

Kino is much more soluble in boiling than in cold water. The decoction, therefore, on cooling, becomes turbid with a very copious red sediment. The residuum seems to be softened by the heat of boiling water, at least it agglutinates into masses resembling melted red sealing wax dropt into water. By repeated decoctions with very large quantities of water, I have never been able to exhaust it of its soluble parts: the last decoctions had still a deep red colour, and blackened solutions of iron. This residuum is not more soluble in alcohol than in water, and is not fusible, but when thrown on live coals burns away without flame. Vauquelin observed, that when the whole quantity of water necessary to dissolve the soluble parts of kino is not employed at once, the residuum becomes more insoluble. Alcohol dissolves the whole of the Botany-bay kino except its impurities. With a certain proportion of water, this tincture lets fall a copious red precipitate, which may be separated by filtration, but with a larger proportion of water its transparency is only slightly disturbed. It is also remarkable, that alcohol dissolves kino entirely, but does not dissolve the residuum of the decoction. This fact would shew, that the portion extracted by the water had the property of rendering the residuum soluble in alcohol. The solutions of kino precipitate gelatine, and, according to Vauquelin, silver, lead, and antimony, white; and iron, green. I find that it resembles other astringents, in forming a black precipitate with red sulphate of iron, which however is converted into green by the slightest excess of the sulphate, and by a larger excess is dissolved into a bright green liquid.

Med. use.—It is a powerful remedy in obstinate chronic diarrhœas and dysenteries; in all passive hæmorrhagies, especially from the uterus; in fluor albus; and in diseases arising from laxity of the solids.

It is exhibited internally, in doses of from ten to thirty grains, in substance, or dissolved in diluted alcohol.

Externally, it is applied as a styptic, to check hæmorrhagies from wounds or ulcers, and to diminish the discharge of sanious or ichorous matter from ill-conditioned ulcers.

LACTUCA VIROSA. *Ed.*

Willd. g. 1404, sp. 12. Smith, g. 342, sp. 1. Syngenesia equalis.—*Nat. ord. Compositæ semiflosculosæ.*

Strong-scented or cut lettuce.

Off.—The leaves.

FOLIUM LACTUCÆ VIROSÆ. *Ed.*

THIS plant flowers in August and September, is biennial, and grows wild on rubbish and rough banks, in many places in this country.

The whole plant abounds with a milky juice, intensely bitter, considerably acrid, and having a strong virose smell like opium.

The garden lettuce, when in flower, is also very bitter, and abounds with a milky juice, in its taste and smell remarkably like opium, for which, when dried, it has been proposed and used with success as a substitute, by Dr Cox of Philadelphia; and, more lately, Dr Duncan has published his observations concerning various preparations made from it. Before it begins to shoot, it has none of that bitterness, and contains no milky juice, and probably has not those soporific effects which are commonly ascribed to the use of lettuce.

Medical use.—An extract prepared from the expressed juice of the leaves of the strong-scented lettuce, gathered when in flower, has been given in dropsies of long standing, proceeding from visceral obstructions, to the extent of half an ounce a-day. It is said to agree with the stomach, to quench thirst, to be gently laxative, powerfully diuretic, and somewhat diaphoretic. Plentiful dilution is allowed during its operation. Dr Collin of Vienna asserts, that out of twenty-four dropsical patients, all but one were cured by this medicine.

LAURUS.

Willd. g. 798. *Enneandria Monogynia.*—*Nat. ord. Oleraceæ.*

Sp. 1. LAURUS CINNAMOMUM. Ed. Lond. Dub.

The cinnamon tree.

Off.—The inner bark and its essential oil.

a) *CORTEX LAURI CINNAMOMI. Ed.*

CORTEX CINNAMOMI. Dub. Liber Lond.

b) *CINNAMOMI OLEUM. Lond.*

CINNAMOMI OLEUM ESSENTIALE. Dub.

THIS valuable tree is a native of Ceylon, where it was guarded with unremitting jealousy by the Dutch, that they might monopolize the commerce of its productions. They failed, however, in the attempt; and the cinnamon tree is now propagated, not only in other parts of the East Indies, but also in Jamaica, and other islands in the West Indies. Ceylon now belongs to the British, and Captain Perceval has published a very interesting account of the cinnamon tree. It is found in greatest perfection in the immediate neighbourhood of Columbo, and grows from four to ten feet high, very bushy.

