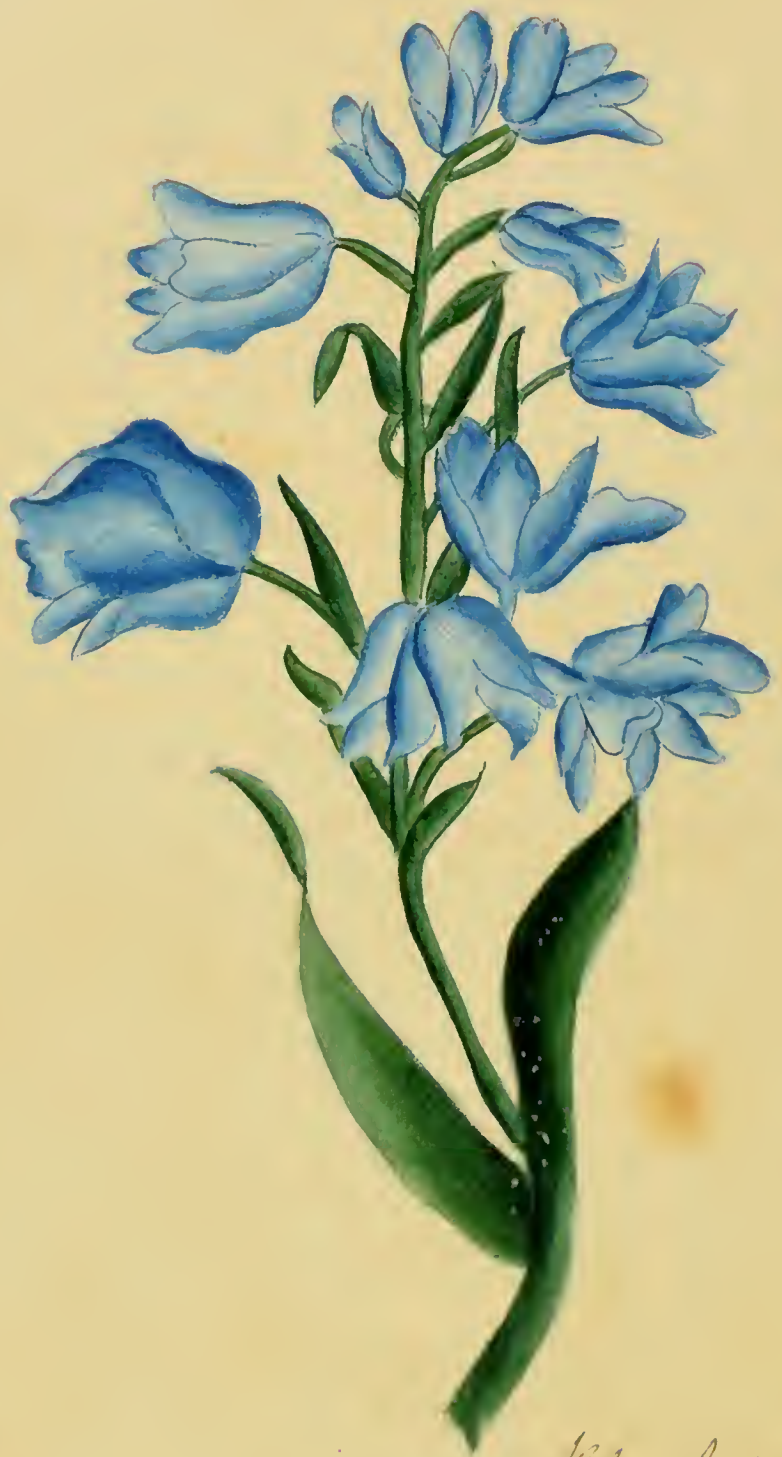
Rhus. Swamp sumach is the tallest of our native species of rhus: grows in swamps & makes a fine appearance. In New England this is commonly called Dogwood.—

The rhus radicans, toxicodendron & vernix are highly poisonous, & are particularly active in warm weather, after a meal & when the hair touching the plant is moist with sweat. The rhus vernix is more violent than the other species, & poison will be communicated by touching it by smelling any part of the plant or even by the smoke when burning or the steam of a decoction of the plant. In about forty eight hours an inflammatory condition appears on the surface of the skin, attended by pain, swelling & itching & fever. The conditions sometimes alternate, after which the inflammation subsides & the ulcers heal in short time but the patient frequently remains blind for several days. It operates somewhat differently in different constitutions; & whereas some persons are incapable of being poisoned with it at all. The remedies are bleeding: when the symptoms are violent, smart purging, exhibiting by scarifies, cold water, or ice, or a wash of spirits of sal ammoniac, bathing with warm water, or of lead water applied to the parts. Dr. Barton has shown

and a solution of corrosive sublimate in water to answer the purpose of
action is speedy cure. — One case of the remarkable effects of this poison has
been under the observation of the compiler of this volume. The patient having in
advertently expressed the juice from the leaves of a species of rhus was soon after
attacked with violent inflammation, constriction & swelling of the whole face, with
severe & extreme pain. The whole surface of the body swelling & the red
ness & exhibited the appearance of a most malignant kind of small pox.
It is worthy of note the dangerous symptoms that with the loss of his hair & nail
& some second skin before his death was effected. — Dr. Thornfield in his excel-
lent inaugural dissertation on the rhus venenatum, rhus radicans, & rhus glabrum
declares his full conviction, after many judicious experiments that the rhus
venenatum, or the true varnish tree of Japan described by Kempfer. He found that
the greatest quantity of juice was obtained from incisions made in the tree about
the middle of May. Mumbey, & others, are also of opinion that the Japanese var-
nish so much celebrated may be obtained from our native rhus. It is a subject
undoubtedly worthy of attention. — A singular instance is related in the Medical
Repository of the poisonous effects of the rhus vernix upon a swarm of bees.
Some of which the day they attached themselves to the branch were found
dead & their bodies turned black & swelled to nearly twice their natural size. (end)

Chap. 13. Roses.

Rose. R. Damascena. Eng. Damask rose.
Use. This is justly termed the queen of flowers & for its fragrance & elegance is
indeed the ornament of every garden. It is sometimes called the hundred leaved
rose. The damask rose, yields on distillation a small portion of an oily oil, to-
gether with a water which possesses the odour & taste of the roses, & are generally es-
teemed for the agreeable flavour they impart to culinary preparations & also to cordials.
A valuable perfume is obtained from the flowers by distillation called ottar or es-
sence of roses. The true ottar of roses is sold in the East Indies at the exorbitant
price of twenty guineas & upwards per ounce. It is doubtful if the most elegant ess-
ence in vegetable nature; as a single drop imparts its fragrance throughout
a room or dwelling & withstands other less agreeable odours. (end) —



Hyacinthus

Blue bell hyacinth

vid. page 279

Class 6. Order 3.

Rumex. R. Aquaticus. Eng. Water Dock.

Use. It grows in peat mosses, wet ditches, pools, & the sides of rivers, & in shallow waters. It flowers in July & August, & is recognised by large seeds. This plant affords a medicine of considerable efficacy, when applied externally, as a wash for spongy fungid gums. Its roots when fresh have been found excellent for cleaning the teeth. These roots are of a bitter astringent taste, & have been employed for the cure of scorbutic & cutaneous disorders, whether administered internally, or applied externally in ointments, cataplasms, lotions, or fomentations. Decoctions of the leaves are likewise an efficacious laxative & have been taken with advantage in rheumatic pains, & chronical diseases occasioned by visceral obstructions. The dose usually given is a decoction of half an ounce of the fresh roots, or from one to two drachms of them in a dry state.

The Indians, says Dr. Cutler, used the root of water dock with great success in cleansing foul ulcers. It is said they endeavoured to keep it a secret from the Europeans. —— Dr. Withering says he saw an ill conditioned ulcer of the mouth which had destroyed the palate, cured by washing the mouth with a decoction of the root, & drinking a small quantity of the same decoction daily. (Thacher)

Class 10. Order 1.

Rute. R. Graveolens. Eng. Rue.

Use. This is a very small shrubby plant met with in gardens where it flowers in June, holds its green leaves through the winter. It has a strong unpleasant smell, & a bitterish penetrating taste; the leaves when in full vigour, & extremely acrid, insomuch as to inflame & blister the skin if much handled. Former writers on Materia Medica have retained a very high opinion of the medical virtues of this plant, & it is still received in the Massachusetts & other Pharmacopoeias. It has been considered as powerfully stimulating, alternative & detergent, & hence in cold phlegmatic habits, it quickens the circulation, dissolves tenacious juices, opens obstructions of the excretory glands, & promotes the fluid secretions. Boerhaave is extravagant in his praises of the essential oil, & distilled water of rue for their efficacy in promoting sweat & perspiration, & for the cure of the hysteric passion & of epilepsies, & for expelling poison. In modern practice, rue is not regarded as possessing much power as a remedy. The

Class 21. Order 2.

Salix. S. Alba. Ang. White willow.

Use. The species or varieties of the willow which have been mentioned by botanical writers are very numerous; & it is very probable that the bark of them all possesses properties in many respects similar. In 1763 Mr. Stone an English clergyman, presented a paper to the Royal Society, on the beneficial effects of the salix alba or white willow in intermittent fevers; & Dr. Cullen on this authority, & from the valuable qualities it possesses recommends it in his Materia Medica, as a substitute for cinchona. Mr. Stone gathered the bark in summer, when it was full of sap, dried it by a gentle heat & gave a drachm of it powdered every four hours. In a few obstinate cases he mixed with it one fifth part of cinchona. Some judicious physicians here, says Dr. Cullen, made trial of the bark of white willow, & recommended it as a valuable substitute for the Peruvian bark. They have used principally the bark of the root. (Ibid)

Class 3. Order 2.

Secale. S. Cereale. Ang. Rye.

Use. Rye is subject to a disease especially when a hot summer succeeds a rainy spring; the spurious substance thus produced in France is called ergot, from its resemblance to a cock's spur but in England is called horned rye spur or horn seed. Bread made of this kind of rye has a nauseous acrid taste, & produces numerous fatal diseases, as spasm, extreme debility, & mortification of the extremities. At various periods subsequent to the year 1596 the most alarming & destructive consequences were occasioned among the poor in France & England by the use of bread made of such damaged grain. Horned rye is said to have been equally fatal to brutes, & fowls when fed with it by way of experiment.

Rye is affected by the disease in this country similar to that of France particularly summer rye in low wet situations. The singular production called ergot is found projecting from among the leaves of the spike or ear; it is a long crooked excrescence resembling the spur of a cock, pointed at its extremities, of a dark brown colour externally & white within. Some spikes are occupied wholly by spurs, while other two or three only interspersed with genuine seeds of rye.

The medicinal properties of this extraordinary substance were first amon

the public by Dr. John Stearns of Seneca county in a letter to Dr. Kirby of New York in which the article is extolled for its powers ad partum accelerandum. It is now satisfactorily ascertained that ergot is capable of exerting a specific action on the uterus, & of augmenting the powers of this organ during the efforts of parturition. In lingering & laborious cases it is found to be an invaluable medium, speedily inducing forcible pains, & greatly expediting delivery. For obvious reasons however it is wise to caution against employing this powerful parturient in cases of preternatural presentation. In the form of powder it is given from five to ten or fifteen grains, but it has sometimes been found more active in the form of decoction, half a drachm of the powder being gently boiled in half a pint of water; one third may be given every twenty minutes, until proper pains shall have commenced. A large dose of decoction or of pulvis ad partum accelerandum will excite nausea & vomiting. No example of ergot having induced deleterious effects, has come to our knowledge; but there is much reason that it is capable of producing abortion at any period of pregnancy.

We have now the satisfaction of deriving instruction on this subject from the experience of some practitioners of eminence in our own metropolis. Travers in the New England Medical Journal No. Vol. 1. states that it has not appeared to relax the rigidity of the muscular fibres, "but it has almost uniformly increased the efforts of the uterus to expel the foetus." And also that occasions have occurred authorising a caution of the highest importance in practice. The powerful & continued efforts of the uterus, from the effects of ergot, prevent the retreat of the child's head after being advanced & that the increasing pressure has in some instances occasioned the death of the child. Let this circumstance therefore have its due effect, & induce the utmost precaution in the administration of this powerful article. In one case of amenorrhea, Dr. Beekman administered one drachm of ergot in decoction; bearing down pains immediately ensued & the suppression was the next day removed. It has been successfully employed on similar occasions by other practitioners. However extraordinary it may appear, the assertion is from the most creditable source that ergot has often proved one of the most efficacious remedies in menorrhagia in all its stages; & moreover it restrains in a remarkable manner the profuse uterine flooding following the separation of the placenta in parturition. — In two instances ergot is stated to have been administered during the early stages of pregnancy. In one case, about four drachms were taken with

 a few days, the consequence was regular griping down pains, resembling the several throes of parturition; & these recurred with every repetition of the medicine, yet on examination, the os uteri was not much dilated. In neither case was the natural term of gestation interrupted by the operation of the medicine.

The fact has long been known among our farmers, that rye itself possesses a quality of producing abortion in females of the animal tribe & they carefully withhold that grain from such, during their periods of gestation. Ibid,

Class 3. Order 2

Triticum. T. Hybernum. Eng. Wheat.

Use. Wheat flour consists principally of gluten, starch, albumen, & a sweet mucilage. It is the presence of gluten that characterizes wheat flour; & on the due admixture of it with the other constituents depends the superiority of wheat flour for making bread. Bread is not only one of the most important articles of nourishment, but is also employed in Pharmacy for making cataplasms & giving form to more active articles. An infusion of toasted bread has a deep colour & pleasant refrigerant taste; & is an excellent drink in febrile diseases, & in nausea & debility of the stomach; & also in cholera morbus; examples are related of several cases of this kind cured by it, without the aid of any other medicine.

Starch. The fecula of wheat forms a gelatinous solution when boiled with water, which is used as a demulcent. It is thus given as an enema in dysentery & diarrhoea, from irritation of the intestines, & is the common vehicle for giving opium in that form. Ibid.

Class 21. Order 2.

Fraxinus - F. Acuminata - F. Americana. Eng. Ash tree

Use. Ash a well known & useful tree natural to this climate; of which we reckon three, viz. the black, the white, & the yellow. The body of the black ash is easily separated into thin strips by bruising it with a beetle. & is therefore much used for brooms & baskets. The white ash is of two sorts, or varieties, one of which is a stiff, light & durable timber. It is therefore highly esteemed by the farmer, & much used for ploughs, & wagons, & many of the tools used in agriculture. That is the best which grows upon high land. But implements made of this wood should not be much exposed to

rather. For it soon rots if it be not kept dry. — The oak & the ash are used
many to make vessels for stowing of grain, seed, &c They are light to handle,
sufficiently strong & extremely durable. — The season of felling ash for timber
is from November to February. If it be cut in the wrong season the sap will rot it
it will be destroyed by worms: & turned to what is called powder post. (Farmers Dict.)

Class 21. Ord. 2.

Cucumis. C. Sativus. Eng. Cucumber.

Use. Cucumbers, a cold fruit, which is pleasant to the taste of most people, & much
used by those who find themselves able to digest them. They are rendered wholsome by
pickling. — The method of growing them is simple & easy. They should not be planted
till after indian corn; for the least degree of frost entirely destroys them. The dung of swine
should be put under them, which makes them grow more rapid than any other manure
I have ever tried. Some steep the seed & cause them to sprout before they are planted
But I have never found any advantage in it. It is not amiss however, to wet them
a little & cover them with powdered rot. — Mr. Miller thinks the seed should not
be sown till they are three or four years old. Four plants are enough to stand in a hole
together; therefore when they get into rough leaf they should be thinned to this number.
The vines should be so conducted as to interfere as little as possible with each other. Those
who wish to raise them at all seasons of the year, may consult the gardener's Dictionary
I have known surprising quantities of cucumbers raised for tubs. The method is
this: take a very light barrel tub, fill it up to the bung with stones, then a little
straw & earth over the straw enough to fill the barrel. Fill the lower half with
water. Instead of letting it steep thro' the earth it should be passed thro' a tube
placed in the earth for that purpose as often as more earth is wanted. The bung
should be kept out & the water kept as high as the hole by repeated waterings.
The plant lying so high will be out of the way of insects, which is a great ad-
vantage; & they will not be hurt by drought. The plants should be a little
sprinkled, however, with water once in a while if the season proves
very dry. Deane & Farmers Dictionary, page 95.

Class 6. Order 1.

Allium. A. Schoenoprasum. Eng. Cives or Chives.

Cives or Chives a perennial species of onion of a very small size, seldom growing a foot high. The roots are but little bulbous, & they grow in tufts. The way to make them increase fast is to divide the tufts into very small parcels. Another kind are called French Cives. Their increase is more rapid. Both kinds are up early in Spring, & are much used in Sallads. Ibid.

Class 12. Order 1.

Cactus. C. Opuntia, Eng. Prickly Pear.

Use. The Cactus Opuntia is very tall erect, & large, & strong enough to bear the weight of a man; some are seven or eight feet high: the whole plant or tree seems to be formed of great oval compressed leaves or articulations; those near the earth continually increase, magnify & indurate as the tree advances in years, & at length lose the bright green colour & glossy surface of their youth, acquiring a ligneous quality, with a whitish scabrous cortex. Every part of the plant is nearly destitute of aculea, or those fascicles of barbed bristles which are in such plenty on the common dwarf indian fig. The cochineal insects are feeding on the leaves. The female of this insect is very large & fleshy, covered with a fine white silk or cottony web, which keeps always moist or dewy, & seems designed by nature to protect them from the violent heat of the sun. The males are very small in proportion to the females & but very few in number: they have each two oblong pelucid wings. The large polypetalous flowers are produced on the edges of the last year leaves, & are of a fine splendid yellow, & are succeeded by large pearshaped fruit, of a dark livid purple when ripe: its pulp is charged with a juice of a fine transparent crimson colour & has a cool pleasant taste, somewhat like that of a pomegranate. Soon after eating this fruit, the urine becomes of the same crimson colour, which very much surprises & affrights a stranger, but is attended with no other ill consequence: on the contrary it is esteemed wholesome, & powerfully diuretic. Bart.

Class 20 Order 2.

Morus. M. Alba. Eng. Mulberry.

Mulberry, a well known tree, the leaves of which are the proper food of silkworms. For this ~~that~~ the mor that bear a black fruit are preferred. (Some say the white). According to Mr. Mill the male & female organs of generation are commonly on the same tree but sometimes one will have only male flowers. It would be right for us to propagate these trees if it might be done with the greatest care. We may do it by their seeds, or by layers, cuttings or slips. If we are not disposed to make use of them for the feeding of silk worms they would pay for the trouble of rearing them by their fruit & their timber. They will our climate & grow rapidly at least in Connecticut & in the western part of Massachusetts. —— Possibly the time may come when we may be glad to make silk for our own use in this country. If this should happen, it will be regretted if there be no trees in the country from which the worms can be fed. They will grow well in deep, dry soil which is moderately rich. (Farm. Dict.)-

Class 18. Ord 1.

Gnaphalium. G. Margaritaceum. Eng. Common Life Everlasting.

Use. It appears to me that this plant is a kind of cudweed. - Life everlasting grows about a foot high, the flowers are whitish; they emit an agreeable odour. - An infusion or decoction of the tops is said to be good for ulcerations in the mouth & throat. A catablasm also of the same, has been applied externally for this disorder especially when seated in the neck. (Stearns, American Herbal)-

See my M. M. vol. 1. page 82-

Class 20 Order 2.

Alnus. A. Serrulata. Eng. Alder.

Use. The alnus or alder tree, is properly speaking, another species of the Canada birch. When suffered to grow in an open situation it has an agreeable appearance. Where any sort is suffered for pasture, the alder should by no means be encouraged, as it poisons the herbage & makes the soil moist & rotten. - There are several species of alder peculiar to the United States. The bark is used by tanners & leather dressers. It dyes a yellow; & with a little copperas a yellowish gray, very useful in the demitints & shadows of flesh in tapestry. The shoots cut in March will dye a cinnamon colour; & a fine tawny, if they be dried & powdered. The fresh wood quickly, a dye the colour of rappee snuff. The catkins dye green. The bark is also used as a basis for blacks; an ounce of it dried & powdered, boiled in three quarts

ies of a pound of water, with an equal quantity of logwood, with solution of copper, tin, & bismuth, six grains of each, & two drops of solution of sulphate of iron (copperas) will dye a strong deep bouc de Paris, or Paris mud. The leaves have sometimes been employed in tanning leather. The whole tree is very astringent.

The alder tree thrives in swampy ground. The wood of this tree is in great esteem in Europe for machinery. The cogs for mill-wheels formed of it are deemed superior to any other. It is commonly used for bobbins. It resists water powerfully, & hence is of great value for pump trees, pipes, drains, conduits to reservoirs, piles under water, & all kinds of wood work, kept constantly wet. In Flanders & Holland it is raised for this purpose. —— The alder is highly useful as a medicine. I have heard of a well authenticated instance of the efficacy of an infusion of the catkins, or candles taken internally, having effectually cured a boy of sore eyes, which apparently proceeded from a scrofulous cause, after a variety of medicines had been used without effect. A decoction of the barks of black alder & dogwood (cornus florida) is a common & successful remedy in the United States for intermittents. The root of the liriodendron tulipifera, or tulip poplar tree, & of the sassafras are sometimes joined with the alder & dogwood. Medical gentlemen who practice in the country would render a service to the public by stating the proportions of each remedy, which produces the best effect. Dom. Enc.

Class 14. Order 1.

Stachys. S. Aspera. S. Palustris. Arg.

Class 10 Order 1

Andromeda. A. Paniculata. Arg. White bush. A. Calyculata. Leather leaf. Sorrow tree. Indian pipe stem. Wicky.

Use. An extensive genus, many species of which abound in the United States. They occupy a similar soil & situation of the heaths in the old continent. The wharlberry is the most common trivial name in the United States for all the species, because they bear no berries, & resemble the wharlberry bushes. They are all hard flowering shrubs. The A. formosissima of Barton, or Indian pipe stem, is the most beautiful. It is an evergreen. The Creek Indians set a high value upon the

feet long. Dr. Barton informs that a decoction of the S. marianum, or broad
leaved moor-root, is used as a wash in a disagreeable ulceration of the feet attended
with an intolerable itching, which is common among the negroes of the Southern states.
The plant is there called "Quickie". It is suspected to be poisonous, & Schoepf says that
it is hurtful to sheep; no doubt he spoke from the information of our farmers. Ibid

Class 13. Order 13.

Anemone. A. Thalictroides. Gen. The Anemone or wind flower.

Anemone or windflower, is the name of a plant chiefly British, noticed on account
of its beautiful flowers which by the Greeks were supposed not to open till the
wind blows; whence it has received its original name. Linnaeus enumerates 21 species.
Anemone Thalictroides grows near the city of Philadelphia in woods & shrubberies, &
is cultivated for its elegant simplicity. Ibid.

Class 11. Order 1.

Asarum. A. Canadense. Eng. Wild-snakeroot. Wild ginger root.

Use. This plant in a moist shady situation, & may be increased by parting the roots
in autumn. Too much wet will rot the Canadian root in winter. The juice of the fresh
root is emetic. The powder of this plant I have known to answer very good effect in ca-
se of griddings, unattended by too much fullness. It was used as a snuff. It certa-
inly is an active plant, & deserves further trials. (Ibid)

Class 13. Order 13.

Geum. G. Rivale. Eng. Purple Avens. Water Avens.

Use. It grows in meadows & groves of a humid soil; its flowers appear in July. The herb
root of this species, tho' of inferior efficacy have also been employed in medicine, as well
by tanners. (Ibid)

Class 20 Order 13.

Juglans. J. Tenuginea. Eng. Beech.

It is a large tree growing in many parts of America. The fruit agrees in virtues with
nuts. The expressed oil of the nuts is called anthelmintic. Powdered leaves dissolved in
oil destroy worms. Some poor people in Silesia use it instead of butter. The dried leaves &
ashes in the lye — Captain Carver informs that a decoction of the leaves cures wounds & scalds
to which members of this activity that have been injured by rest. & Dose of the expressed oil of

 of the nuts is an ounce, morning & evening, in sugar if most agreeable. (Evans)

Class 5 Order 2.

Beta. B. vulgaris. Red Beet. Beta Cicla Scarcity-

Use. This is a plant of which there are four species. – Beta vulgaris the red beet the roots of which are large & of a deep red colour. It is worthy of remark that the larger the roots grow, they are more tender; & the deeper their colour, the more they are esteemed. The varieties of this species are the common red beet, the turnip rooted beet, & the green leaved red beet. – The cicla, which grows wild on the banks of the Tagus, in Portugal. It is originally a small white root, but there is a variety of it called by the Germans Runkel-rübe or the beta alba sina of botanists the culture of which cannot be too strongly recommended. The stalk of the latter grows to the height of seven or eight feet, & the root weighs from eight to twelve ~~feet~~ pounds. This variety of the root of scarcity is the true Mangel-wurzel, which some years since excited much attention in Britain, tho' there is reason to suppose that other species of the beet have been mistaken for the beta alba sina; the root of which is white, juicy, & streaked with red fibres; it is sown like cabbage, & to prevent injury to the fibres of the root, the young plants must not be pulled but dug up with a spade; they should then be transplanted on the same day (either in rainy weather or after sunset) on a rich well manured & well ploughed soil, in rows from sixteen to eighteen inches asunder. Sow thin, & cover the seed an inch only: it will continue in the ground a month. In transplanting the roots are not to be shortened but the leaves cut at the top; then set the plant with a dibber, so that the upper part of the root shall appear half an inch out of the ground. The roots will not arrive at perfection, unless the plants be twice hoed at least & stripped of the superfluous leaves every fortnight, or three weeks. – Sugar in considerable quantities has been obtained from the different species of beets. The beds of beets must be 3/4 ths of a yard wide & the plants six or eight inches apart. When they come up about a finger length & is the ground be weeded & transplant them into other beds. – An important discovery lately been announced by Professor Schrer of Vienna, & which promises of great service in domestic economy, especially when barley is scarce.

nd from experiments that but roots afford an excellent substitute
malt. it may be obtained in great part of this juice by pressure. then
ied. & treated in the same manner as grain intended to be used for malt
re. The beer thus brewed was found to be perfectly wholsome & palatable;
ing little inferior to that prepared from malt. Besides the juice obtained from
e excellent roots may be advantageously converted into sugar.

According to Mr. Rocque, the white but is a most excellent fodder for cows.
but wants of mowing them is to mow the plant, & give it to them fresh.
ing the summer. — The red but is possessed of mild aperient qualities
& afford but a weak nutriment to the human body. Hence it should be
ten for supper, by persons of a costive habit; but, tho. it be easily digested
ere is sometimes attended with flatulency; for which reason, it would be
ore wholsome & nourishing to eat the but with other mealy roots, as
otatoes, or with those of an aromatic nature, for instance, parsley, celery &c. &c.

Class 5. Order 1.

Campanula. C. Rotundifolia. Angl. Round leaved bell-flower.

re. A genus of plants comprehending 80 species — C. Rotund. produces blue or
ite flowers in August & Sept. Cattle & sheep browse upon these flowers with
ridity, & they are likewise useful in dyeing. The milky juice of the white flower
is said to turn a beautiful green colour by the addition of alum. The juice
the blue flowers alone has been used for painting & writing. & Dambourney as-
s us that with these flowers he dyed wool & cloth of a fine vigogne colour hav-
ing previously immersed them in a probably diluted solution of bismuth.

Class 10. Order 1.

Vaccinium. V. Vitis idæa. Angl. Bilberry.

re. The fruit of the bilberry is acid & cooling. In Sweden it is eaten in the form
a jelly. The young leaves of this species might also be advantageously substituted
tea, from which they can scarcely be distinguished. — All the species of bilberry are
tringent, & their juices mixed with sugar, & probably fermented may be converted into
ful & wholsome domestic wines. Ibid.

5. Order.

Convolvulus. C. arvensis. Lin. Field. Bind weed. Great bindweed.

Use. The arvensis or small bindweed is a common plant in fields & hedges, but particularly troublesome in gardens of a gravelly soil. As the roots of this plant, particularly in wet seasons, sink deep into the ground, & injure the growth of corn, they ought to be carefully extricated & transplanted on the sandy banks of rivers & lakes, where the growth tends to bind the soil. Bees are uncommonly partial to the flowers of the convolvulus; yet it is easily eaten by black cattle & sheep. (Ford)

Class 20. Order 13.

Betula. B. Populifolia. White birch. B. Lenta. Spicy birch. Black birch.

Use. The white or common birch tree is not of a large growth, but when cultivated in a favourable soil, & a good situation, it rises to a considerable height. There is a degree of elegance in its general appearance in summer, & the bark in winter is frequently variegated with red & white. It is easily cultivated by the usual method; but when raised from seed, the young shoots of the birch should remain two years in the seminary & then be transplanted in rows. They may also be propagated by layers. For this purpose a sufficient number of plants should be placed at a distance of three yards from each other in a soil which has been cleared by the spade. If in the following year they should produce no shoots they may be lopped to within a foot of the ground, to form the stools, in consequence of which they will be furnished with vigorous shoots in the following summer. In autumn the young shoots should be pulled near the stools, & the tender shoots layed near the end. This management will have taken root, & become fine plants the following autumn.

Lewardi remarks in the 2nd vol. of his natural history that the flowers of this tree when boiled in water afford a good substitute for soap. — Besides the utility of the sap or juice of the birch tree in affording a delicious wine, it appears from the experiments of Hunzaldent that yeast may be obtained by infusing the juice of the variety called Black birch. But yeast however is only of an inferior quality, not less in quantity than that produced from the sugar maple. The bark of the birch is of very extensive use. Professor Pallas mentions

The inhabitants use this bark both to dye, & the [illegible] of the bark for the portable boats, canoes &c. It is also used in fumigations to purify a tainted atmosphere. The Lapponders eat the outer bark & flour of their [illegible] mixed with bark & other stuff; & it also forms some part of their wearing apparel; it is used in dyeing; & as a substitute for oak bark in tanning. The Swedish [illegible] use this bark, after burning it, to a certain degree as a cement for broken china, [illegible] ware. When boiled with alum, it affords a dye for a dark brown color. Dr. Bonnet says that the bark is better for tanning when dried than in a fresh state. For this purpose it is cut into small pieces & boiled for half an hour in pure water; & the spent liquor is then used in tanning, while it is warm. The dye is in use boiled on the first morning, & the stuffing of the leather is often repeated; after which it is suspended in the air. Leather thus prepared is said to be water proof. The leaves of the birch give a yellowish brown to wool, which has previously been boiled with alum. Those taken in the spring, however, are not so proper for dyeing as the autumnal leaves, or some prefer produce a greenish tinge; but the latter afford a beautiful yellow color. They have also been used in the dropsy, itch &c. either applied externally or in decoction taken by the mouth. — The fungus which grows on the trunk of the birch tree is a very good [illegible]; when boiled in water, beaten & dried in an oven it makes excellent touch wood — such rings are used for fishing rods & brooms; as well as by bird-catchers, who call them the bird-lime. — Birch wine was formerly in considerable repute as a remedy in phthisic disorders, but is disused in modern practice. It is a rich cordial — according to Dr. Buchan, an excellent remedy for consumption & the [illegible] we shall acquaint our readers with the method of preparing it: tho we have no experience of its medicinal powers. — The juice of the sap of the birch tree should be extracted about the beginning of March when the buds begin to swell, & before the trees put forth their leaves. An incision or hole must be made in the trunk almost as deep as a pith under some branch of a well thriving tree on its southern side & about one foot above the ground. A hollow tube should then be fitted to the aperture, which the sap will flow similar to distillation. In a fortnight a little more than one pint the ground will heal & the bark spread over. Some persons are of opinion that the sap drawn from the trunk of the tree is not so pure as that obtained from the branches. To prevent this juice from fermenting till a sufficient

[illegible] the bottle in which it is collected ought to be immediately stopped. — One of the best methods of making Birch wine is as follows: to every gallon of the sap add a pint of honey or a pound of sugar, stir the whole together & boil it for an hour with a few cloves & a little lemon peel: at the same time skim the rising impurities. When cool a few spoonfull of new ale should be added to induce a proper degree of fermentation & after the yeast has settled the wine should be bottled up & kept for use. If this liquor be prepared with the greatest attention, it becomes so strong that the common stone bottles into which it is decanted frequently burst. (Ibi.)

Class 19. Order 1.

Rubus. R. Idaeus. Rasp. Garden Raspberry. R. Villosus. High Blackberry. R. Corylifolius. Dewberry.—

Use. R. Idaeus. Rasp berries are antiseptic, moderately cooling & corroborant. — They quench thirst, relieve diarrhoea, promote the natural excretions, & strengthen the viscera: they also dissolve tartarous concretions of the teeth. — An agreeable syrup, & a wine is made of their juice. Some make them into sweetmeats with sugar; & they are often eaten with milk. — Both the fruit & leaves were formerly recommended in vomiting, dysenteries, uterine & nasal haemorrhagies. (Stokes.)

Blackberry. We have two species, the fruit of which in general is called Blackberry. The first which we designate by the title of R. Villosus is a robust plant which frequently in a rich moist loose soil will send forth shoots 10 or 12 feet in length, & an inch in diameter, somewhat rubbed or angular, armed with strong hooked prickles; the next season after these shoots spring out of the earth, they flower, & bear fruit in corymbs, or clusters, which terminate like the branches, proceeding from the axilla of the leaves; the fruit is oblong, above an inch in length & $\frac{3}{4}$ of an inch diameter, of a beautiful shining black colour of an agreeable taste sweetish mixed with a sub-acid astringency.

The second species R. Corylifolius is commonly known by the name of Dewberry. This seldom not grow either so high or so robust as the preceding species: its stems are weaker, diffuse from the root & bear close towards the earth. Their extremities often trail on the ground, & taking root in the earth, form new plants, & in a little time spread over uncultivated ground. The latter keeps high hilly land: the fruit is large, nearly round & black in ripe resembling the a plantum nebula or mist like the Damascene plum. Grapes & the pulp a sweet & lively relaxed taste, & for eating is generally preferred to the former spe

ally made of blackberries or dewberries when one [illegible] to [illegible] is used in the United States for the gravel. [illegible] of the editor [illegible] to this disease spoke highly in praise of the remedy.

Rubus saxatilis. Stone bramble. The Indians make the berries of this plant with honey, which when fermented is a pleasant beverage. Wine & vinegar are also made of the fruit of the same plant & a syrup & jelly prepared from it are used as gentle astringents. The leaves afford several colours in dyeing. (Dom. Rec.)

Class 5. Order 3

Staphylea. S. trifolia. Eng. Bladder nut tree.

This is a plant containing two species, the pinnata, indigenous in Britain & the trifolia from Canada. Bladder nut, a native of Virginia. This shrub affords an oil which might be employed for lamps, but the trouble of expressing it is too great. The wood is used on the continent for various domestic purposes & the flowers are much frequented by bees. Ibid.

Class 13. Order 13.

Rosa. R. rubiginosa. Eng. Sweet briar.

This is a well known indigenous plant found in hedges & on heaths. It grows to the height of five or six feet, having green branches armed with prickles. The varieties of this species are the common single flowered, semi double flowered, double flowered, & yellow flowered. This shrub deserves to be cultivated in every garden on account of the odoriferous properties of its leaves. The best place for planting it are the borders contiguous to walks, where it will perfume with its refreshing fragrance. The young branches of the sweet briar are a rich addition to the odour of nosegays & bright pots. The blossoms of this shrub are constantly visited by bees, & the leaves are used on the continent for tanning soft leather. (Ibid.

Melissa. M. Nepeta. Eng. Calamint. (Class 14. Order 1.)

This is an indigenous species of the balm. — The calamint as well as the other species of Melissa is now only ranked in medical practice among the mild corroborants. Infusions of the leaves in water have an agreeable smell, but a weak taste, yet when inspissated they leave a considerable quantity of a bitterish extract. (Ibid.)

Class 3. Order 2.

Tracan. C. c. rundinacea. Eng. Variegated grass.

The C. Round. or granted Lady grass. or Cadis Grass, is occasionally sown in our gardens on account of its beautiful striped leaves. It is of considerable utility for thatching ricks or cottages, & this plant is more durable than straw. In the north of Europe the its stalks attain the height of from two to six feet, it is mowed twice a year, & given to cattle as a nutritious & wholsome food. We are therefore of opinion, that this species might also be successfully cultivated, for the same purposes, in Britain. (Ibid.

Class 12. Order 3.

Ionla. C. Lathyrus. Eng. Caper. garden Caper. Spurge caper.

Use. This plant delights in the crevices of rocks, old walls, &c. & throws luxuriently in an horizontal direction. In the warm parts of Europe it is propagated by seed, & the buds, pickled with vinegar &c. are annually imported from Italy or the Mediterranean. Capers are supposed to excite the appetite & assist digestion & to be useful detergents & aperients, in obstructions of the liver.

Mr. Jefferson in a letter to the committee of Correspondence of the Agric. Soc. of S. Carolina dated Paris, July 1788. recommends the introduction of the caper into the southern states. He observes "the caper tho a tender plant, is certain in its produce; because a mound of earth of the size of a cucumber hill thrown over the plant in the autumn, protects it effectually against the cold. When the danger of frost is over in the spring, they are to be uncovered, & the culture begun. There is a great deal in the neighborhood of Toulon. The plants are set about eight feet apart, & yield one year with another about two pounds of capers each, worth on the spot about threepence sterling the pound. They require little culture, & this may be performed either with the plough or hoe. The principal work is the gathering the fruit as it forms. Every plant must be picked every other day from the last of June until the middle of October. But this is the work of women & children. This plant does well in any kind of soil, which is dry, or even in walls, where there is no soil, & they last the life of a man.

Class 18. Order 3.

Anthemis A. Cotula. Eng. May-weed. Fœtid chamomile. Mathem.

Use. It grows in corn fields, on road sides, & borders of dung hills; it is a troublesome

me weed in tilled land, very congenial & disagreeable to bees. & not eat
d by either horses, cows, sheep, goats or swine; but toads are said to be fond of it
g its uncommon acrimony it frequently blisters the skin & scalds. Notwithstand
g its very pungent taste it has often been used with advantage in diseases
uliar to females. - Beckstein - In dyeing a decoction of the whole plant
en in flower imparts a permanent citron colour to wool prepared in a solu-
on of bismuth. Dambourney

Class 20. Trees.

Castanea. C. Americana. Am. Chestnut.

The characters of the chestnut tree are nearly the same as the beech, except that the male
wers are disposed in cylindrical catkins. The styles more numerous & bristly. The capsules much
rger round, & set very thick with long prickly spines; containing from to four or five, but
nerally two or three nuts, filled with a sweet kernel. - Chestnuts especially the mellow-
lent sort form an important article of commerce in Italy & in the Island of Corsica.
Genoa alone exports annually such quantities as amount in value to 100,000 crowns
The germans roast them among embers & eat them with butter & salt; the Tu[illegible] with mon
ica & syrup which agrees better with weak stomachs. This farinaceous fruit is also em-
loyed in several articles of confectionary; as a substitute for coffee & in the preparation
f chocolate - Altho. these nuts are palatable, & less oily than most productions of a sim
lar nature, yet when used in abundance, they are not easy of digestion, & require therefore
be eaten only by the healthy & robust to promote their solution & assimilation in the
omach. They require the aid of salt in a considerable proportion; but the addition of
tter renders them still heavier, & tends to retard rather than to accelerate their conversion
to alimentary matter. - This tree is highly valuable for many purposes, & ought to be
carefully attended to by the people of this country. The superiority of the timber over most
thers in durability is well known. The tree splits easily, & hence is used for fence rails. The
ed chestnut tree is very brittle, & apt to crack, & therefore does never stand longer than
hile it is in a growing state. If cut while it squares only six inches, it will be quite
ewable, having very little sap in proportion to other trees. The nuts are the usual & in
ny places almost the only food of the common people of Italy, Savoy & France, not
ly boiled & roasted, but also in puddings, cakes & bread.

[illegible] propagated by planting the nut with the burr in the spring. The best nuts for planting are such as are brought from Portugal & Spain, or a large quality which are sometimes seen in the Philadelphia markets. The direction to plant the nuts in the burr is given in consequence of the destruction of them, which a gentleman in New Jersey (who has wisely planted several acres) lately experienced from field mice. The nuts, if imported, must be brought over in boxes of earth. In setting the nuts, make a drill with the hoe about four inches deep, & six inches distant, with the eye upwards; then draw the earth over them with a rake, & make a second drill at about a foot distance from the former, proceeding as before, allowing three rows in a bed, with an alley between them three feet broad for conveniently cleaning the beds. Keep the ground clear of weeds, & in two years remove the trees to a nursery, at a wide distance, & three years afterwards transplant them into the places where they are intended to stand. — In Portugal & other countries they engraft cyons upon trees bearing the largest & finest fruit upon stocks ~~sup~~ raised from the nuts. More grafting trees are set for timber. — Another way of propagating the chestnut is to encircle the stump of a tree recently felled with a fence. Shoots will come out the first year, & form a bush in two seasons. — Chestnut trees, but particularly those bearing large fruit, ought to be preserved with religious care. No more certainly productive legacy could be left by a parent to an infant than land planted with an hundred thousand chestnuts. — Mr. William Prince of Long Island, informs the editor, that the Spanish or or Portugal chestnut succeeds well in the United States, & produces fruit in about seven years from the seed. It grows more rapidly than the America chestnut; the fruit is more than four times as large, & for boiling or roasting is generally preferred. — It may be budded on the common chestnut, but being quicker growth is apt to overgrow the stock. It is best to raise it from seed, which if the trees from which the nuts are taken do not grow too near the common chestnut, will produce the genuine sort. (Bom Lin.)

