Diarrhoea Mercury
Dysentery - 8
Scarlatina - 8
Gastritis - 6
Tetanus - 4

This volume contains remarks upon some Barks, - Leaves, - Flowers, - Fruits & some Products.

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× Exotic

We obtain Angustura from the W. Indies. - It was formerly used in Bilious malignant fevers by the natives of S. America & afterwards introduced into Europe.

Twenty-First Lecture continued Jan.y 6. 1834

×Angusturae- Angus. Bark.- This has been supposed to be derived from different plants, and has been referred to Cusparia (Humboldt & Bompland) febrifuga (Lint) Bonplandia (Willdenow) trifoliata, and Galipea (Hancock &c.) officinalis, by which latter it is recognised in the U.S. Phar.- It grows on the Orinoco, about 200 miles from the ocean.- It is a small tree with beautiful flowers, having a strong odour.- In the Shops it is found in pieces of various lengths, slightly curved, from 1 to 3 lines in thickness,- externally it has a whitish wrinkled epidermis,- internally it is of a yellowish brown,- brittle fracture, readily pulverised, but when moistened becomes soft, so as to be cut with Scissors, and its odour becomes faint by age.- Taste bitter & permanent.- Imparts its virtues to Alc.l & Water, and is not injured by boiling.- It does not contain cinchonia.- Seldom employed here.- It is less apt to offend the Stomach than Cinchona.- Dose X to XXX grs.- An infusion is made from ℥ss to 1 pt.- Dose, wineglassful.- Tinct. ℥ij to ℥iv.

We sometimes read of False Angus. bark, but it is not known in our market,- it is poisonous, containing the alkali Brucia, found in Nux Vomica.

Cornus Sericea. Swamp Dogwood. Red Willow or Rose Willow, - is another variety. - It is indigenous also & possesses similar properties.

x Indigenous

Dogwood Bark has been highly recommended for cure of intermittents, but it cannot be relied on. — Dose ℥ij x as to take ℥ij between the Paroxysms. —

x Indigenous.

*Cornus Florida. Dog Wood. - This is an indigenous tree, having its trunk covered with a bark which is cracked. - It is abundant in all parts of U. S, and is too well known to require a minute description. - Early in the Spring, it is covered with large white compound flowers. - Belongs to Class and Order Tetrandria, Monogynia. - The fruit is a red oval berry, in clusters of 3 or 4 together. - In the fall the leaves turn red, - hence in both Spring and fall it presents a beautiful appearance in our forests. -

The bark is derived from both the stem and the root, and is of various sizes. - That of the root is preferable, - is darker and very different in appearance from that of the stem. It has a feeble odour, - bitter, astringent, slightly aromatic taste, and imparts its virtues to Alc. & Water. - The flowers have similar properties with the bark. -

It is a tonic and astringent, but more feeble and uncertain than the Peruvian Bark. Dose pow. ʒi to ʒi.

Decoction is made by boiling ʒi in a pt. of Water for 10 min. - Dose Wine glassful.

Twenty Second Lecture Jan 9 - '34

*Liriodendron. Tulip-Tree Bark. - American Poplar. The bark of the Liriodendron Tulipifera. This is

Licodendrin is said to be somewhat analogous to Camphor.

an indigenous tree, and may be called the pride of the American Forest. - Attains a great height; and is from 1 to 3 or 6 ft. in diameter. - It has a peculiar leaf, which is sufficient to distinguish it from that of any other tree, being of a glossy green, three-lobed, one one each side and the lobe at the end, notched, - the side lobes are pointed, sending out a tooth-like process. The flowers are large and beautiful somewhat resembling the tulips in their general aspect. - have a double calyx, the external one consisting of two deciduous leaflets, while the interior one has three. - It has 6 - 9 or 12 petals. - Belongs to Class and Order, Polyandria, - Polygynia. - The fruit is a conical mass of scales containing each 2 seeds. - It delights in a rich soil, and its flowers are in full bloom about the Middle of May. - The odour of this wood is obnoxious to worms, hence it is usefully employed in cabinet-work - for inside of book cases &c. —

The bark is officinal, but seldom found in the shops, - that of the root is the best. When recent, it has a peculiar odour, which disappears by age. - Taste bitter, pungent and aromatic, when recent. — The taste and odour reside in a peculiar vol. prin. called Liriodendrin, by Prof. Emmet of Va.

† Indigenous. –

It is a white, crystallizable solid, - insoluble in Water, but soluble in Alcohol and Ether, volatilizable, and appears to hold a similar place with Camphor, - is neither acid or Alkali, and seems to be held in solution by its affinity for other substances. - Water precipitates it from an Alc. solution.

The bark imparts its virtues to boiling Water and Alc. but these are injured by long boiling. - —

It is a stimulant tonic and diaphoretic, and has been recommended in intermittent fevers, but is not very efficacious. It is better suited to rheumatism &c. Dose pow. XXX grs to Bij.