The leaves resemble those of the laurel, and, when chewed, have the hot taste and smell of cloves. The blossom is white and very abundant, but diffuses no odour. The fruit resembles an acorn, and a species of fixed oil is obtained from it. There are several different species of cinnamon trees, or trees resembling them in Ceylon, but four only are barked by government; the honey cinnamon, the snake cinnamon, the camphor cinnamon, which is inferior to these, and yields camphor from its roots, and camphor mixed with gum from incisions made into it, and the *cabatte* cinnamon, which is harsher and more astringent than the others. The bark is collected at two seasons; the grand harvest lasts from April to August, the little harvest is in December. Such branches as are three years old are lopped off, the epidermis is then scraped off, the bark slit up, loosened, and removed entire, so as to form a tube open at one side. The smaller of these are inserted within the larger, and they are spread out to dry. They are then packed up in bundles. The tasting of those bundles to ascertain their quality is a very disagreeable duty imposed on the surgeons. It excoriates the tongue and mouth, and causes such intolerable pain as renders it impossible for them to continue the occupation two or three days successively. In their turns, however, they are obliged to resume it, and they attempt to mitigate the pain by occasionally eating a piece of bread and butter. It is then made up in large bundles about four feet long, and eighty pounds in weight. In stowing the bales on shipboard, the interstices are filled up with black pepper, a practice which is supposed to improve both spices.

The best cinnamon is rather pliable, and ought not much to exceed stout writing paper in thickness. It is of a light yellowish colour; it possesses a sweet taste, not so hot as to occasion pain, and not succeeded by any after-taste. The inferior kind is distinguished by being thicker, of a darker and brownish colour, hot and pungent when chewed, and succeeded by a disagreeable bitter after-taste. The Dutch were accused of deteriorating their cinnamon by mixing it with a proportion of real cinnamon, but which had been deprived of its essential oil by distillation. This fraud could only be detected by the weaker smell and taste. It is also often mixed with cassia bark. This last is easily distinguishable by its fracture being smooth, and by its slimy mucilaginous taste, without any of the roughness of the true cinnamon.

By distillation with water, it furnishes a small quantity of very pungent and fragrant oil; the water itself remains long

milky, and has a strong flavour of cinnamon. The watery extract in Neumann's experiment amounted to 720 from 7680 parts. With alcohol the oil does not arise in distillation, but remains in the extract, which amounts to 960.

The essential oil of cinnamon has a whitish-yellow colour, a pungent burning taste, and the peculiar fine flavour of cinnamon in a very great degree. It should sink in water, and be entirely soluble in alcohol. It is principally prepared in Ceylon.

Medical use.—Cinnamon is a very elegant and useful aromatic, more grateful both to the palate and stomach than most other substances of this class. Like other aromatics, the effects of cinnamon are stimulating, heating, stomachic, carminative, and tonic; but it is rather used as an adjunct to other remedies, than as a remedy itself.

The oil is one of the most powerful stimulants we possess, and is sometimes used as a cordial in cramps of the stomach, and in syncope; as a stimulant in paralysis of the tongue, or to deaden the nerve in toothach. But it is principally employed as an aromatic, to cover the disagreeable taste of other drugs.

Sp. 2. LAURUS CASSIA. Ed. Dub.

The cassia tree.

Off.—The bark and flower-buds gathered before they open.

a) CORTEX LAURI CASSIÆ. *Ed.*
CORTEX CASSIÆ LIGNEÆ. *Dub.*

b) FLORES NONDUM EXPLICITI LAURI CASSIÆ. *Ed.*
FLORES NONDUM EXPLICITI CASSIÆ LIGNEÆ. *Dub.*

THIS tree is very similar to the former. The bark, which is imported from different parts of the East Indies and from China, has a great resemblance to the true cinnamon, from which it is only distinguishable by being of a thicker and coarser appearance, and by its breaking short and smooth, while the cinnamon breaks fibrous and shivery.

It resembles cinnamon still more exactly in its aromatic flavour and pungency than in its external appearance, and seems only to differ from it in being considerably weaker, and in abounding more with a mucilaginous matter.

Cassia buds are the flower-buds, which are gathered and dried before they expand. They have the appearance of a nail, consisting of a round head, about the size of a peppercorn, surrounded with the imperfect hexangular corolla, which gradually terminates in a point. They have a brown colour, and the smell and taste of cinnamon.