Sept 5. 1846

Nigrakis. [illegible] Ang. Sweet Cicely.

Sweet Cicely, the mont, or great chervil, or rich herb needle, the Scandix odorata L., is a

the plant, growing in orchards, hedges, & was [illegible] roses
chiefly found in the counties of Westmoreland, Cumberland, Lancaster, & Worcester. It is peren-
nial, & bears white flowers, which flow in the month of May or June, & are of an agreeable
astringent taste. The whole plant has an aromatic scent, & its buds are used in the north of
England for polishing & perfuming oak floors, & furniture: they also yield an essential oil,
similar to that obtained from anise seed... The green leaves & stalks of the sweet briar
impart to wool a fine citron yellow dye, when prepared in a solution of bismuth; as
stated by Lambourney. Ibid.

Class 4. Order 1.

Sanguisorba. S. Canadensis. S. Officinalis. – Eng. Burnet Saxifrage.

Sc. Burnet the great, or wild, or meadow burnet, a native plant growing on moist pastures,
especially on a marly & calcareous soil. It is a hard, woody plant, & grows from two to three
feet high, branching towards the top, & terminated by thick oval spikes of flowers, of a
dark brown colour, which appear in June & July. This plant should not be confounded
with the ~~following~~ Poterium Sanguisorba, or upland burnet which is a very different ge-
nus of plants. The great or wild burnet, has been recently employed in the art of dye-
ing. Dyers dye wool, silk, linen or cotton in a decoction of the dried brown flowers
of a grey colour with a greenish shade by the addition of alum; of a dark olive, which
soon assumed a beautiful grey by adding a solution of tin; & of a deep black colour
by dropping into the liquor a solution of copperas. According to Beckstein the whole
of the wild burnet is used in tanning of leathers as a substitute for oak bark & the plant
is also relished by cattle especially by sheep. Ibid

Class 13. Order 13.

Potentilla. P. Anserina. Wild tansey. P. Argentea. Silver cinquefoil.

Potentilla. a genus of plants comprehending 85 species. Argentea. silver cinquefoil grows in
meadows & pastures in a gravelly soil & flowers in June... The whole may be used for tan-
ning & dying black colour; as it is not touched by cattle. Beckstein.

Class 3. Order 1.

Lavia. L. Sclarea. L. Pratensis. Eng. Clary. Wild Clary.

Sc. It is perennial, & flowers in the month of June & July; & its leaves are slightly aromatic.
When soaked in water for a few moments its seeds acquire a mucilaginous coat, somewhat simi-
lar to the spawn of frogs. Beckstein observes that this plant when used as a substitute for hops,
imparts an agreeable flavour to beer & wine, but at the same time renders them more inc-

poisoning & pernicious to health. It may, however, be more usefully employed in tanning leather, & dyeing a permanent dark brown. — Both the leaves & seeds of this plant have a warm bitterish, pungent taste, & a strong, tho' not an agreeable odour. They are principally recommended in hysteric disorders, & in flatulent colics.

Clary Water is composed of brandy, sugar, clary flowers & cinnamon in which a little ambergris is dissolved. It is also prepared with brandy, juice of cherries, strawberries, & gooseberries, cloves, white pepper, & coriander seeds; the whole of which are infused, sweetened & strained. This medicated water is said to assist digestion, & to be an "excellent cordial" but we have reason to apprehend that it is, like all other cordials, calculated to increase the catalogue of tipplers, rather than promote the purposes of health. Ward.

Class 17. Order 10

Trifolium. T. Pratense. Eng. Clover. Red Clover.

Use. Clover a species of Trefoil or Trifolium L. a genus of plants comprising 55 species of which 16 are indigenous in England.

The pratense or common (red) clover is frequently found in meadows & pastures. This species thrives best on a firm heavy soil & is raised from seed which is usually sown between the months of February & April in the proportion of ten or fifteen pounds per acre. If it be often sown on the same land, the crop will fail; it should therefore be changed for trefoil or lucern.

Common (red) clover is usually sown together with wheat in the spring, ~~together~~ as well as with barley & oats; but experienced farmers generally prefer wheat; as in dry seasons the clover frequently overpowers the oats or barley; & if it be sown late, in order to obviate this evil it often fails, & the crop is lost for that reason. It is also mixed with rye grass; & if mown when the latter is beginning to flower, the lower growth is considerably increased, & a great quantity of excellent grass is obtained. Another advantage arises from this expedient; for, however severe the frost may be the clover will be completely screened from its pinching effects by the rye grass.

The common clover is in flower from May to September, & produces seed which are known to be ripe by the stalks & heads changing their colour. Cattle, sheep, & pigs are exceedingly fond of this species, & frequently eat of it so eagerly as to become hoven or blown. That disorder, however, may be prevented by constantly moving them

at the field, when turned in, so that the first ploughing is into their
ew, before the next be dishonored. Or if cattle be turned into clover fully ripe, they
ll, it is said, receive no injury by eating too freely of it, as it is pernicious only in
early state. Should they nevertheless be attacked with that dangerous swelling
y may be relieved by a dose of the remedies pointed out under the article Cattle
one 1st volume — It deserves to be noticed that the introduction of this
luable plant into modern husbandry has been attended with numerous & impor-
t advantages. Since that period the new system of stall feeding dates its origin
many insignificant farms on the Continent of Europe, have since been converted
to valuable estates; for as this species of clover is annually productive, of three
four crops for two years at least, it is generally ploughed in, after the last
owing in autumn, & wheat or rye immediately sown on the land, without
y other manure, except what is derived from the fertilizing roots of that
vegetable. Sometimes however, gypsum is scattered on such fields during winter.
In Pennsylvania this operation is generally performed during the months of March
& April. — In Sweden the heads are employed for dying wool of a green
lour; & if mixed with alum they yield a light, if with copperas a dark green colour
Trifolium Repens. White clover abounds in meadows & pastures. — It abo-
nds in light land, where it will thrive luxuriantly, if frequently sown. It is usually sown
th red clover, rye grass, or barley & is in blossom from May to September. It produces the
ulest hay on dry land, especially when mixed with hop clover & rye grass, & possesses
n advantage over the common clover, that it will admit of being irrigated. Horses
w & goats eat it, but sheep are not fond of it, & hogs totally reject it —
White clover whether wild or cultivated is one of the most valuable grasses for cattle
is evidently a natural grass of the country & uniformly appears in our meadows
ith of the city, when closely nibbled by sheep. A gentleman who has travelled
ch thro' the hostile Indian country, says he has seen fields covered with this grass
The sweet blossoms of white clover powerfully attract the bees all summer but it
chiefly in the months of May & June, that the aliment is collected & stored in hives.
It is observed that clover honey may be easily distinguished from every other flower in the hive.
ite clover when mixed with timothy or green grass (for which it makes excellent rais-

Class 3. Order 1.

Carex. C. Paniculata. Eng. Club rush.

Use: It grows in the banks of rivers ponds & ditches, & is chiefly found in the western parts of England. It is perennial, grows from nine inches to two feet high, flowers in the month of June & July. Hogs greatly devour the roots of this species when fresh: but will not touch them when dry. They are also eaten by goats & horses, but refused by cows & sheep. Ibid.

Class 13. Order 5.

Aquilegia. A. Canadensis. Eng. Common Columbine

Use. It is a native plant growing in hilly wood & thickets. It is perennial & blooms in July. The beauty of its flowers, & their uncommon variety, both in shape & colour have introduced this plant into gardens. It is eaten by goats, but sheep are not fond of it, nor is it relished by cows, horses, & hogs. Ibid.

Class 9. Order 1.

Eriophorum. E. Angustifolium. Eng. Common cotton grass.

Use. It is found chiefly on marshes & bogs in the county of Stafford, on Birmingham heath & near Newport, Shropshire. In the island of Skye, in Scotland, this plant is useful to support cattle in the earliest parts of the spring, before the other grasses are sufficiently grown. The poorer classes of people stuff their pillows with the woolly down of this plant, & also employ it in making wicks for their candles. Ibid.

Class 12. Order 5.

Pyrus. P. Coronaria. Eng. Crab apple

Use. This is an indigenous plant growing in wood & hedges; it flourishes better on declivities & in shady places, than in open exposed situations, or on boggy soils. Its blossoms are white & appear in the month of May.

This is the parent stock, from which the numerous varieties of the apple are obtained, & on which the better sorts of them are grafted; because its roots are neither killed by frost, nor eaten by field mice. Grass & even corn will grow beneath it. The wood of the crab is tolerably hard, turns clear on the lathe, & when made into cogs for wheels acquires a polish which renders it very durable. The acid juice of the fruit is common termed verjuice & is much employed in recent sprains, & in other cases as an astringent or rubefacient. This fruit is eaten by horses, cows, sheep, goats, & particularly by hogs, which are extremely fond of it.

Trees abound especially in our forests, & their fruit is in a state of plenty for deer, in the latter part of autumn when grass begin to fail; & in winter they browse its branches, which are cut down for that purpose. As this species quickly attains its growth, it deserves to form a part of every plantation; & we have only to regret that it is not more generally cultivated, as it will in a short time amply compensate the labor & expence bestowed on setting it. In dyeing the bark of the root has been employed for extracting a yellow, & especially a citron colour. Dambourney relates that a dry drawing of this wood imparted a fine chestnut brown to wool prepared by a solution of bismuth. Ibid.

Class 4. Order 1.

Ranunculus. R. Aquatilis. Eng. Water Crowfoot.

It grows in ponds & ditches, where it produces white flowers with yellow spots on the base from May to July. In the 5th vol. of the "Transactions of the Linnean Society" we are informed by Dr Pattenay that the cottagers in the vicinity of Ringwood, on the banks of the Avon, support their cattle almost entirely with this plant which is devoured with such avidity that it is deemed unsafe to allow them more than a certain portion. The cows thus fed continue in excellent condition, & yield a sufficient quantity of good milk. These animals are so partial to the Water Crowfoot, that, excepting the scanty pittance they procure on the adjoining heath, five cows & one horse had not consumed more than half a ton of hay in one year. Hogs likewise eat this vegetable, on which they remarkably improve: according to Dr. P. it is not necessary to allow them any other food, till they are put up to fatten.

Class 6. Order 1.

Narcissus. N. Pseudo-Narcissus. Eng. Daffodil

An indigenous perennial plant, growing in woods, meadows, & the sides of hedges, which is found chiefly in the north & west of England. It produces large, yellow, ill-scented flowers, which appear in March... Bechstein observes that two drachms of the root afford a powerful emetic. Dom. Lex.

Class 18. Order 2.

Bellis. B. Perennis. Eng. Common Daisy.

The leaves of the daisy, tho' slightly acrid, may be eaten as early spring sallad, or boiled like spinach, its roots have a pungent taste, & are in high repute abroad as an excellent vulnerary, attenuant, cooling & astringent medicine; yet no attention is paid to it in this country except what it claims from the beauty of its flowers; on account of which

has been introduced into gardens. It is refused by horses, sheep & cows.—

Mr. Bechstein a respectable German naturalist, mentions a curious fact relative to the virtues of the common daisy. He says in a note. "I am acquainted with a very skilful & experienced physician who has completely cured several consumptive persons with the flower buds of the Bellis perennis, by stuffing young chickens with them buds, without any other ingredients; then stewing them in a small beef tea or broth, adding a little fresh butter, & allowing the patient for three weeks no other food but the medicated dishes thus prepared. At first it affords a delicious repast." We candidly confess we have had no opportunities of ascertaining the efficacy of this preparation, by the test of experience; but nevertheless we believe that in so desperate a situation as that of pulmonary consumption, or other species of atrophy, unattended with violent febrile symptoms, it well deserves to be opportunely & fairly tried. (Ford)

Class 3. Order 2.

Lolium. L. Perenne. Red darnel or Ray grass.

Flowers in radical & lateral partures; it attains the height of two feet, & flowers in June. As it makes good hay, upon dry, chalky, or sandy soils it deserves to be cultivated especially with clover; it springs earlier than the other grasses; thus supplying food for cattle at a season when it is most difficult to be obtained. But tho' it is eagerly eaten when young, it is too dry & hard when converted into hay by itself. Mr. Swayne hints in his Gramina Pascua a most valuable publication for practical farmers, who wish to obtain a complete knowledge of the different pasture grasses; that the common ray-grass but probably by frequent sowing, degenerated from its natural qualities, & that it was in many respects inferior to that growing naturally in our best meadows & pastures. Mr. Pagey, an enlightened agriculturalist, has lately raised a variety of ray grass from seed raised in old pastures, & has now multiplied it to such an extent as to sell annually a considerable quantity, at the price of 10/6 per bushel. It has by the most competent judges been proved to be infinitely superior to the cultivated ray-grass & he has sufficient demand for his whole produce... The red darnel is eaten by horses, cows & sheep: but goats do not relish it. Ford.

Class 8. Order 1.

...rca. D. Palustris. Eng. Leather wood. Moose wood

...is is a low shrub, & native of the United States, growing in most shady places, seldom ...ing more than four feet high, spreading into a head, with many small & very flexi... branches. The flowers are produced at the extreme ends of the former years shoots. The ... of an herbaceous colour, & make a tolerable appearance. The flowers which appear ... the latter end of March before any perfect leaves are of a yellow colour. The bark ...uncommonly tough, yet the enclosed wood is very brittle. It is highly valued by the ...tive Indians, & used in the place of cords. This plant, according to the information ... Mr. W. Bartram, occupies an extensive range of territory from Canada to Georgia.

Class 6. Order 1.

...Allium. A. Ascalonicum. Eng. Shallot. Eschallot.

It is a native of Palestine whence it has been introduced into our kitchen gardens. It is ...ised from suckers, which are set about the end of February in beds, or furrows at the ...tance of about three inches from each other. Towards the end of June the stems are ...d up; & in the course of another month, the plants are pulled out of the earth; when ...y are exposed to the air to dry, & afterwards preserved in some airy place. ...e roots of the eschallot are very pungent; have a strong but pleasant smell ...are preferred to onions as ingredients in highly flavoured soups & gravies. They ...e also pickled, in which state considerable quantities of them are consumed in ...e East Indies.

This plant when mixed with vinegar, rue & honey, is said to be re... ...medy against the bite of a mad dog, we doubt, however the efficacy of such ...application. It is also recommended as an excellent cephalic, especially ...hen inhaled thro' the nostrils; but its most beneficial properties are those of ...ating an appetite, & expelling foul air. (Ibid.)

Class 3. Order 2.

...stuca. F. Elatior. Eng. Tall Fescue grass.

...grows in boggy meadows, & at the sides of wet ditches, where it often attains to the ...ght of four or five feet. It is perennial, flowers in the month of June or July ...metimes twice in the year & makes excellent pasture, but requires a rich soil. ...It is eaten by horses, cows, sheep & goats. Ibid.

Class 18. Order 3.

Matricaria. M. Chamomilla. Ang. Chamomile Feverfew.

It grows in corn fields, dung hills as well as on road sides. & is in flower from May to August. Its properties are similar to those of the common chamomile. it is eaten by cows, goats, & sheep, but not relished by horses; & hogs totally refuse it. According to Porner the flowers of this species of feverfew afford a fine yellow pigment which may be rendered more permanent by the addition of alum & cream of tartar & gypsum. Schiffer another German chemist informs us that a decoction of these flowers imparts a beautiful yellow colour to silk. if a solution of tin, saturated with cream of tartar be gradually dropped into the liquor till it acquires a deep yellow tinge. Berthollet however, on this occasion remarks that pure water must be employed, which does not precipitate the solution of tin, & that the dyeing bath should be kept in a hot, tho' not in a boiling state. (Ibid)

Class 3. Order 2.

Alopecurus. A. Pratensis. Ang. Meadow Foxtail grass.

It is perennial, grows in meadows & pastures & flowers in the month of May or June. this plant thrives naturally in moist soils only. it affords the best grass that can be sown on low meadows or in boggy places which have been newly drained. Its seeds are in ears, & are easily collected. A. Pratensis. these grasses on it are said to acquire a coarse fleece yet it furnishes a most grateful food to cattle; but as the larvae of a species of flies devours the seed to so great an extent, that in many spikes scarcely one can be found perfect, its cultivation is rather precarious. These insects are very minute, of an orange colour, & are the fry of the Cimex Cantharis or fiddle bug whose mouths are peculiarly formed for searching the husks of grasses.

Class 5. Order 2.

Panax. P. Quinquefolium. Ang. Ginseng.

Use. It is indigenous in North America. The dried root of ginseng has a mucilaginous sweetish taste similar to that of liquorice, but accompanied with some de

of bitterness, & a slight aromatic warmth, with very little odour. The Chinese ascribe extraordinary virtues to this plant, & consider it as a sovereign remedy for almost every disease to which they are subject. No proofs however, of its wonderful efficacy have occurred in Europe. Nevertheless it is often used as a tonic, antispasmodic & stimulant, in doses from 20 to 60 grains powder. Nor do we believe that the boasted ginseng has possess any peculiar properties, excepting those of a nauseous taste & loathing, which the warm water mellowed with it debilitates the stomach.

This well known plant is the only native production of the United States which answers for export in order to procure the luxuries of China. It is not much esteemed in China, unless clarified, except in times of great scarcity of the plant. When well clarified it has brought the extravagant price of one hundred dollars per pound, & great wealth has been acquired by some early adventurers from Philadelphia. The process of clarifying, though hitherto kept a profound secret, consists in the careful application of heat & moisture to the fresh roots, & afterwards dipping them in hot rice water, or a solution of isinglass in water. It is observed that not more than one root in twelve will clarify. This plant grows abundantly near Philadelphia. — The Chinese attribute almost miraculous powers to ginseng. In particular they suppose it possesses the property of preventing the effects of old age, & in preserving their virility to a late period. Medical men in Europe & the United States do not ascribe any virtues to this plant: but Mr. Pennant shrewdly remarks, that it is very extraordinary that a nation so acute as the Chinese, should continue to use it for so long a period, & still believe in its good effects, & therefore he cannot be persuaded but that the plant must possess some of the properties attributed to it by the Chinese. Ibid.—

Class 5. Order 1.

Genus. R. Grossularia. Eng. English gooseberry. R. Uva crispa Smith. gooseberry. Goch. — This useful shrub flowers in April, & bears fruit in June or July, which however does not acquire its natural vinous flavour in this climate till August or September.

Obs. Gooseberries are generally eaten or employed for culinary purposes, before

 They seem at present only just being one of the most saccharine productions we possess they might with more advantage be converted into wine. A cask pound of the juice expressed from ripe berries requires only one ounce of salt nitre, whereas the dried currants require double that quantity to induce the vinous fermentation, a very wholsome & very excellent domestic wine may be made at a trifling expense. After standing several years in bottles well corked, it becomes equal in quality to muscadel or other sweet Italian wines. If the flower-buds of this shrub be added to a cask of any other flavourless wine, Bryant asserts that they impart to it the taste of genuine muscadine

The husks of this fruit, when the juice is expressed for making wine, are usually thrown away: it appears however, that they may with advantage be employed in distillation, & afford an agreeable spirit resembling brandy. It has indeed been ascertained by experience, that such liquor, after having been kept a few months, was little inferior, in point of strength & flavour, to the best French Coniac-

Gooseberries are a delicious & wholsome fruit, & would be found very profitable if attended to, in the United States. They not only afford a very pleasant article of diet, but also form the chief article in an excellent domestic wine. Such a wine, made near Downingtown, the Editor had the satisfaction lately to taste, & hopes to be able to describe the particular process pursued in making it. — This fruit may be preserved by being put up dry in a large mouthed strong black bottle, covering the cork well with rosin.

The smooth gooseberry ribes u. crispa can with difficulty be distinguished from the preceding species either by the flower scales or even by the smoothness of its berries. Mr. Robson assures Mr. Withering that the seeds from the same plant will produce both rough & smooth gooseberries-

All the different gooseberries are wholsome fruit, but they should not be eaten, before they are perfectly ripe, nor is it proper to swallow their stones along with the juice; but the skin may with probable advan

be used by those who are accustomed to take any quantities at on 273
; in order to prevent flatulency. It is however founded on erroneous notio
their chemical properties, either to boil the unripe berries for sauces, or to
wet them in to domestic wines, which, tho' more cooling & refreshing, do
t possess the delicate flavour, & rich saccharine quality inherent on
in ripe fruit. (Ibid.

Class 5. Order 2.

henopodium. C. Album. Eng. Pigweed. White goosefoot, or common
wild Orache.

It grows frequently in corn fields, on old dung hills, rubbish & in gar-
s; & flowers in the months of July & August. It is eaten by cows, goats, sheep,
rses, & hogs which devour it with avidity. But Linnaeus asserts that it is to-
lly refused by horses. According to Prof. Pallas, the White goosefoot is a
ry troublesome weed among corn on the banks of the Volga, where the Ger-
an colonists make use of its very abundant seeds by mixing it with bread
our, & also boiling it separately in the form of groats. -- Townsend relates
at a species of potash, or barilla is prepared from this plant. Ibid

Class 21. Order 2

ucurbita. C. Lagenaria. Eng. Bottle gourd.

It is a native of both the Indies where it grows on the banks of rivers: it ha
ick trailing woody stalks, extending from 10 to 20 feet, & producing large
ite flowers which are succeeded by long incurvated fruit, of a whitish yellow
our, from 2 to 5 or 6 feet in length & from 9 to 24 inches in circumference
is used for dishes & ladles.

. Pepo. Pumkin or Pompion.

It is cultivated in various parts of Germany & the U States, but the native soil
which is unknown. It produces fruit of various shapes & sizes, frequently 10
hes in diameter, & its culture in a tolerable land exposed to the rays of the sun
quires but little trouble. The pulp of the fruit is eaten as an ingredient in puddi
gs & pancakes. But the most economical use of this bulky vegetable product

not of fattening pigs, as well as carp when thrown into fish-ponds. For these purposes extensive fields are devoted to the growth of the common gourd or pumpkin in Bohemia, Saxony, Thuringia &c. climates which coincide with many parts of Britain. It is that this plant certainly deserves to be more generally reared in this country. Besides, its numerous seeds afford an annual proportion of expressed oil amounting to one half their own weight: when triturated with water, they yield a cooling & nutritious milk; & boiled into a jelly, they are said by Bechstein to be a very efficacious remedy for curing a retention of urine.

C. Verrucosa Ang. Club squash.

It is reared in America as a culinary vegetable; its young fruit is eaten boiled & frequently mixed with wheaten flour in the baking of bread, to which it imparts a yellow colour, but an agreeable taste.

C. Melopepo. Ang. Flat Squash.

It has a long erect stalk, several feet in height, which becomes bushy towards the top. It produces a knotty fruit of a moderate size, & is used like the preceding species.

All these species of the gourd have several varieties, & the fruit of each frequently changes its form. They are raised from seed set annually in the month of April, or in the beginning of May. But if the plants be forwarded in a hot-bed, till they are a month old they will produce fruit six weeks earlier, & mature comparatively sooner. It is remarkable that the stalks of the different species of the gourd contain a considerable proportion of nitrous particles, & might therefore become useful in the manufacture of saltpetre. The lagenaria will not ripen in G. Britain. But in the East & West Indies both the gourds are sold in the markets, & are used for food for the inhabitants seasoning them with vinegar, which renders them very wholsome. Hard

Class 3. Order 3

Gen. 8. Lanatus Eng. Meadow soft grass.

root is perennial, stems from two to three feet high. The velvet like softness of the
ant, & the redness of the opening panicle, render it very conspicuous in the field.
plant is esteemed by Mr. Marshall, as excellent for promoting the growth of young
ses, & cattle of every kind, but not good for horses... Indeed it has been accused of
ating the discharge of a morbid quantity of urine in horses & young Animals.

Class 2 Order 2.

Gen. Anthoxanthum. A. Odoratum Eng Sweet scented vernal grass.

It is common in our meadows & grows to the height of ten inches; it is an early grass
delights in moist soils

Class 3. Order 2

Gen. 9. Compressa. Eng. Blue grass.

t is a native grass of the United States, having a compressed or oblique culm or
alm, panicles squeezed, spikelets round & eight flowered. This is eaten by cattle tol
bly well when young, & remains green until after frost. It binds the soil in the
ure of three or four years, so as to require ploughing up. This is often mistaken
r the green grass & both are called occasionally spear grass & wire grass. (D.E.)

Class 3. Order 2

Agrostis. 1. Alba. White top. A. Vulgaris. ~~White~~ Red top. A. Stricta
ed grass. White top. Foul meadow grass of East Jersey. Dr Muhlenberg informs the
tor he thinks this grass is the Agrostis stricta of Waldenow. It is peculiarly adapted
wet grounds. It ones & consolidates the surface, continues many years, excluding
other grass & all weeds. Many worthless swampy spots in the lower parts of the
ate of New Jersey have been rendered valuable grazing grounds by this grass. Loads
cows have grazed over places, which two or three years before sowing it, would scar
admit a wagon thro' without sinking. It makes excellent hay, & cattle are said to
fer it to that made of either clover or timothy. It is more succulent than timothy
not so coarse. The same bulk of red grass hay will weigh one third more than the
me bulk of timothy hay. Four tons is a common crop for one acre. It yields no second
p, but affords excellent late & early pastures. It was first brought to New Jer
England by the late Wm Foster, who resided near mount Holly; & introduced
Pennsylvania about ten or twelve years since. The Red top & White top

[illegible] specimen of the above species of grass. The latter is the larger of the two, & is particularly valuable as it will grow & bind the first year on banks, when no other grass will thrive. (Ebenezer.)

Class 1st. Order 10.

Fabacis. A. Hypogaea. Eng. Ground Pea.

A plant cultivated in the West Indies by the negroes. When in flower it inclines towards the earth, into which the pontical enters, & extends to a certain depth, where the seed or nut are formed; so that the latter attains its maturity under ground. A large quantities or crops of this vegetable are produced on light sandy lands, & with proper culture it may, perhaps be a valuable crop, cultivated in the southern counties of Britain.

The seed or nut, when dried & expressed thro' canvas bags, afford a pure, clear & sweet oil, which in the opinion of Dr. Watson, may be used for the same purposes both culinary & medicinal, as those obtained from olives or almonds. The oil of ground pea, however, possesses a great advantage, as it will admit of being kept a considerable time, without becoming rancid, or requiring any particular care even during the heat of summer. A bushel of the seed when expressed, yields a gallon of pure oil without. So much larger quantity than of inferior quality with the aid of heat. They deserve to be more generally known & imported. The value of a bushel of them nuts in S. Carolina did not exceed eight pence in the year 1768. Some specimens of the seed were produced before the Royal Society & an account given in the 59th vol. of their Philosophical Transactions for 1769 (Ibid.)

Class 5. Order 3.

Viburnum. V. Opulus. Eng. Gueldar-rose. Water-elder. Snow-ball.

It bears white blossoms in May or June, & red berries in September. When in bloom the tree exhibits a singularly fine appearance. The flowers, tho' small are formed into large globular umbels, whence it is sometimes called the Snow-ball tree. Birds are enticed by the red berries, but will not eat them. According to Bechstein, these berries may be preserved in vinegar, & the tough hard wood is employed by turners for small pieces of work. Ibid.

Class 23. Order 1.

ius. C. Americana. Hazelnut. fruit. C. Rostrata. Beaked hazelnut.
the different species of the hazel are large, hardy, & deciduous shrubs; they have sev-
variities valuable for their fruit, which in a cultivated state are known under the
m of filberts. The uses of this wood are various: it is employed for poles, roofs for var-
, spars, hurdles, handles for implements of husbandry, walking sticks, fishing rods &c.
here beautiful specimens are required for veneering or staining, the roots of the hazel
e more preferable to the branches. In Italy the chips are used for fining the bid wines
countries where yeast is scarce, the twigs of this shrub, dried, & afterwards soaked in
fermenting liquor serve as a substitute for that article in brewing. Painters & en-
avers prepare coals for drawing outlines from the wood of this plant by the follow-
process. Pieces of dried hazel, about the thickness of a finger, & four or five in-
es in length are put into a large pot filled with sand, & the top of which is closely cov-
d with clay. In this manner they are put into a potters oven, or otherwise exposed
a sufficient degree of heat, & on cooling, the sticks are found to be converted into
charcoal, which draws finely & is easily effaced with India rubber.
The kernels of the fruit of the hazel nut are, tho' difficult of digestion, have a
d farinaceous oily taste, which is agreeable to most palates. Yet filberts are
d to be more nourishing than nuts; both, however operate as a cathartic, when
ed small, & taken in considerable quantities; but produce constipation of the
els if swallowed in large pieces, & dysentery if eaten unripe. A kind of choc-
te has been produced from this fruit, which has also occasionally been con-
ted into bread. An expressed oil has been obtained from the nuts, which is lite
inferior to that of almonds; it is often preferably used by painters as a vea
, & chemists employ it as the basis of fragrant oils artificially prepared
cause it easily combines with & retains odours. An emulsion made of the kernels
aken with good old mead, is recommended for inveterate dry coughs. Squirrels &
ice are excessively fond of the nuts; goats & horses eat the leaves but they are re-
ed by sheep & hogs. (Ibid)

Class 5, Order 2.

ta. C. Virosa. Aug. Water hemlock. C. Bulbosa. Bulbous water hemlock
is a perennial plant growing on the edges of rivers & pools; flowering in the month
August. It is likewise one of the most virulent vegetable poisons. Its roots are
ce, hollow, & contain a very acrid smelling juice, that soon changes to a saffron colour

 & has a nauseous taste, somewhat similar to that of parsnip. The stem attains a height of four feet. Early in the spring when it grows in the water, it is frequently eaten by cows, which are inevitably killed by it; but as the summer advances, its scent becomes stronger & they carefully avoid it. Yet thus tho. it is thus fatal to cows, it is eaten with safety by horses, sheep & goats, which last devour it with avidity.

Two species of cicuta are natives of the United States viz C. bulbifera, with white flowers, & C. Maculata with a purple spotted stem & black flowers. They are both highly poisonous. Ibid.

#

Alcea. A. Rosea. Eng. Hollyhock. Class 20 Order 13

A native exotic plant, frequently cultivated in our gardens. It is a native of China; grows to the height of 8 or 9 feet; & nearly the whole of its stalk is covered with white, red, dark yellow or variegated flowers that continue to blow till September. The hollyhock is propagated either by seeds deposited in drills about the middle of April, on beds of light earth, & afterwards covered with soil about half an inch deep; or by separating & setting the roots. As soon as the plants shoot forth a few leaves they are removed into nurseries beds where they require to be well watered till they have taken root, after which no particular care will be necessary till the month of October, when they should be transplanted to those places where they are intended to remain.—

Besides the ornamental appearance of this majestic plant, Dr. Barton informs us that the soft fibrous & woody part of its stalks, without any addition of rags, makes a white & fine paper. Ibid.

Class 20. Order 13.

Carpinus. C. Americana. Eng. American Horn-beam.

It grows in woods & hedges; flowers in the month of May. The horn-beam will thrive on poor, dry soils, on barren & exposed hills. If intended for trees it is propagated by seed as soon as it is ripe. It vegetates 18 months before the plant is fit for transplanting, & the young trees are transplanted at the age of two years to the spots where they are intended to remain. When designed for hedges, & understood it is propagated by layers. The horn beam is a very tenacious tree, & grows to a large size; its leaves

it a pratifull food to cattle [illegible] is very white & soft & burns like a candle. It is very much employed by turners: is used for various implements of husbandry, & is wrought into cogs for the wheels of mills &c. which is far superior to those made of yew. The inner bark imparts a permanent yellow colour to yarn. Ibid.

Class Cryptogamia Order 1.

Genus. 1. Hyemale Eng. Scouring Rush.

It is found in marshy watery soils & flowers in the months of July & August. This species is poisonous to horses, by whom it is eaten, but it is hurtful to cows, & disagreeable to sheep. It is usefully employed by turners & cabinet makers for polishing their work, as well as by dairy maids, for cleaning pails & other wooden utensils. — Ibid.

Class 6. Order 1.

Genus. Eng. Bluebell. Hyacynth.

A genus of perennial plants to Great Britain one of which is indigenous: it comprises 16 species, of which the scripta is indigenous to England (Scilla nutans or Wild Hyacinth of Dr. Smith.) It grows in woods & hedges, where it flowers in the month of May. The fresh roots of this plant are poisonous; but it appears from experiments that they may be advantageously converted into starch. —

The most admired of the exotic species is the Orientalis, or Eastern Hyacinth, which is cultivated to great extent, & with success by the florists of Holland whence it has taken its name. It is one of the most odoriferous flowers, & has several hundred varieties, the price of which is from three pence to 10£ or 30£ per root.

The hyacinth is a hardy plant & will prosper in any soil, tho' the more delicate varieties require to be housed during the severity of winter. They may be propagated either by the seed, or by planting offsets from the roots in autumn; in which latter case the bulbs must be judiciously cleaned & dried. (Ibid.) in plate pag. 215

Class 2 Order 1.

Genus. 1. Vulgaris. Eng. Lilac.

A genus of exotic plants, natives of Persia, consisting of three species the principal of which is the vulgaris, or common lilac. It has long been cultivated in our gardens on account of its ornament & flowers & if properly managed will grow to the height of 18 or 20 feet.

It should flourish on almost any soil, but it produces the most beautiful flowers on a dry land tho' it flourishes best on wet grounds. It is propagated by suckers which shoot up from the parent stock in the month of May & may be set in a nursery in rows

[illegible] each other, one foot distant from the other. In the second or third year they may be removed to the spot where they are intended to remain. After this operation, no further attention will be required, except digging about their roots once in the course of the year, & cutting off the suckers, which not only destroy the beauty of the plant, but likewise deprive it of its nourishment —

The leaves of the common lilac are frequented by the Spanish fly: the yellow & red brush wood of old trees is valuable to turners & inlayers; as the vessels & utensils manufactured of it are equal to those made of olive wood, & almost indestructible. By immersing such articles in a cold dye, consisting of a pint of tartarized chalybeate water they acquire a fine red colour. From the flowers of this plant may be distilled an essential oil, similar to that of roses. — Ibid.

Chap. 17. Order 10

Fraxinus. F. Pulpair. Common Pole Bean. P. Nanus. Bush Bean. Kidney Bean

There are a number of different kinds of beans, both in America, & in other parts of the world. — Common beans are called nutritious, the leaves cooling & refrigerant, & the skin of the seed astringent. — Beans have been more employed in food than in Physic; the latter nourishing, but strong & flatulent, & if old not easily digested. — The distilled water of the flowers has been used as a cosmetic. The fresh leaves beat up into a poultice for an ulcer are cooling, & good to repel humours — Half a pint of the leaves, when the plant is in the blossom, boiled gently with a pint of new cream, & half a pound of the best honey, in an unglazed earthen pipkin, till half is consumed, is recommended for the cure of a cancer, or any other tumour, if applied thrice in a day. Vid. Fa[illegible] Abraham's Almanac, Phil. 1795. — There is an Egyptian bean, which may be eaten raw or boiled. It is astringent, & good to strengthen the stomach. (Steam Doctor)

Chap. 9. Order 1.

Lauraceae. L. Benzoin. Sweet. Fever-bush. Spice bush.

This beautiful, fragrant shrub, growing wild in many parts of America, & in high repute among the inhabitants as a febrifuge, from whence its name. The whole plant is highly aromatic. The bark of the root has much the taste of lemon peel, though pungent, & tea made from any part of the bush is both aromatic & mucilaginous, & is found very efficacious in dysenteries. It will probably one day or other attract the attention of the medical societies in this country, or has already done so. (National Physician)

Class 14. Order 1.

Nepeta. N. Cataria. Eng. Catnip. Cat mint.

is is an excellent herb for infants. The distilled water & essential oil are powerful in
is bowel complaints. It is said to partake of the virtues of mint & pennyroyal. It grows
great abundance in fields & hedges, & is so well known as need a particular description.
have distilled it in the flower, & found it yield a small quantity of very pungent essential
which cooled in white flakes, but readily dissolved in rectified spirit. I also distilled
when the seeds were just formed, & obtained a very clear essential oil of a dark green
lour, resembling the other in smell & flavour. Ibid

Class 13. Order 13.

ragaria. Eng. Strawberries.

well known & delicious fruit the production of this bush or plant. It may seem rendered it so
known as not to require any further description; but tho' as a direct it is known, its medic-
virtues are not so well understood. Many, perhaps, are to be told, that the plant taken
infusion as a tea is excellent for the jaundice; that the leaves bruised & applied to a fresh
wound will stop bleeding. & what will be more interesting to the ladies, the fruit is said to dis-
the tartarous incrustations of the teeth. Surely so excellent a dentifrice cannot be obtained
money by art. The fruit is also said to be peculiarly efficacious in curing long & obstinate
arrhoeas, & an excellent remedy for the scurvy. (Ibid)

Class 11. Order 1.

Portulaca. P. Oleracea. Eng. Purslane.

leaves & seed are ranked among the four lesser cold seeds. – Both the leaves & seed are cooling, anticor-
tic, & moderately astringent. – The seed have been employed in cooling emulsions, & the leaves in
salad, & as a pot herb, for the scurvy, & cutaneous eruptions. (Thacher)

Class 13. Order 13.

Hepatica. H. Triloba. Eng. Noble liverwort.

is a low plant, which has no stalk but pedicles of leaves & flowers. It grows wild & is also cul-
tivated in gardens. The leaves are called cooling, & moderately astringent & corroborant. – It has
been employed in diabetes, spitting of blood, bloody urine & dysentery, to strengthen the stomach
the pain; for which purposes an infusion of the herb may be drank as a tea, or a powder of
the leaves may be taken. The close of the powder is two drachms. – (Ibid)

[illegible] Order

[illegible] C. [illegible] Genus [illegible] to [illegible] Gen.

Common Opuntia vulgaris. [illegible] The fruit of the plant resembles a tongue. It is the Opuntia [illegible] (Linn.) [illegible] with a slender stalk arising from the bottom of it, and about the size of a [illegible] It grows in [illegible]; the leaf is thick of a fresh green colour & juicy. The [illegible] is a green [illegible] both [illegible] & [illegible] colours.

[illegible] internally for bruises, wounds, &c. & an ointment made of the leaves with lard or fresh butter for the same purpose. But it is not much employed in present practice. [illegible]

Class 10. Order 1

Genus. C. Rotundifolia. Eng. Skin leaf. Pearleaved wintergreen. Consumption root. This is a low kind of bush or plant found in moist grounds. Some of the country people have found the root good in the consumption. Ibid.

Class 13. Order 1.

Genus. Pot. Canadensis. Eng. Common five finger

Called also quinquefolium & pentaphyllum. & also potentilla reptans. — This is a trailing plant which grows wild in pastures in many parts of America. — The roots are highly astringent. They are good in fluxes, colliquative diarrhoeas, intermitting & acute fevers, & in gargarisms for strengthening the gums & other parts. But as there are more powerful astringents, it is but little used by gentlemen of the faculty — Dose of the cortical part of the roots one drachm — Of the internal part two drachms. Ibid.

Class 13. Order 5.

Genus. A. Napellus. Eng. Monkshood.

Blue Monkshood, helmet flower & wolfsbane. It is cultivated in gardens. This plant is so very poisonous, that hunters mixed it with meat, baited & destroyed wolves with it. It operates as a caustic & narcotic quality: it stops the swallowing & corrodes the stomach — Dr. Stoerk however has ventured to use an extract made of the expressed juice of the fresh herb in an inveterate gonorrhoea, obstinate pains which followed intermittent fevers, nodes, & various tumours, indurations of the parotid gland, & in the Anchylosis — The dose was two grains mixed with two drachms of fine sugar, thrice in a day. The doses were increased to the amount of half a drachm three times in 24 hours. It creates doses were increased to the amount of half a drachm three times in 24 hours. It creates a copious discharge of urine — Those poisoned by this plant, should take a large

til. Soil & water; & afterwards carminatives & in the intervals of vomiting, to
lay cordials; these remedies ought to be repeated till the patient has recovered. Ste

Class 13. Order 2.

onia. P. Officinalis. Eng. Piony.
The male & female peonies have nearly the same virtues; but as the latter is the larger
or elegant it is commonly used in the shops. Its roots & leaves have been esteemed as alli
corroborant. & slightly anodyne. They have been employed in obstructions, & erosions of
viscera, heat of urine, pains in the kidneys, spasms & the epilepsy. It appears by the
mical experiments that they have a corroborating power. In the course of my practice
ould never discover that they were beneficial; & Dr. Cullen could not find a practitioner
who could give testimony of their virtues from experience; & he was suspicious that the plants
tain poisonous qualities, & that they ~~contain~~ belong to an acrid class; & I believe they are wi
ly expunged from the London Pharmacopoeia. The dose of the root in powder was from
to 20 grains. In decoction from two drachms to half an ounce. Of the seeds in infusion from
½ an ounce to an ounce. Ford.

Class 15 Order 2.

hicum. L. Sativum. Eng. Pepper grass. L. Virginicum Wild Pepper grass.
lso pepper wort. Mitander. & the poor man's pepper. The whole plant is hot like pep-
. Another species is called sciatica cresses. & Lepidium graminifolio. It is the lepidium
Linn. The first of these plants grows wild by the sides of rivers in shady places. The se
is cultivated in gardens for culinary uses. Both of these plants are recommended as aperients
mants, stomachic, anticorbutic & antiseptic. They are used for the same purposes as the
den scurvy grass & the garden cresses, having much the same general virtues; hence they
good in scorbutic complaints, when the vital juices are in fault, & the chylopoetic or-
s are weak; in rheumatic & wandering pains of long continuance, & scorbutic rheuma.
. & for promoting the fluid secretions, particularly that of urine. If heated & applied
t parts affected they help the sciatica, by irritating & drawing the blood & humours
e skin. The dose of the leaves in powder is from two drachms to half an ounce in
in the morning fasting. Ford.