An infusion is made from Zi to 1 pt. Dose f Zi to f Zij. -

* Prunus Virginiana. Wild Cherry Bark. - This is the bark of an indigenous tree, which is too well known to require description. Belongs to Class and Order, Icosandria Monogynia. - The wood is of a light red, much used for furniture &c. - The fruit is used for imparting its flavour to Spirituous liquors. - The bark of the root is stronger than that of the stem. - In Shops, it is of various sizes, more or less curved, usually deprived of its epidermis, which runs round the tree, - of a cinnamon colour, brittle, - lighter internally when broken, than on the ext. or int. Surfaces. - Powder is of a greyish fawn colour. -

The odour is owing to the Prussic Acid associated with the Volatile Oil. –

It is sedative in its action on the nervous system, on accounts of the Acid which it contains. –

It is used in debility of the Stomach & bowels, connected with irritability. – In Scrofula, – convalescence from Intermit. where there is a disposition to its returns. –

When fresh or boiled in Water, it has an odour resembling the peach-flower. - Taste is bitter, and resembles that found in all this genus; - Which is ascribed to a volatile oil, probably containing Hydrocyanic Acid. - The existence of this acid, never having been clearly proved, it would be worthy the attention of some one to analyse it. - First subject the bark to a distillation with Water, and continue with different portions of fresh bark, till a volatile oil is obtained, - then test this for Prussic Acid. - - Done by Procter in 1834. -

The bark imparts its virtues to hot or Cold W. - When an infusion is made with Cold W. - it should be permitted to stand about 12 hrs. - when it assumes the appearance of Madeira Wine. - It is injured by boiling. - It unites the properties of a tonic and sedative, and is one of the most useful of medicinal agents. - It increases the appetite, strengthens the System, - allays nervous excitement, - is used in consumption, - in intermittents. - Dose of powder is from thirty grains to ℥i. -

It is generally, however, given in the form of an infusion, made as before stated, from macerating ℥ss for 12 hrs in a pt. Cold. W. - Dose, wineglassful 3 or 4 times a day.

+ Exotic

Be Stahl this disciple it was substituted for Cinchona, which they considered to possess such deleterious properties, - but such an opinion has long since lost its supporters. -

It may be sometimes used as an amatic tonic, in Chronic affections of the Alimentary Canal. —

* Cascarilla. The bark of the Croton Cascarilla, - or more abundantly from the Croton Eleuthenia. - It grows in W. Indies, in Eleuthena, one of the Bahamas and is a small Shrub. -

It comes to us in two forms, - the first which is supposed to be the product of the C. Cas. is in rolled pieces or quills varying from ½ an inch to 1 or 2 lines in diameter, of different length, - with a whitish epidermis, beneath which is a dark coloured bark, - internally, chocolate

The second variety, supposed to be from C. Eleuthenia consists of shavings, not having the white epidermis, but brown both ext. and int. - this is most common in the Shops. - Has a peculiar, aromatic odour, when rubbed, and a warm, spicy, pleasant taste. - It is distinguished by its yielding the odour of Musk, when burnt. - It contains a bitter extractive and a vol. oil which it imparts to Alc. & Water. -

It is an aromatic tonic, formerly used in intermittents, but now employed principally as an adjuvant to other tonics. - Dose of the powder from XX grs to 3ss. -

An infusion is made by macerating 3i of bruised bark in a pt. boiling H2O for 2 hours in a covered vessel. - Dose of this, a wineglassful. — a —

* Exotic. -

The active matter is extracted by Alc. & Water, both cold & hot. - The decoction becomes turbid on cooling, on account of the deposition of the resinous matter. -

It is but little employed in Medicine: - may be used in atonic Diarrhea; in Dysentery after the Inflammatory Stage. - It resembles, but is inferior to, Quassia. -

* Exotic. -

× Simaruba. This tree has been referred to different genera, and the synonymes are Quassia Simar. – Simaruba officinalis. – Simar. Amara. – It is a large tree growing in the W. Indies. – The bark comes to us in pieces, long, – 2 or 3 inches broad, – flexible, fibrous, folded lengthwise, – of a light ash colour externally, – taste acrid and intensely bitter, with virtues similar to those of Quassia. Dose of powder from ℈i to ℈i. – An infusion is made from ℥ij to Ipt. – Dose a wineglassful –

The next class of Barks, which require our attention are the Astringents. – First we shall notice is + Salix. Willow, – which is seldom used in this country, and none are employed but the European variety. Bark is taken from the branches, is thin, rolled, – imp. vertues to W. by decoction. – The vertues consist in a bitter principle and a large proportion of tannin. – The bitter prin. Salacin is a white crystalline solid, – sol. in cold W. – but more so in boil. W. – & Alc. – insol. in Ether & oil of Turp. – It was brought into notice to supply the place of Quinine but has failed. – it was employed in intermittents, & sometimes successful, owing to the nature of the disease, which is exceedingly diversified, frequently dependent

- Indigenous

The principal constituents are Tannin, - Gallic Acid, and a Bitter Extractive

Its use in marasmus, - Scrofula, - Leucorrhœa, - Prolapsus Uteri, Ani, or Vulvæ; - the Powder, - formed into Poultices, is recommended by Dr Barton as an application to External Gangrene & Mortifications.