Medical use.—Both the bark and buds of cassia possess the same properties with cinnamon, though in an inferior degree.

The bark is very frequently, and sometimes unintentionally, substituted for the more expensive cinnamon; and the products obtained from cassia bark and buds, by distillation, are in no respect inferior to those prepared from cinnamon.

Sp. 3. LAURUS CAMPHORA. Ed. Lond. Dub.

Camphor tree.

Off.—The camphor.

CAMPHORA LAURI CAMPHORÆ. *Ed.*

CAMPHORA, concretum sui generis distillatione paratum. *L.*

CAMPHORA, resina. *Dub.*

THE camphor laurel grows in great abundance, and to a very considerable size, in the forests of Japan. It is not uncommon in greenhouses in England. Every part of the tree smells strongly of camphor, which is obtained from the trunk, branches, and root, by distillation. They are cut down into small pieces, and put into a still, with a proportion of water. After the water has been kept boiling forty-eight hours, the camphor is found adhering to the straw with which the head of the still is lined. In this state it is imported by the Dutch, and is called crude camphor. It is very impure, consisting of small brownish or dirty grey grains, mixed with straw, wood, hair, and other impurities. From these it is purified, in Holland, by a second sublimation in glass vessels; being previously mixed with quicklime, to combine with and prevent any empyreumatic oil with which it may be contaminated from subliming, while the camphor concretes in the upper part of the vessel into cakes, convex on the one side, and concave on the other, about two or three inches thick, thinner at the edges, and generally perforated in the middle.

Pure camphor is lighter than water, very white, pellucid, somewhat unctuous to the touch, brittle, yet tough and elastic, so as to be scarcely pulverizable; shining in its fracture, and crystalline in its texture; of a bitterish, aromatic pungent taste, yet accompanied with a sense of coolness, of a strong and very penetrating smell; very volatile, inflammable, burning entirely away, without leaving any coal or ashes; capable of combining with the resins and balsams, soluble in alcohol, ether, fixed and volatile oils, and the concentrated sulphuric, nitric, muriatic, fluoric, and acetic acids; separable from these alcoholic and acid solutions by water; insoluble in water, alkalies, and the weaker acids; decomposed by heat, when mixed with alumina, into an essential oil and charcoal;

and by treating it with a sufficient quantity of nitric acid, forming a portion of camphoric acid; and by treating it with sulphuric acid, forming artificial tannin.

But the production of camphor is not confined to the *laurus camphora*, although it furnishes almost all the camphor of commerce; it is found in very great purity in interstices among the woody fibres of an unknown tree in Borneo; it is also contained in the roots of the *laurus cinnamomum* and *cassia*, *alpinia galanga*, *amomum zedoaria*, &c.; in the seeds of the *amomum cardamomum*, *piper cubeba*, &c.; and in many indigenous plants, as in the *thymus serpyllum* and *vulgaris*, *juniperus communis*, *rosmarinus officinalis*, *salvia officinalis*, *mentha piperita*, &c. and may be separated from the essential oils of rosemary, lavender, marjoram, and sage. An artificial camphor, differing from common camphor, in not being soluble in weak nitric acid, nor being precipitated by water from its solution in strong nitric acid, may also be prepared, by directing a stream of muriatic acid gas into oil of turpentine. Camphor is now universally considered to be a peculiar principle of vegetables, and not a resin, as incorrectly stated by the Dublin College.

Medical use.—Camphor is a very active substance, when taken into the stomach. It increases the heat of the body considerably, and gives a tendency to diaphoresis, but without quickening the pulse. At first it raises the spirits, but produces a subsequent depression, and facilitates voluntary motion. In excessive doses it causes syncope, anxiety, retchings, convulsions and delirium. These violent effects of camphor are most effectually counteracted by opium.

In a morbid state of the body, camphor allays inordinate actions. When the pulse is hard and contracted, it renders it fuller and softer. It removes spasms, and fitting pains arising from spasms; and in delirium, when opium fails of procuring sleep, camphor will often succeed. It is also said to correct the bad effects of opium, mezereon, cantharides, and the drastic purgatives and diuretics.