Class 8. Order 2.

gonum. C. Punctatum. Eng. Biting pepper. Arsemart. Lakweed. calage &c.
s are antiseptic, aperient, & diuretic. The leaves resist putrefaction, open obstructions &
ote urine, & are esteemed good in scurvy, cachexies, humoral asthmas, hypochondria
hites, wandering gout, & suppressions of urine. The fresh leaves applied in stomach
y catarrhal, are good in foul ulcers, & for destroying fungous flesh. Ford.

Class 16 Order 13.

Malvaceæ. Malva. Eng. Mallows.

This order includes the Peruviana or Peruvian mallow, & the Mauritiana or Mauritian mallow, which macerated like hemp, afford a thread equal in fineness for spinning, to that obtained from the Eastern vegetable; & the cloth made of the three species before mentioned is said to be more beautiful than that manufactured of flax. From the called mallow, which produces the strongest & longest fibres, excellent cordage & twine have been procured; & M. De Lisle, fabricated a new kind of paper from different species of the mallow, which not only served for the purposes of writing & painting, but also appeared to be equal to the vellum for drawing, & for the hanging of furniture. (Dom. Rec.)

Class 12 Order 5.

Spiræa. S. Ulmaria. Eng. Queen of the Meadows.

An indigenous perennial plant growing in moist meadows, & on the banks of rivers, flowering in the months of June & July. Its stalk attains the height of four feet; & the fragrant flowers, when infused in boiling water, imbart to it a very agreeable odour, which arises on distillation; hence they are often employed by wine merchants, for improving the flavour of medicines. The roots are so powerfully astringent, that calf skins have been tanned by them in a fortnight. According to Pursant the Russians prepare from roots a palatable gruel, or groats; & Claffen informs us, that they colour a durable black colour, by a decoction of the whole plant. Hogs devour the roots with avidity; goats & sheep also eat this herb, but cows & horses refuse it. (Ibid.)

Class 21. Order 10.

Quercus. Eng. Oak.

The author of the history of the American oaks, was first hastily given by John Philip Du Roi, in his Observations in Botany & Botanical Dictionary, printed at Brunswick in Germany in 1771. & lately (1801) more extensively by Andrew Michaux the celebrated Botanist, & author of the Sylva. The Botanical garden which was established by the late Lord Lonsdale many years at the Potomac, in Virginia, was destroyed by the British in 1814. The recent varieties described are the best in. This tree is perhaps superior to be in the hands of every gardener & planter. Some others were sold in Philadelphia at the sale of Mr. O.

[illegible]

Class 6 Order 1.

Allium. A. Cepa. Onion.

To obtain seed from onions; plant the largest & smallest in beds nine inches apart. In a month the tops will appear; & every one will send up several stems. When the heads of the seed begin to appear, each plant must have a stake about four feet long, & its stems loosely tied to the stake by a soft string: otherwise, the heavy tops will lay the stalks or the seed heads down. Keep the beds clear of weeds.

The properties of onions in no respect differ from those of garlic, excepting that the former are less pungent (see Gar.); & are therefore, more generally used for culinary purposes. Many persons, however, dislike them on account of the strong disagreeable smell which they communicate to the breath: but this inconvenience may be obviated by eating a few leaves of parsley immediately after partaking of onions, the scent of which is thus completely removed, & they at the same time more easy of digestion.

Onions were formerly reputed to be an efficacious remedy for retentions of urine & dropsical complaints; but they are at present chiefly used in external applications, as poultices, or cataplasms for suppurating tumours &c. A distilled water from these roots is frequently recommended on the continent, as an excellent solvent of the stone & gravel (Ib.)

Class 17. Order 10

P. Sativum. Arg. Garden Pea.

The common pea has long been cultivated in this country. There are two sorts of this vicia known by the name of Grey or Hog-pea, & of the common or garden pea. The latter is again divided into many varieties, of which gardeners enumerate not less than thirty, but we shall only mention the names of those which amply repay the labour & expence of cultivation, namely the Grey hog

 In common with both of the Crafton or Early Gray, will grow the Rouncipval; Sugar, large green, & Spitten peas.

All these varieties delight in dry, warm soils, tho' the blue pea will also succeed on poor land. They are raised from seed which is sown from the middle of February to the middle of April, in the proportion of from three to five bushels per acre broad cast; but if drilled, two bushels will be fully sufficient. — Besides their utility for culinary purposes, peas, when harvested dry, & ground into meal, are uncommonly serviceable for fattening hogs; as no other grain agrees better with those animals. If the straw be forwarded in autumn, & has been housed without injury, it will be little inferior to common hay, & afford a very useful article of fodder, on which every kind of cattle will thrive; & tho' it be apt to occasion gripes in horses, if given to them before the month of January, yet such effects may be corrected by allowing a few turnips, cabbages, or potatoes, either with, or after they have eaten the pea-straw. A crop of peas is far from exhausting the land that it may be considered an excellent & ameliorating manure. Plant early peas, if sown early towards the end of March, & ploughed in shortly before they flower, will prove a valuable dressing for wheat. — In common with all leguminous fruits, peas possess a strong mucilage, with an earthy basis, & yield a very solid nourishment to persons of vigorous stomachs; but as pulse of every description evolves a considerable portion of fixed air within the bowels, it is apt to excite flatulency & costiveness if eaten too frequently, or in too large quantities. On the other hand, peas boiled in a fresh or green state, are equally wholsome & agreeable; being less flatulent, & more easily digested, than after they have attained to maturity. Bread formed & baked of peas alone, is remarkably solid, heavy, & unwholsome. Beckman informs us, that meal bread which was had an agreeable taste, but was productive of hoarseness & sore throats. Experience, however, has proved, that three parts of rye flour, & one of ground peas, afford a palatable, & more nourishing bread than that made of wheat or rye alone. (M

Class 12. Order 1.

Amygdalus. A. Persica. Amy. Peach.

A well known exotic fruit originally brought by the Romans from Persia to Italy. There are numerous varieties of this tree cultivated on account of this delicious fruit. Peach-spirit or distillation a highly flavoured spirit which is deservedly much prized on distillation (Peach-spirit adds) to a bowl of common punch greatly improves it. Indeed one or two thousand adds) to a bowl of common punch greatly improves it. Indeed it is difficult to find a more agreeable cordial than such a combination.

The flowers of peaches emit an agreeable fragrant odour, & have a bitterish taste

distilled in a water bath [illegible] a white liquor [illegible] of the
ight & which communicates to a large quantity of other liquors a flavour similar to the
the kernels themselves. An infusion of half an ounce of the fresh gathered flowers, or
ction of them when dried in half a pint of boiling water, sweetened with a little sugar, is
d to be an useful excretion & vermifuge for children. Ibid.

Class 12. Order 5.

gous. P. Communis. Angl. Common Pear.
& valuable indigenous tree growing in woods & hedges & woods in various parts of Britain;
ering in the months of April & May.

The pear tree delights in rich soils & gentle declivities, but will not thrive in moist
ations. It resists the severest frosts; its wood is smooth, light, & compact; & is used in
siderable quantities by turners for making carpenters or joiners tools & for fitting frames,
ich are stained black in imitation of ebony. The leaves impart a yellow dye, & are some
s employed to communicate a green colour to blue cloth. They are eaten by horses, cows, sheep
c. — In the wild state the fruit of the pear has an austere & unpleasant taste; but
en cultivated it is big, gratefull, & skilfull gardeners have obtained not less than 1500
ieties by inoculating, marching, engrafting &c. the common wild stock, with scions of the
t bearing trees. The most valuable of these, whether for the dessert, or for culinary
poses are enumerated under the article orchard. All the varieties of this tree are hardy,
will succeed in any common garden soil, provided it be dry & deep. They are propa-
ted by engrafting, & by budding or inoculating, either upon free stocks, that is such
h have been raised from seed, or upon quince stocks. The latter, however, requires a rich
moist soil. Sometimes the scions are engrafted on medlars in order to render them
ar; & nursery men have ventured to bud them on white or hawthorn, when there is
a scarcity of original or free stocks. But such practice ought to be adopted only in
es of great necessity, as it renders the fruit stony, & otherwise diminishes their value
Speculative value of pears depends not less on the state of ripeness or immaturity
which they are used, than on their different properties; some of them being hard, astrin-
t, & difficult of digestion. The more juicy ones however, possess a saccharine flavour
ich does not offend the stomach; nevertheless all the varieties are more flatulent than
ples, plums, or the generality of fruit; & winter pears are particularly liable to such in-
veniences; as they are commonly eaten at a period of the year, when the stomach is gene-
ally relaxing, rather than covering nourishment.

Independently of their utility for domestic or culinary purposes pears (if managed in a
a manner with apples for making cyder) afford a pleasant liquor [illegible] by the name of Perry.

Class 12. Order 5.

Gen. P. cydonia. Eng. Quince tree

Quince trees ~~require~~ are raised or propagated by layers, suckers or cuttings. They require very little pruning, the most important part of their management consists in clearing their stems from suckers; & in cutting off such branches as interfere with each other. All succulent shoots, that strike upward from the middle of the tree, must be lopped off lest the head be too much crowded with wood, which might prevent the growth of the fruit. Quince trees are also highly esteemed, as stocks, on which pears might with great advantage be budded. This operation greatly improves the taste & flavour of those pears which arrive at maturity in summer & autumn: but it is by no means proper for winter fruit, which is thus rendered hard & stony. In the colder countries of Europe Quinces are not eatable in a raw state; nevertheless they possess antiseptic properties, when dressed. & contain a considerable portion of acid & mucilaginous juice. Though their pulp be somewhat difficult of digestion, they seldom disagree with the weakest stomach. The liquor expressed from them has frequently been given in small quantities with great success in nausea, vomiting, & similar complaints. This fruit is generally boiled & eaten with sugar in which form it may also be usefully employed in cases of dysentery. One quart of the juice of quinces mixed with one pound of sugar, & fermented, affords a delicious wine; on adding to the same quantity, one pint of the best French brandy & four ounces of sugar the celebrated liqueur is prepared on the Continent & which is greatly prized as a cordial & stomachic, when taken in the small quantity of two or three tablespoonfull before breakfast. By boiling the kernels of quinces in water, a mucilage is extracted which is often used in medicine as a proper substitute for that of gum arabic. Ibid

Class 12. Order 1.

Prunus. Eng. Plum.

A genus of plants comprehending 90 species — All the different varieties of plums have been raised from the stones, & afterwards grafted or budded on plum stocks. The best for this purpose is the sloe tree or Blackthorn. — Besides their utility as a culinary fruit plums possess valuable medicinal properties. In a dried state they are well known & are eminently useful in cases of costiveness accompanied by irritation the bowels would be aggravated by hourly laxatives; but they ought not to be eaten after

[illegible] fustian, or for an opiate in lieu mixed with the [illegible]
[illegible] flatulence. With this exception they are almost every one [illegible] poisonous [illegible]
[illegible] & apparent effects; but when prunes do not operate sufficiently their power may be
[illegible] by combining them with a small portion of rhubarb or cream of tartar.

If plums be eaten in a fresh state, or before they are perfectly ripe, & in immod-
[illegible] quantities, they induce colics, loosenes & similar affections in the stomach & in
[illegible]. The larger kinds especially ought to be used seldom, & with great precaution
[illegible] more dangerous than the smaller plums; because the former are rarely permit-
[illegible] to attain to maturity. Ibid

Class 5. Order 4.

[illegible]egina. S. Procumbens. Ang. Pea wort. Trailing Pea wort. or Breakstone.
[illegible]covered in America by Professor Eaton, in the water. It flowers in the Month of
[illegible]ay to August. This elegant herb is one of the smallest productions of the vegeta-
[illegible] Kingdom; its thread-like stem divides itself into many branches; the leaves are
[illegible]de & minute; the blossoms premit white. & the whole plant scarcely exceeds two
[illegible]ches in height. Ibid.

Class 20 Order 16

[illegible]nus. Ang. Pine tree
A genus of trees consisting of 30 species. (Nine of which grow in Deerfield)
All the species of pines are hardy trees. From this genus of trees is extracted the common
[illegible]pentine. which on distillation affords the oil known under that name; the process is perfor-
[illegible] in the following manner; Early in the spring, the bark is hard off the pine tree, in orde
[illegible]t the sap may flow the more freely into the vessel placed for its reception. This is the
[illegible]mon turpentine which is fit for immediate use; after the sap has ceased to flow, the
[illegible] is cut into billets. which is thrown into pits where they are set on fire; allowing the
[illegible]tion, a black thick matter sinks to the bottom which is conducted into a proper
[illegible]el which is known by the name of Tar which is poured into barrels for sale; but
[illegible]signed to be made into pitch. it is boiled in large cauldrons, without the addition
[illegible]ater or any other fluid; & on becoming cool it concrets into a hard black mass.
Rigida. Pitch-Pine. P. Taeda. Pitch pine. A common species in the United States
[illegible] to the height of sixty feet. much used for sawing into boards. It is the largest & heavi-

of all the pines. It is chiefly used for fuel, & for making charcoal; its knots being full of the pentine afford a light in shaping candles. Its root is collected & used for camp. black. It also yields tar, & is sawed into boards, & makes strong planks for vessels.

P. Strobus. New England White Pine. One of the largest American trees. Dr Belknap styles it "the prince of the American forest, in size, age, & majesty of appearance." It abounds in the New England states. Great use is made of the timber for masts, yards, & bowsprits of ships. It is also sawed into boards which are much used for inside work of houses. The grain is smooth, & when free from knots, does not injure the workman's tools; but the softness of its texture subjects it to shrink in the weather. Shingles are also made of this tree, & are thought to be as good as the white pine. The sapling pine this of the same species is not so fine & smooth as those of cedar. The sapling pine this of the same species is not so fine & smooth as the white pine, & is more sensibly affected by the weather.—

P. Resinosa. Yellow Pine. is harder & heavier than the white, but never grows to the same size. Its planks & boards are in great demand for decks of ships & floors of houses. It is called White Norway pine. red pine.—

C. Nigra. P. Alba. P. Fraseri. Spruce. Black Spruce. &c. These are three varieties distinguished by the color of their cones which are white red & black. The grain of the wood is twisted, & makes bad wood on account of its continual warping. The young twigs of the black spruce are boiled till the bark may be stripped from the wood, & being sweetened with molasses makes a pleasant summer drink. Of this spruce is made the essence, which is as well known in Europe as America (see

Class 10 Order 3

Diantus. D. Barbatus. Sweet William. D. Plumarius.

All the species of pinks are beautiful plants & are generally cultivated in gardens on account of their fragrance. They are propagated by seed as well as by slips & layers, the latter of which should be planted three inches apart towards the end of July in shady borders, & towards the end of July in shady borders. That have previously been well dug & ~~water~~ moistened. Should the weather prove dry it will be necessary to water the slips &c. daily till they have taken root; after which one or two cases will be required than to shade them from winds & to transplant them in autumn to those borders they are designed to decorate. Wild

Class 20. Order 3

2. Platanus. P. Occidentalis. Lin. The Sycamore tree. Button ball tree.
is indigenous in Virginia & other states of North America where it grows to an
common size instances having occurred of trees measuring eight or nine yards in
circumference & which when felled, produced twenty loads of wood. Both the Occiden-
tal & the Orientalis are highly esteemed for their beautiful & majestic appearance
They their leaves decay early in autumn. They are indiscriminately cultivated in their
native countries, especially along public walks & other places of resort. on account
their cooling & agreeable shade... The plane tree is very hardy, & will flourish
any common soil or exposure: it may easily be propagated by mere cuttings
twigs which should be committed to the ground in autumn.

This deciduous tree particularly the American species
ows rapidly & is one of the greatest ornaments of modern plantations: its wood
excellent for various articles of domestic furniture, especially for tables; because
it acquires a beautiful veins. & when rubbed with oil manifests in
beauty that obtained from the finest walnut tree... The dry leaves & branches
this tree, according to Dambourney's experiments afforded a decoction of a very
ine bright red-brown tint; which, on adding different ingredients either assu
ed various shades, or remained unaltered; so that they may be to advantage e
ployed in dyeing. Ibid.

Class 4. Order 1

Plantago. P. Lanceolata. Ang. Ribwort Plantain, or Ribgrass.
is a herbaceous plant very common ~~plant~~ in pastures, & flowers in the month of June
Linnaeus remarks that this plant is eaten by horses, sheep, & goats, but wholly refused by
; though the richness of the milk in the noted Attica dairies, is by Hatter attributed to
nutriment derived from this plant & the Common Ladies Mantle... The former is ofte
cultivated for pasturage, but does not answer the purpose unless combined with clover or o
grasses. The total absence of rib-grass in marshy lands, is a certain criterion of the
different quality, & in proportion as such soils are improved by draining, this plant
it flourishes a bound. Dr. Withering observes, that when it grows detached from other
grasses, for instance by the sides of foot-paths, he has never known cattle to touch the
ribwort plantain; but that they certainly eat it when mixed with other herbage
ed.

Class Cryptogamia Order 1

Polypodium. Pol. Vulgare. Eng Polypody.

Polypody. a genus of plants consisting 1 or 2 species. The vulgare or common polypody is perennial; grows on old walls, shady places, & at the roots of trees; it flowers from June till October. The root of this plant has a sweetish taste; but by long boiling it becomes bitter. When fresh it operates as a mild cathartic, so that an infusion of six drams of this root, in half a pint of boiling water, may be taken in divided doses. Lond.—

Class 21 Order 8.

Populus. P. Dilatata. Eng. Lombardy Poplar.

It is a native of the northern parts of Italy; it also flourishes in moist situations; but will not succeed if its roots are too long covered with with water. On account of its rapid growth, this species is greatly esteemed for ornamental plantations; its cuttings are useful for hop-poles; the wood being soft, free from knots, & easily worked, it is much employed by joiners, carpenters, & cartwrights; it may be wrought into very flexible shafts for carriages or fellies for wheels. Farther it forms excellent masts of small vessels, & is particularly serviceable for packing boxes; because the plank yielding to the nail is not liable to be split; & in case the box &c. be accidentally dropped on the ground, the boards are not easily broken or splintered, as those of oak, & other trees. Lastly it appears from numerous experiments made by Dambonney, that the Italian Poplar affords a dye of as delicate a texture & equally durable as the finest yellow wood: its tinging matter is more readily extracted; but instead of striking a proper green with indigo, it changes to an olive shade. The dry branches are preferable to those in a green state; nor should they be cut or lopped; being possessed of the property of fixing the colours obtained from Brazil & logwood.

Populus Balsamifera Balsam Poplar

This is a native of Carolina, & attains a great height. It is best adapted to bogy soils; & as it grows with greater rapidity than any other species, it soon repays the expence of planting. Its wood is very soft, spongy, light, & principally employed for packing boxes, though it also furnishes good posts for fences. Dambonney obtained from the Carolina as well as the other poplars a fine fawn, nut, & similar grave colour for wool according to the quantity of wood employed & the length of time it was boiled. The balsamic juice exuded from the flower buds is probably the American Sa[illegible] an excellent application to recent wounds, provided no nerves & tendons have been injured.

are four species of poplar growing in this town viz. P. [illegible] P. [illegible]
namely P. grandidentata & P. Dilatata.
The different species of these trees produce on the upper part of their seed vessels, a woolly or
cottony substance which is of considerable value; by combining it with cotton Prof. Mitchell
Munich has lately converted this composition into wadding, counterpanes, gloves & stockings.
From a mixture of two ounces of the down before mentioned, & four ounces of rabbit wool
obtained excellent hats; & according to his calculation, each poplar tree yeilds not
than 40lbs of such material. Ibid.

Class 5 Order 1

Solanum. S. Tuberosa Arg. Potatoe.
Valuable root originally a native of America whence it was introduced into Ire-
d. & subsequently into Britain about the commencement of the 17th century —
ere are numerous varieties of the potatoe, which are cultivated both for culinary pur-
es, & for the feeding of cattle. — The potatoe is one of the most valuable roots for culi-
y uses. When boiled it forms a principal article of food, & serves partly as a substi-
te for bread. Mixed with wheaten flour, fermented with yeast, & properly baked, it makes
wholesome & nutritious loaf. — Potatoes are likewise valuable in fattening hogs, but if
ey be designed for bacon or hams, it will be advisable to mix gradually four bushels
ground grain with an equal quantity of the boiled roots; which portion will, it is ap-
end, fatten an animal of twelve stone. In a boiled state they may be given to poultry
the same effect & they will fatten in nearly one half the time that they do with
ed of corn or even meal by itself — Mr. Bordley has incontestibly proved, in his ex-
llent notes on husbandry, the superiority of potatoes as food for beasts, over Indian corn
e in respect to cheapness, & the quality of nourishment afforded by both articles — In the
ting of hogs, if the potatoes shew the least tendency to purge them, a little alum or Ar-
nian bole may be given with them. — Sheep are very fond of potatoes. Boiling certain
creases their nutritious qualities.

Formerly, a kind of brandy was distilled from these roots; but the Legislature has pro-
hibited such practices. Besides a fine size may be obtained from potatoes, which
answer all the purposes of that in common use, particularly for whitening ceilings & walls. With
this intention, any quantity of raw made potato starch should be boiled into a paste, a sufficient ter
of which ought to be mixed with the whitening after the latter has been diluted with water. The
thus prepared is much cheaper, retains its whiteness longer, & is less liable to crack or scale,
much as is mixed with the animal glue. There is another economical way of employing the
starch prepared from potatoes in the process of making starch or size. This liquor is so fre-

for washing linen, whether plain or coloured, silk handkerchiefs, stockings &c. without the aid of ley or soap: it is said to improve rather than diminish the lustre, while it restores their original brightness & imparts a degree of stiffness to silk stuffs, which cannot be obtained in the common way of cleaning them. It deserves however, to be remarked that no discoloured or otherwise damaged roots must be used for this purpose --- Bakers in Germany, further, convert the pulp of potatoes into yeast, by adding a small proportion about an 8th or 10th part, of the latter, & then with two drams of calcined & powdered crab's claws or oyster shells, & a similar quantity of burnt barley --- to every pailful of the preparation. This compound is asserted to increase the bulk of the paste, & consequently of the bread; but double the measure of it is required to serve as a substitute for barm.

Further, the stalks of these roots, when cut in small pieces, afford a grateful food to cattle: the haulm has also been converted into paper; but it is more generally, & we conceive, more profitably employed for stable litter; or, when straw is scarce, instead of thatch for cottages... Lastly, even the potato apples may be usefully employed in domestic economy. In the new Swedish Journal of Agriculture for 1796, it is directed, that such apples should be collected while in a green & hard state; then well rinsed in cold water, & put for 48 hours into a strong filtrated brine. Next they are to be placed for six or eight hours in a colander or drain. When they ought to be boiled in good vinegar, with the addition of some spice, till they acquire a certain degree of transparency, without becoming too soft. Thus prepared, they will afford a wholesome pickle & less wasteful pickle than either olives or cucumbers. Ibid.

Class 16. Order 3.

Raphanus R. Sativus. Garden Radish. It is an exotic species originally from China, & which is cultivated for the table. There are several varieties of it, known under the names of the small tapered, deep red-pale red or white, & the long tapered, striped radishes; all of which are annual plants; but the small tapered is generally preferred in the vicinity of London, on account of the little room which it occupies in the ground — Radishes are esteemed aperient, & stimulating & antiscorbutic when eaten in moderate quantities; they are in a certain measure salubrious to persons of strong habits, but are in general apt to produce a considerable degree of flatulence in those whose stomachs are relaxed. The small tapered salad radishes are greatly superior to the large sort: as they are more easy of digestion, & tend to improve the appetite. No radishes, however, should be eaten by persons after having been kept for some time; as they are then utterly indigestible & render the breath extremely offensive. Ibid.

Class 13. Order 13

bus. R. Occidentalis. Eng. Black or Virginian Raspberry bush

fruit is white, black sometimes, & is uncommonly delicious, but smaller than species. It is indigenous to Great Britain. It thrives in the open air of our climate

rubus. Odoratus. Sweet scented raspberry. Flowering raspberry. with a plain stalk, ma many rose-coloured flowers, & numerous palmated leaves. It attains the height of eight feet, & forms a spreading shrub, with close foliage. Its bright red berries are of a peculiar flat shape, & have an agreeable sub-acid, vinous taste (Ibid)

Class 10 Order. 2.

saxifraga. S. Virginiensis. Eng. White Saxifrage. Rock Saxifrage

common white Saxifrage was formerly in great request for its supposed efficacy curing nephritic & gravelly complaints; at present it is totally disregarded. we should neither have given a coloured engraving, nor described the specific characters of this plant if it were not uniformly discovered in soils beneath which a bed Gravel will be found at no considerable depth. Hence it affords a certain guide which surveyors & landed proprietors may be directed in digging for that useful sit, especially in places where other stones cannot be easily procured for repairing public roads. Ibid.

Saxifraga. Pennsylvanica. Eng Water Saxifrage. Meadow Saxifrage.

It has a perennial, long, thick wrinkled root, white within, & lying at the top, with stems at rise from one to two feet in height, which are thick round, furrowed, smooth, hollow, & branched. The leaves are smooth, of a deep green, & divided into long, narrow pointed, stiff segments, with an acrid taste. The flowers grow on the tops of the branches in umbels, which have five leaves or petals in the form of a rose, & a whitish colour. These are ~~succeeded~~ succeeded by fruit composed of two short furrowed, convex on one side & flat on the other: they have a strong pleasant, & a vinous aromatic taste. It grows almost every where in moist places, & has been looked upon as excellent good for the gravel, the root being a powerful diuretic. but it is not now made use of for that purpose. Brooks. (It is used as a pot herb in the spring of the year.)

Class 12. Order 5

bus. S. Americana Eng. Service tree. Mountain ash.

Service tree is cultivated in Britain principally as an ornament for diversifying extensive plantations; as it grows to the height of 40 feet. It is propagated by sowing the seed, which after the fruit is ripe in pots, which must be sheltered during the winter, &

the spring advances it will be proper to plunge them in hot-beds, & to water them frequently, during dry weather. Towards the middle of October the young plants may be removed to a warm spot of light soil, & placed one foot apart from each other, in rows two feet asunder. Here they should remain for three or four years: at the expiration of which, they ought to be transplanted to the place appropriated to their growth. Ibid. Dom. Cyc.

Class 6. Order 1.

Galanthus. G. Nivalis. Eng. Snow-drop, or Fair Maid of February.

The snow drop presents a beautiful little flower, & is chiefly esteemed on account of its early appearance; adorning the garden when the ground is covered with snow: it is divided into three varieties, known under the names of single, semi-double, & double, which differ only in the seasons of their flowering. They may be easily propagated in any soil, & will multiply exceedingly by offsets from the roots.

The roots of the snowdrop may be made subservient to an useful domestic purpose: Dr. Darwin thinks that if they were dug up in the winter & prepared in a similar manner they might afford a nutritious powder, resembling that of Salep. He observed that he once boiled a few; which on tasting them, possessed no unpleasant flavour. He is therefore of opinion, that if prolific seed could be procured from this plant, it might be advantageously cultivated for the same purpose as the orchis; a conjecture which is corroborated by the experiments of Gleditsch, who obtained from the roots of the snow drop an excellent starch. Ibid.

Class 18. Order 1.

Sonchus. S. Oleraceus. Eng. Sow-thistle.

It grows on cultivated ground, dung-hills, & in hedges; its yellow flowers appear from June till August. The leaves of this troublesome weed are the favorite food of hares & rabbits; they are likewise dressed & eaten among other culinary herbs. The roots have occasionally been converted into bread. Sheep, goats & swine devour this vegetable, but it is not relished by horses. (Ibid.)

Class 21. Order 5.

Spinacia. S. Oleracea. Eng. Spinach, or Spinage.

It is cultivated for culinary purposes. If intended for winter use it is propagated by the seed, sown in a bed of light earth towards the end of July, & during moist weather. When the young plants appear they must be carefully weeded, & thinned to the distance of six inches in October they will be fit for use: when the longest leaves only should be gathered

those in the centre being suffered to grow to a large size, so that a bed thus managed will supply of this vegetable during the winter, till the spring, when it is fit for the table, which generally happens in April.

This vegetable is growth turned at the table but is hot & in taste with smelled but it prefers speedily thro the bowels without being duly digested; & consequently affords no nourishment. It is particularly improper for persons of weak & relaxed habit; as debilitates the alimentary canal; excites looseness & not unfrequently occasions the heartburn or acidity in the stomach (Ibid)

Class 3. Order 1

Thoroanthum. A. Odoratum. Avg. Sweet Vernal grass. Spring Grass

an indigenous perennial, growing in meadows & pastures; flowering in the month of May. This is one of the earliest British pasture grasses & occasions the delicate flavour observable in newly made hay. It is eagerly eaten by cows, horses, goats & sheep on account its aromatic taste, & giving aromatic nature. Mr. Swayne however observes that it abounds most land particularly on peat bogs & that it appears to be of little consequence as it is neither very productive to the farmer nor palatable to cattle. Nevertheless the agricultural list are of a different opinion & Mr. Sole Little & Rolen in their Husbandry Board Vol. IX. observe, that the vernal grass seed be sown alone, by sowing it in the proportion of one eighth. This judicious advice every practical farmer will be induced to adopt, as it is well known fact that this grass, if left to itself, spreads, & increases in its stalks when cultivated in rich situations but it will effectually choke the growth of other grasses. He further remarks, that the root of this grass is very of that of marsh. The dried flowers on the footstalk emit an agreeable flavour & strong (Ibid)

Class 1 Order 2.

Hydrilla. C. Verna. Vernal Stagnant Water Grass. Water Fennel, or Water chickweed. grows in ditches, ponds, & slow streams; it flowers from April to August.

Hydrilla. C. Autumnalis. Autumnal Stagnant Water Grass. & Water

[illegible] Vegetable [illegible] to be called a low trailing [illegible] without being hairy. They may be taken [illegible] that [illegible] & [illegible] so as to be [illegible] than for [illegible] (Ibid)

Class 18 Order 1

Cichorium L. Endivia Thy. Endive. The Garden.

A biennial plant which is generally sown in our gardens as an ingredient in cold salads. It is propagated by sowing the seeds, which should be sown from the beginning of June to the end of July, in order to obtain a supply for the fall. The young plants must be removed into beds or borders, that have previously been well prepared by the spade; & as the chief excellence of endive consists in the extent of its small leaves, it will be advisable, either to cover them with flower pots, or tie them loosely together, when nearly full grown, so as to exclude them from the sun for two or three weeks, in consequence of which they will become perfectly blanched. In the winter, they are either covered with straw, & mats; or preserved in fresh sand in a dry cellar. (Ibid)

Class 18. Order 3

Helianthus Annuus. Thy. Sun flower.

It will perfect in any common soil, either by sowing the seeds, or by raising the plants in the month of March. Within a few weeks, the plants will appear; & when about six inches high, they should be removed into the borders of gardens, or other places selected for them, so that the distance of 15 or 18 inches in quincunx order. They may be occasionally watered: & it would be probably conducive they will vegetate with luxuriance, to attain the height of seven or eight feet; in July they ripen flowers, & continue to blow till October, when they produce ripe seed, which on expression yields a large proportion of palatable oil. The young flower cups of this plant may be dressed & eaten like artichokes; the stalks are of considerable size often exceeding an inch in diameter; hence they may with advantage be raised in situations where fuel is scarce, indeed we are not acquainted with any vegetable that is likely to afford greater advantages to an industrious cultivator who possesses a few acres of ground which is not sufficiently fertile for corn or hasten grass. It deserves notice to be remarked that it greatly tends to exhaust the ground; as it requires constant moisture, it would not be productive without a liberal irrigation.

Some papers on the subject of sunflower oil in the 9th vol. of the Trans. Phil. Society. It appears that one bushel of the seed yields three pints of oil & that the quantity of seed is produced from one hundred plants set about three feet apart, in the same manner as the Indian corn is planted. The oil is thin, clear & of an agreeable taste. It is recommended to set the seed in a hot, & when the

[illegible] Divisions. [illegible] for [illegible]
[illegible] different species of the [illegible] flowers, have [illegible] for ornament.
[illegible] not to obviate the [illegible] they may be [illegible] to many economical purposes
[illegible] especially as a bottle for [illegible] in manufacturing paper [illegible] from the [illegible]
[illegible] earth [illegible] to be [illegible]. That the [illegible] of the plant [illegible] the
[illegible] in comparison to the [illegible] course, which they [illegible] be considerably [illegible]

Class 9. Order 5.

[illegible]delphia. A. Syriaca. Hong. Common Milkweed. Syrian Swallow wort. [illegible] la t-
[illegible] of North America, & especially of Virginia. It strongly [illegible] than the Sunflower
[illegible] feet, the pale [illegible] flowers of which in June & July, contain agreeable odour; &
succeeded by large, thick & rough capsules, the seeds of which are furnished with a long [illegible]
[illegible]. In this respect, it forms one of the most valuable productions. As the expense to late
[illegible] in Russia, fully evinces that it may be equal a [illegible] tax to raise in the over-
[illegible] of Britain, we strongly recommend its culture, which is [illegible] by one [illegible]
[illegible] in the most indifferent soils. It may be propagated either by the seeds or root; vegetate
[illegible] vigorously in a loose sandy & rather damp ground. The seed should be sown in the
[illegible], & the young plants be transplanted into a well [illegible] & [illegible] where they
[illegible] be [illegible] in the succeeding summer, & round after [illegible] the
[illegible] feet. When the principal stem displays the flower, all the collateral branches should
be carefully removed. The plant attains to maturity in August & September, when
the external rind becomes soft, yellow & wrinkled. The seed should then be cut off, as
[illegible] the, & allowed to burst spontaneously. The dry stalks are [illegible] to be [illegible] at
[illegible] close to the root. The decayed plants must be [illegible] by the root
[illegible]; then the ground [illegible] for the [illegible] in the succeeding spring. The
[illegible] should be covered. 24th. Secretia, [illegible] provided [illegible] this country
[illegible] the climate which the plants [illegible] to flower. [illegible] this [illegible] appears to
[illegible] in considerable space, that the [illegible]. The [illegible] in [illegible]
[illegible]. The silk obtained from the seed vessels of the Syrian Swallow wort is not only a
[illegible] for the finest pillows, [illegible] fine gauze, [illegible] & mixed with the cotton [illegible]

300 [illegible] poisonous; but it also affords a valuable one [illegible] paper of a superior quality. It is stated may be advantageously [illegible] as substitutes for hemp. In Canada a fine paper is extracted by evaporation the juice of the flower. In Germany the [illegible] stems as a paper [illegible] the [illegible] juice of this plant is poisonous.

The plant abounds in the neighborhood of Philadelphia & does not [illegible] for the many uses to which it may be applied. Dr. Gardner's Chemist, Vol. 5 says that in Germany the plant is cultivated extensively & that stuffs have been made from it which rival in lustre the true animal silk. The stems are said to yield a good flax & also to answer for candle wicks. (Ford)

Class 18. Order 1.

Cnicus. C. lanceolatus. Eng. Plant Thistle.

It grows on rubbish & road side. Where it flowers in the months of July & August... According to Dr. Withering, this species vegetates on ground newly turned up & covered with thistles: under the shelter it affords, new plants will speedily appear, & the whole become fertile. Its flowers like those of the artichoke possess the property of curdling milk. It is not relished by horses, cows, or goats; & is totally refused by sheep & swine.

All the species of this neglected vegetable may be usefully employed for various purposes: thus the seed-down of the thistle affords both a valuable material for manufacturing Paper, & a kind of strong cloth; the other obtained by running the whole plant are of great service in glass houses; & the young, tender, small stalks may be peeled & eaten as substitutes for asparagus. Ford.

Class 18. Order 1.

Onopordon. O. Acanthium. The Cotton Thistle.

A biennial, growing to the height of 6 feet on rubbish & road-side, where it flowers in July. This vegetable is refused by cows & sheep & horses: - its expressed juice has, among the ancients been applied to a purpose in cancerous cases... The receptacles, or pulp with the stems may be boiled & eaten like artichokes. The corolla is used in curdling milk. The seed is equally useful in the manufacture of cloth & paper. The seed of this remarkable plant also possesses great advantages to the inventors of Vaucanson: we learn from Duhamel a French writer that he collected a quantity of the seed down weighing 22 ℔ from which he obtained 12 ℔ weight of seed, & on

[illegible] 3 lbs of excellent camphorated oil [illegible] equal to other oil. Ibid.

Class 14 Order 1

Thymus Sl. Vulgaris. Ang. Garden Thyme

It is original to a [illegible] of the southern parts of Europe but is now generally cultivated in our gardens. It may be propagated either by the seed, by offsets from the roots, or by slips planted in light, rich & well prepared soil; its aromatic leaves are employed in Broths & for culinary purposes. In its medicinal properties, this is one of the most powerful aromatic plants; its essential oil is often sold in the shops as a substitute for that of Lavender. (Ibid.)

Class 17. Order 10

Vicia. Ang Vetch. Tare. A genus of plants comprehending 20 species, [illegible] which are in this town V. Sativa. V. Cracca. V. Sylvatica (V. Cracca.)

V. Cracca. Ang. Tufted vetch.

It is frequent in shady places, meadows & fields; flowers in the Months of July & August. Both this & the Sylvatica are said to restore weak or starved cattle to their former plump condition more speedily than any other vegetable food to this country.

V. Sativa. Common Vetch, or Tare. This is sown in the meadows, pastures & commons & never flowers from April to June. This genus is one of the most valuable of the vetch kind & is divided into three varieties, namely 1. The Common vetch or tare, which is sown over the land. Each or each in proportion of 8 or 10 pecks to an acre; the other [illegible] that quantity is sufficient to the acre [illegible] pecks. The variety is chiefly propagated for cattle, sometimes [illegible] horses & cows. It is [illegible] for pigeons. Bees [illegible] from the common tares. This plant [illegible] a delicious saccharine juice. 2. The winter vetch, is sown in the month of September in the same proportion as the preceding sort; a small quantity of oats or rich spring blades of blackoats being intermixed to support the plants; which are generally cut when ripe to preserve them from the frost. This variety is subservient to the same purposes as the common vetch, when grown in small land in the neighbourhood of towns, it serves as excellent manure for wheat intended to be sown in the ensuing autumn. 3. The Bitter vetch is sown in the spring, but is seldom cultivated, because it supplies [illegible] varieties & class, [illegible] according to the [illegible] See [illegible]

Class 3 Order 2.

Triticum T. Hybernum. Hang. Winter Wheat. It is principally raised in Great Britain & the United States. Its grains are somewhat smaller than those of the Spring or Summer Wheat. & its chief varieties are 1. The T. hybernum, spica & grana rubra or common wheat with a red ear & grain. 2. T. hybernum rubrum, spica ~~& grana~~ alba, or common wheat with a white ear. ~~& grain~~ 3. T. hybernum rubrum, spica & grana alba, or Winter wheat, with a white ear & grain. 1. These varieties are distinct of beards, & should be sown earlier than in September, nor later than in November. They produce the most valuable wheat, which yields the largest proportion of flour.

Triticum T. Compositum. Egyptian wheat is remarkable for its uncommon fruitfulness: its straw is strong & tough, whence it has received the name of reed wheat. The grain however, do not yield so large a proportion of flour or meal as any of the preceding species or varieties; & the flour is scarcely superior to that obtained from the finest barley. Ibid.

Class 20 Order 2.

Salix. Hang. Willow a genus of trees comprising 42 species.

1. S. Vitellina. Golden or yellow willow abounds in our bottoms & flowers in May. Its shoots are used by cradle or basket makers; its white, tough, pliant twigs are employed by ~~basket~~ nurserymen & gardeners for tying up the branches of wall & espalier trees. The wood surrounding to the vessels, when mixed with cotton affords excellent yarn for manufacturing purposes.

S. Dicolor. variety purpurea. v. Helix. v. monandra. Rose, purple, or red willow grows in hedges, watery places, & the sides of rivers, where it blossoms in the months of April & May. Its long slender & flexible shoots are manufactured into baskets, cradles, & other articles of wicker work. This species eminently deserves to be cultivated in the sandy banks of rapid streams; as it is one of the most useful trees for consolidating loose soils, & even drift sands.

Salix. Alba. Hang. White or common willow. It abounds in wood hedge rows in wet meadows, & pasture grounds, where it attains a considerable size; flowering in the month of April. Its blossoms are carefully visited by bees; its leaves & young shoots are eaten by horses, cows, sheep & goats; the wood is employed in making pots, hoops for casks, sticks & fuel. The bark communicates a cinnamon colour to yarn, & it is not only advantageously employed in tanning ice, thus, but has also like that of the crack & smooth willows been successfully administered in ague. The Rev. Mr Stone directed the bark to be gathered in the spring when it abounds with sap, & to be taken

lowes of one dra[illegible] every four hours, or [illegible] in a [illegible] case
[illegible] found it necessary to [illegible] one fifth part of Peruvian bark with sharp [illegible]
[illegible]. As this tree frequently grows in wet marshy situations, where agues are most
[illegible]alent, its bark promises to afford a valuable substitute for the foreign drug, espe-
[illegible]ly as the price of the article has lately been exorbitant, that the
[illegible] cannot easily procure it, while its quality becomes every year more impaired by
[illegible] & fraudulent adulterations.

[illegible]. Babylonica or Weeping Willow is a native of the East, hence its culture has
[illegible] & spread into Portugal & from thence into the U. States. It flourishes by the sides
[illegible]vers, attaining to a considerable size; & its long, depending branches contribute greatly to dis-
[illegible] the scenery: it is raised chiefly for ornament.

All the species above enumerated delight in moist situations. They may be easily propa-
[illegible]ted by planting sets, cuttings or truncheons of willows about 6 years, either in spring
[illegible] autumn: as they speedily take root, & in the course of a few years, amply repay the only
[illegible] bestowed on their culture. The yellow willow ought never to be planted too nea
[illegible]ts or springs, because its spreading roots retard their course; on the contrary this spe-
[illegible] may with advantage be propagated in swampy situations, as its roots tend to consol
[illegible]ate the ground; & after a few years, the soil will generally be converted into a firm me
[illegible] (Ibid.)

Class 12 Order 5.

[illegible]us. P. Malus. Aang. Apple. tree

[illegible] apple tree is too well known in this country to require a minute description. It ge
[illegible] the height of twenty or thirty feet, & produces a considerable variety of fruit. Botanists
[illegible] of opinion that the wildling, or crab-apple of the wood & hedges, is the original kind
[illegible] the seeds of which the apple now cultivated was first obtained. – The varieties of
[illegible] species are multiplied to some hundreds, in different places, all having been first
[illegible]dentally procured from the seed or kernel of the fruit, & then increased by grafting
[illegible] on crabs, or any kind of apple stocks. Notwithstanding the numerous sorts, not abov
[illegible]ty or fifty, are cleared in the nursery. This fruit arrives at full growth in succes-
[illegible] order from July to the end of October, but comes to maturity only after gathering
[illegible] sweet of the winter kinds may be preserved for many months – Apples are
excellent fruit for the dessert, the kitchen, & for making cyder. The following sort
most esteemed for eating, are ranged according to the successive order in which the

 ripen; the white juniating, margaret apple, summer pearmain, summer queening, embroidered apple, golden russet, summer white calville, silver pippin, aromatic pippin, La russettegrise, la haute bonte, royal russeting, Wheeling's russet, Shaw's russet, the spice apple, golden pippin, non-pareil, & pomme di api. Those for culinary use, are the codling, summer marygold, summer red pearmain, pomme violette, Spencer's pippin, the stone pippin, & baken pippin. Those most esteemed for making cyder are, the Devonshire royal wilding, red-streak apple, Whitesour, Herefordshire hundred leaf, John apple, or deux ames, everlasting hanger, & gennet moyle.

Among all the fruit growing in this country, says a celebrated botanical writer, apples justly deserve the preference. In raising these useful trees for orchards or fields whether for cyder or baking, the wild crab kernels are the most suitable as they yield hardy stocks, which are better able to endure cold & coarse lands, take firmer root & produce larger trees. Where these seeds cannot be conveniently procured, the kernels of common apples may be substituted, especially with a view of engrafting them. Altho' the former do not bring forth trees bearing the same kind of apples, yet they thrive without grafting, & their hard fruit may, notwithstanding its astringent & acid properties, be advantageously converted into cyder.

Linnaeus considers the apple & the quince as species of the pear tree, or Pyrus. All the varieties of which are hardy, & will succeed in any common garden soil if planted in a free situation. They are propagated by grafting, & budding upon any kind of pear-stocks, occasionally upon quince, & sometimes upon white thorn stock also. (For further particulars concerning this valuable fruit & the method of cultivating it see that most excellent work, Forsyth on Fruit trees)

Class 20. Order 3.

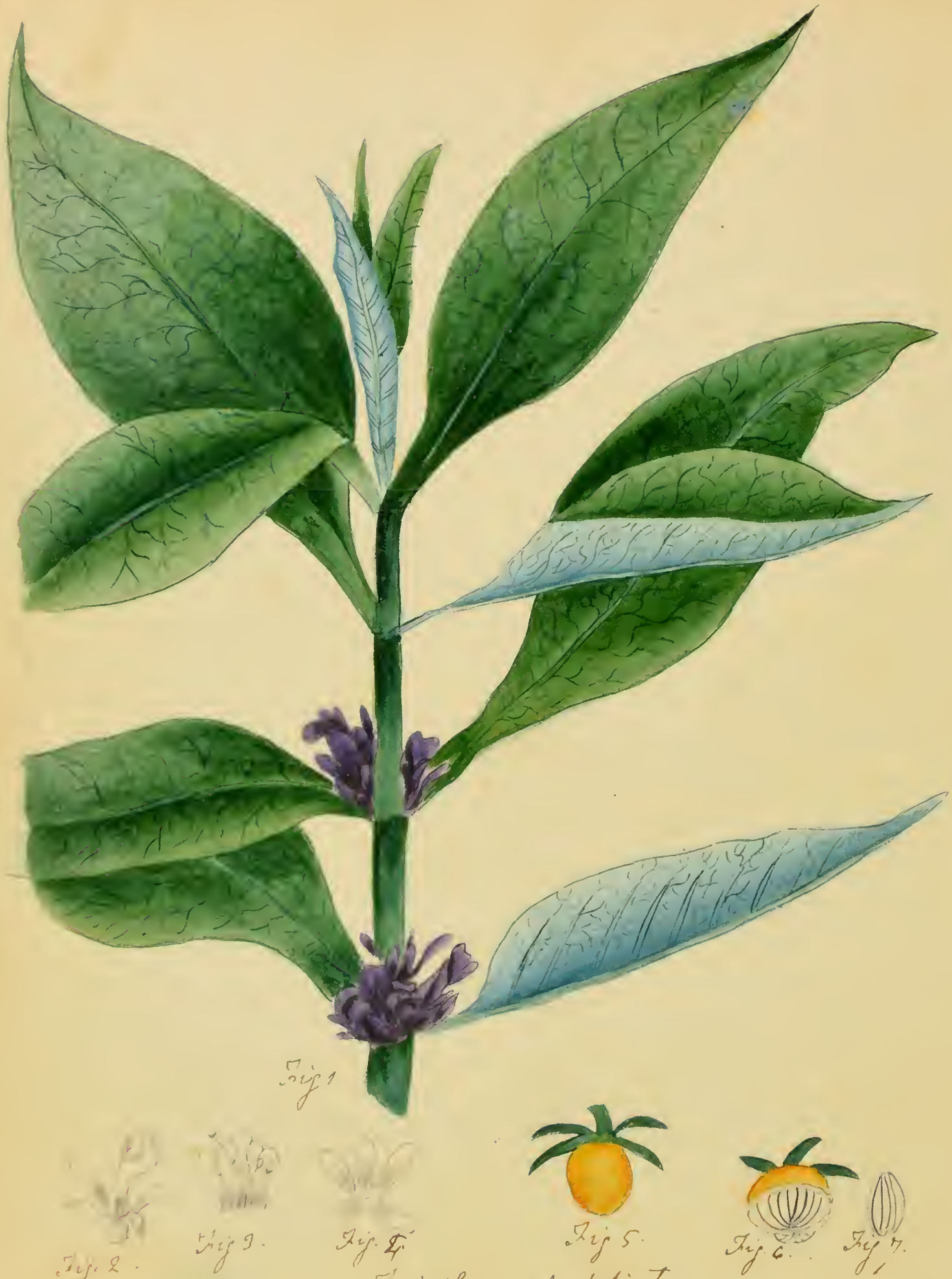
Zea. Z. Mays. Lin. Indian Corn.

The uses to which this invaluable plant are applied in the United States are well known. The articles of diet into which it enters as a component part, are various & important. Alone, it is served up in several ~~parts, are various & important~~ forms all of which are excellent. As a strong nourishing food for horses & swine, it is probably superior to any kind of grain. Many other articles will fatten animals, but it is corn alone upon which we depend for obtaining that which is in the fa

-ch which are so valuable in slaughter animals. Experience proves that corn
in a mill, will go one third farther in feeding beasts, than when given whole. The stalks &
s of corn, if carefully stacked & cut have been found by a gentleman (P. K. Eggr) a
ler food to oats, for his coach horses. By a powerful cutting box, the stalks & blades were
mall, & given sometimes alone & sometimes with oats, & were observed to increase the spirits
th of the animals in a very sensible manner. The reason is evident; the stalks, especial
the two lower joints, abound with sugar, & was extracted during our revolutionary war; & sug
of the most nutritious articles in nature. Considering the importance of the use of the
s, it is truly melancholy to see acres covered with them in winter, in some parts, instead
being been housed for cattle. In the Venetian territory, according to the late Dr. Scan-
ci, the blades of corn are pulled, dried, & given to cattle without injury to the crop of corn
r. Bordley says he stripped 150 hills of corn, & cut off the tops when the corn was not
without any difference being observed between the stalks so treated, & the rest of the field
l. also states, that corn is sown broad-cast, upon highly manured places near the
le, & when it reaches its highest growth, & the tassels begin to wither, the stalks are
down morning & evening, & given to cattle in the stable. These facts may be useful
ose who want fodder, & have corn; but barley straw or hay, ought to be cut with
e corn, or blades & tops to prevent the beasts from becoming hoven. It has already
said that the cobs of corn are chopped fine by mills for cattle in Lancaster.

The blades of corn make a good coarse paper, & may be a valuable substitute
rags in a scarcity of that article. Ibid ff

306



Triosteum Perfoliatum
Tewel root. Horse Ginseng

ostium. 5. Perfoliatum Eng. Fever root. Horse ginseng.

is a perennial plant. & though met with in most part of the United States, it rarely lives in large quantities. About Boston it is found in several places at the borders of woods in rich situations. Its common names are fever root, & wild Ipecac. Pursh observes that it is rare, & only occurs in limestone soils. With us it flowers in June & ripens its fruit in September.

The genus Triosteum is found in the class Pentandria, & order Monogynia. Its natural affinities place it among the Aggregate of Linnaeus & the Caprifolia of Jussieu. - This plant was the subject of an interesting communication to the Linnean society of New England, by Dr. John Mandell. The experiments made by him on its medical uses & pharmaceutical preparations are numerous & serve to throw much light on its properties. In trying the solvent powers of water & alcohol, he found that water afforded a much greater quantity of extract than alcohol. That the spirituous extract was perfectly soluble in water, whence he infers that no resin in a free state exists in the plant. He discovered no volatile oil by distillation, nor any other vehicle of activity in waters distilled from the plant. He concludes also, that no free acid exists in this vegetable. Of the different parts submitted to examination, the leaves yielded the greatest quantity of soluble matter, but the root afforded that of the greatest activity. By decoction & evaporation with water an ounce of the dried stalks afforded one drachm of extract; an ounce of the dry roots, two drachms & two scruples, & the same quantity of ~~root~~ leaves yielded an ounce. From a similar treatment of equal portions with alcohol, rather more than half of the above quantities of extract were obtained.

The sensible qualities of the root were found essentially different from those of the herb. Both of them possess a large share of bitterness, but the root has also a nauseous taste & smell somewhat approaching to that of ipecacuanha. The medical properties of the Triosteum are those of an emetic & cathartic. In the above dissertation, about thirty cases are detailed, in which different preparations & quantities of the article were given to various persons with a view to their medicinal effects. The general inference to be made from them is, that the bark of the root acts with tolerable certainty as an evacuant upon the alimentary canal, both by emesis & catharsis. When given alone, either in powder or decoction, the instances of failure were not many, & when combined with calomel, its operation was attended with a certainty, hardly inferior to that of jalap. The aqueous & alcoholic extract of the root were likewise efficacious, & nearly in an equal degree. Comp. [illegible] the different parts of the [illegible]

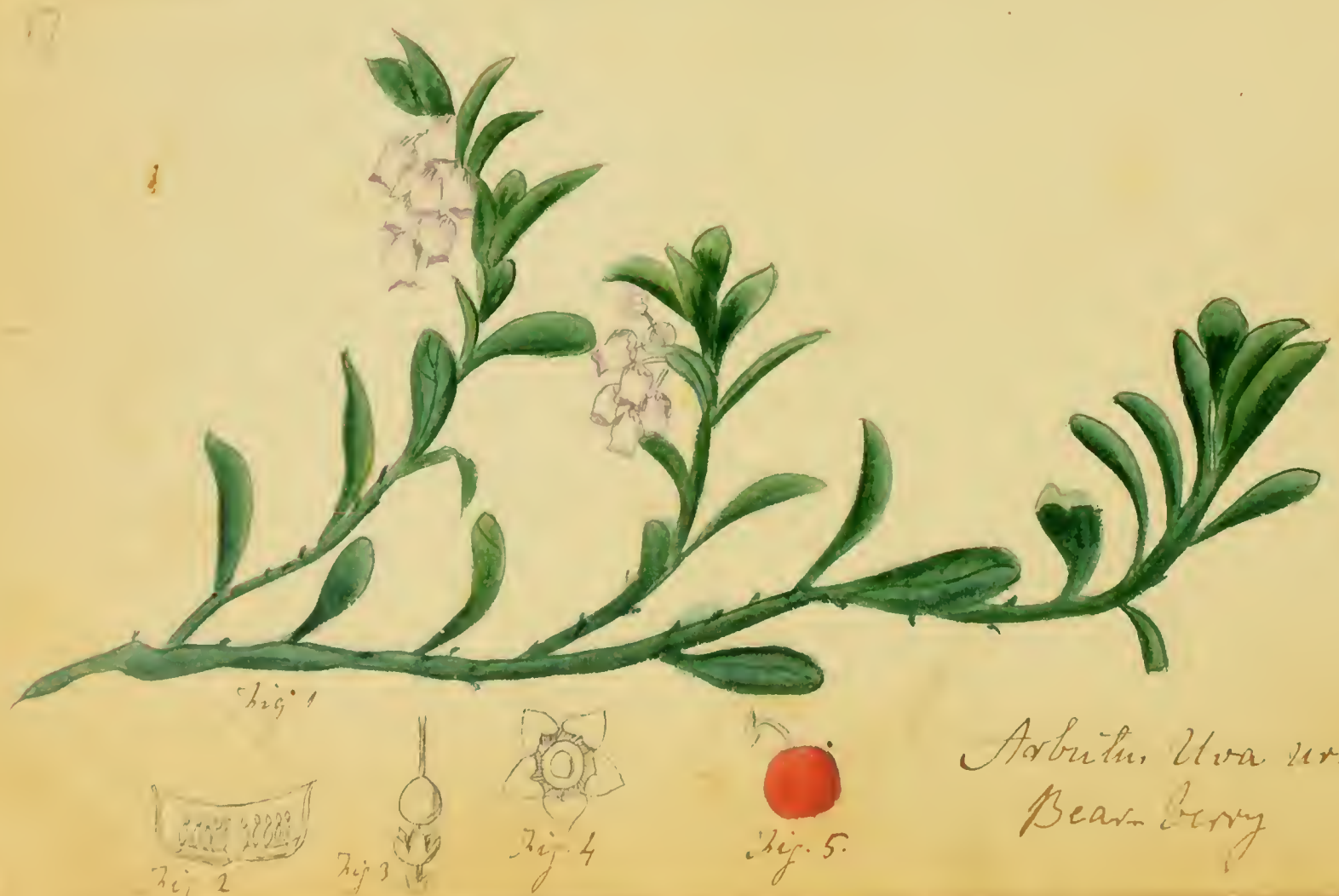
diaporetic. & that of the stalk producing no effect.

The late Professor Barton of Philadelphia, in his Collections towards a Materia Medica of the United States, speaks of this plant as a mild & good cathartic, sometimes operating as a diuretic & in large doses as an emetic.

My own experience with this plant has not been extensive, yet sufficient to satisfy me of its medicinal power. Where I have administered it, it has generally proved cathartic, a large dose, however, being requisite for this purpose, than of jalap or aloes. It has sometimes failed to produce any effect, & I am inclined to believe that its efficacy is much impaired by age. Those who may incline to employ it, will do well to renew their stock annually, & to keep the powder in close stopped phials.

A dose of the bark of the root in powder is twenty, or twenty-five grains & of the extract a somewhat smaller quantity. (Bigelow's Medical Botany)

Fig. 1. Torreyum Perfoliatum.
Fig. 2. A flower separated.
Fig. 3. The corolla opened, showing the stamens & style.
Fig. 4. The calyx.
Fig. 5. The fruit crowned with the calyx.
Fig. 6. The same dissected to shew the three seeds.
Fig. 7. A seed.



Arbutus Uva ursi
Bear-berry

Fig. 1. Arbutus Uva ursi, the American variety

Fig. 2. The magnified corolla opened showing the insertion of the stamens

Fig 3. Calyx, nectary, germ & style magnified

Fig. 4. Calyx & nectary

Fig. 5. Berry.

Fig. 1. A branch of Datura Stramonium. The fruit varies with leaves & flowers

Fig. 2. Stamens & Style

Fig. 3. Transverse section of the pericarp. Showing the cells, receptacle & seed.

Commencing doses of the Stramonium when properly prepared are as follows –

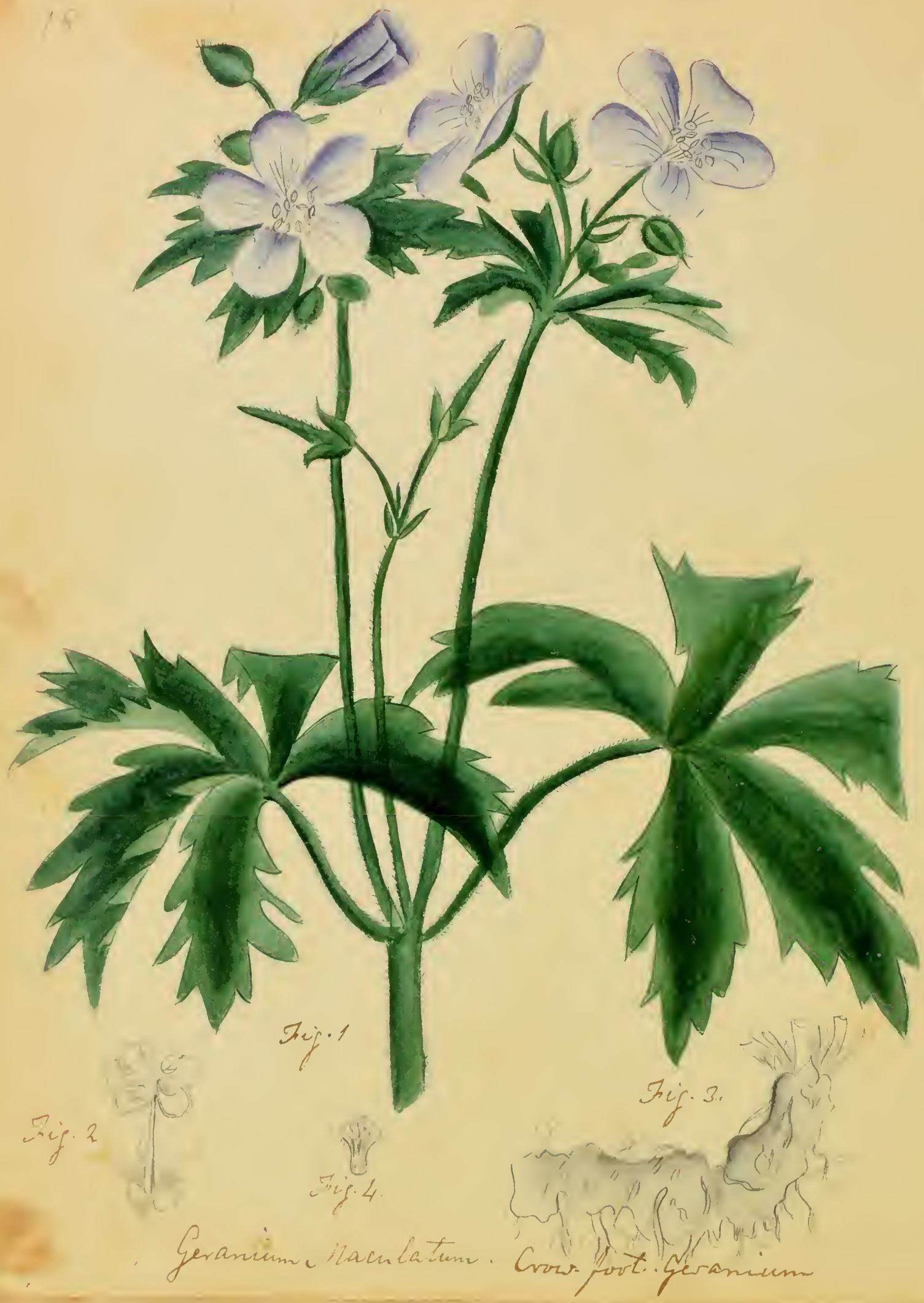
Of the powdered leaves – 1 grain

" powdered seeds ½ a grain

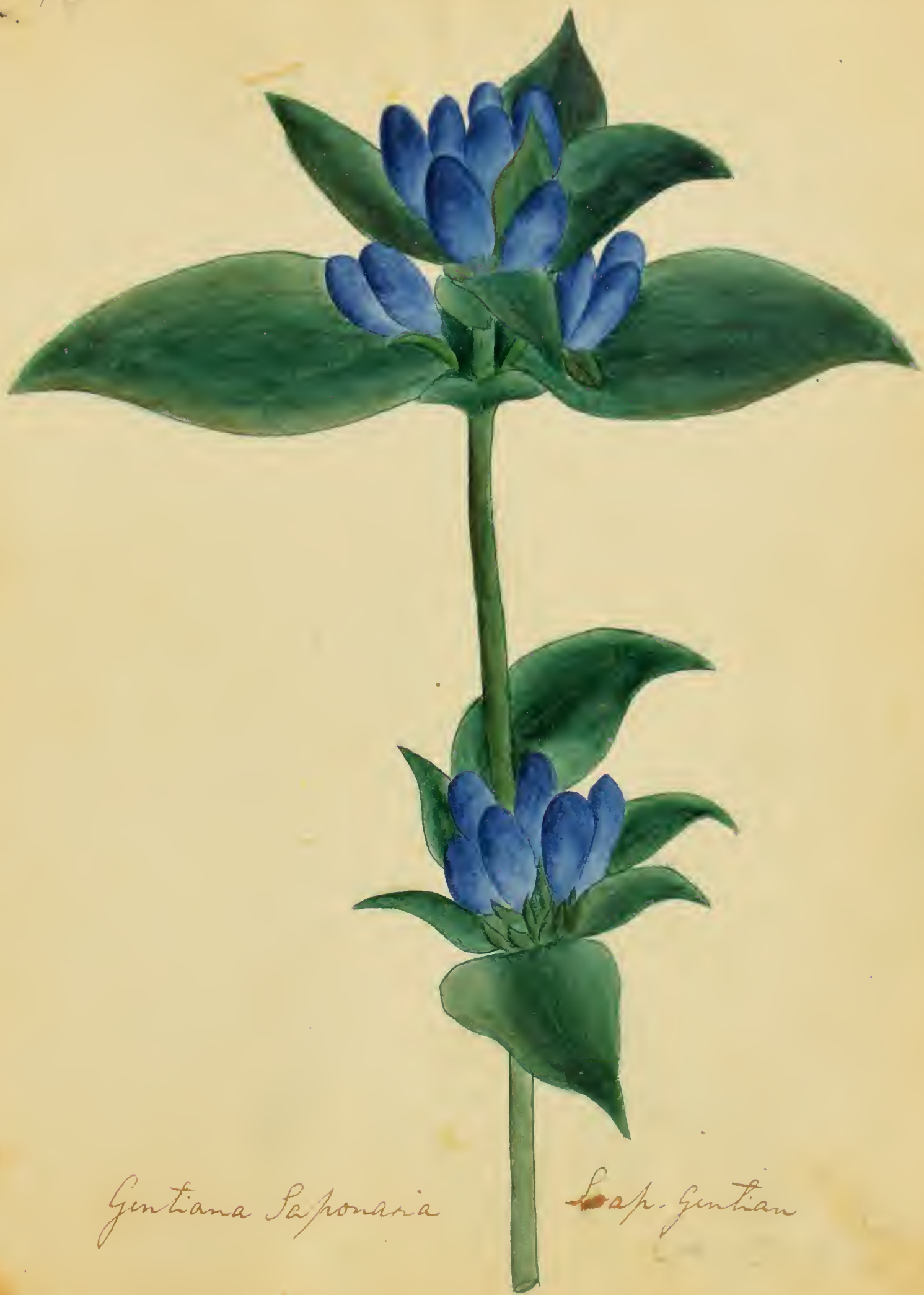
" inspissated juice or extract 1 grain

extract of the seeds ¼ to ½ a grain

– tincture from 15 to 20 drops – Rejected

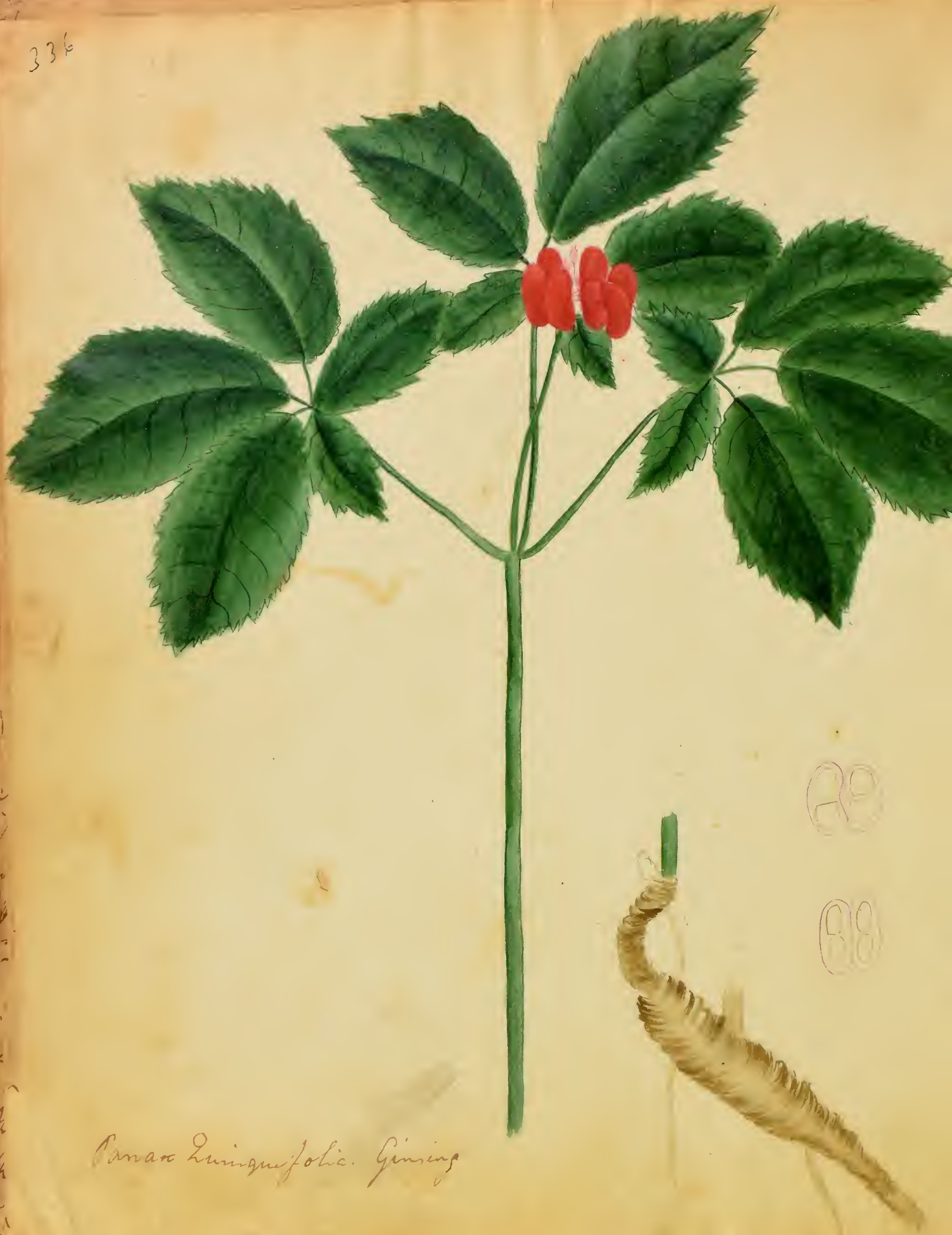


Geranium maculatum. Crow-foot. Geranium

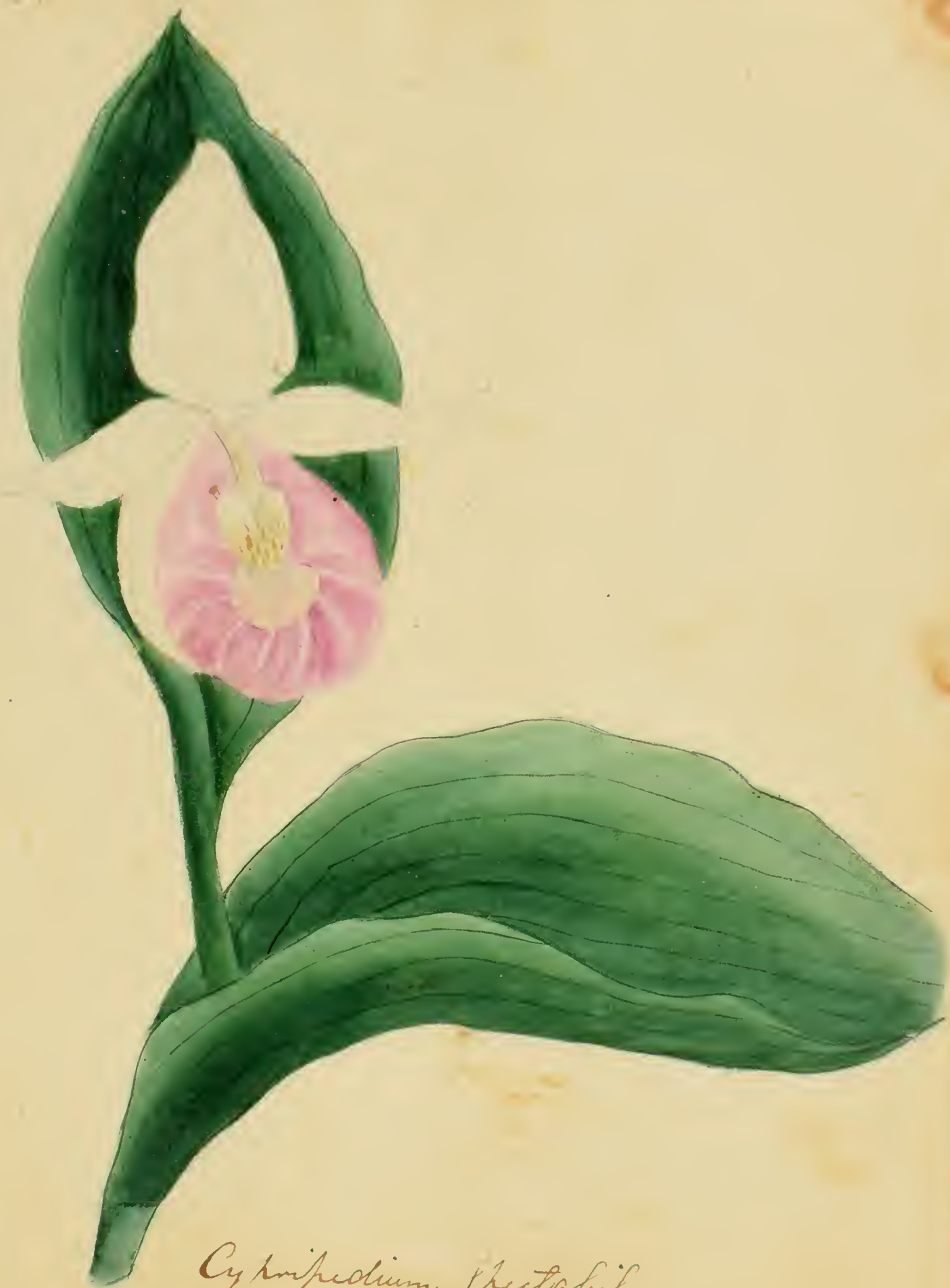


Gentiana Saponaria Soap. Gentian

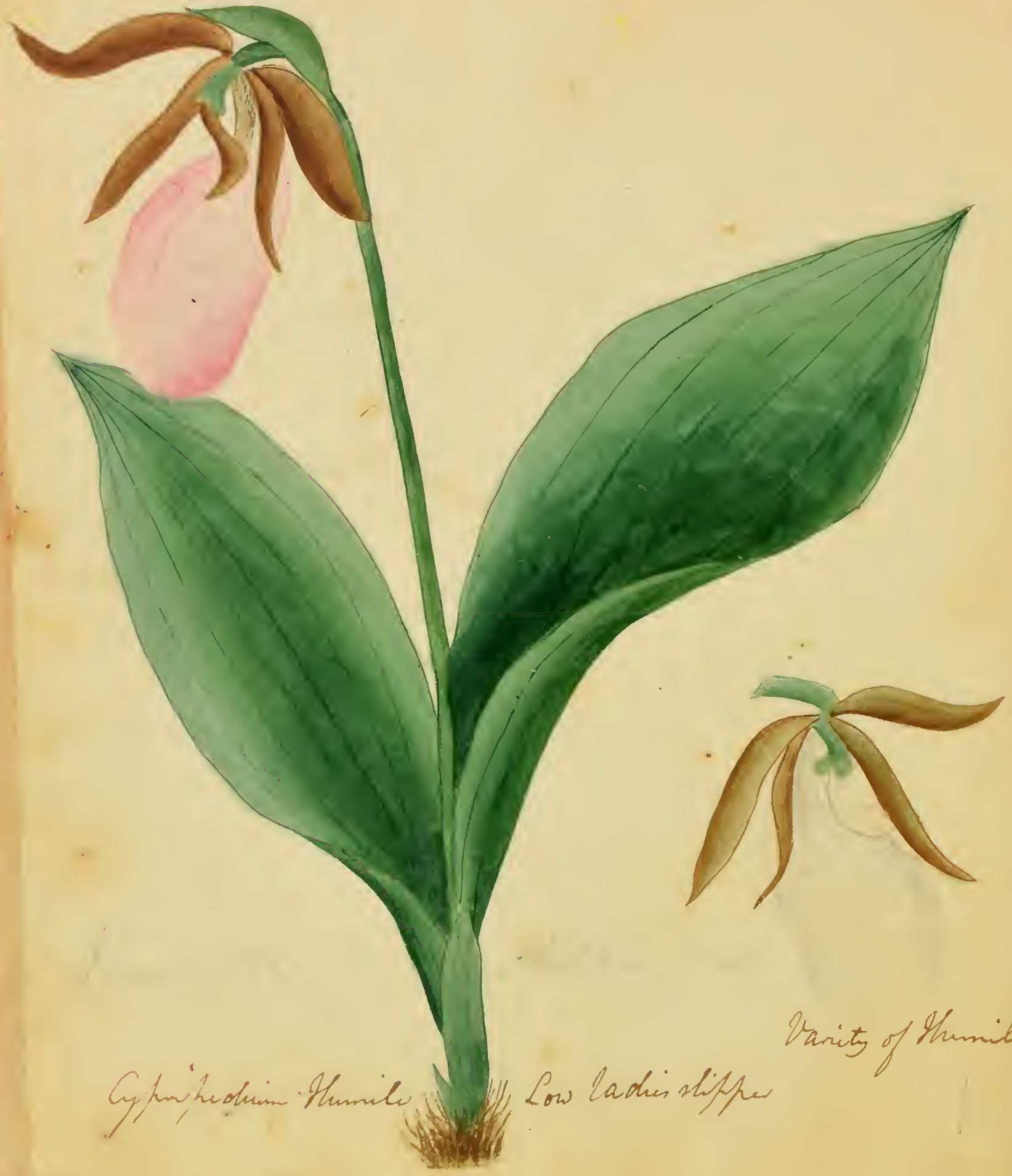
336

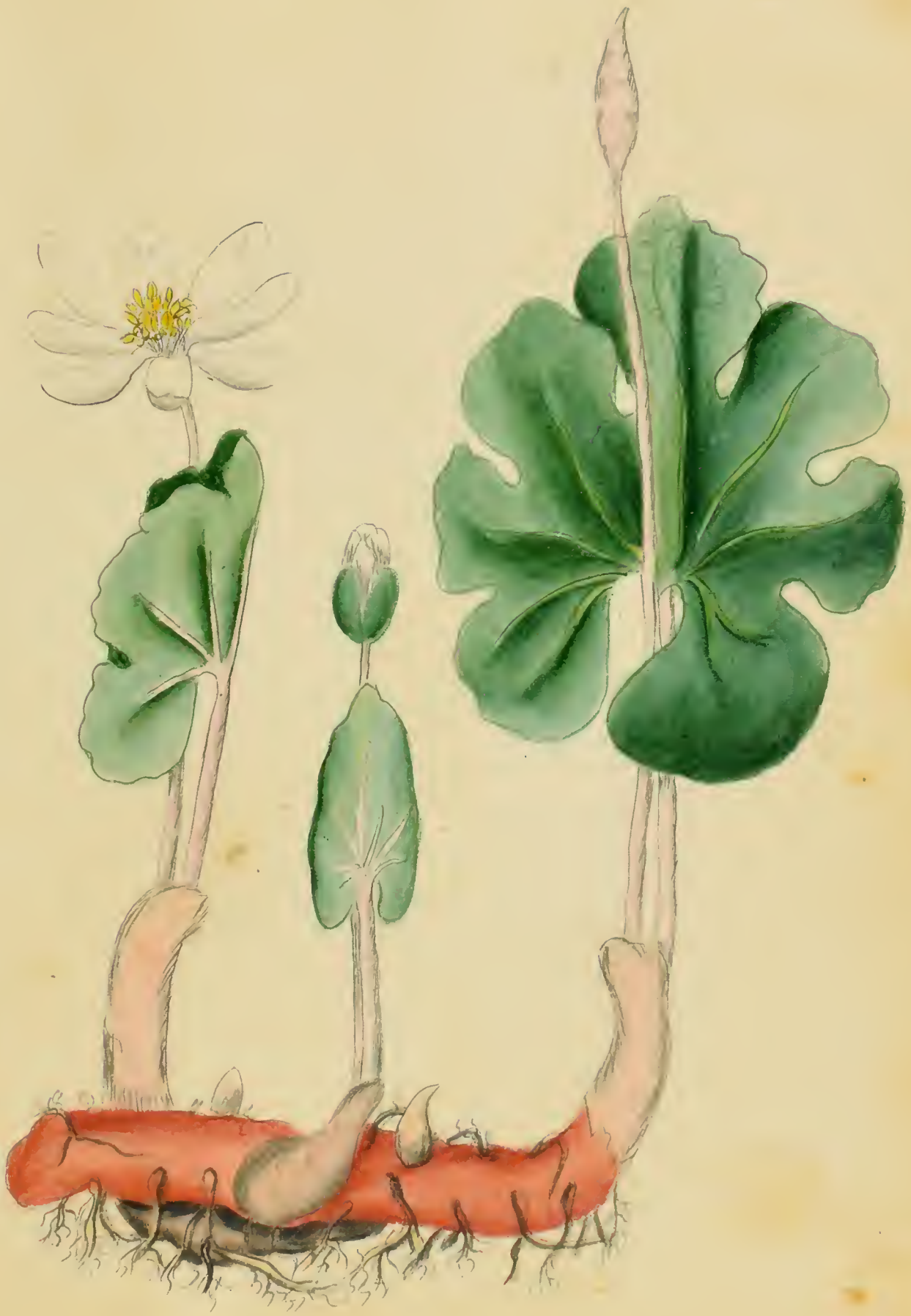


Panax Quinquefolia. Ginseng



Cypripedium Spectabile
Gay Ladies slipper.