The most general indication for the use of camphor is the languor or oppression of the *vis vitæ*. It may therefore be given with advantage,

1. In all febrile diseases of the typhoid type, especially when attended with delirium.
2. In inflammations with typhoid fever, as in some cases of peripneumonia and rheumatism.
3. In eruptive diseases, to favour the eruption, or to bring it back to the skin, if from any cause it has suddenly receded, as in small-pox, measles, &c.

4. In many spasmodic diseases, especially mania, melancholy, epilepsy, hysteria, chorea, hiccough, &c.
5. In indolent local inflammations, not depending upon an internal cause, to excite action in that part.

As, from its great lightness, it is apt to swim upon the contents of the stomach, and to occasion pain at its upper orifice, it is necessary that it be always exhibited in a state of minute division. In order to reduce it to powder, it must be previously moistened with a little alcohol. It may then be given,

1. In powder, with sugar, magnesia, and nitrate of potass.
2. In pills, with the fetid gums and mucilage.
3. In solution, in alcohol, oil, or acetic acid.
4. Suspended in the form of an emulsion, by means of mucilage, sugar, yolk of egg, almonds, vinegar, &c.

Internally, it may be given in small doses, of from one to five grains, repeated at short intervals, as its effects are very transient, or in large doses, not under 20 grains.

Sp. 10. LAURUS NOBILIS. *Ed. Lond.*

Bay tree.

Off.—The leaves, berries, and expressed oil of the berries.

a) FOLIUM LAURI NOBILIS. *Ed. Lond.*

FOLIA LAURI. *Lond.*

b) BACCA LAURI NOBILIS. *Ed.*

BACCE LAURI. *Lond.*

c) OLEUM FIXUM LAURI NOBILIS. *Ed.*

THIS tree is a native of the south of Europe, but bears the winters of this climate perfectly well. Both leaves and berries contain a considerable quantity of essential oil, which renders them aromatic stimulating substances.

The berries are generally brought from the Mediterranean, and are more pungent than the leaves. In Spain and Italy, a considerable quantity of oil is obtained by expression from the fresh berries. It has a green colour, and strong aromatic taste and smell. As it therefore is not a fixed oil, but a mixture of fixed and volatile oil, and as its peculiar properties depend entirely on the presence of the latter, it is incorrectly stated to be a fixed oil by the Edinburgh college. It should rather have been denominated, from the mode of its preparation, an expressed oil.

Medical use.—It is only used externally as a stimulant.

Sp. 34. LAURUS SASSAFRAS. *Ed. Lond. Dub.*
Sassafras.

Off.—The wood, root, and bark.

- a) LIGNUM LAURI SASSAFRAS. *Ed.*
LIGNUM SASSAFRAS. *Lond. Dub.*
b) RADIX LAURI SASSAFRAS. *Ed.*
RADIX SASSAFRAS. *Lond. Dub.*
a) CORTEX LAURI SASSAFRAS. *Ed.*
CORTEX SASSAFRAS. *Dub.*

THIS tree is a native of North America, and is cultivated in Jamaica. It is the root which is commonly employed. It is brought to us in long branched pieces. It is soft, light, and of a spongy texture; of a rusty white colour; of a strong pleasant smell, resembling that of fennel; and a sweetish, aromatic, sub-acrid taste. The bark is rough, of a brown-ash colour on the outside, and ferruginous colour within; spongy and divisible into layers, and of a stronger taste and smell than the wood.

Neumann got from 480 grains, 80 of alcoholic, and afterwards 60 of watery extract, and inversely 120 watery, and 7.5 alcoholic. In distillation, alcohol elevates nothing, but water a ponderous essential oil, in the proportion of about 10 from 480.

Medical use.—Sassafras, from the quantity of volatile oil it contains, is a gently stimulating, heating, sudorific, and diuretic remedy.

It is best given in infusion. The decoction and extract are mere bitters, as the oil is dissipated by the preparation.

The essential oil may be obtained separate by distillation. It is of a whitish-yellow colour, and sinks in water. It is highly stimulating and heating, and must be given only in very small doses.

LAVANDULA SPICA. *Ed. Lond. Dub.*

Willd. g. 1099, *sp.* 1. *Didynamia Gymnospermia.*—*Nat. ord. Verticillata.*

Lavender.

Off.—The flowering spikes.

- SPICA FLORENS LAVANDULE SPICE. *Ed.*
LAVANDULE FLORES. *Lond. Dub.*

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, and a warm, pungent, bitterish taste, the broad-leaved variety is the strongest in both respects, and yields in distillation thrice as much essential oil as the other; its oil is also hotter,

and specifically heavier; hence, in the southern parts of France, where both kinds grow wild, this only is used for the distillation of what is called oil of spike. The narrow-leaved is the variety commonly met with in our gardens.

Medical use.—Lavender is a warm stimulating aromatic. It is principally used as a perfume.

LEONTODON TARAXACUM. *Ed. Lond. Dub.*

Willd. g. 1407, sp. 1. Smith, g. 344, sp. 1. Syngenesia æqualis.—Nat. ord. *Compositæ semistilosculosæ.*

Common dandelion.

Off.—The root and leaves.

a) HERBA LEONTODI TARAXACI. *Ed.*

FOLIA TARAXACI. *Dub.*

b) RADIX LEONTODI TARAXACI. *Ed.*

RADIX TARAXACI. *Lond. Dub.*

THIS perennial plant is very common in grass fields and uncultivated places. It flowers from April to July. The whole plant contains a bitter milky juice, which, however, is most abundant in the roots before the flower-stem shoots. The bitterness is destroyed by drying, and therefore the recent roots only should be used.

Medical use.—Its vulgar name in all languages shews a popular belief of its possessing diuretic properties; and it was lately a very fashionable remedy in Germany, given in the form of an expressed juice or decoction, or extract prepared from either of them; but it seems to be merely a mucilaginous bitter.

LICHEN.

Murray, g. 1202. Cryptogamia, algæ, lichenes.

Sp. 50. LICHEN ISLANDICUS. *Lond. Dub.*

Iceland moss. Eryngo-leaved liverwort.

Off.—The plant.

LICHEN. *Lond.*

LICHEN ISLANDICUS. *Dub.*

THIS is a perennial lichen, very common in Iceland, but also found in the forests and dry sterile woods of Switzerland, and Germany, growing upon stones and on the earth. It has dry coriaceous leaves, divided into lobes and laciniae, which are again notched and subdivided, with elevated margins, beset with short, very minute, rigid, parallel hairs, and marked with white spots, reddish towards the points. Amongst the leaves are found peltated, somewhat excavated, shining, viscid

bodies, internally of a brown colour: these are the pericarpiums. When fresh, the colour of this lichen is greenish-yellow, or greyish-brown; but when dried, greenish-white or grey. In Sweden principally, and in Germany, a variety is found, with smaller, tenderer, crisper leaves, destitute of hairs on the margin, of a paler lead colour, orange beneath. It is gathered in rainy weather, because it is then more easily detached from the stones. In the countries where it abounds, it is used for the nourishment both of cattle and of man. Mr Proust has analyzed it with much success. A pound of dry lichen immersed in cold water soon resumed its fresh colour, and weighed two pounds two ounces, gave out a pale fawn colour to the water, but none of its bitterness. When previously powdered, it gives out a bitter, pale, yellow juice, losing about three *per cent.* in cold, and six in boiling water. This bitterness resides in an extractive, which is employed in Iceland to dye a brown colour. By boiling lichen a quarter of an hour, it becomes sufficiently tender for use as an esculent vegetable. Lichen cooked in this manner has a kind of membranous elasticity, peculiar to some of the *algæ* and *fungi*; and after being dried, has only to be moistened with boiling water to resume this elasticity. Its appearance is not very prepossessing, having an unequal yellow colour, and a slight marine smell. A pound of dry lichen by boiling weighs three pounds, and when dried again, is reduced to two-thirds of a pound.

The decoction has a clear yellow colour, and a slightly bitter taste, which, even when made with eight waters, on cooling becomes a tremulous jelly, without any viscosity. This jelly on standing, contracts, expresses the water, cracks, and dries into transparent angular fragments, of a deep red colour, insoluble in cold water, soluble in boiling water, from which it is precipitated by infusion of galls. By nitric acid it is converted into oxalic acid. The insoluble part dissolves readily in nitric acid, forming oxalate of lime and oxalic acid, and is converted into a gelatinous pulp by potass.