Variety of Humile
Cypripedium Humile Low Ladies slipper



Sanguinaria Canadensis
Blood. Root

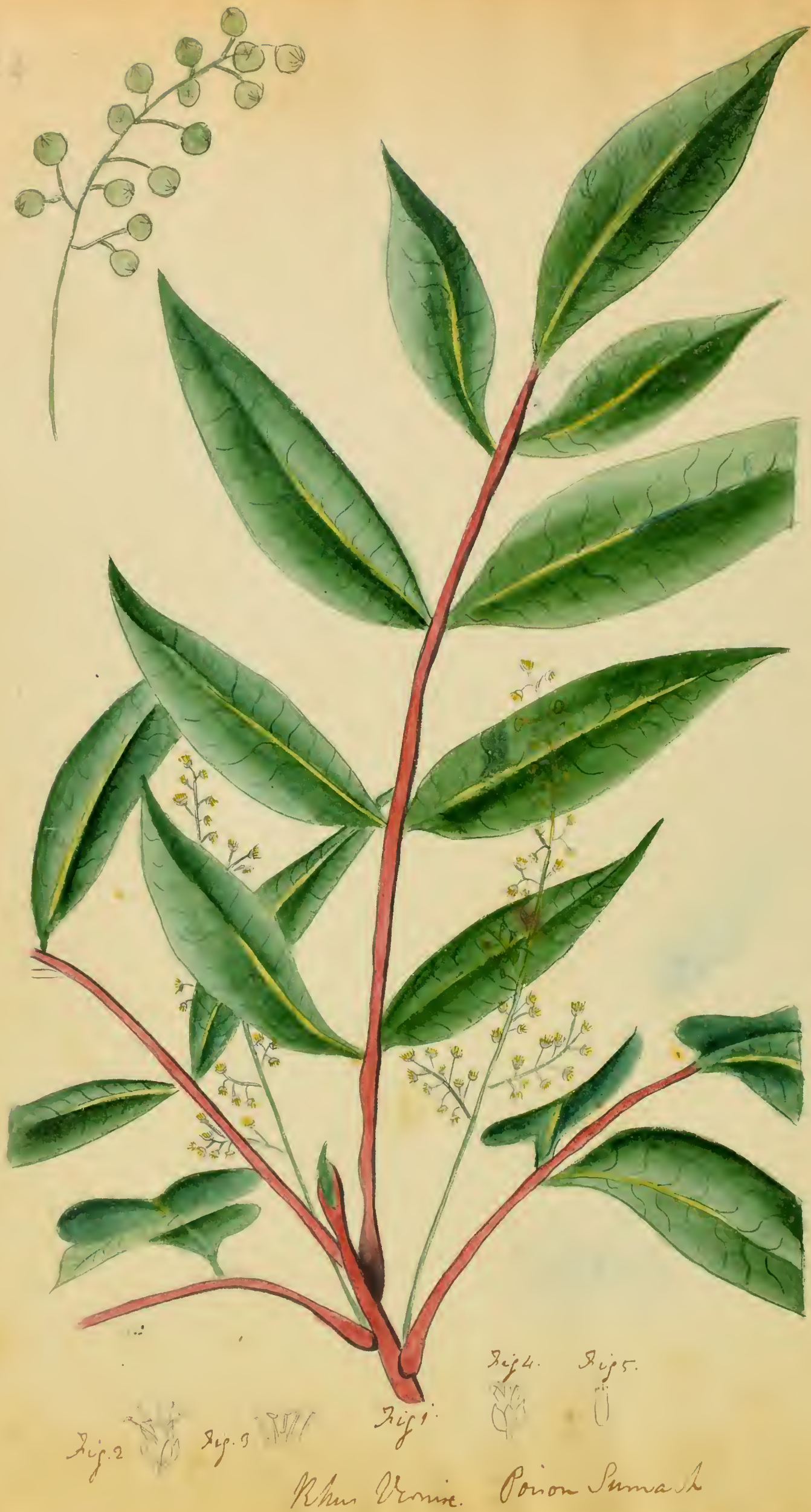
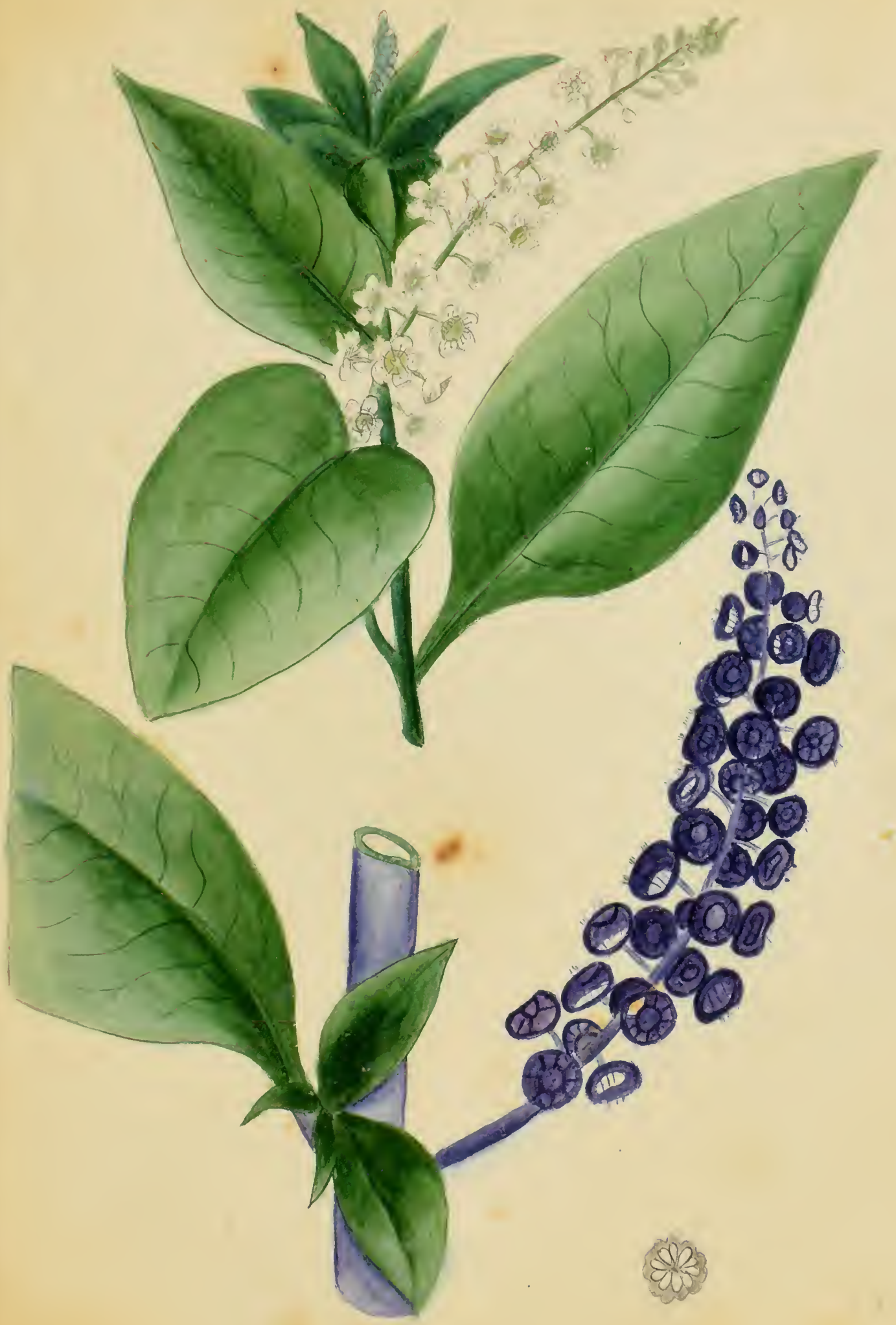
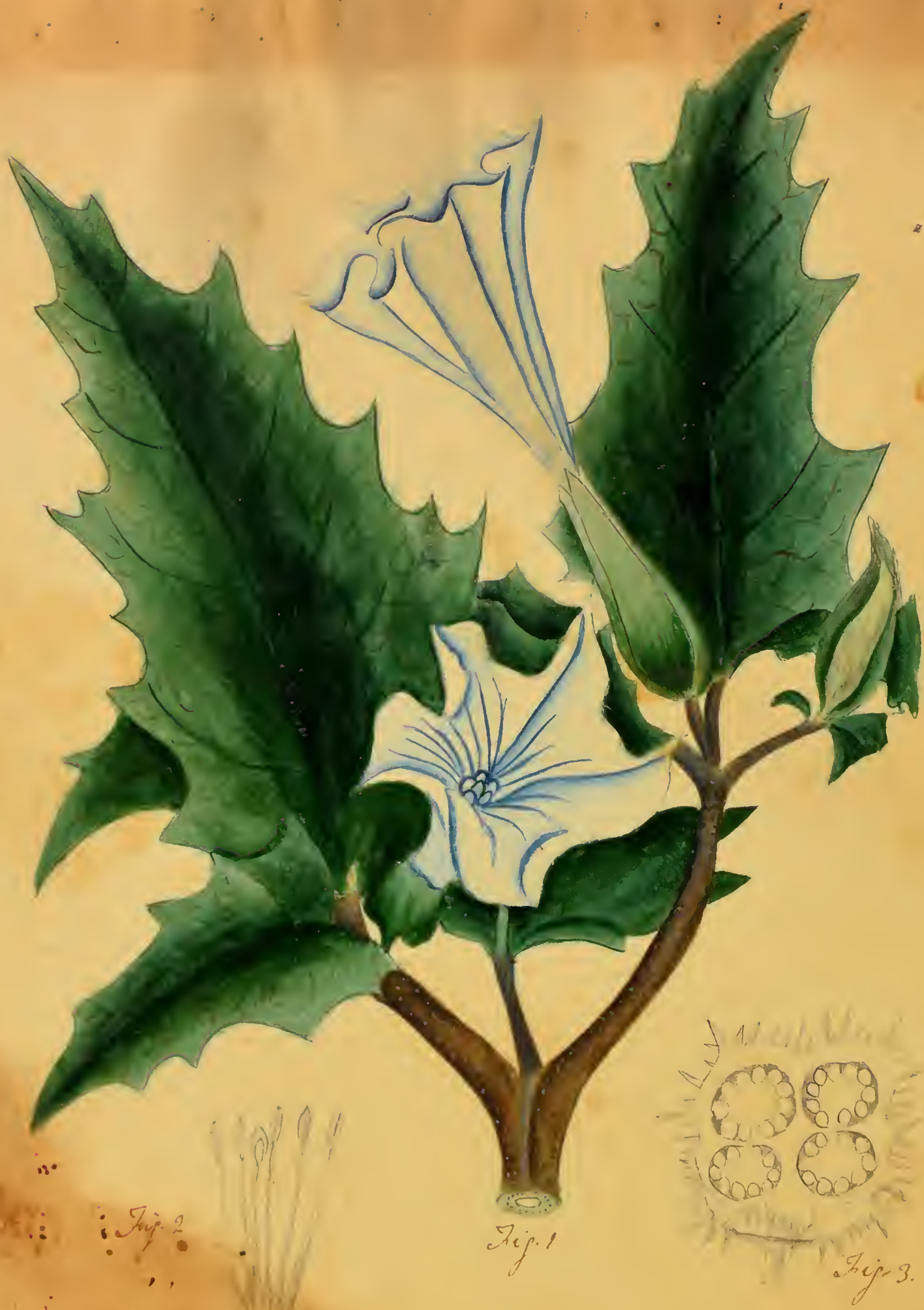


Fig 4.
Fig 5.
Fig 1.
Fig. 2
Fig. 3
Rhus Vernix. Poison Sumach

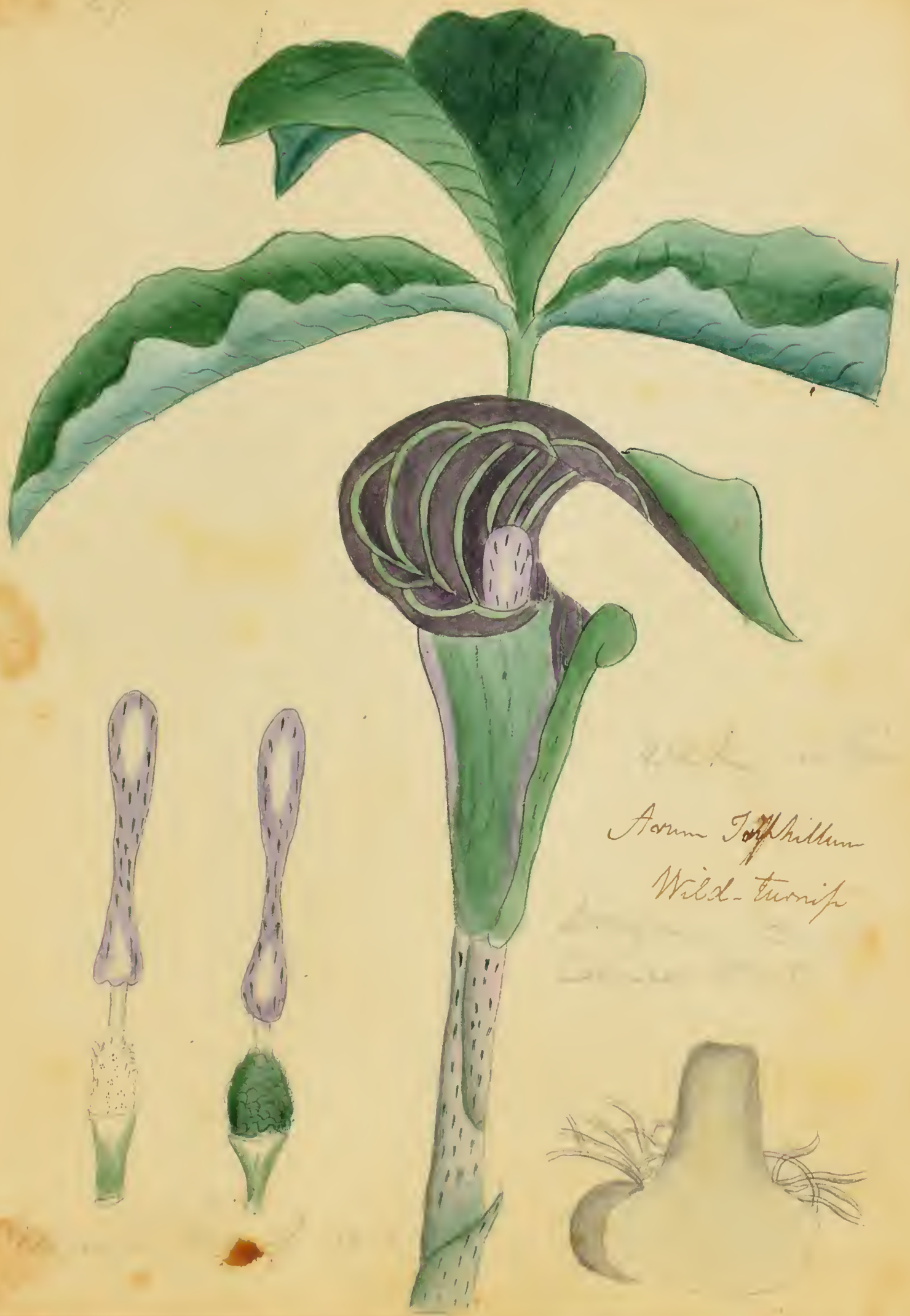


Phytolacca Decandra. Poke. weed. Crow. berry

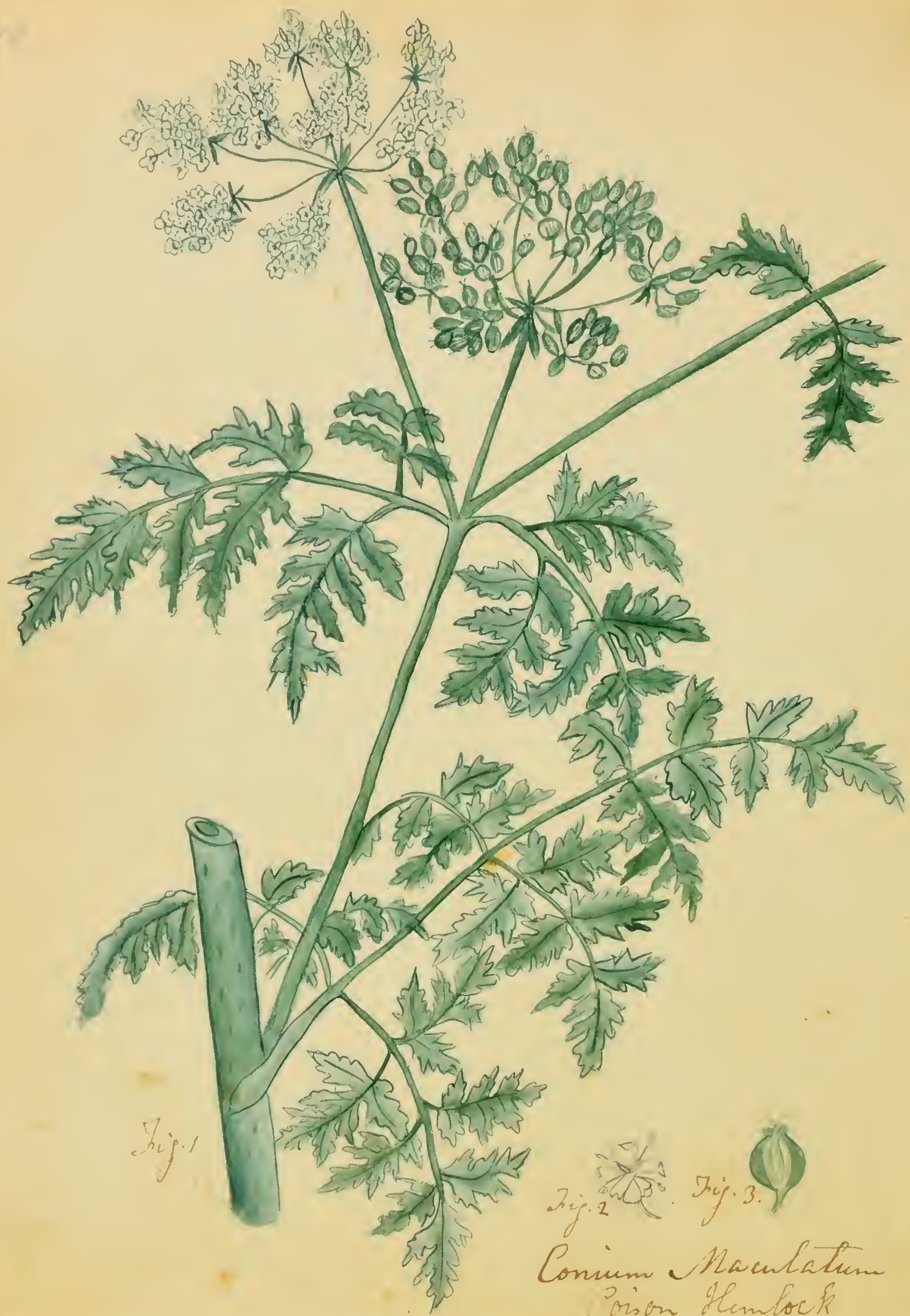


Datura Stramonium

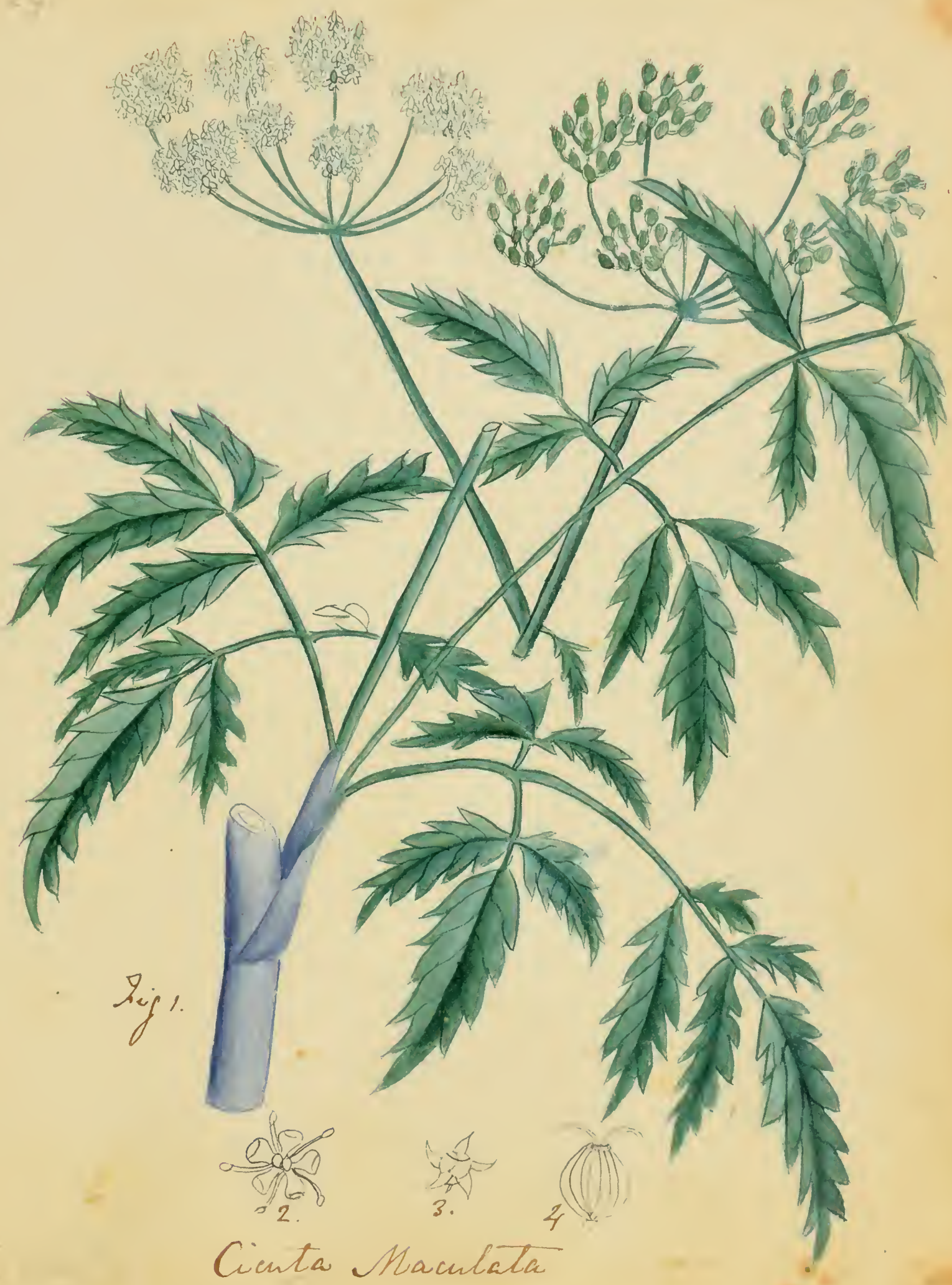
Thorn Apple



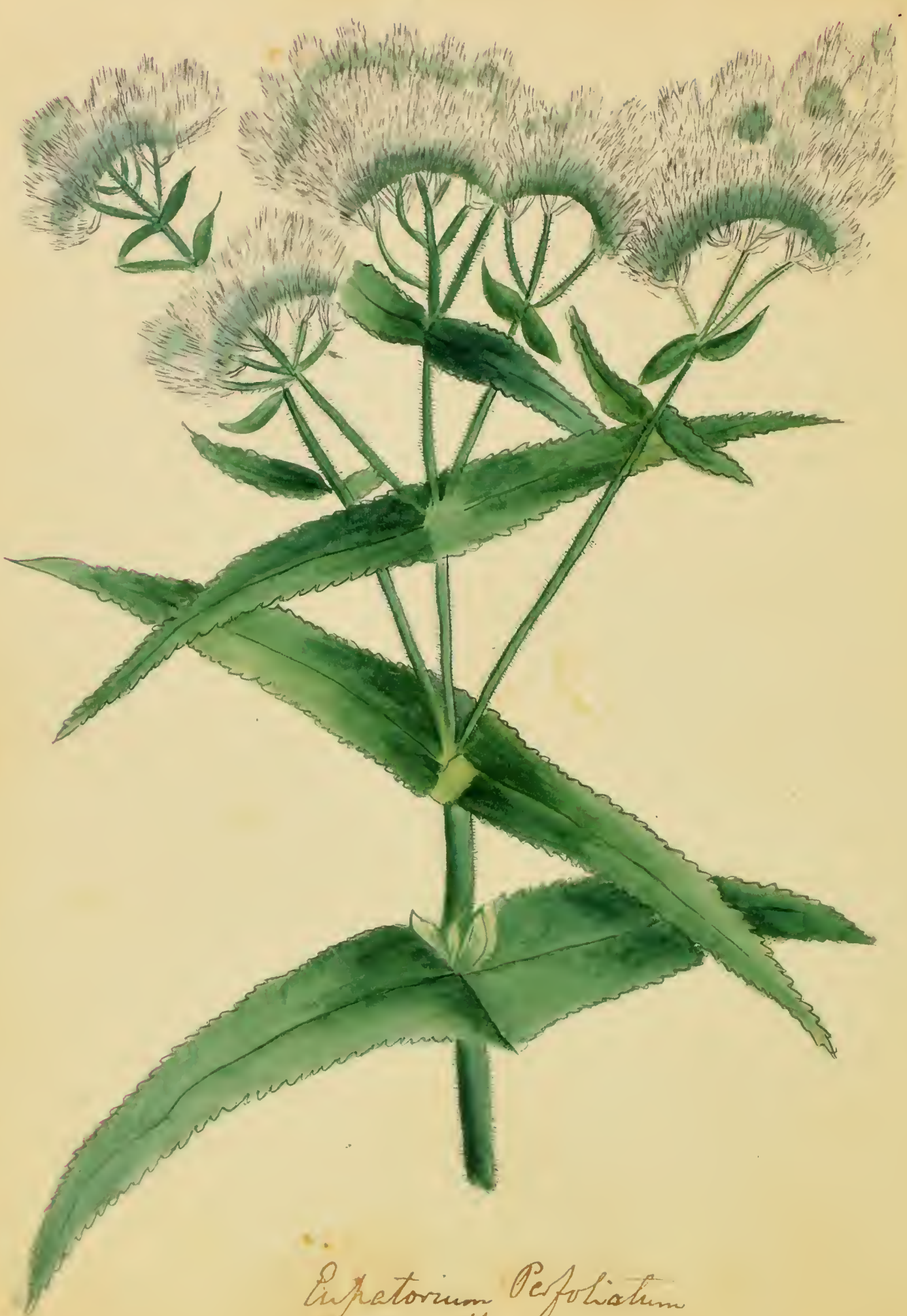
Arum Triphillum
Wild-turnip



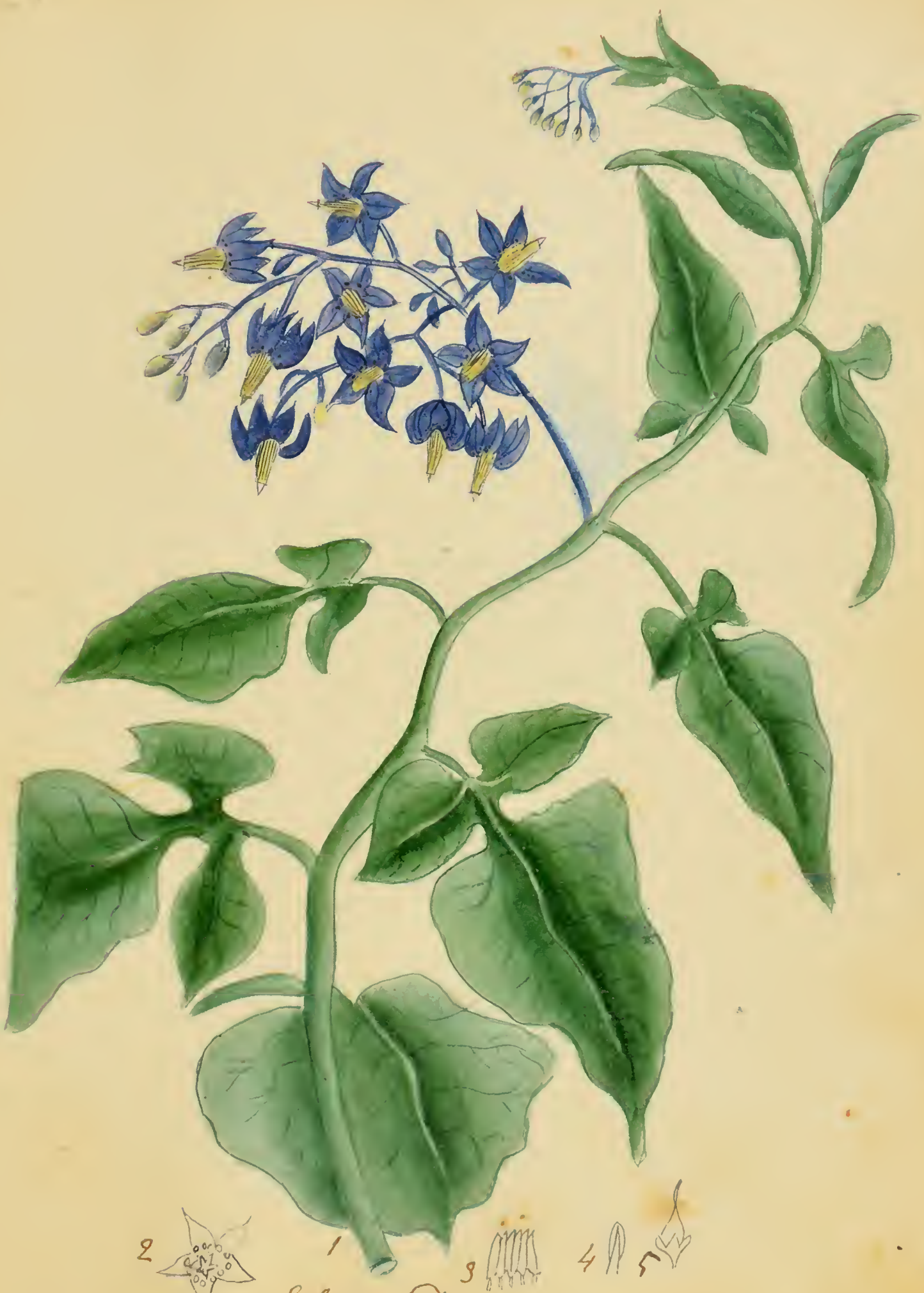
Conium Maculatum
Poison Hemlock



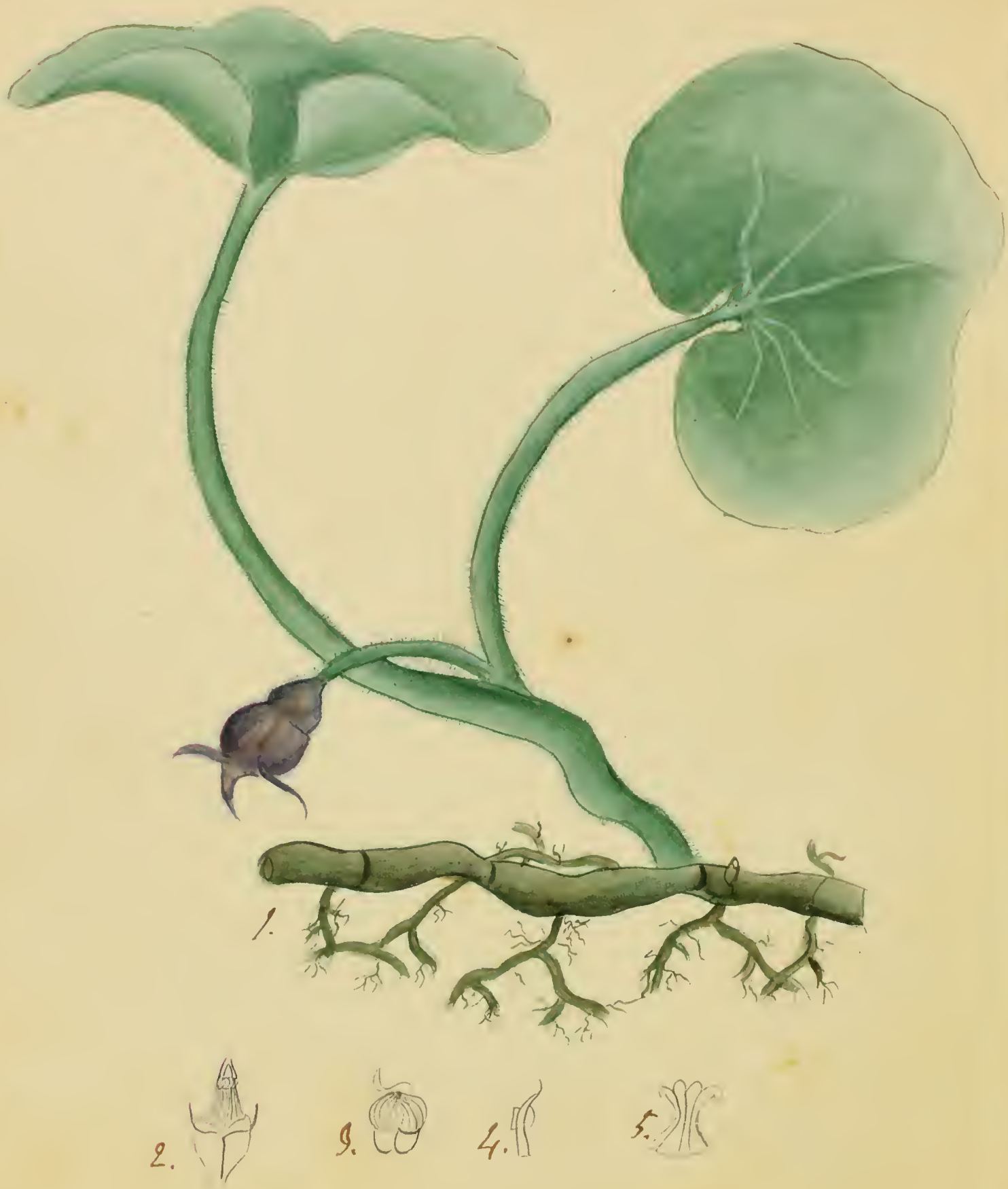
Cicuta Maculata



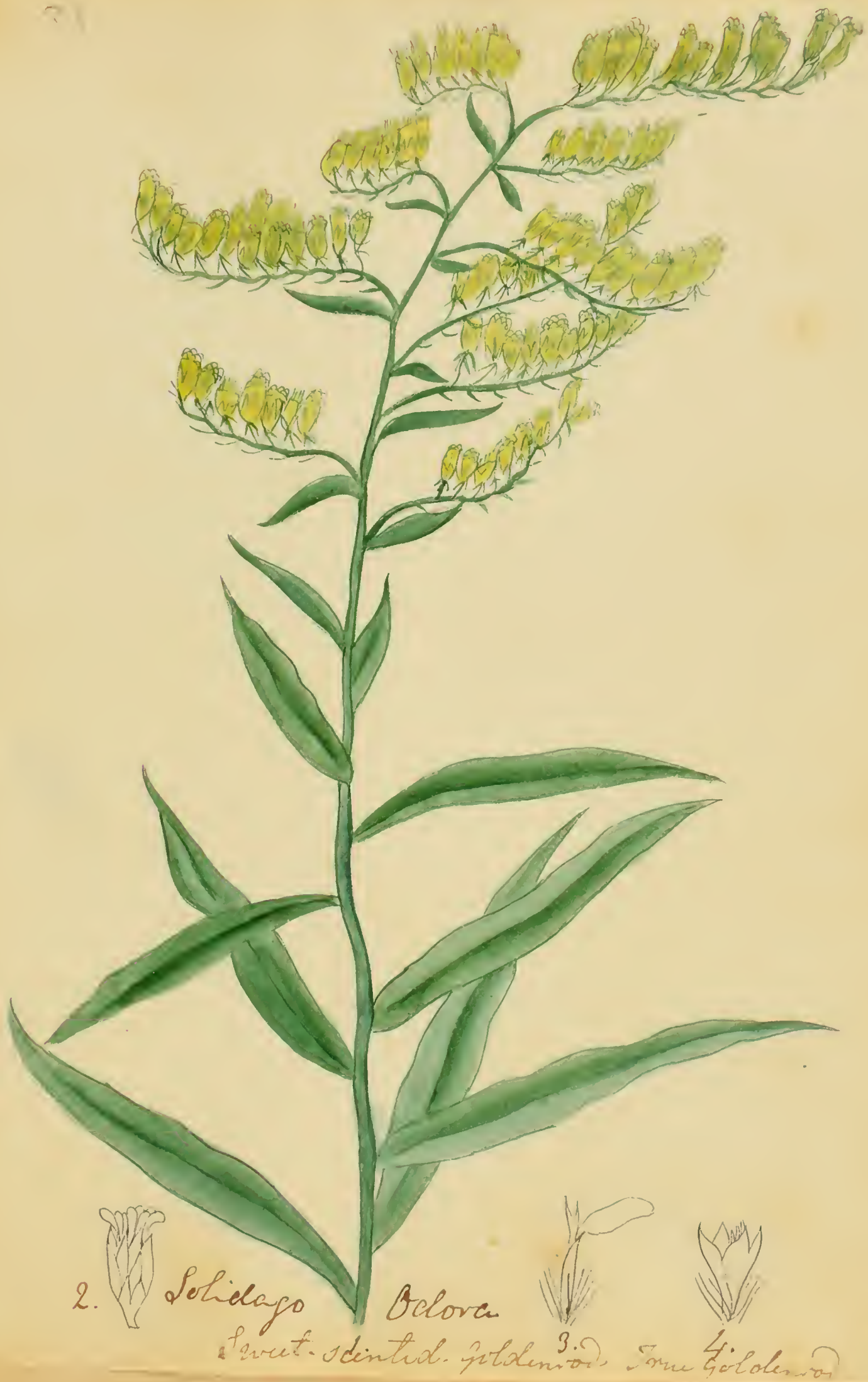
Eupatorium Perfoliatum
Thorough-wort

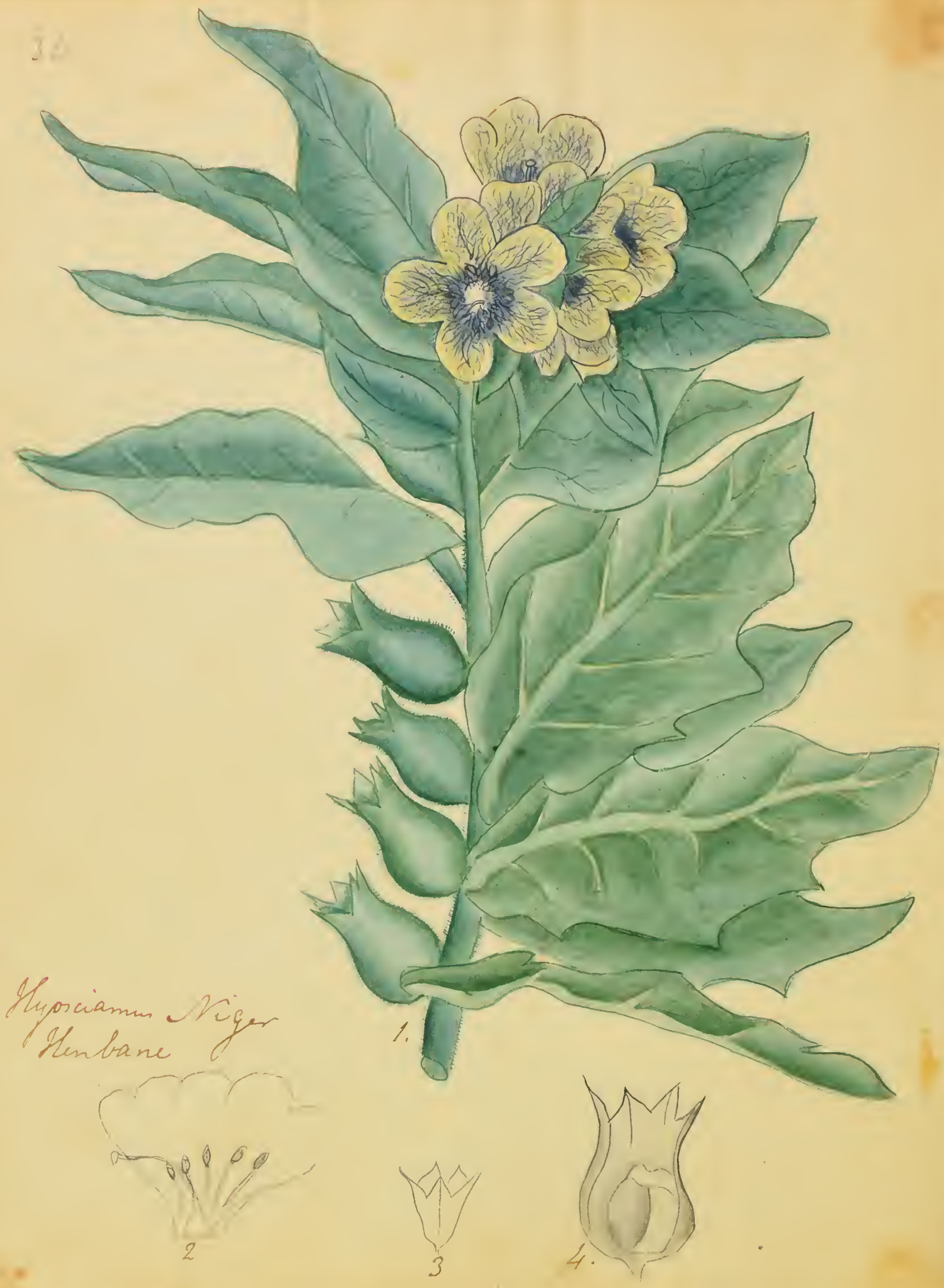


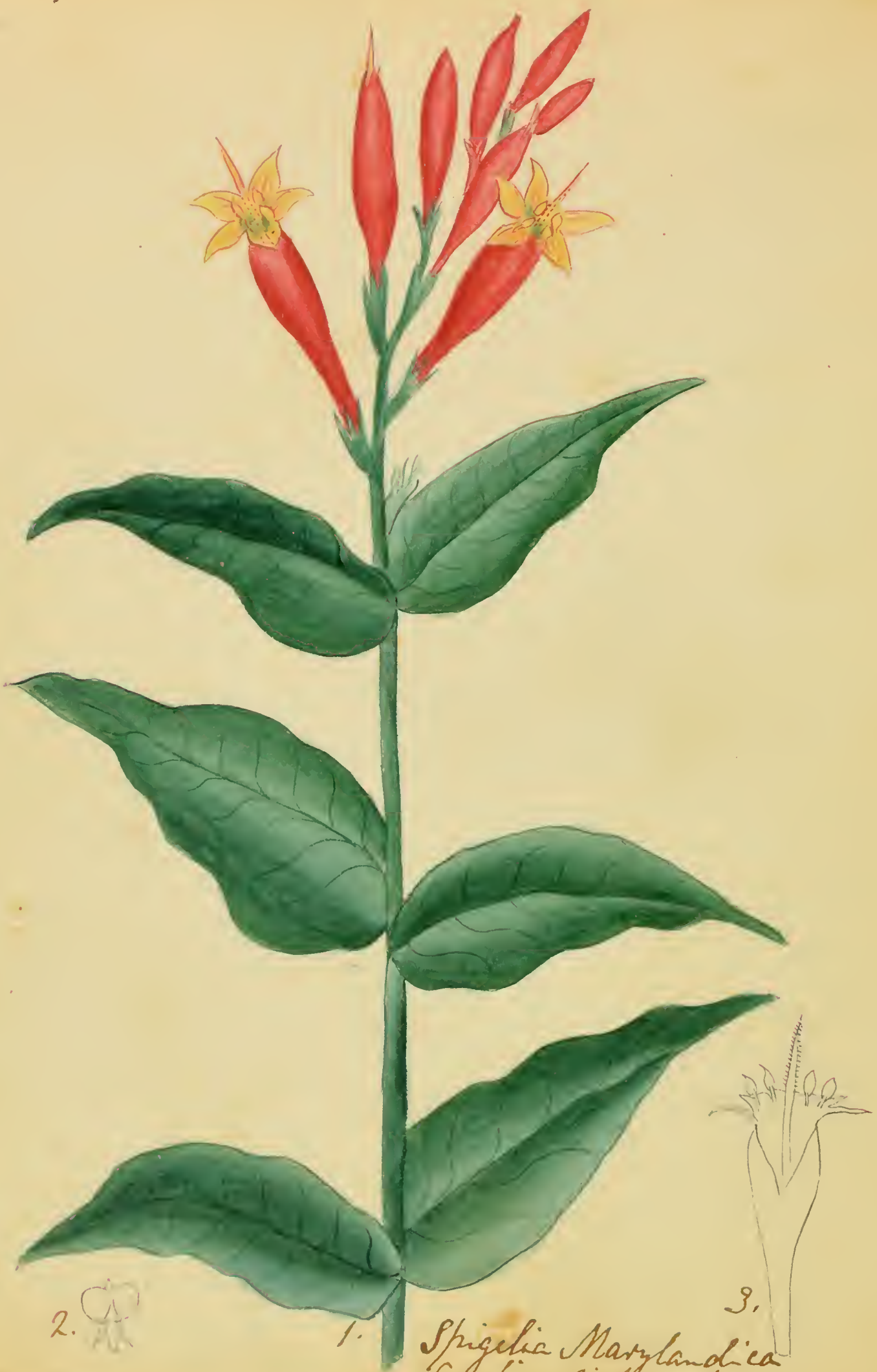
Solanum Dulcamara. Bitter-sweet



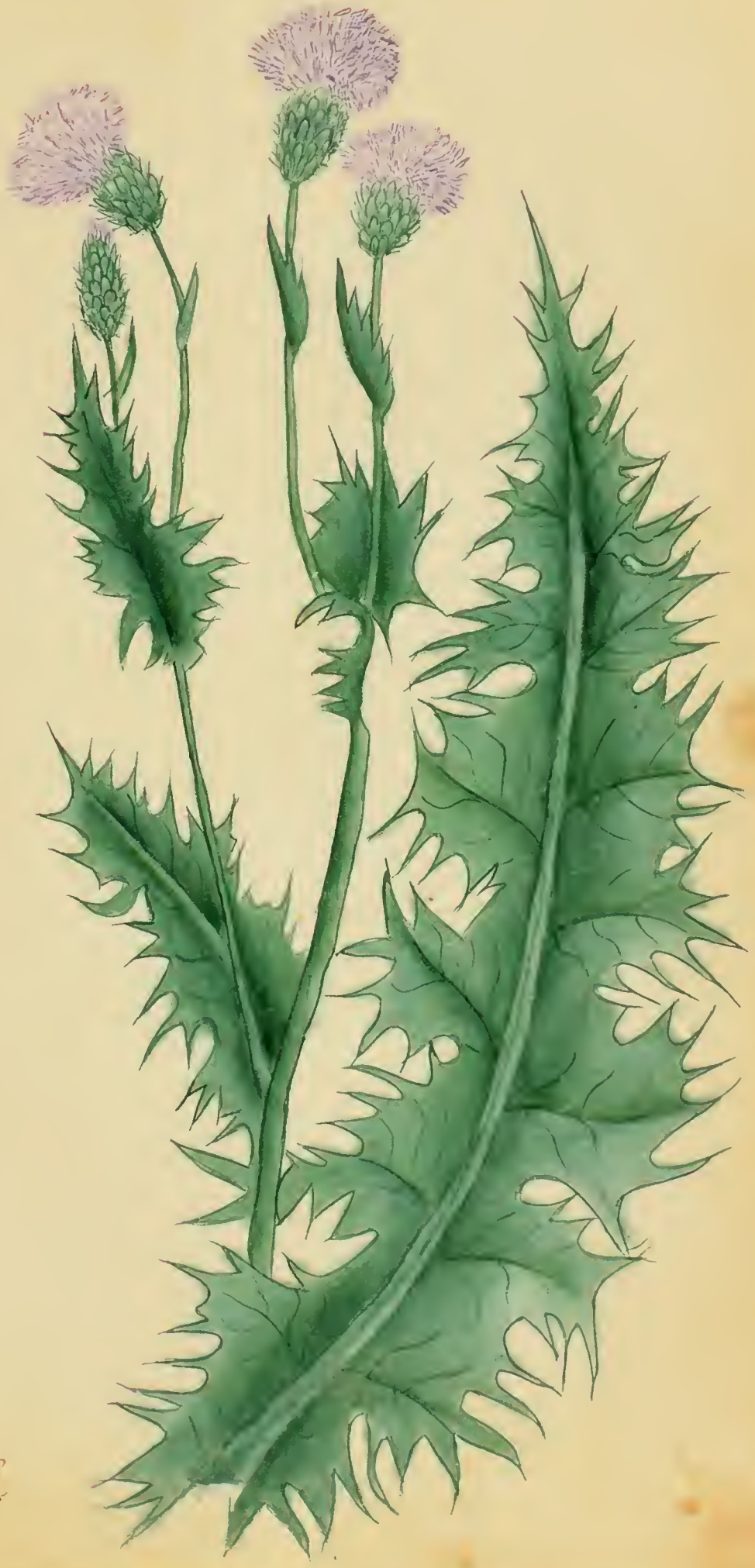
Asarum Canadense
White-Snakeroot. Wild-ginger