According to this analysis, one hundred parts of dried lichen give, of

Bitter extractive,	3
Matter soluble in hot water,	33
Matter insoluble in hot water,	64 = 100

The last substance has much analogy with gluten, and the second with starch, particularly in the remarkable property of being precipitated by infusion of galls. It differs from it, however, in not being glutinous, and in the solid matter of the

jelly contracting and separating from the fluid, as curd does from whey.

Medical use.—From the analysis of this lichen, it appears to consist principally of a nutritious substance, combined with a bitter; and on the combination of these, its medical virtues probably depend. It is used, according to Arnemann,

1. In cough with expectoration, threatening to terminate in consumption; after neglected catarrhs, the consequence of peripneumony, when the expectoration becomes more copious and purulent.
2. In emaciation from measles, (Schoenheide); from wounds and ulcers with great discharge, (Plenk); after salivation; and from actual ulcers in the lungs, when there is no fever, (Scopoli), especially after neglected colds, or from translated morbid matter. In a high degree of the disease it does little good, but the night sweats are diminished by it, (Millin). In pituitous phthisis it is of great service.
4. In hæmoptysis, (Frize).
5. In chincough, (Tode).
6. In diabetes, as a tonic and palliative remedy.

It is commonly exhibited in decoction with water, broth, or milk, after the bitter has been extracted from it by steeping it in warm water; or in substance, boiled in chocolate or cocoa, or made into a jelly with boiling water. Half an ounce, or an ounce, must be used daily, and continued for some time. Proust disbelieves its specific virtues, but recommends it strongly as an article of diet in times of scarcity, and as a very convenient antiscorbutic vegetable in long sea voyages.

Sp. 115. LICHEN ROCELLA. *Dub.*

Orchill.

Off.—Litmus, turnsole.

LITMUS, lacmus tinctorius. *Dub.*

THIS lichen is found in Guernsey and Portland island, but it is from the Canary islands that it is chiefly obtained. It is not sold in the state of the plant merely dried, but manufactured by the Dutch into a paste, called *Litmus, Orseille en pate*. It is sold in square masses, about an inch in length, and half an inch in breadth and thickness, hard and brittle, having the appearance of a violet-coloured earth, with white spots. It has a violet smell, probably from the addition of oris root powder; and when tasted, speedily tinges the saliva, and gives a sense of heat in the mouth. This paste is prepared by making the lichen undergo a kind of fermentation in vats with

urine and lime-water, forming the whole into a pulp, and then dividing it into squares to dry.

Litmus is chiefly used as a dye-stuff, and by chemists as a very valuable test of the presence of uncombined acids. I must frankly confess my ignorance of the grounds upon which the Dublin college have introduced it into their *Materia Medica*. The translator of the Pharmacopœia merely says, "It has been used medicinally with an intention of allaying the tickling attendant on phthisis, and in hysterical coughs."

LINUM.

Willd. g. 590. *Smith, g.* 163. *Pentandria Pentagynia*.—*Nat. ord. Grinales*.

Sp. 1. Willd. Smith. LINUM USITATISSIMUM. Ed. Lond. Dub.
Common flax.

Off.—The seed and oil expressed from the seed.

a) *LINI USITATISSIMI SEMINA. Ed. Lond.*
LINI SEMINA. Dub.

b) *LINI USITATISSIMI OLEUM. Ed.*

THIS valuable annual plant is said to have come originally from those parts of Egypt which are exposed to the inundations of the Nile. It now grows wild in the fields in the south of England, and is cultivated in large quantities. It flowers in July.

Lintseed contains about one-fifth of mucilage, and one-sixth of fixed oil. The mucilage resides entirely in the skin, and is separated by infusion or decoction. The oil is separated by expression. It is one of the cheapest fixed oils; but is generally rancid and nauseous, and unfit for internal use. The cake which remains after the expression of the oil contains the farinaceous and mucilaginous part of the seed, and is used in fattening cattle, under the name of Oil-cake.

Medical use.—Lintseed is emollient and demulcent. The entire seeds are used in cataplasms. The infusion is much employed as a pectoral drink, and in ardor urinæ, nephritic pains, and during the exhibition of corrosive sublimate.

Sp. 26. Willd. ; sp. 4. Smith. LINUM CATHARTICUM. D. L.
Purging flax. Mill-mountain.

Off.—Herba. The herb.

THIS is an annual indigenous plant, found wild on dry meadows and pastures. It flowers from June to August. It is extremely bitter. An infusion in water or whey of a hand-

ful of the fresh herb, or a drachm of it in substance, when dried, is said to purge without inconvenience.