2. Solidago Odora
Sweet-scented Goldenrod
3.
Tall Goldenrod
4.



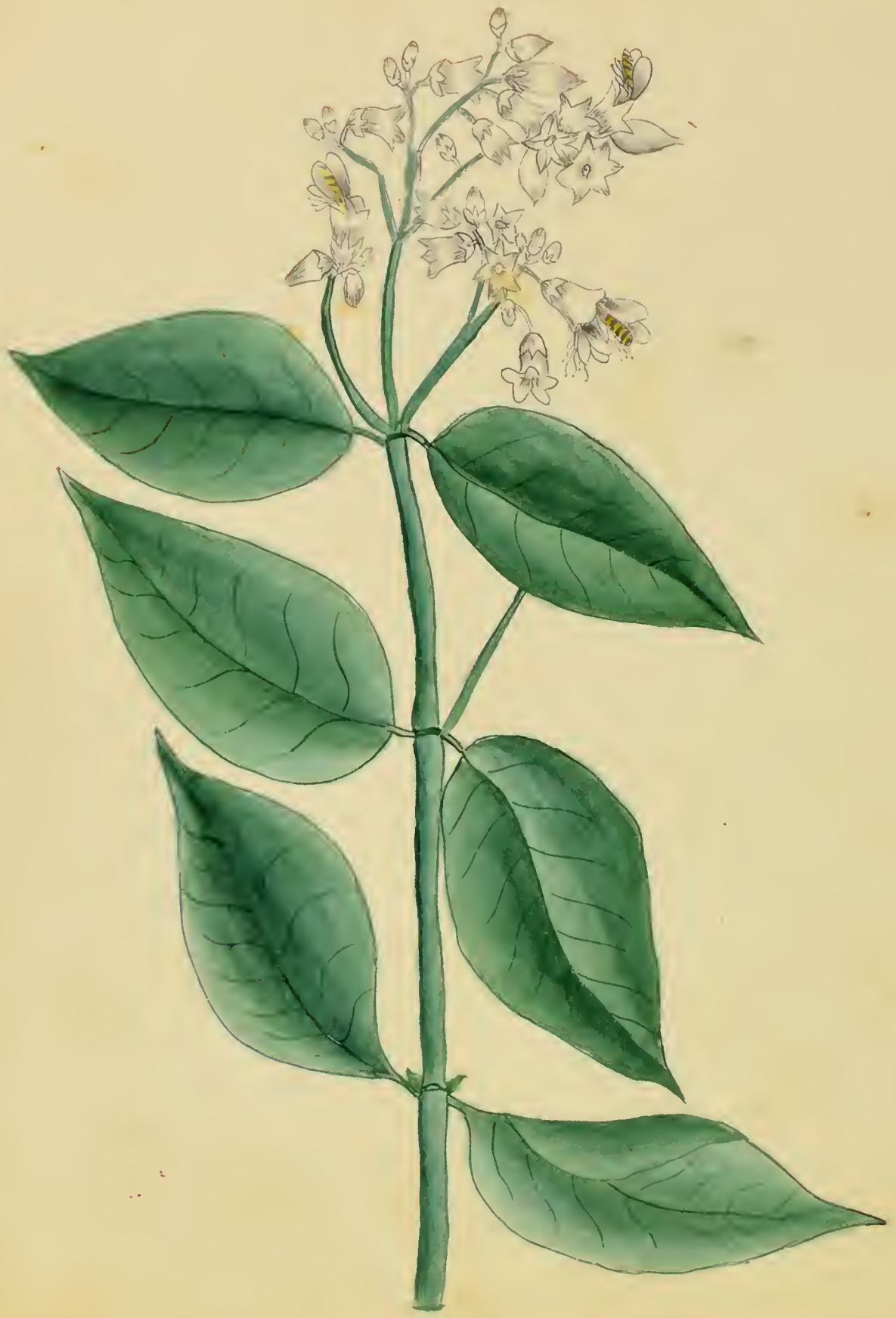


Spigelia Marylandica
Carolina Pink. root

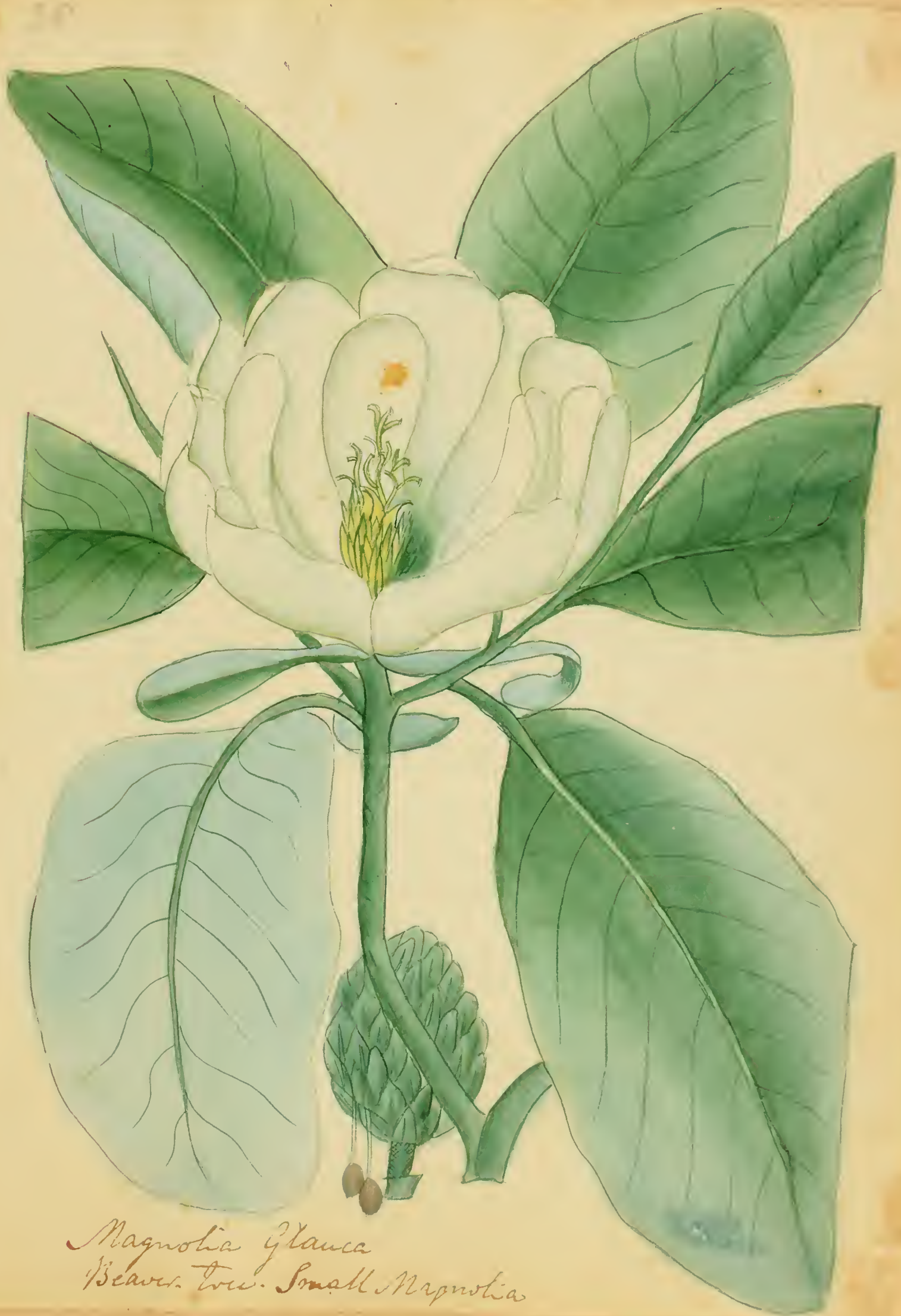


Cnicus Horridus

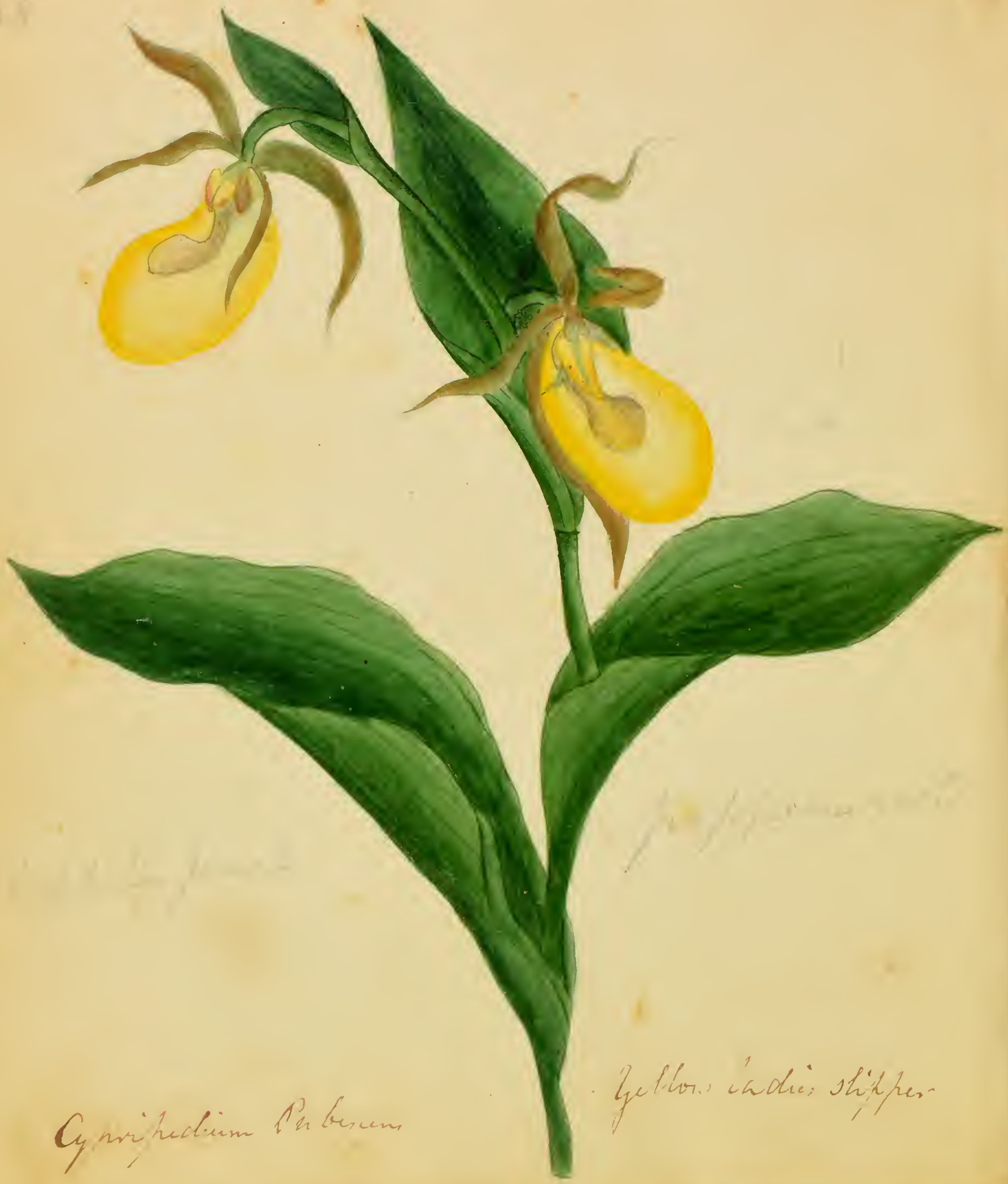
Canada Thistle



Apocynum Androsaemifolium
Dog. bane

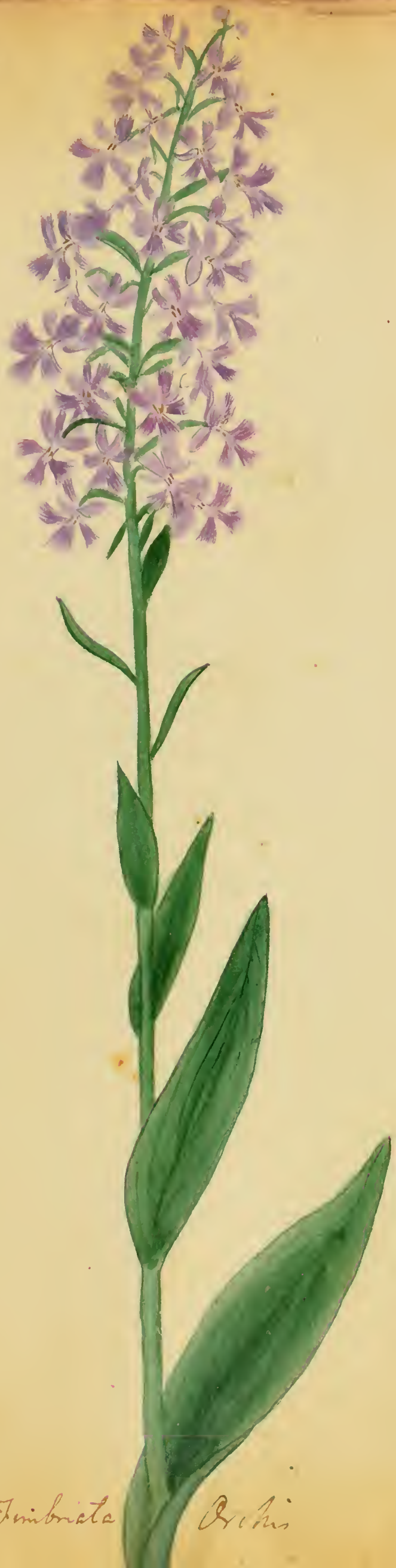


Magnolia Glauca
Beaver. Tree. Small Magnolia



Cypripedium Parviflorum

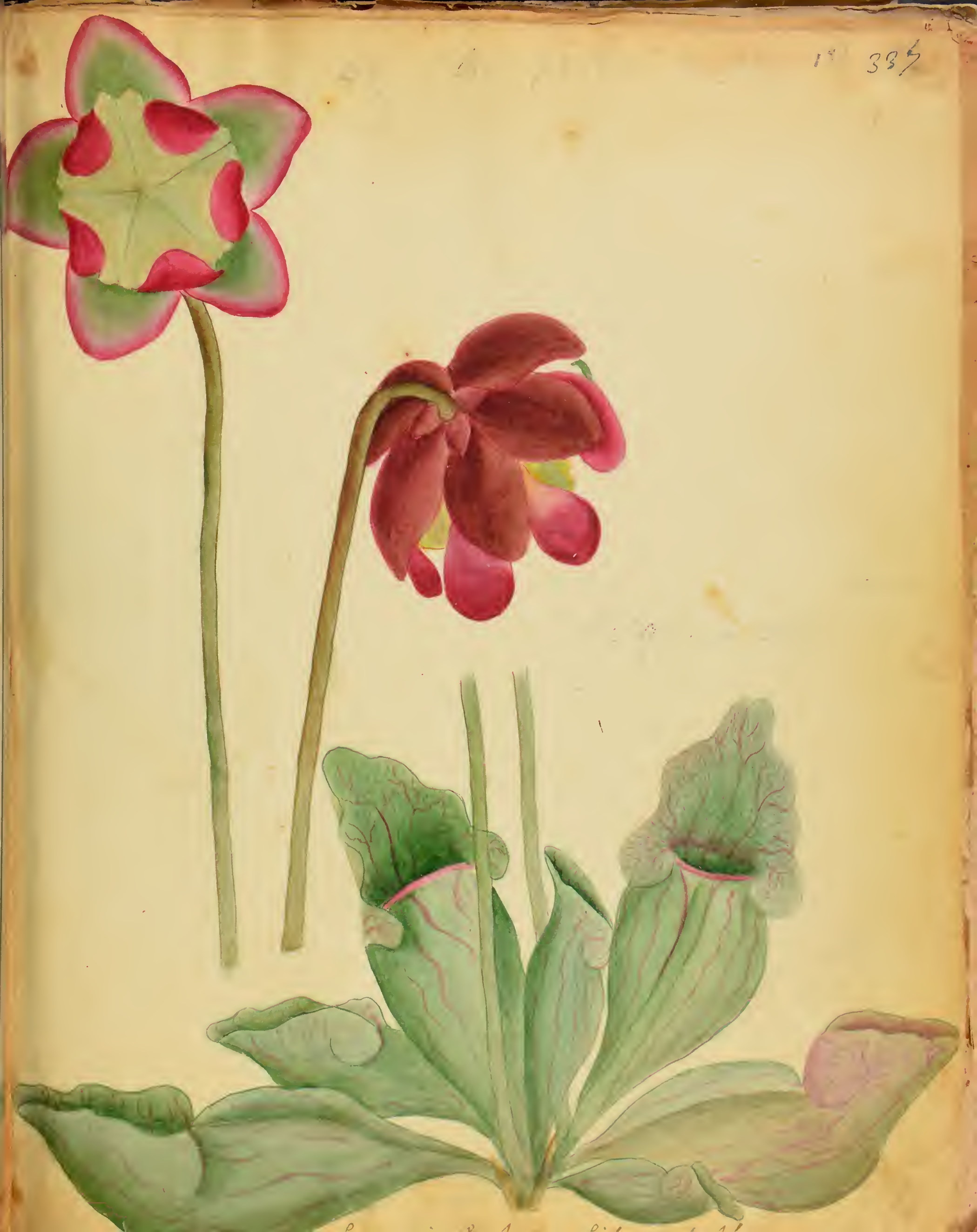
Yellow ladies slipper

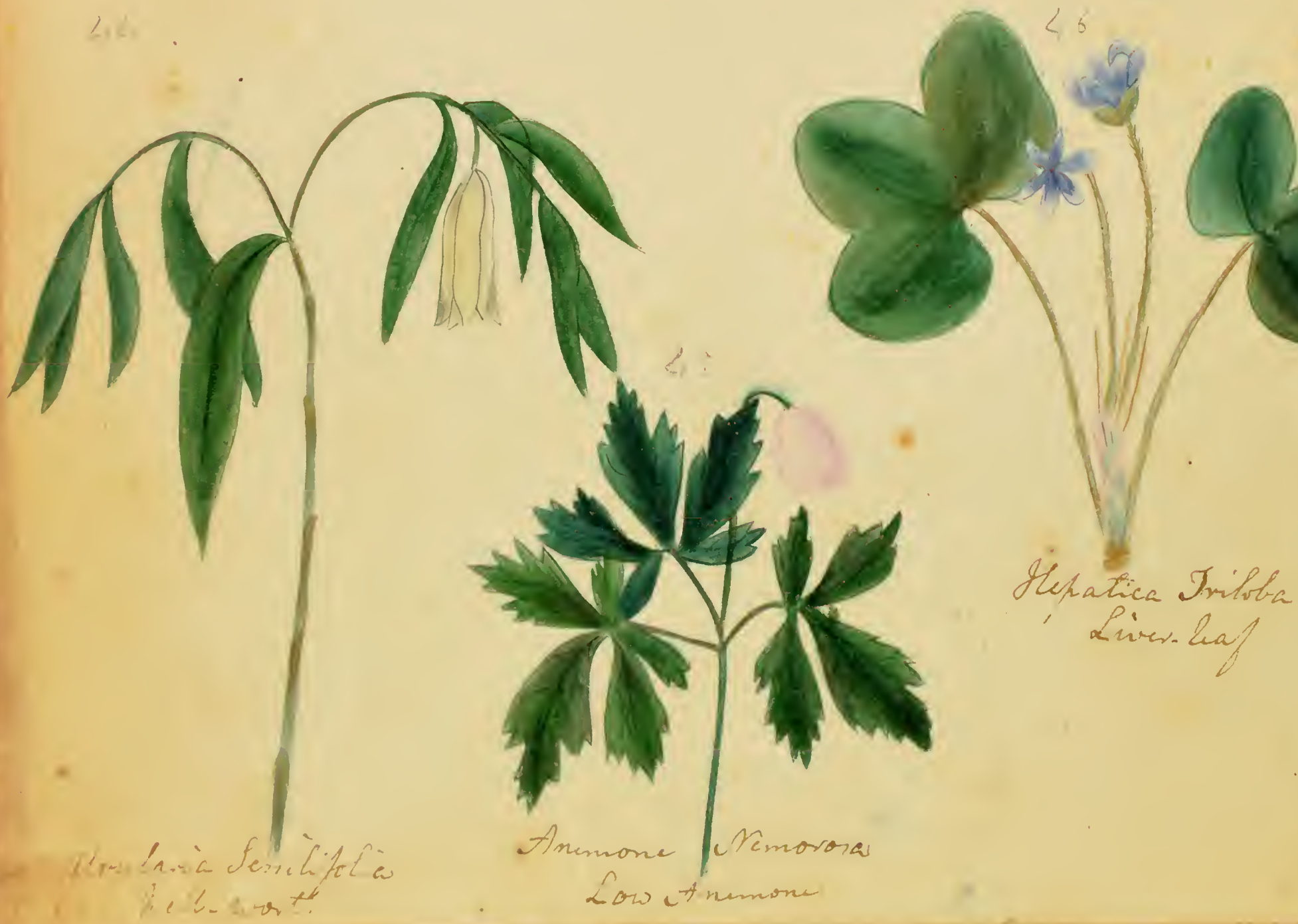


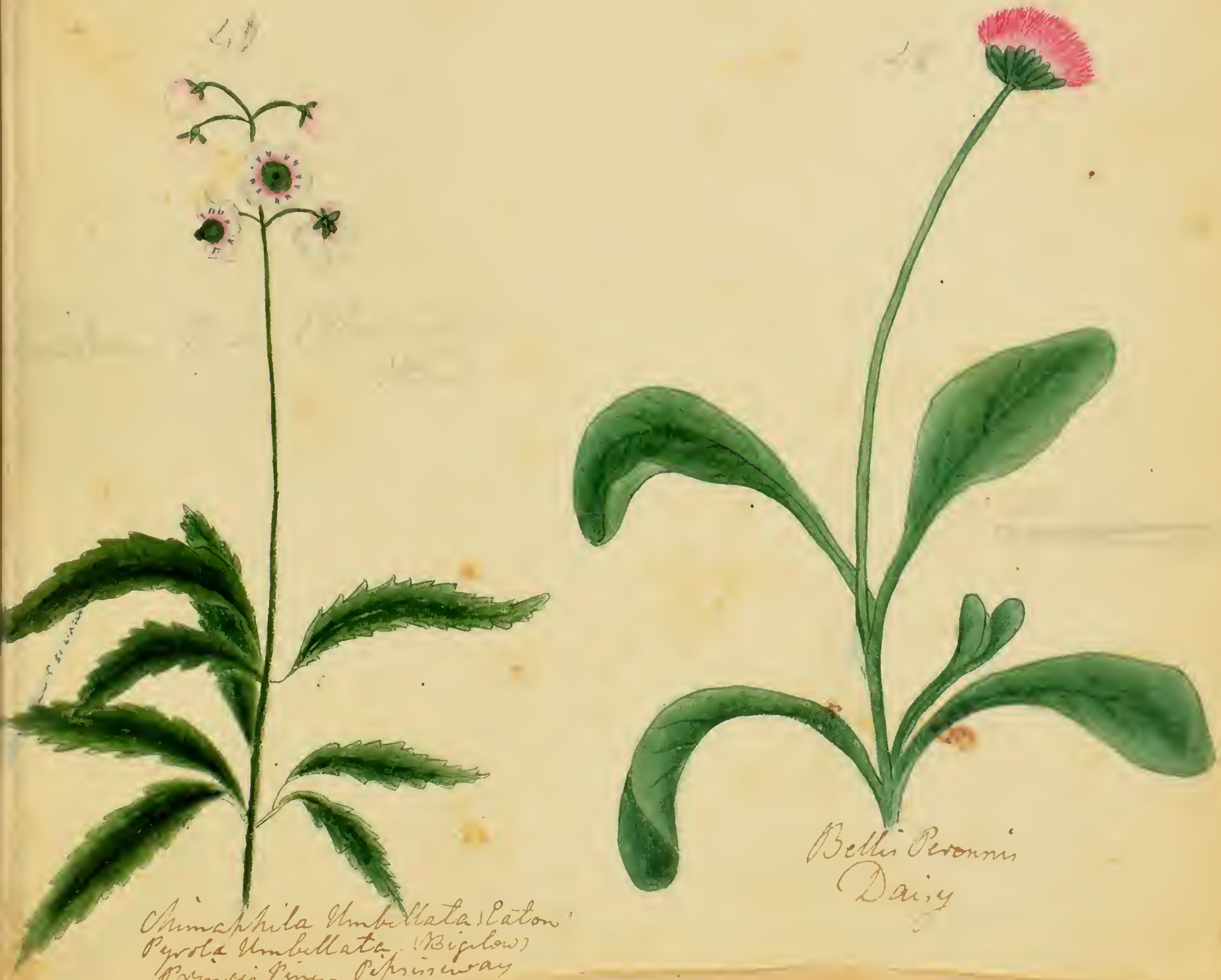
Orchis Fimbriata Orchis

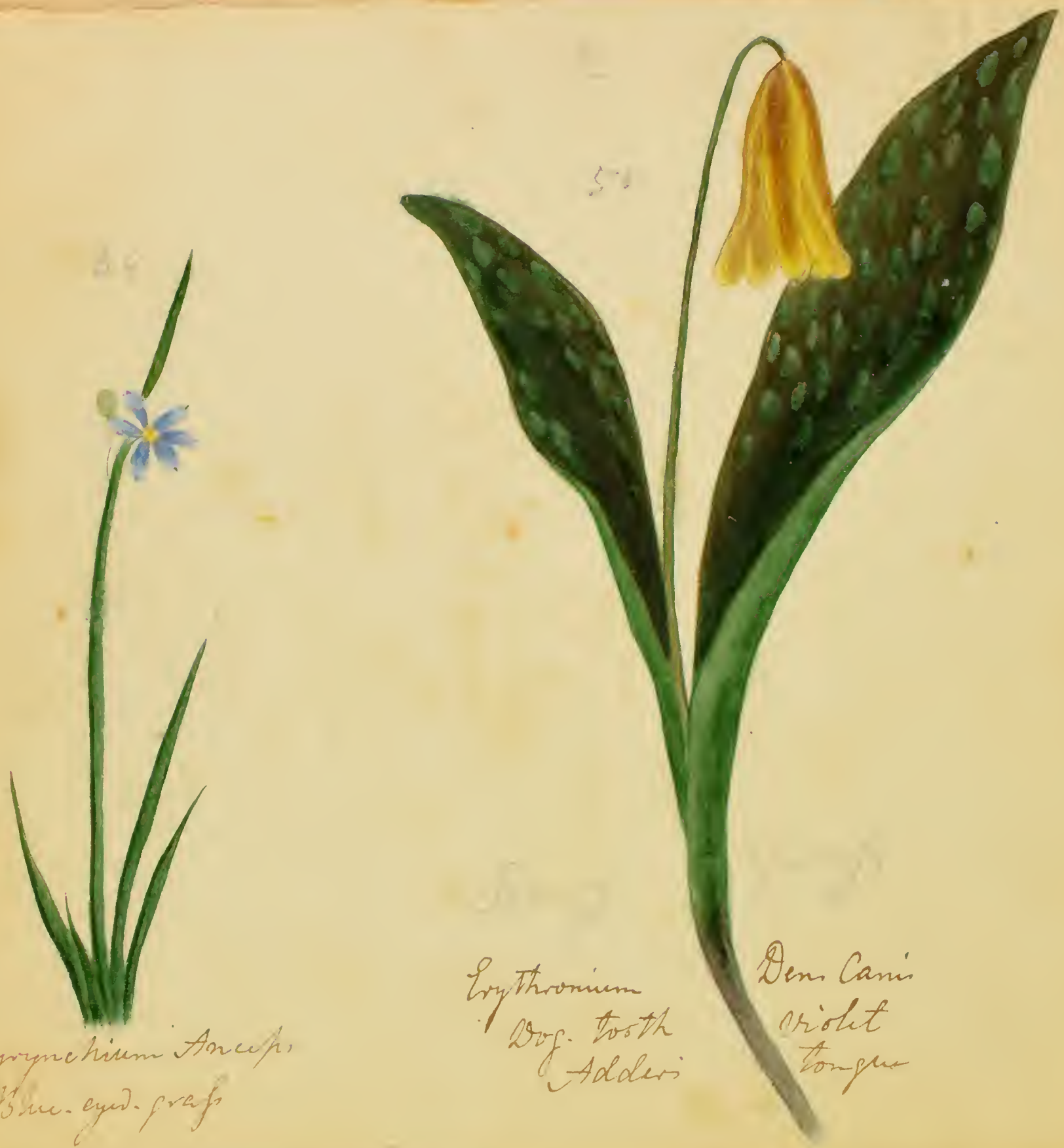
Tiarella Cordifolia
Mitr. Wort. Cool. wort

Convallaria Umbellulata
Wild lily of the valley

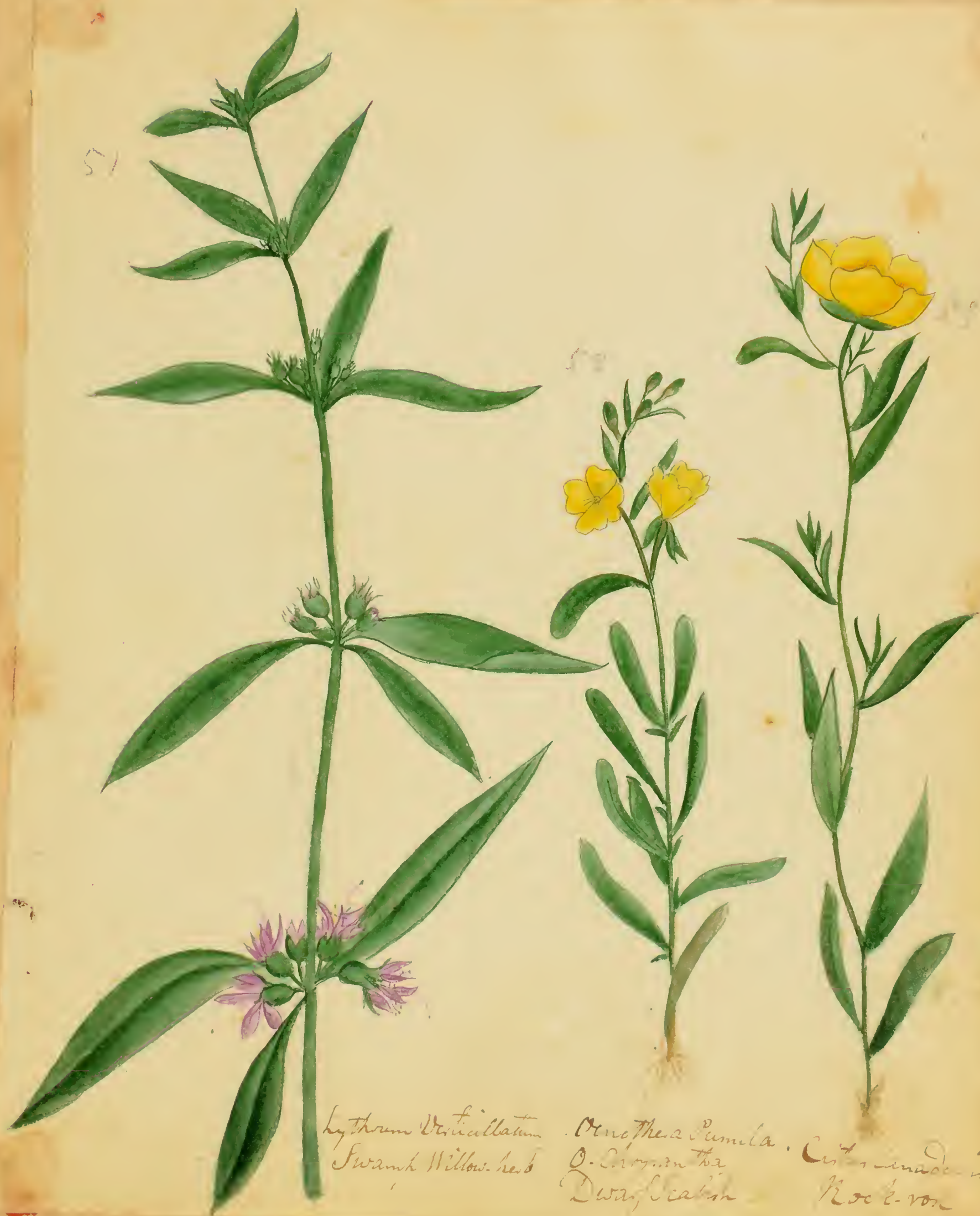



Hepatica Triloba
Liver-leaf
Anemone Nemorosa
Low Anemone


Chimaphila Umbellata (Eaton)
Pyrola Umbellata (Bigelow)
Princes Pine - Pipsissewa
Bellis Perennis
Daisy


Sisyrynchium Anceps
Blue-eyed grass
Erythronium
Dog-tooth
Adders
Dens Canis
Violet
tongue

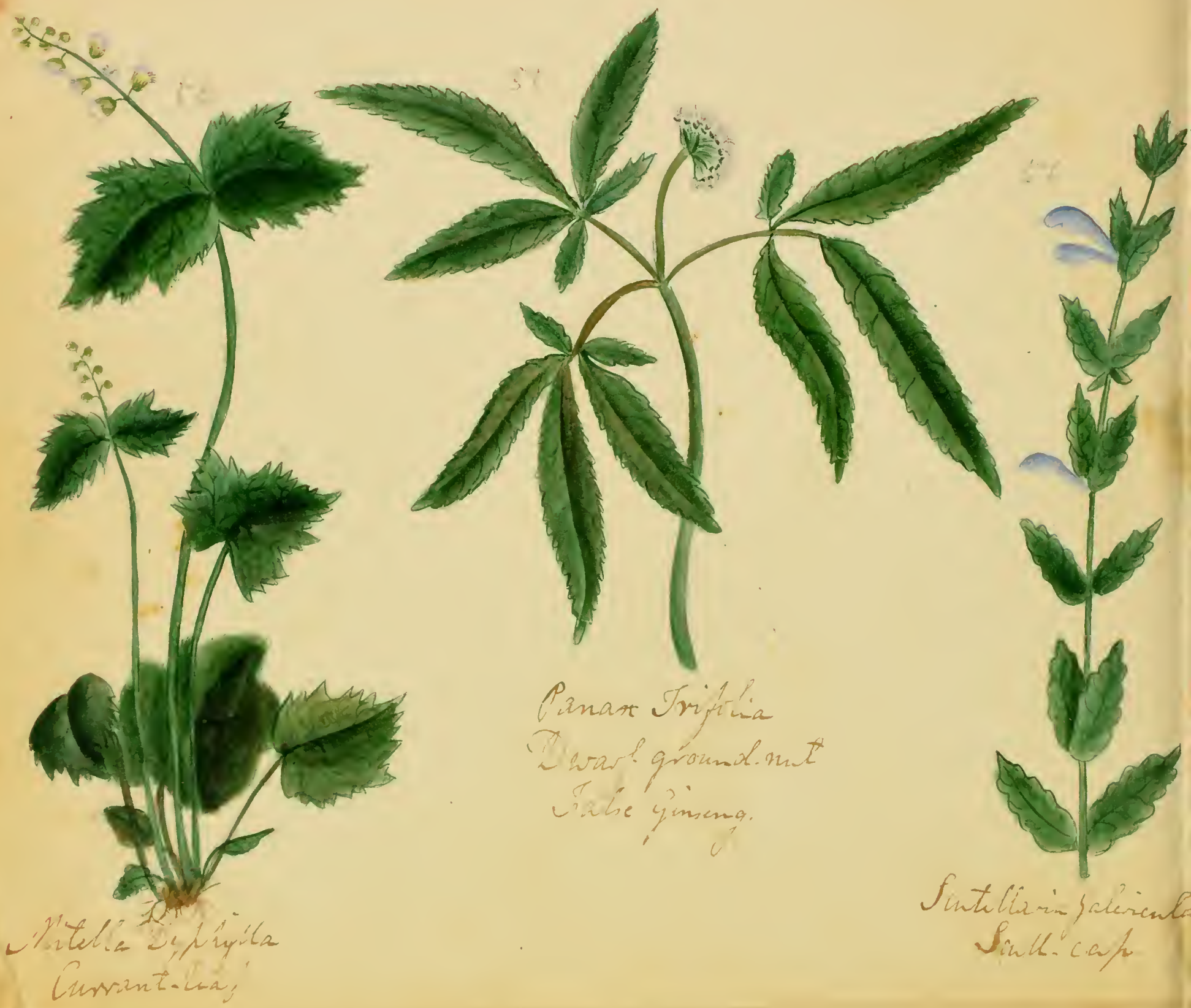
51

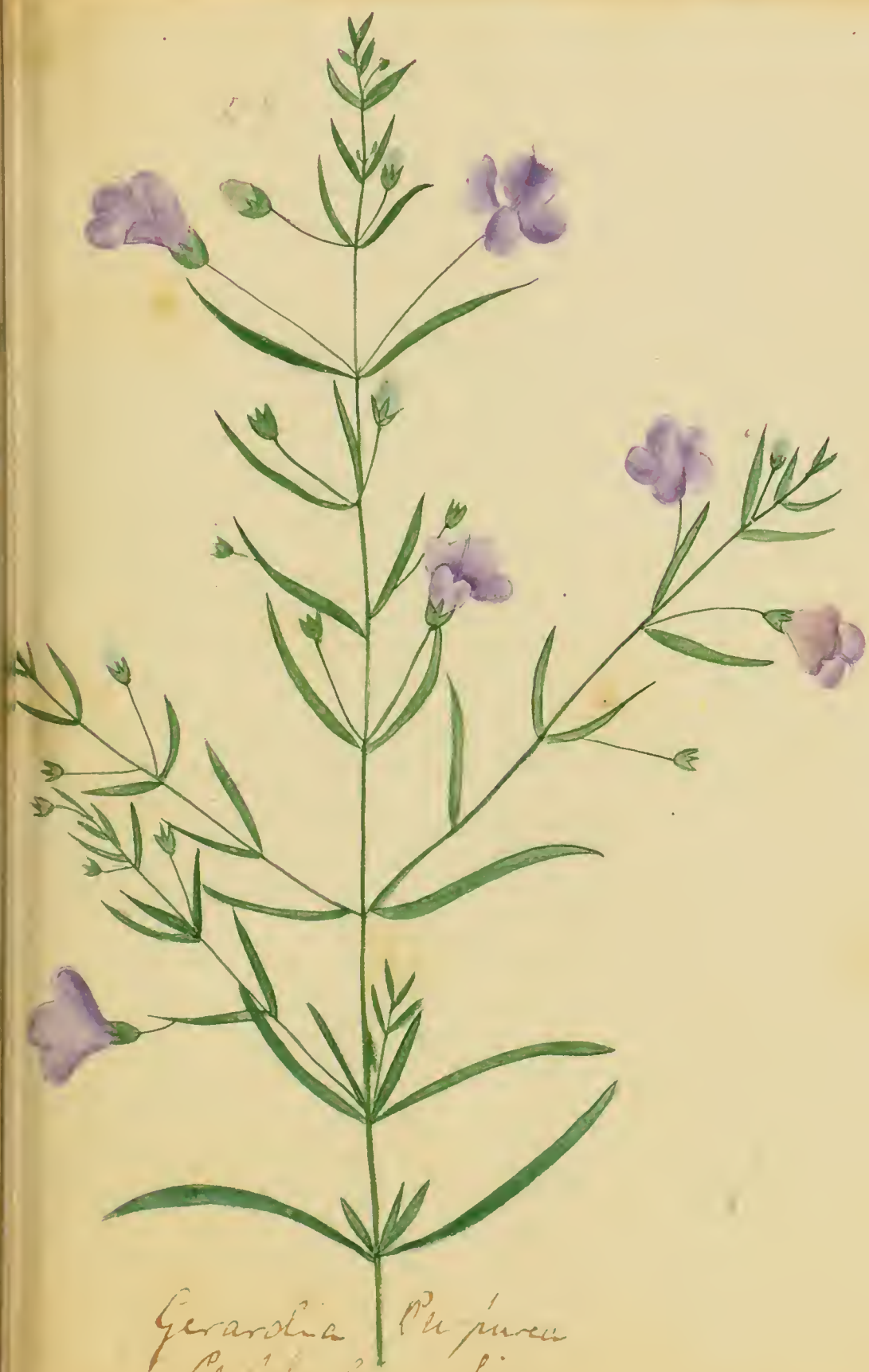


Lythrum Virgatum — Swamp Willow-herb

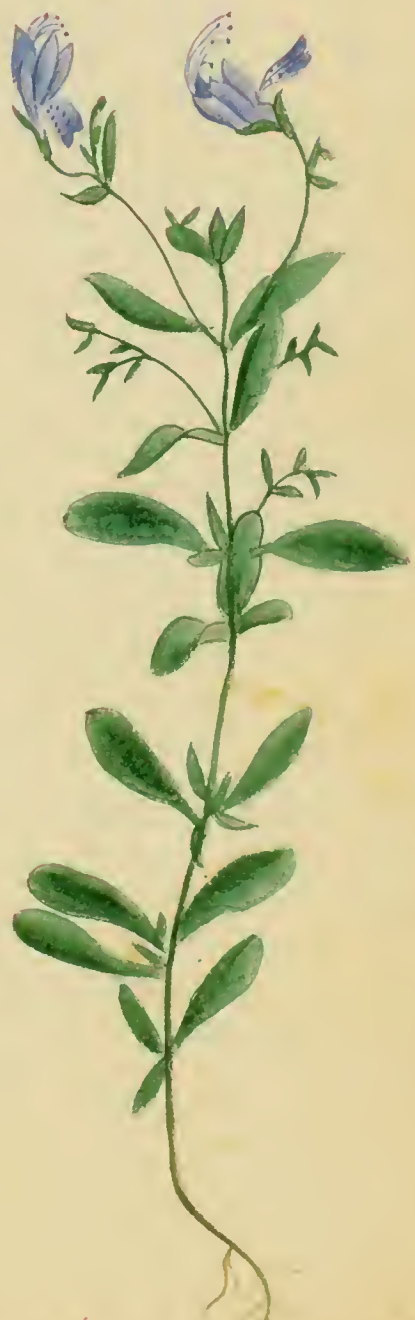
Oenothera Pumila — Q. Chrysantha — Dwarf Scalish

Cistus vulgaris — Rock-rose

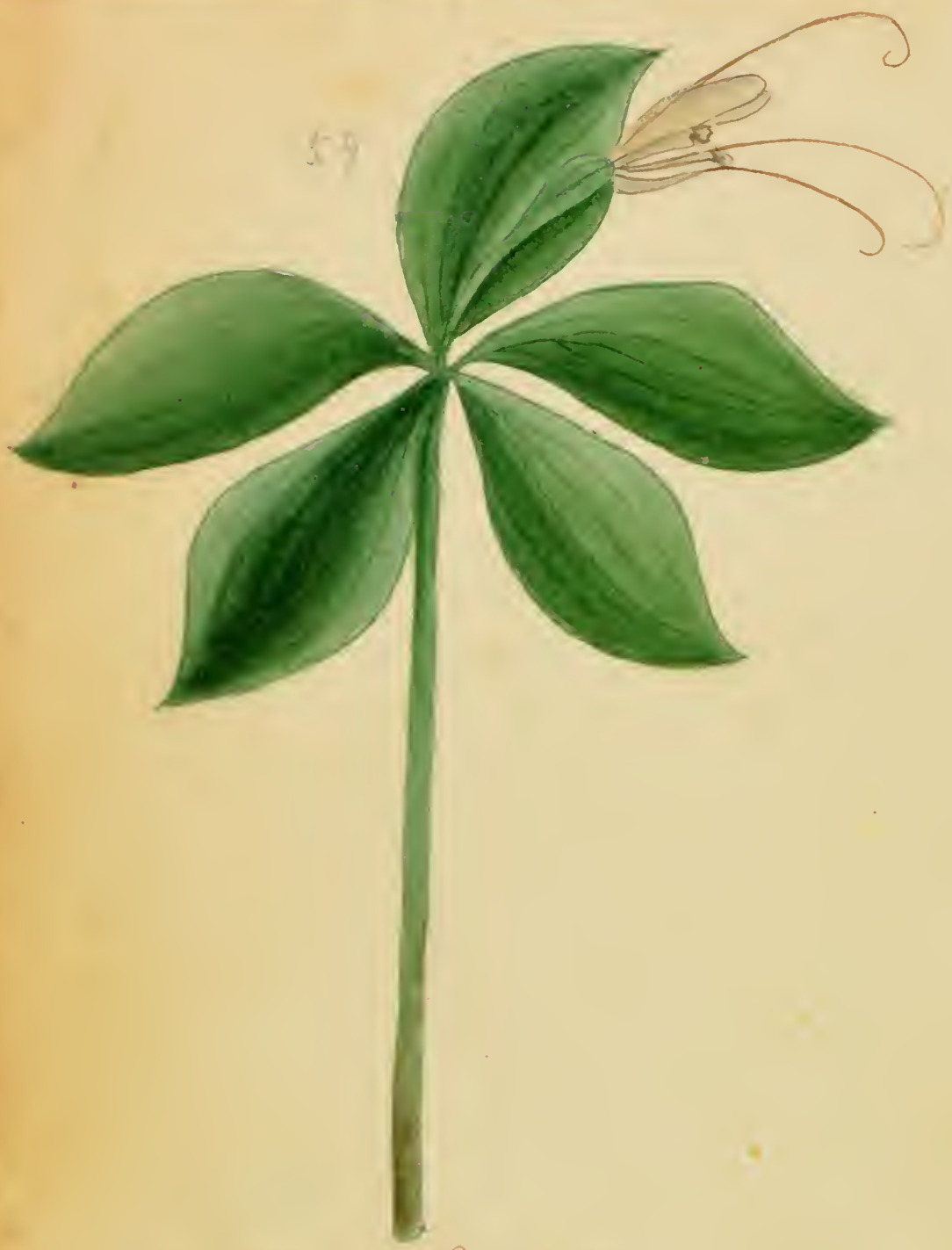

Mitella Diphylla
Currant-leaf
Panax Trifolia
Dwarf ground-nut
False ginseng.
Scutellaria galericulata
Skull-cap



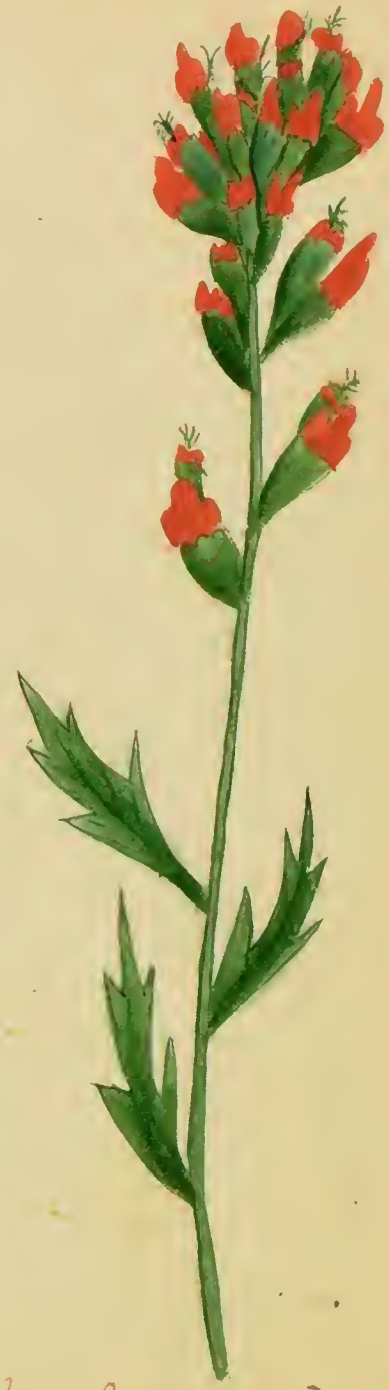
Gerardia Purpurea
Purple Gerardia



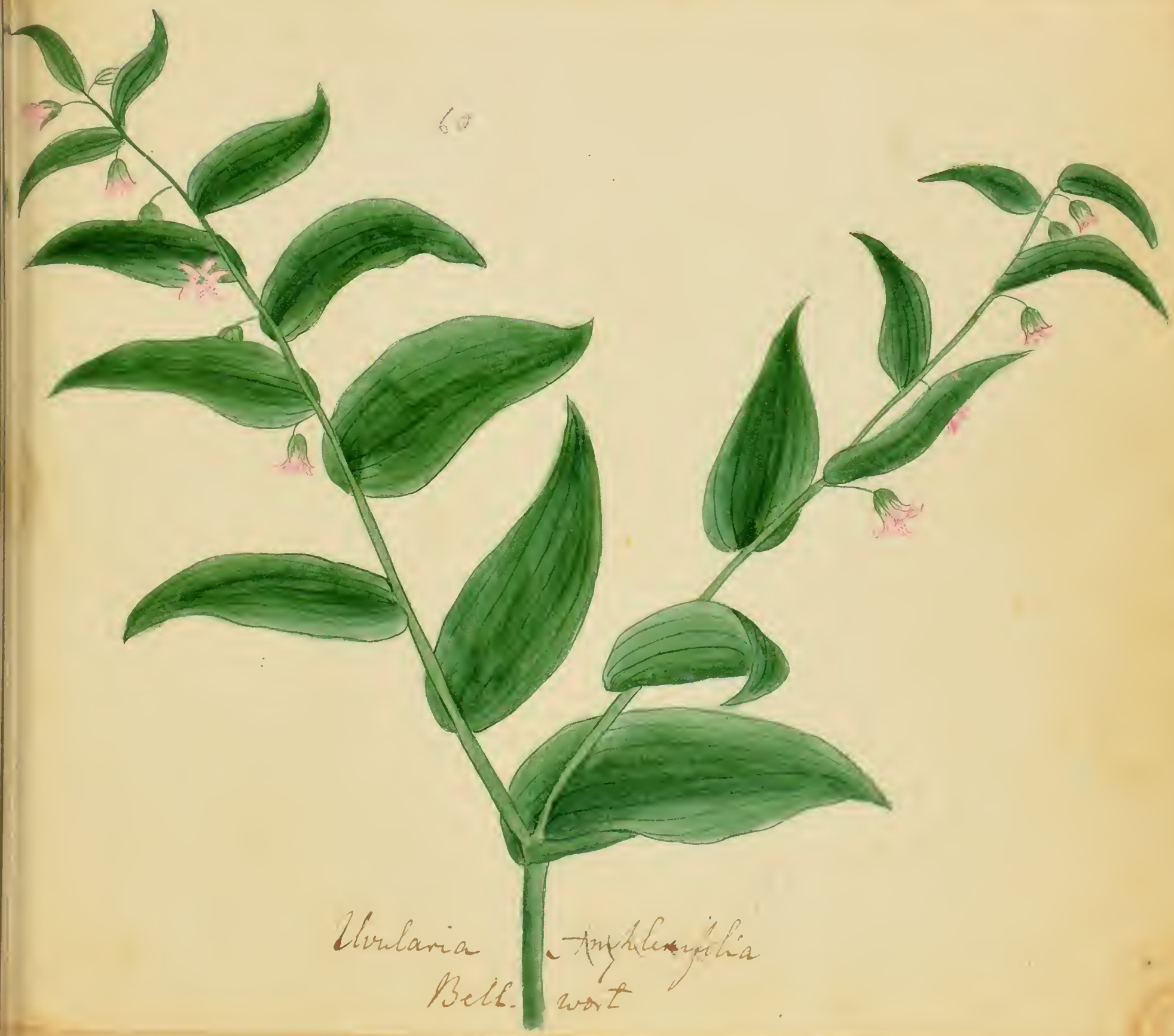
Trichostema Dichotoma
Blue-curls



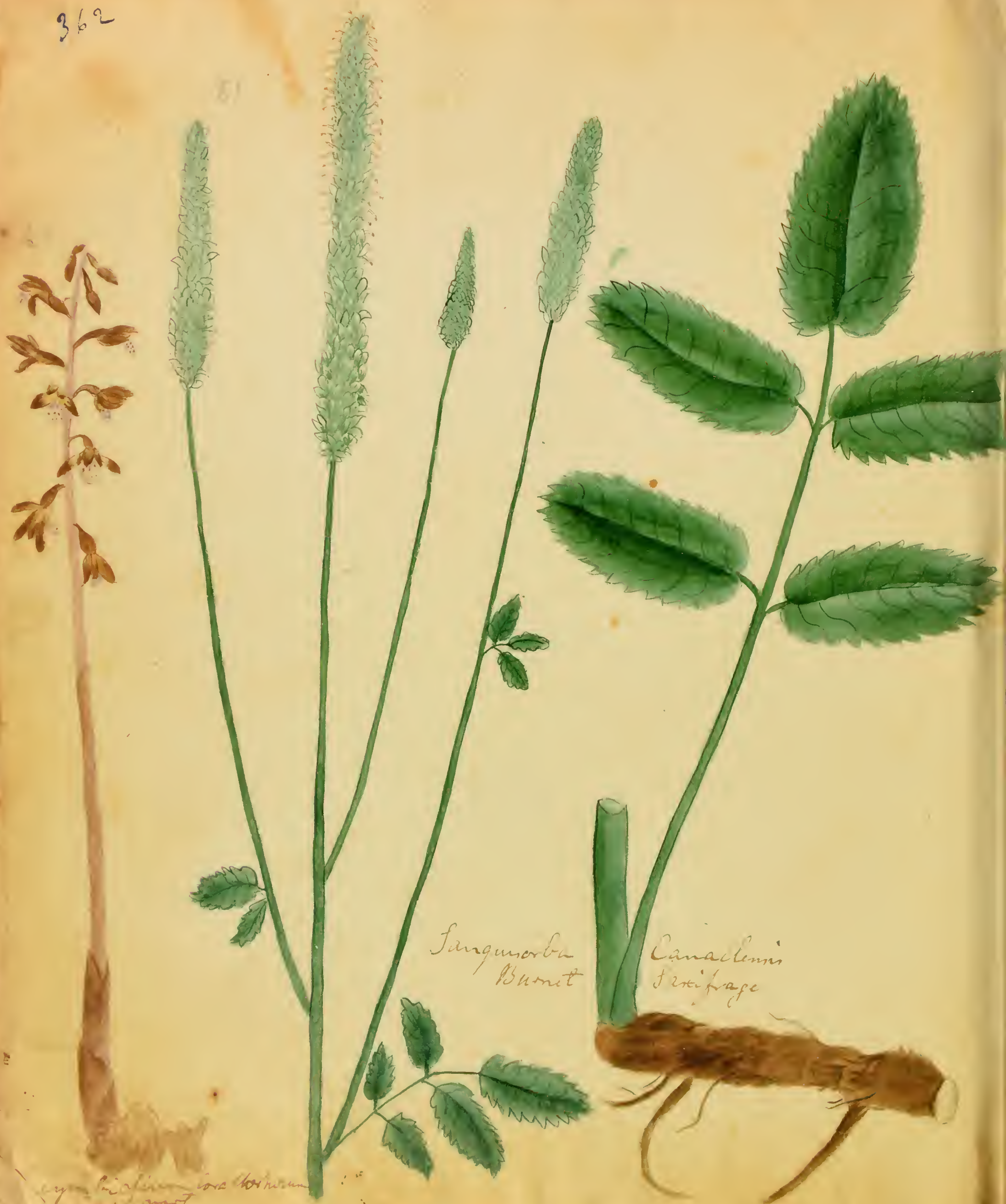
Anthusa Verticillata
Anthusa

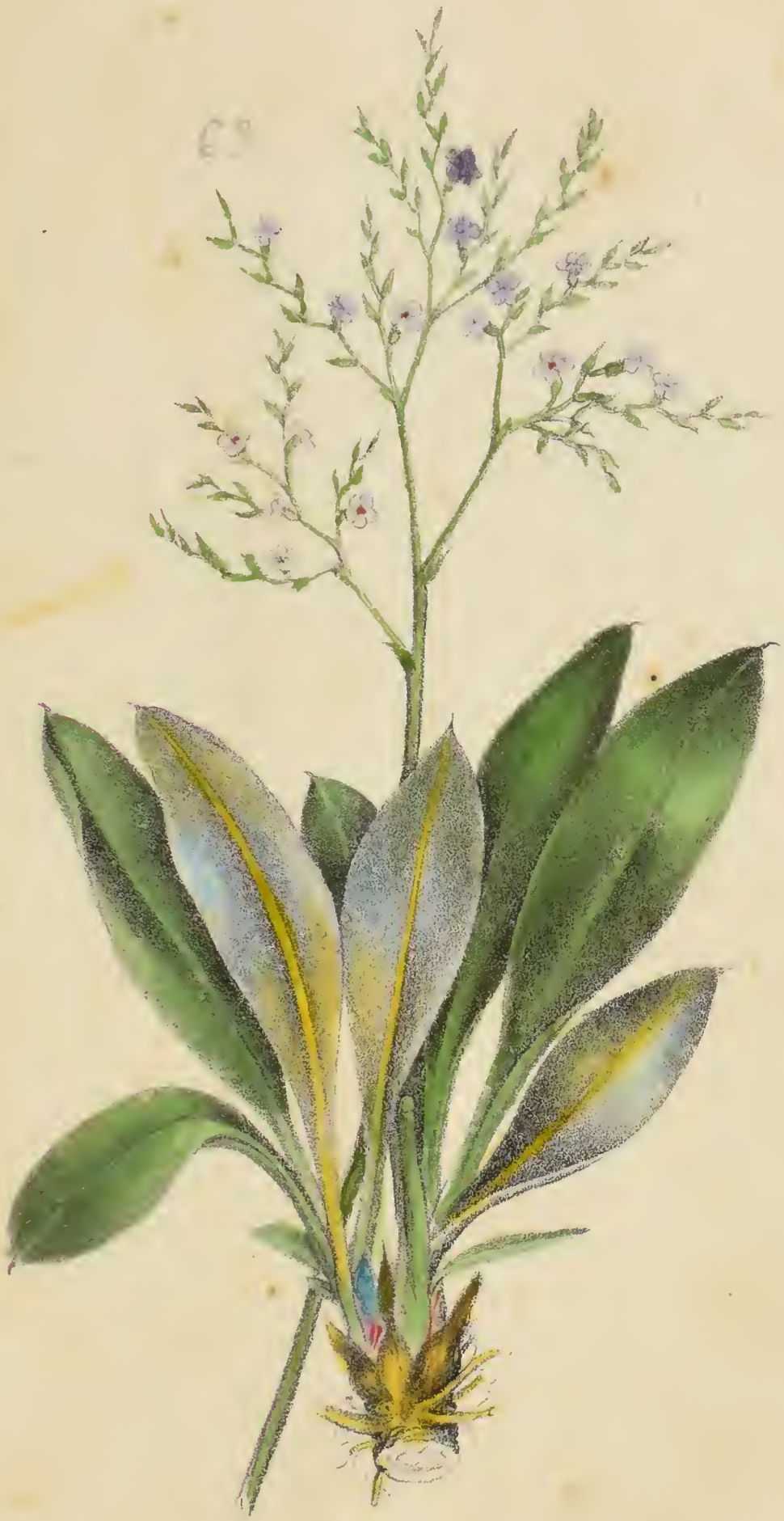


Bartsia Coccinea
Painted-cup



Uvularia mylhleuylhia
Bell. wort

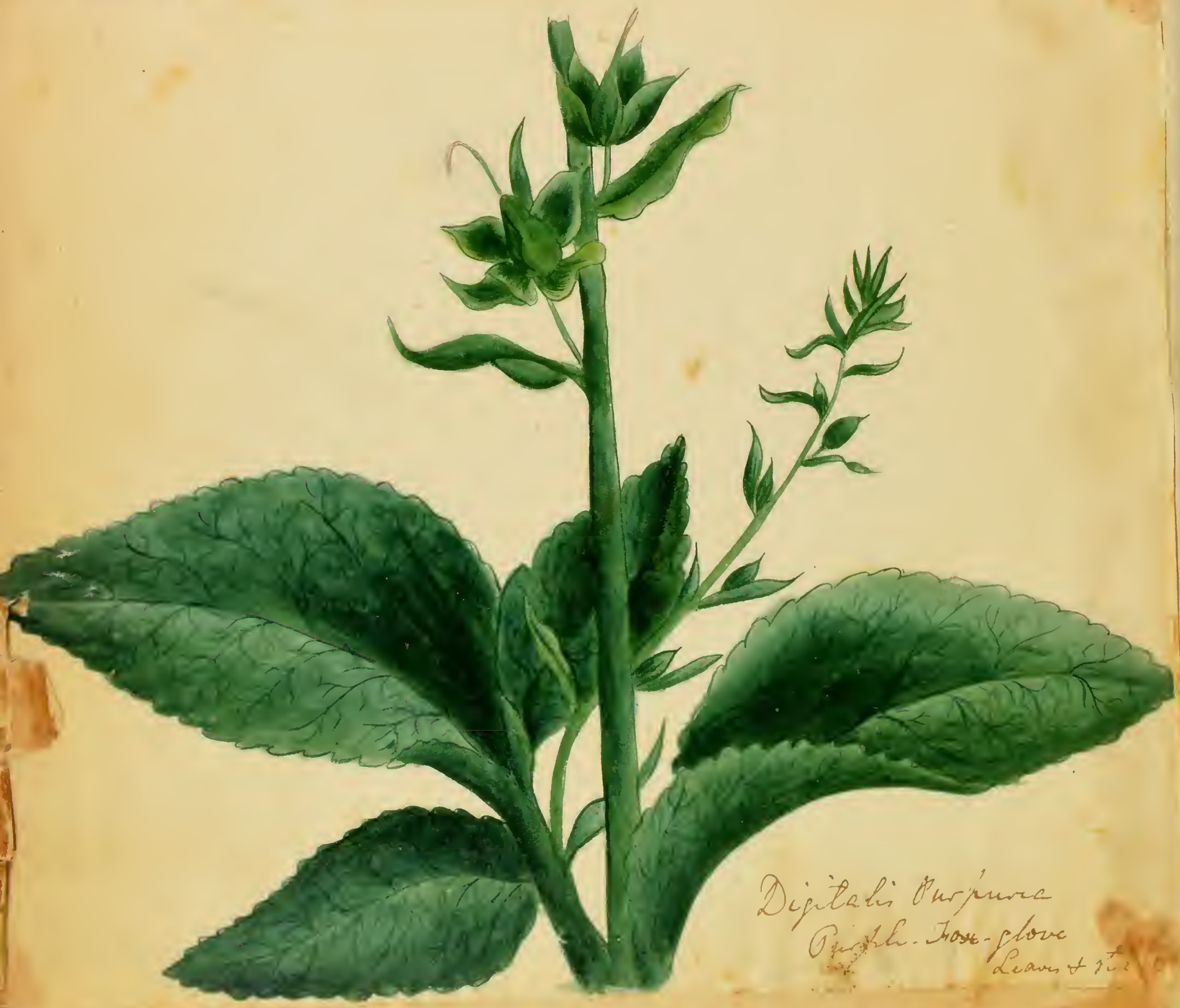

Sanguisorba
Burnet
Canadensis
Saxifrage



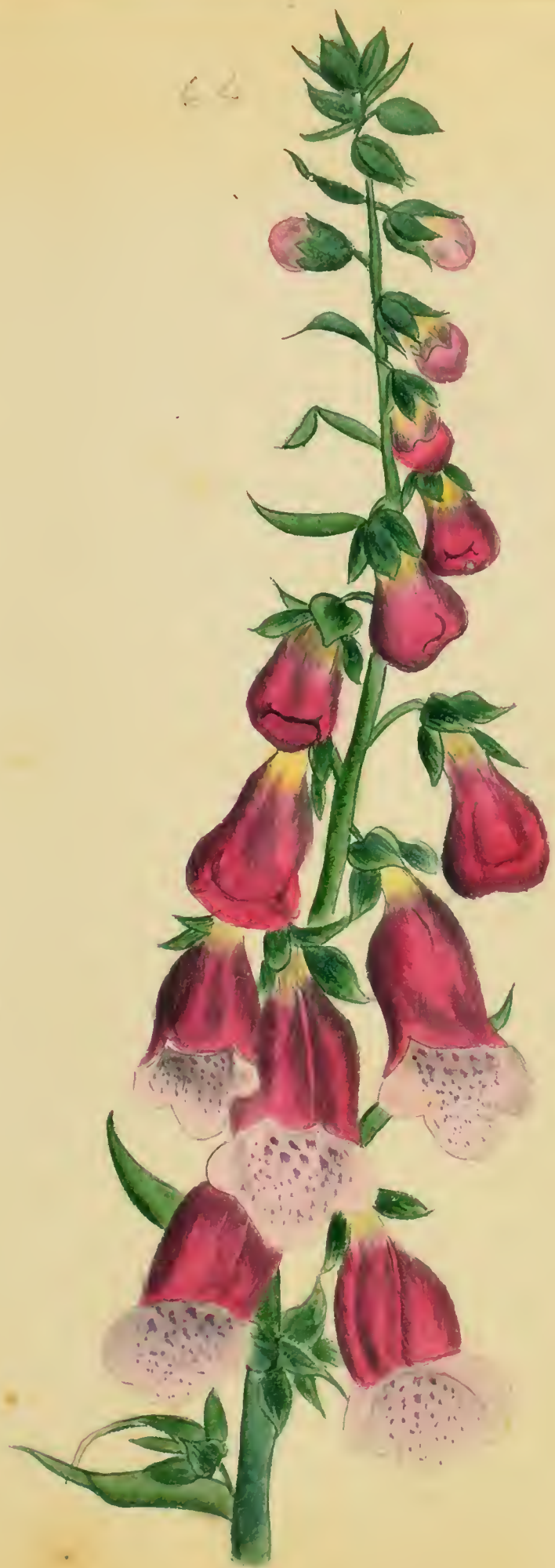
Marsh Rosemary. Statice Carolinana

Miss C Noyes del. Sharpe Morris & Co. 17 [illegible]