LOBELIA SYPHILITICA. *Ed.*

Syngenesia Monogynia.—Nat. ord. *Campanaceæ.*

Blue cardinal flower.

Off.—Radix. The root.

THIS plant grows in moist places in Virginia, and bears our winters. It is perennial, has an erect stalk three or four feet high, blue flowers, a milky juice, and a rank smell. The root consists of white fibres about two inches long, resembles tobacco in its taste, which remains on the tongue, and is apt to excite vomiting.

Medical use.—Dr Barton says, that it is considerably diuretic; and Mr Pearson found, that it generally disagreed with the stomach, and it seldom failed of affecting the bowels as a strong cathartic. It certainly possesses no power of curing syphilis; even the Indians, when they have the disease, are glad of an opportunity of applying to the Whites.

LYTHRUM SALICARIA. *Dub.*

Willd. g. 951, sp. 1. Smith, g. 223, sp. 1. Dodecandria Monogynia.—Nat. ord. *Calycanthemæ.*

Purple-spiked Willowstrife, Loosestrife.

Off.—The herb.

HERBA LYTHRI SALICARIÆ. *Dub.*

THIS perennial plant is indigenous, and grows in marshes, and on the banks of rivers. The dried leaves have a herbageous taste, somewhat astringent, and when moistened soon give out a ropy mucilage. Hence it is difficult to swallow the powder mixed with water. An ounce of the plant yielded to Sagar three drachms of watery, and only two drachms and 24 grains of spiritous extract, and the former was more disagreeably austere and exsiccative.

The decoction of this plant has been long celebrated in Ireland in diarrhœas. In the same disease, it is a popular remedy in Sweden; and De Haen and Stork and others have given it with success in laxity of the intestines from an accumulation of sordes. After premising a purgative, a drachm or more of the powder may be given morning and evening, or three times a-day. A decoction also of the plant or root may be given in diarrhœa or dysentery. Its properties are evidently mucilaginous and astringent.

LYTTA VESICATORIA. *Lond.*

MELOE VESICATORIUS. *Ed. Dub.*

Insecta Cleoptera, Vesicantia. Syst. Nat. Gmelin, g. 2013.
Spanish fly. Blistering fly.

Off.—The insect.

LYTTA. *Lond.*

MELOE VESICATORIUS. *Ed.*

CANTHARIS. *Dub.*

THESE insects have a longish, green, and gold-shining body, with flexible green-striped elytera, which cover the whole back of the body, and conceal brown membranous wings. On their head they have two black articulated feelers. They are found on the fraxinus, sambucus, salix, ligustrum, &c. in Spain, Italy, France, and Germany. The largest come from Italy, but the Spanish cantharides are preferred. They are gathered by shaking the trees on which they are, and catching them on a cloth spread beneath it. They are then killed by the fumes of vinegar, and dried carefully in a stove. The melolontha vitis is sometimes found mixed in considerable numbers with the cantharides. They are easily distinguished by their almost square body; and as they do not stimulate the skin, they should be picked out before the cantharides are powdered. In the East Indies the *Meloë trianthema* is used as a substitute.

The analysis of cantharides is still imperfect. Neumann got from 1920 grains, 920 watery, and afterwards 28 alcoholic extract; and inversely, 400 alcoholic, and 192 watery. Lewis ascertained that their active constituent is entirely soluble, both in water and in alcohol; for extracts made with each of these solvents blistered, as far as could be judged, equally, and as effectually as cantharides in substance. Both the residua were inactive. Thouvenel considered the vesicating power to reside in a green matter of an oily nature. Beauvoil in two substances, one yellow and the other black, both soluble in water, but separable by alcohol. Lastly, Robiquet, in a very detailed analysis, says, that neither of these three principles blisters of itself; but that this property is owing to their combination with a particular white crystalline substance, soluble in warm alcohol, separating as it cools, soluble in oils, and insoluble in water. He also found, besides known principles, free acetic acid, phosphate of magnesia, a reddish-yellow oil insoluble in alcohol, and, lastly, uric acid.

Medical use.—Cantharides have a peculiar nauseous smell, and an extremely acrid burning taste. Taken internally, they often occasion a discharge of blood by urine, with exquisite pain. If the dose be considerable, they seem to in-