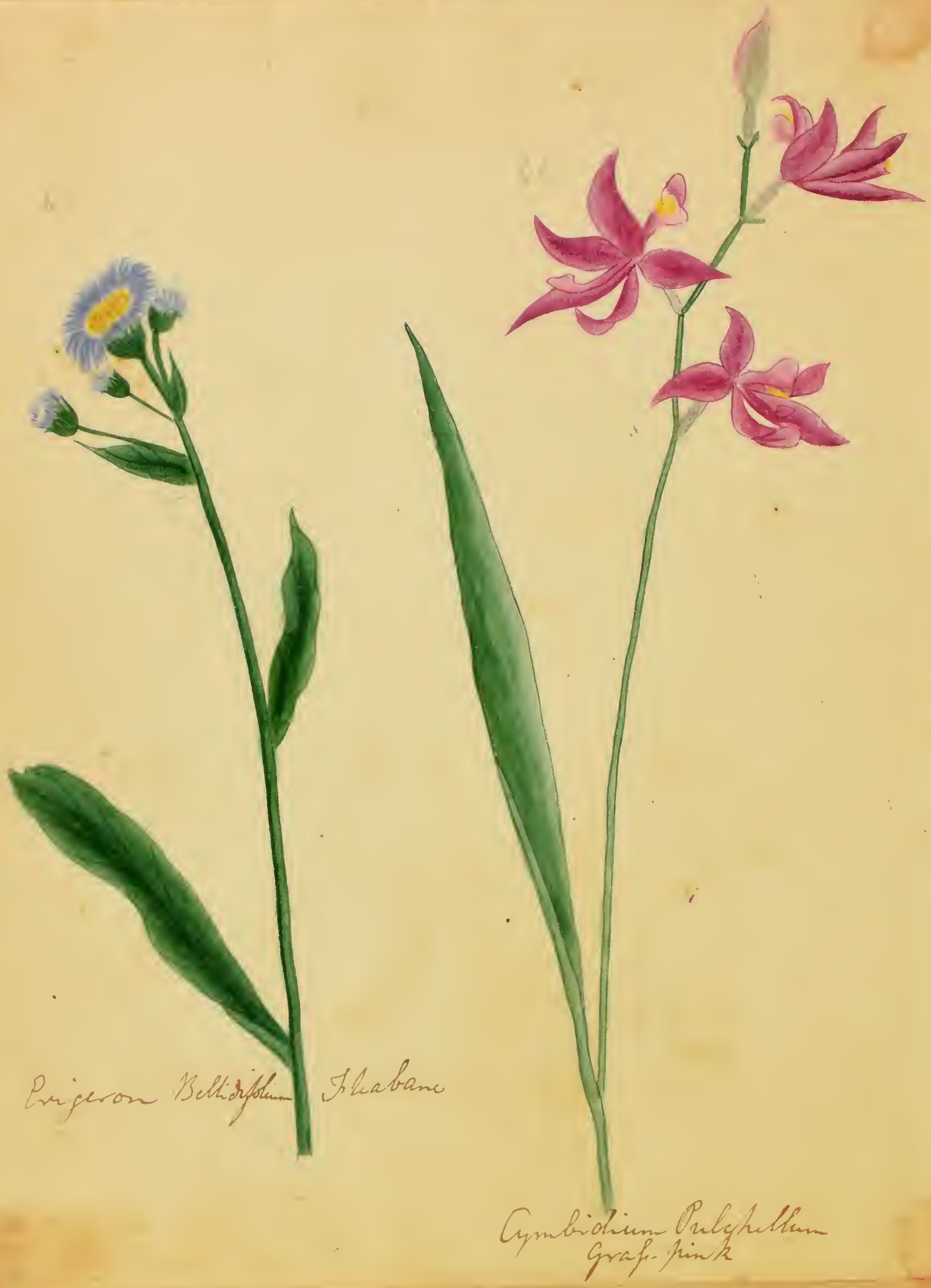
and

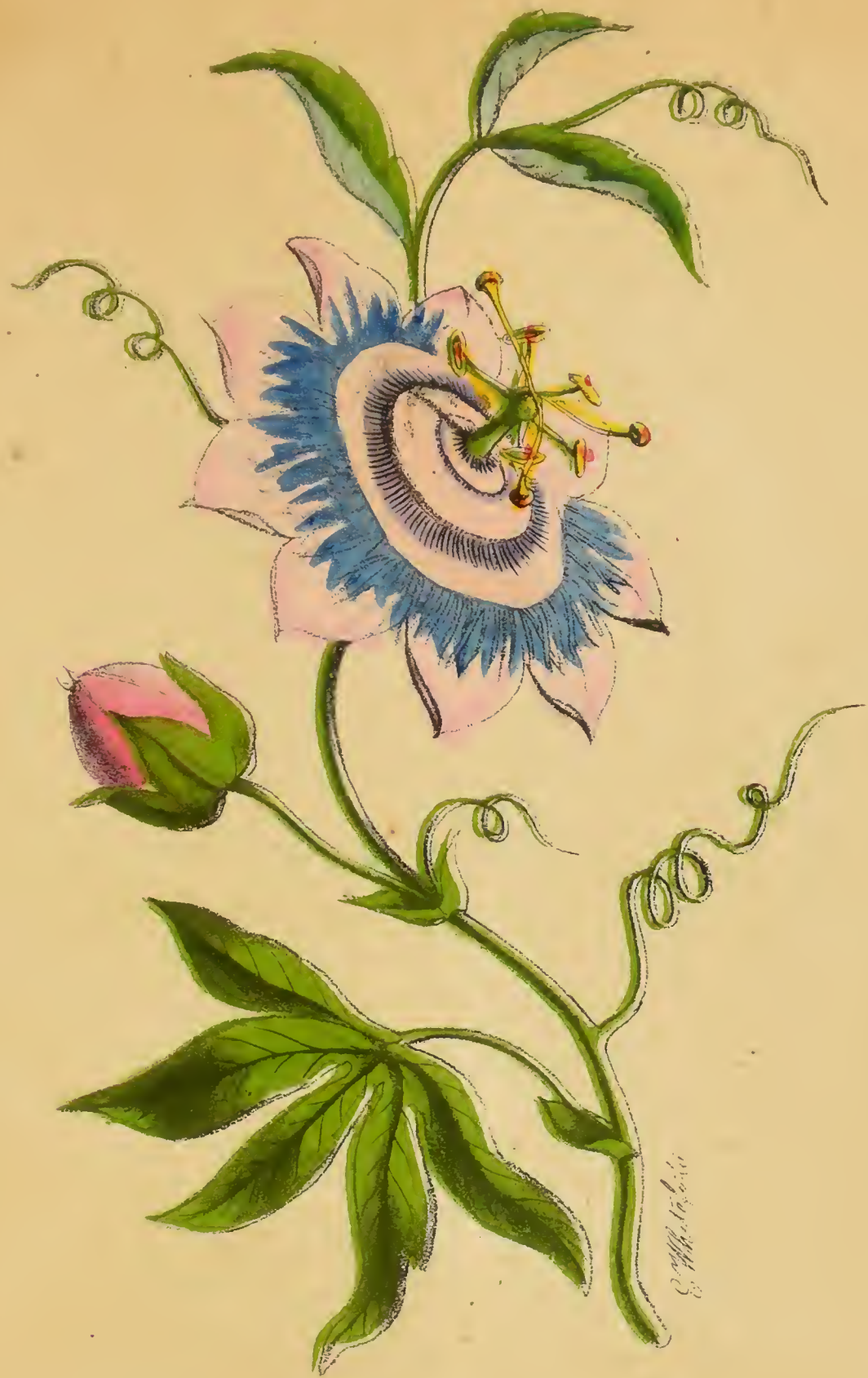


Digitalis Purpurea
Purple - Foxe - glove
Leaves & stem

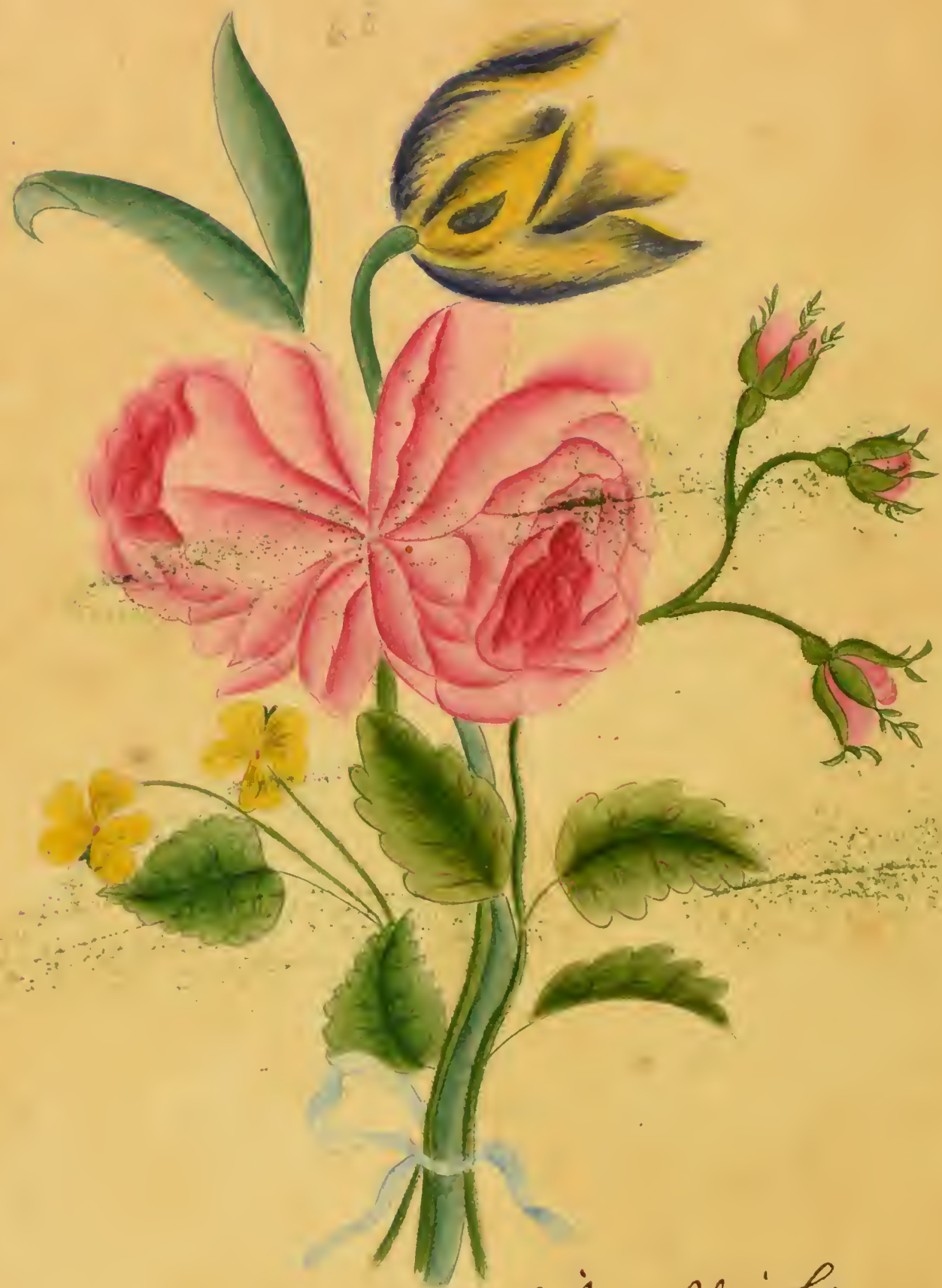


Digitalis Purpurea
Purple Foxe-glove
The flowers


Erigeron Bellidifolium Fleabane
Cymbidium Pulchellum
Grass-pink

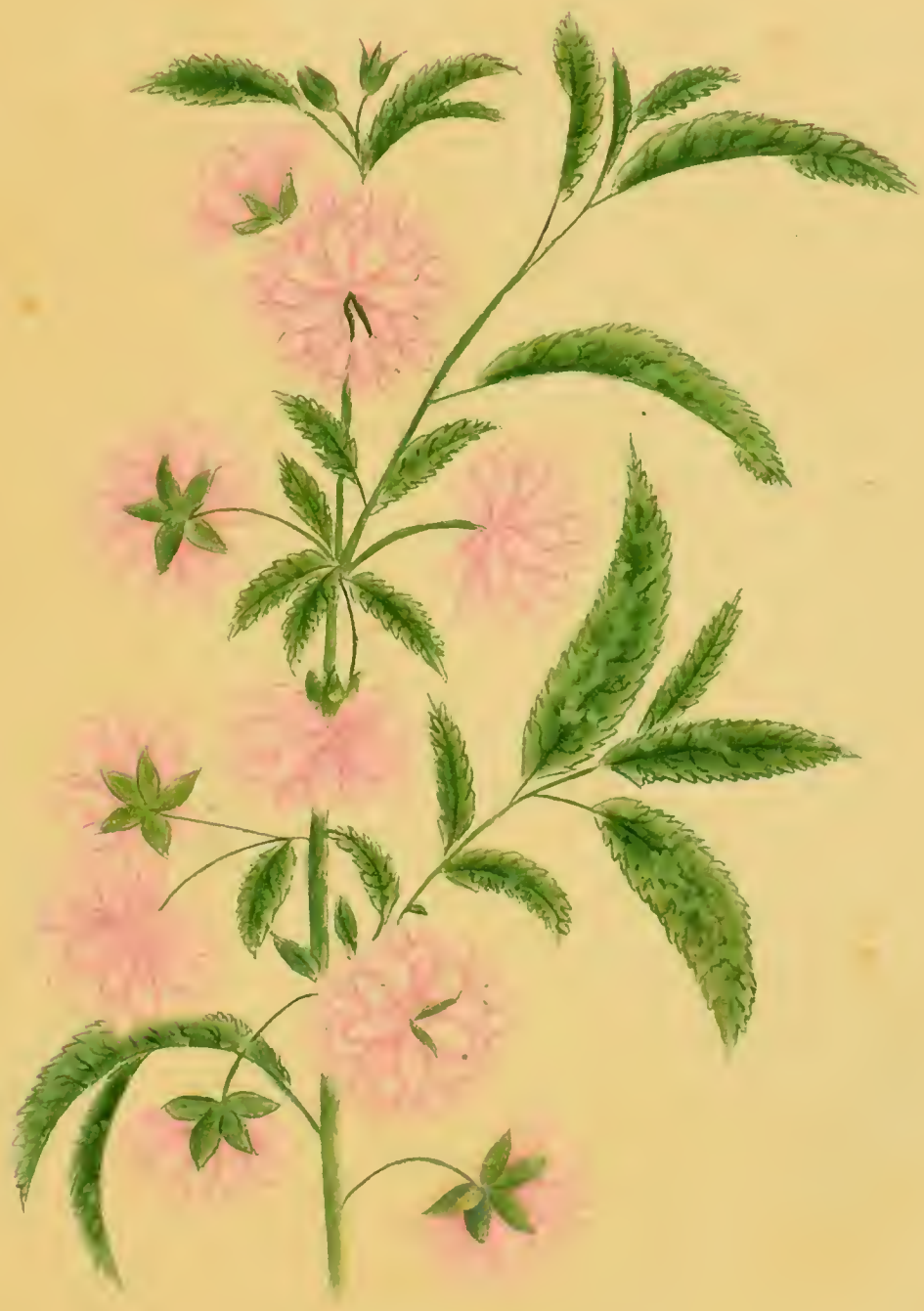


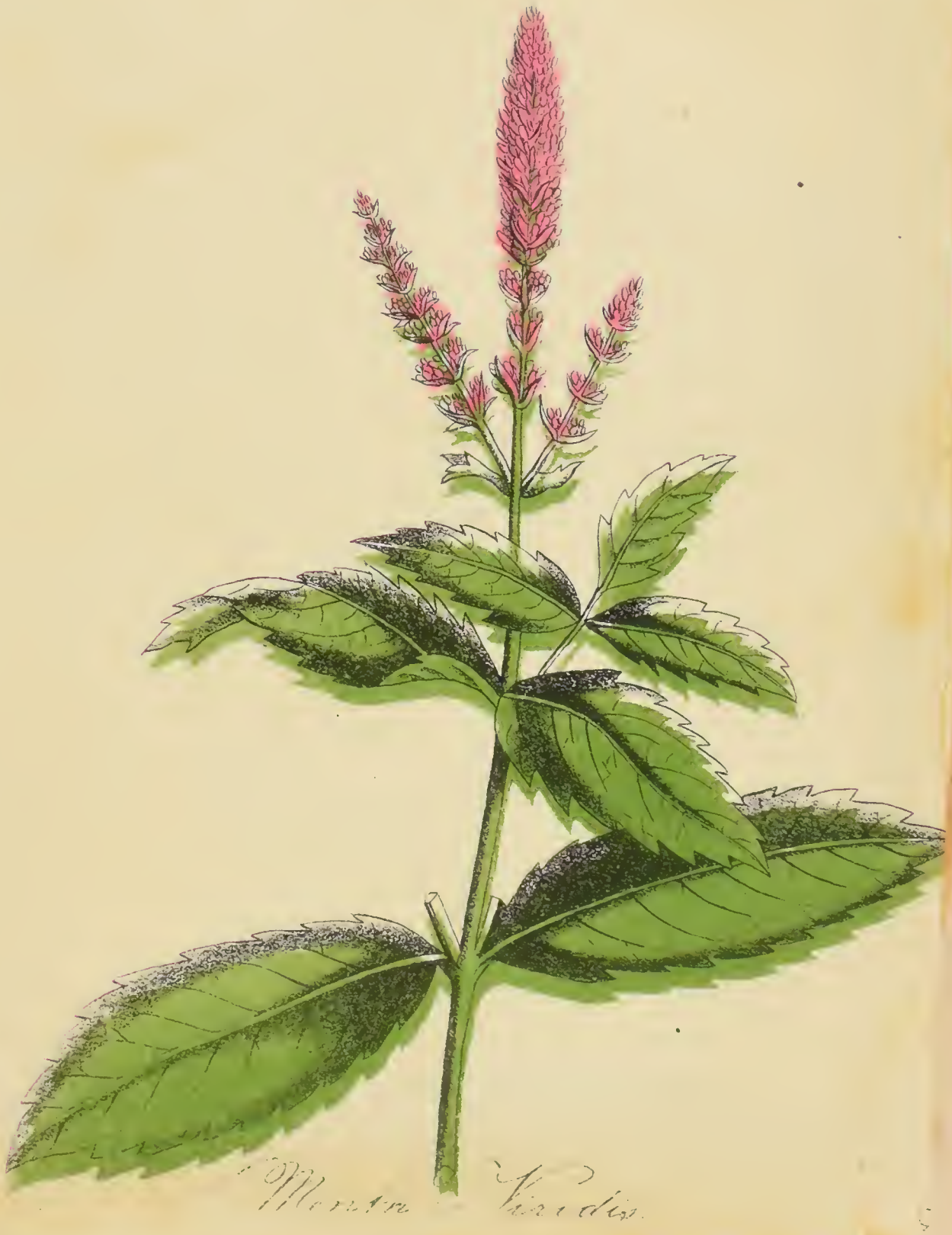
Passiflora.

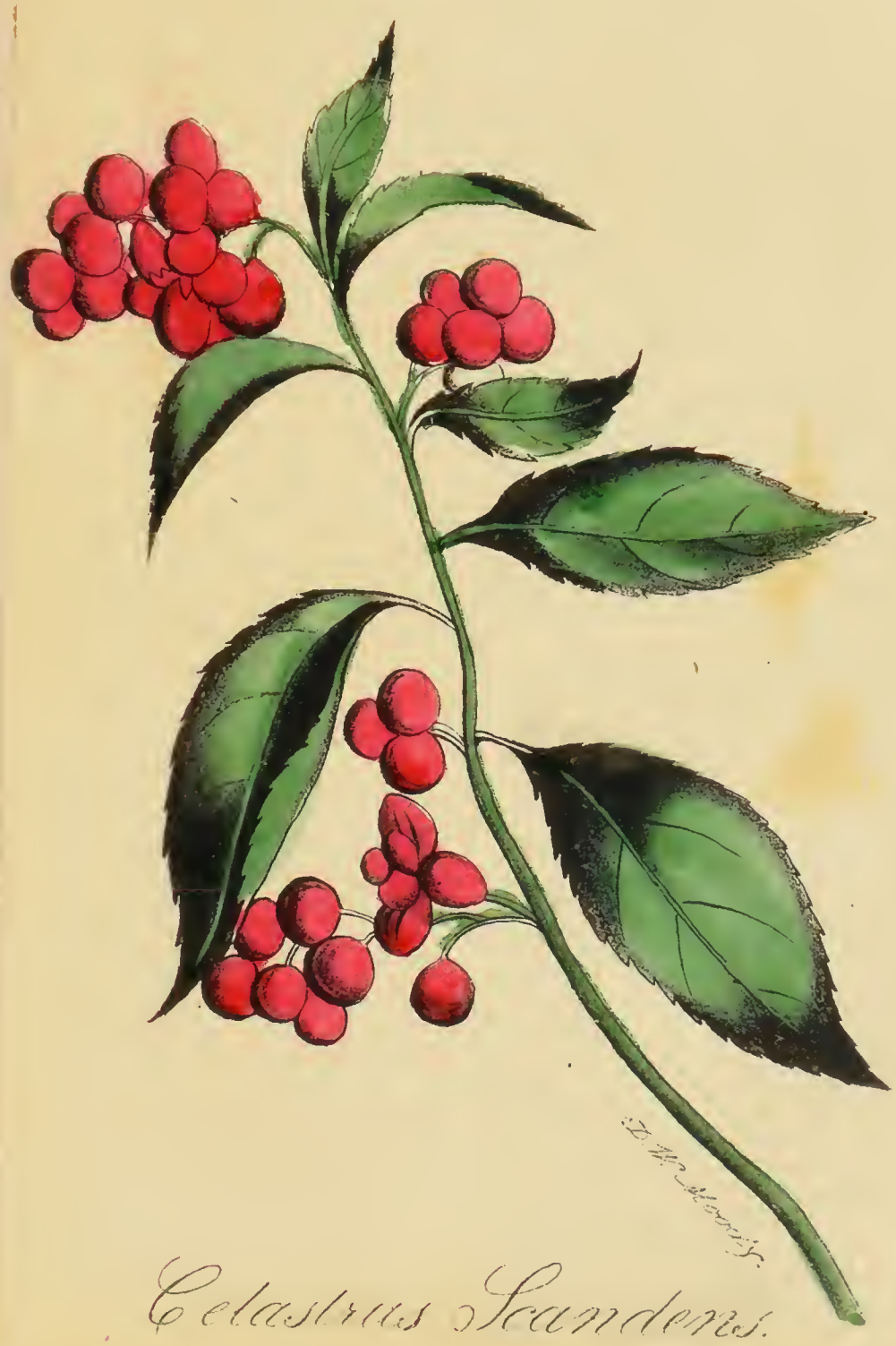


Rosa. Tulipa. Viola
Rose. Tulip. Violet.

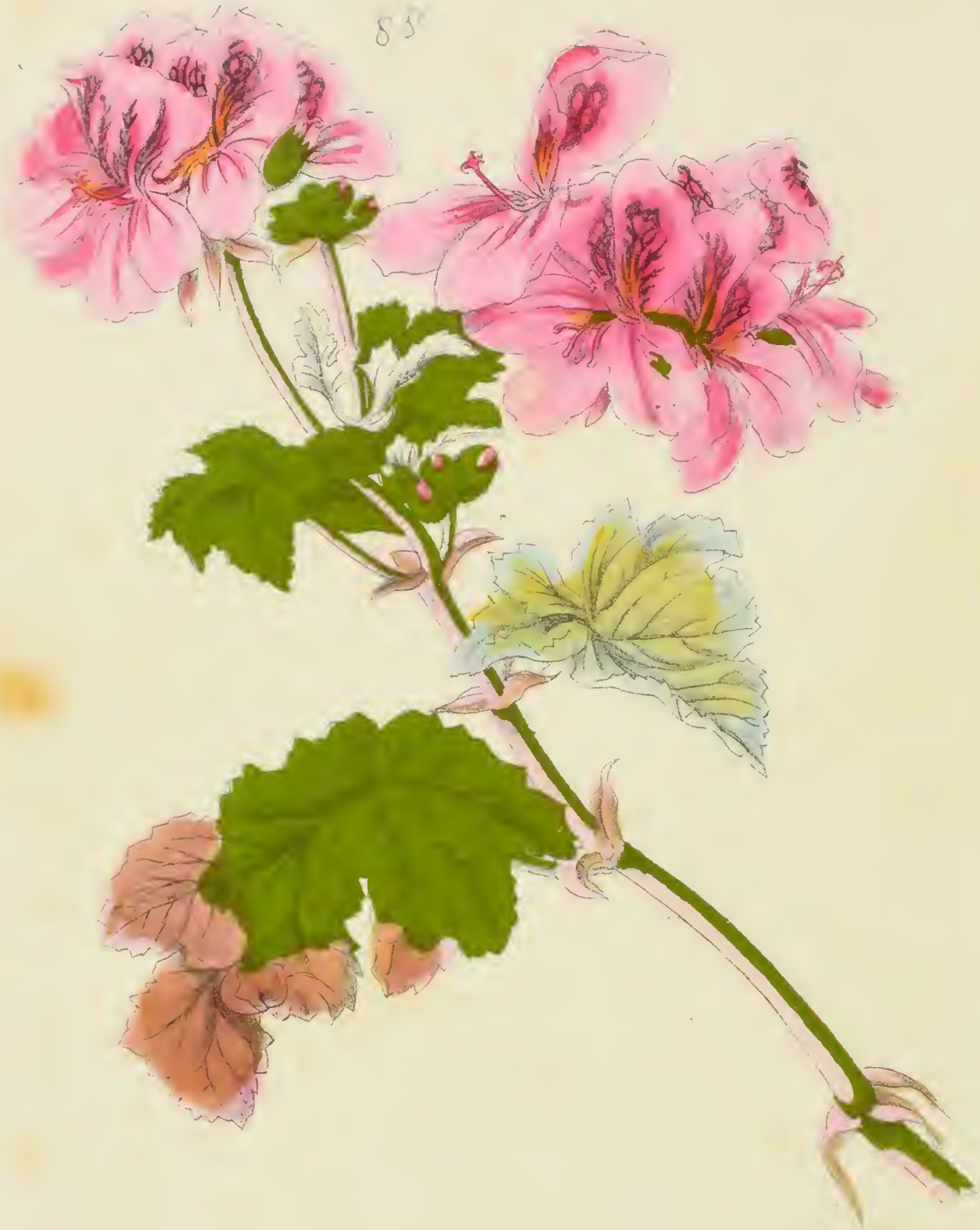
Lonicera Sempervirens
A Specie of Honeysuckle.




Mentha Viridis.



Celastrus Scandens.



Pelargonium Quercifolium.

PELARGONIUM QUERCIFOLIUM—OAK-LEAVED GERANIUM.

CLASS, MONADELPHIA; ORDER, HEPTANDRIA.

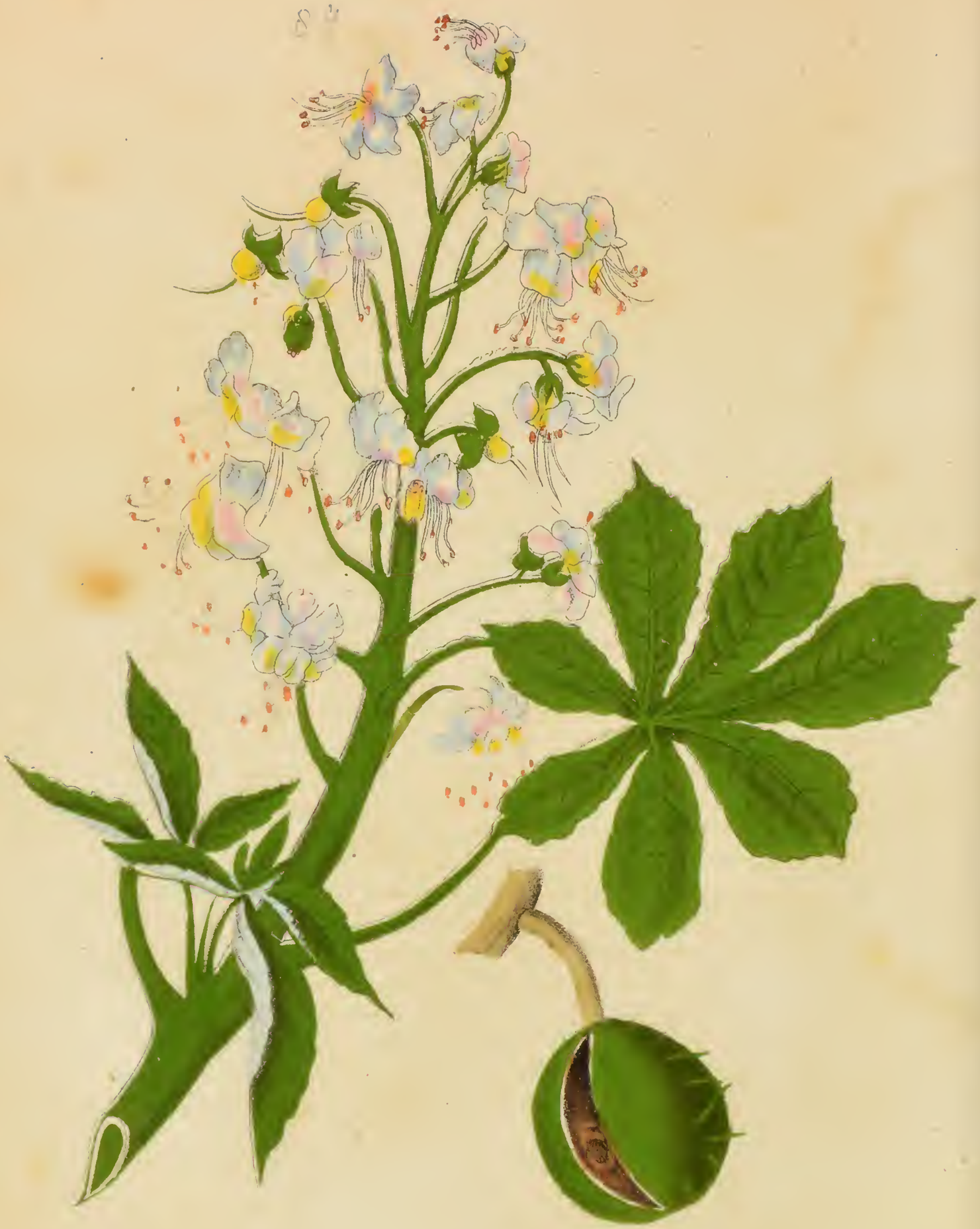
NATURAL ORDER, GERANIACEÆ.

GEN. CHAR. Calyx, five parted, upper divisions much the broadest, terminating in a funnel-shaped, capillary nectary. Corol, five petalled, irregular, upper petals very showy, broader than the lower, and covered with colored veins. Arils, five, each one seeded and awned. Anthers, seven. SPEC. CHAR. Umbels, sub-many-flowered. Leaves, simulating the oak. Filaments, ascending at the apex.

In the description of the Geranium Robertianium, we reviewed the prominent characteristics of this natural and exceedingly beautiful order. This as well as the most of our conservatory species, is a native of the Cape of Good Hope. This geranium will show the celebrated spiral air vessels to very good advantage; and those who are curious to witness the secret workings of vegetation will find much to learn and admire in its structure. For this purpose, place one of the petals upon a piece of perfectly smooth and flat glass, such as is usually furnished for the transparent stage of a microscope, wet it with water, and then lay over it another flat piece of glass. Press the two firmly together, and by degrees all the air will be squeezed out of the petals and it will become transparent. With a good magnifying power all the air vessels of the veins may be distinctly observed, looking like fine threads of silver wire twisted upon a spiral spring.

It has been well remarked, that this race of plants wants but a greater capability of endurance to the cold, to make them the most valuable as well as confessedly the finest productions of the vegetable kingdom. Unfortunately none of them will endure the frost; all have perished upon which the experiments for the purpose of naturalizing them were tried, and in despite of the most persevering and trying effort, they remain as they were at first, Greenhouse plants. They are easily propagated by cuttings from any part of the plant, whether from the old woods or new; placing these in a pot filled with moderately moist earth will ensure their sprouting. The only geranium possessed of much medicinal properties, is the G. Maculatum, or Crane's bill geranium, which is indigenous to the United States, and the purple colored flowers of which are too well known to need description; its root is a highly valuable astringent. Most of the whole species are in perpetual leaf; the remainder die to the ground and come up annually, to flower and produce seed. This plant emblemizes ART, from its faculty of imitation. In it the student of chemistry, as Phillips remarks, will see how imperfect is his art in comparison with natural chemistry, which distils from the earth and conveys by distinct channels, in its small stems, all that is necessary to produce foliage, flowers, and fruit, together with color, smell, and taste, the most opposite fluids and liquids being separated only by divisions so small as scarcely to be deemed a substance. And the research into the wonders of this, as well as every other species of vegetation, may be entered into without hurting the sensibility of the most tender feeling, as plants and roots may be dissected without those disagreeable sensations, which follow the dissection of animals.

"Each secret spring, each organ let me trace,
That mock the proudest arts of human race;
Completest toil from endless source that rose,
Each worth a world; for each the Godhead shows."



Æsculus Hippocastanum.

ÆSCULUS HIPPOCASTÆNUM—HORSE CHESNUT.

CLASS, HEPTANDRIA; ORDER, MONOGYNIA.

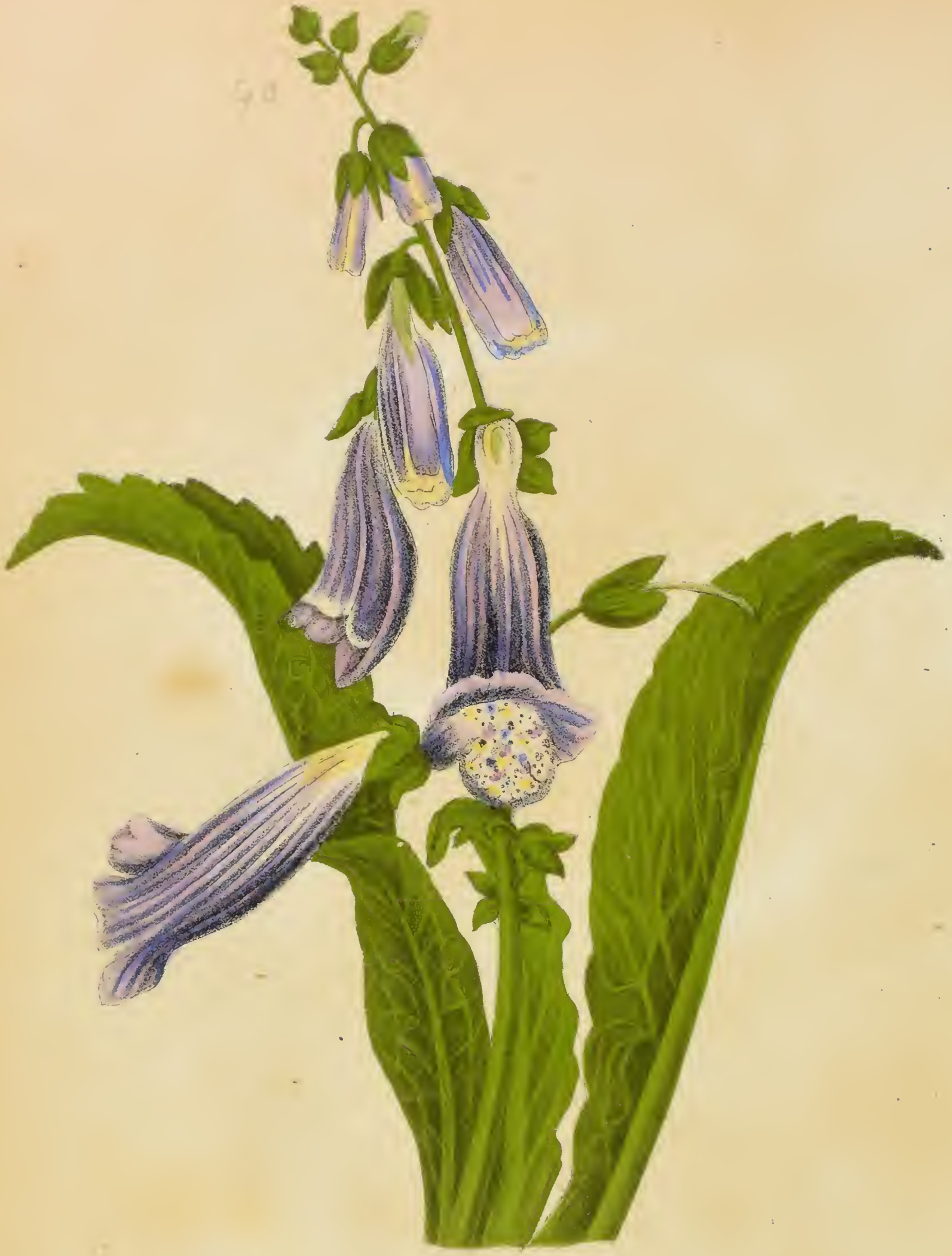
NATURAL ORDER, HIPPOCASTANACEÆ.

GEN. CHAR. Calyx, swelled, four or five toothed. Corol, correspondingly, four or five petalled, inserted on the former, unequal, and downy. Capsule, three celled. Seeds, large solitary. SPEC. CHAR. Leaves, digitate, with seven divisions. Corol, five petalled, spreading.

This magnificent, tree as Tyas remarks, was originally brought from India, and has been naturalized in Europe for more than two centuries; in America not quite so long, as it took quite a circuitous mode of reaching us, by way of Constantinople, Vienna, Italy, France, and England. It gives the deepest and most solemn shade of any tree that is yet known, and for this purpose, as well as its extreme cleanliness and rapidity of growth, is much used in parks, avenues, streets, and to shade houses. It luxuriates in the Tuilleries in France, where it rises around the great basin in masses of incomparable beauty, and at the Luxembourg, spreads its branches in accordant pomp and splendor. It can easily be distinguished from other trees by its magnificence of size and form, were not the five or seven leaves it bears on each footstalk, spread out like a human hand, a sufficient distinction. Its blossom is certainly one of the most splendid and elegant produced by any timber tree in the country. When in full flower, its delicate spikes

of white and pink, and the deep green of its digitated leaves, make it look like a mountain of ivory and emeralds, but this effect soon gives place to its shadowy depth of coloring. In the beginning of spring, one rainy day is sufficient to cause this beautiful tree to cover itself with verdure. If it be planted alone, nothing surpasses the elegance of its stately pyramid of from fifty to sixty feet, the beauty of its foliage, or the richness of its flowers, which in May or June, make it appear like an immense lustre or chandelier all covered with pearls. Fond of ostentation and richness, it covers with flowers the grass it overshadows and yields to the idler a most delightful shade. The nuts and capsules are large, mahogany colored, and are in great request among the rising generation, in the construction of potato mills. Though they yield a fine starch, still not in sufficient quantity to make it an object in the cultivation of the tree. In our western states, they have been successfully used to poison fish. Taken as a whole they rank in the merely ornamental class, for though cattle, especially the Deer, eat the nuts with avidity, to man they are acrid and unpalatable, evidently not intended for his food. The timber is of little service, being soft and perishable. The bark it is said is of some service in tanning, and the nuts, besides the properties we have named, have a soapy quality, which the peasants in some countries employ advantageously. Its generic name is derived from Esculus, a tree which furnished the Romans with an eatable fruit. The specific name meaning Horse Chesnut, was given because the Turks grind the nuts and mix them with corn, for their steeds. It is the emblem of LUXURY.

"There avenues of chesnuts high,
With vaulted roofs conceal the sky."



Digitalis Purpurea.

LITH. OF LEWIS & BROWN, 272 PEARL ST. N.Y.

DIGITALIS PURPUREA—FOXGLOVE.

CLASS, DIDYNAMIA ; ORDER, ANGIOSPERMIA.

NATURAL ORDER, SCROPHULARIACEÆ.

Gen. Char. Calyx, five parted. Corol, bell form, five cleft, ventricose. Capsule, egg shaped, two celled. Spec. Char. Sepals, ovate, acute. Corol, obtuse, superior lip entire. Leaves rough and somewhat spear-shaped.

This genus contains many species, not one of which is American. The generic name is derived from a word signifying thimble, in allusion to the form of the flowers. Its common name is a corruption of Fairy's Thimble. This biennial plant is a native of the mountainous and sandy regions of Europe. It has a simple stem, leafy below, covered with light down, which induced the poets to make it the emblem of youth. The leaves are alternate, of an oval, spear-shape, those from the root attaining a considerable size. It flowers on a spike. Its corolla, says Lindley, is a large, inflated body, with its throat spotted with rich purple, and its border divided obliquely into five very short lobes, of which the two upper are the smaller; its four stamens are of unequal length; and the style divided into two lobes at the upper end. A number of long, glandular hairs cover the ovary, which contains two cells and a great quantity of valves.

Phillips remarks, that this beautiful but deleterious plant, which so highly ornaments the banks of hedge-rows and borders of woods, has been taken into the pleasure grounds to embellish the

shrubbery by its noble spikes of pendant flowers, which hang with such peculiar grace from the spiral branches that they may be compared to a tower of Chinese bells, balanced for the pleasure of the Zephyrs. When these flowers advance from the calyx, they are scarcely closed at the end by the four clefts of the corolla, which meet so exactly as to prevent the admission of air until the parts of fructification have arrived at maturity, at which period the lips of the flower burst open in a bell or trumpet shape, displaying the most beautiful leopard spots in the interior of the flower. In this state the corolla remains for some days, until the anthers have discharged their farina, when the mask drops off that the sun may more readily ripen the seed vessels; but as fresh flowers continue to open in a regular succession, upwards, from the month of June to September, the beauty of the plant is continued for a longer period than most other towering flowers.

The covering of the parts of fructification, reminds us of Flint's remarks, in relation to similar cases. Nature, says he, is always modest, and when the mystery is accomplished and the flower cup fecundated, the peduncle that sustains the flower turns up again towards the sky. Its bower of love was concealed; but it shows the cradle of its children.

The leaves of this plant have a nauseous, bitter taste, but uncommon scent; when dried their color should be of a lively green; a fortunate test of the care used in the process, as this plant is now coming into extensive use. When given in large doses, it has the remarkable property of almost instantly reducing the action of the heart, lowering the pulse from seventy beats in a minute to thirty, and even twenty-five; and that too without previously exciting it. There is a variety with white corollas, to be seen sometimes in the gardens, which may be obtained by retaining the seeds of the common Foxglove a year without sowing them. Cowley says;

> The Foxglove on fair Flora's hand is worn,
> Lest while she gathers flowers, she meets a thorn.

Lilium Canadense.

LITH OF LEWIS & BROWN, 272 PEARL ST

LILIUM CANADENSE—COMMON YELLOW LILY.

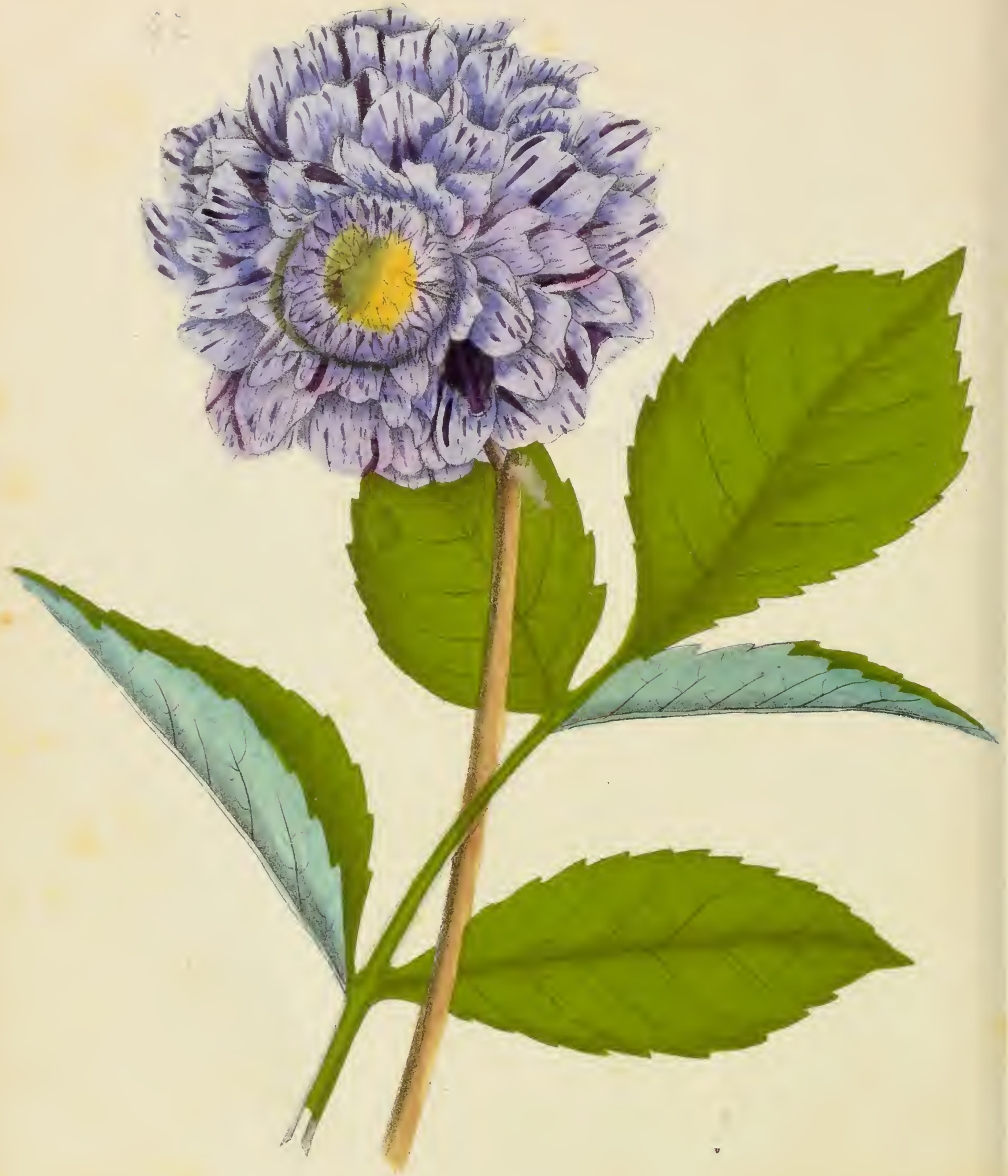
CLASS, HEXANDRIA ; ORDER, MONOGYNIA.

NATURAL ORDER, LILIACEÆ.

Gen. Char. Corolla, six petalled, bell-shaped; with a longitudinal, nectarious line. Capsules, the valves connected by cancelled hair. Spec. Char. Leaves in whorls. Flowers, terminal, drooping, with open petals.

The whole Lily tribe is readily distinguished by the large size of its flowers, some specimens of which are very striking in this respect. Dr. Wallich tells us of the gigantic Lilies of Napal, one species of which grows ten feet high, with flowers large in proportion. During the months of June and July, and sometimes until the middle of August, the larger portion of our meadows and waste moist lands, are ornamented with this flower. It has a green stem, rising to the height of from fifteen to forty inches, with lance-shaped leaves, surrounding it in whorls. Many times this stem bears but a single flower, though most generally three, on the stem; their bells hang pendulous, of a yellow color on the outside, but spotted within; the petals a very little turned outwards. It is perennial in its duration. The beauty and delicacy of the Lily, Phillips remarks, has made it celebrated by the writers of all ages, from the time of Solomon to the present day. It was regarded by Christ himself, as being more splendid than the great King of Jerusalem, in all his gorgeous apparel, and on this account, we

cannot behold the Lily without feeling a kind of reverence for the flower, mixed with our admiration for its elegance of form and purity of color. Jupiter wishing to render Hercules immortal, that he might rank him among the divinities, prevailed on Juno to take a deep draught of nectar, prepared as we presume by Somnus, as it is related that the Queen of the Gods fell immediately into a profound slumber, and that Jupiter then placed the infant Hercules to her breast, in order that the divine milk might enter his frame and so cause his immortality. The infant enjoying the delights of the celestial breast, drew the milk faster than he could swallow, some drops of which therefore fell to the earth, from which this flower immediately sprang up; and from this fable it was called Juno's Rose. Alcaib tells us, in his celebrated and elegant emblems, that Celestial Beauty is represented surrounded by a glory, half of the head hidden in the clouds, holding a Lily in one hand and a compass and ball in the other. As all nations agree in making the Lily the symbol of PURITY and MODESTY, it is the fit attribute of beauty; and perhaps no inhabitants of the earth blend it so happily with the Rose as our own fair daughters. In the Hebrew language, the name Susannah signifies a Lily. The English name is derived from the Latin, as is also the French LIS, the Spanish LIRIO, the German LILIE, the Italian GIGLIO, and the Dutch GILGEN, seem to be corruptions of the same word. The Lily genus appears to have been as great favorites with the ancient as the modern nations; in the wedding ceremonies of the modern Greeks, the priest is supplied with two chaplets of Lilies and ears of corn, which he places on the heads of the bride and bridegroom, as emblems of PURITY and ABUNDANCE. As the Canadian Lily is one of our own flowers, and not improved by cultivation, directions for that purpose would be unnecessary.



Dahlia Superflua

LITH OF LEWIS & BROWN, 272 PEARL ST N Y

DAHLIA SUPERFLUA—DAHLIA.

CLASS, SYNGENESIA; ORDER, POLYGAMIA SUPERFLUA.

NATURAL ORDER, COMPOSITÆ.

GEN. CHAR. Root, tuberous. Leaves, broad, lanceolate, cut on the edges. SPEC. CHAR. Generally six feet in height, with broad foliage and large flowers. Rays fertile.

The generic name of this plant was bestowed by Linnæus in honor of Andrew Dahl, a Swedish botanist. It contains few species, but such has been its reception by the public, that gardeners have bestowed an immense amount of pains in its cultivation, and the varieties produced in consequence, are almost endless. Phillips remarks, that this splendid addition to the autumnal parterres of the Old World was unknown till 1789, when it was sent to Spain from Mexico, where it grows wild, in sandy meadows. It was lost at first in England, but some roots and seeds being afterwards obtained from France, that country partook of the Dahlia-mania of the nineteenth century, which although less dangerous in its effects, was not less general than the Tulip-mania by which Europe was so much affected in the seventeenth century; and it was finally left to English capital and perseverance to illuminate the northern part of the globe, by the full brilliancy of these floral luminaries, which now shine as conspicuously in our groves and gardens as gas in our cities. The ingenuity of the florist has never appeared more conspicuous than in the treatment

of this Mexican plant, as through their art, these flowers have had their petals doubled and quadrupled until they have become as full as the China Aster or Rosa Centifolia, whilst their colors have even been more increased than their petals, and display a richness which rivals that of the gaudy Tulip, or the finest tints which the silk dyer is able to give to glossy velvet. The most beautiful varieties have been raised from the seeds of the single purple Dahlia; these are increased by two different modes; First, by cuttings, which should be taken from the rootshoots in the spring, or from young shoots in the early part of the summer, these when cut off smoothly, in the middle of a joint, are to be planted in light sandy earth on a moderately hot bed, and covered with glasses. The top leaves of the cuttings should be removed when planted; tubers will thus be formed, which will produce flowers during autumn. The second mode is by grafting the shoots of valuable plants on the tubers of the more common kind.

Dahlias should be planted in open situations and in a rich loamy soil; the full grown roots to be put in the ground early in spring, at the place where they are to flower. The most admired are those which throw out their branches like a shrub, and are prolific of flowers, having short footstalks; the blossom should be clear, distinct in color and fully expanded. In examining the florets of this species, it will be seen that the filaments of the stamens are elastic, which by extension admit of the anther being protruded above the floret, by the impulse of the stigmas from within; as charged with pollen they advance to their station through its five valved membrane, which opposes their outlet at the summit, withdrawing the same to its place when these have passed. The roots, which are tuberous, resembling a sweet potato, are used as an aliment by the Mexicans; these should be taken up in October, and preserved through the winter in boxes of dry sand, placed where the frost cannot penetrate. Dahlias have the best appearance when planted on lawns, forming clumps distinct from any other plant. They emblemize For ever thine.