upon the action of the mind, & sometimes cured by exerting an influence upon the mental faculties. - Dose of Salacin 2 to 8 grs. - The bark is used as Cinchona: × Quercus Alba and + Quercus Tinctoria. - The White Oak, and Black Oak. - There about 80 species of the Oak, 30 or 40 of which are found in the U. States Q. Alba is most used. The bark is whitish & externally but in the Shops, is usually deprived of its epidermis, - of a light brown colour, - fibrous texture, - in thin pieces, of an astringent, bitter taste. - The bark of Black Oak is distinguished by its epidermis being of a dark col, and cracked. - It contains a col. prin. Quercitrine which, when chewed, tinges the saliva yellow. - The Spanish or Red oak is analogous to White, - has a lighter epidermis than Black, and not so deeply cracked. - All of them resemble one another in medical properties, except the Black, which seems more disposed to irritate the stomach or bowels. - It is given internally in hemorrhage, diarrhea or scrofulous diseases. - As a bath for Children, or for application to ulcers, for which the liquor from tanyard is useful. Dose pow. XX grs to ℥i. Decoc is made from boil. ℥i in 2 pts to 1 pt. Dose. wineglassful. -

+ Exotic

The Aleppo Galls are generally the best. —

The diminished weight of large Galls is owing to the insect having eaten out the internal portion. —

× Galls. - These, though not the bark of any tree, yet, being astringent, and produced upon the surface of trees, - may be introduced here with more propriety perhaps, than in any other part of the course. - When vegetables are pierced by a small insect, which deposits its eggs in them, a juice exudes, and forms an excrescence, around the eggs. - These are frequently found on the Oak - and the galls used in medicine are derived from oaks growing in Syria, Persia &c. - Quer. Infectoria - Dyer's Oak - It is a small tree, which is pierced by the insect. - the juice rapidly exudes, & completely covers the egg. When the egg is hatched, the worm feeds upon the inner part of the gall, until it arrives at a proper age, then eats a hole out and departs. -

Those in the Shops are brought from Aleppo, Trieste, Smyrna, E. Indies and Calcutta, - some small and some large. The small ones are heavy and are called Blue or Green Galls, - have a number of protuberances on their surface, - very hard, brittle, with a cavity internally, in which lies the dead worm. - As they become larger they become lighter, and are inferior in medicinal virtues. - They contain a large proportion of tannin and gallic acid, - also ellagic Acid. - They impart

The incompatibles with Salts, are, - Metallic Salts, - as the soluble salts of Iron, - Sulp. Copper &c. - Sulph. Zinc. -
As a General Rule, - the Veg. astringents produce precipitates with all the soluble Metallic Salts. -
To this, there are but few exceptions. ——
Other incompatibles with Salts, are, the Mineral Acids & Alkaline Carbonates, - Lime Water & Animal Gelatin.

+ Exotic. -

their virtues to Water by boiling, and to diluted Alc.-
A decoction is precipitated by a solution of tannin.-
They are very powerful astringents.- sometimes employed in Diarrhea (Chronic)- It is more used externally in form of decoction, or as an injection.- When given internally it is in form of pills.- Used as a Gargle. Also for Prolapsus Ani & Uteri, Leucorrhea &c.-
An Ointment is made from ℥i to ℥i Lard, which is used in Piles or old ulcers.- Ist. Dose X grs to XX grs.-

Twenty Third Lecture Jan'y 11- 1834

This lecture will commence the Aromatic Barks. First *Cinnamomeus. Cinnamon:- is derived from the Laurus Cin. (Linnæus) a tree which grows in Ceylon & East Indies.- It is from 20 to 30 ft. high, and the bark (prepared) is the Cinnamon of commerce (of the shoots). The leaves have a spicy taste.- The flowers have an odour like that of newly sawn bones. The fruit smells like turpentine and tastes like Juniper berries.- The inner bark, only (of the shoots) is the article of commerce.- The Ceylon Cin. has heretofore been of the finest quality, because it has always had to pass inspection before it left the island, on account of the trade being wholly monopolized by the owners of the island,- but as it is now thrown open to public commerce, it is probable that we shall soon

have cinnamon of an inferior quality coming from that place. - The seeds are planted at certain distances and spring up like hills of corn, and when they become 6 or 7 years old, are suitable for decortication. - They are cut, barked, placed in masses to undergo fermentation, so that they can be more easily deprived of the cuticle; - the pieces are then put on a stick, and scraped, till nothing is left but the inner bark, - then rolled and dried; - the smaller quills are inserted into the larger, and form a conferies of quills as found in the market. - It is of a lighter colour, than the ordinary cinnamon; - thinner, splintery fracture, - pleasant, sweet, less pungent taste, with an agreeable odour. - Very little of this kind is found in our market. - That which we obtain in much larger quantities comes from China under the commercial name of Cassia. - Respecting the source whence this latter is derived, there is a great diversity of opinion. - All we know about it is, that it comes from the port of Canton. It is of a darker col. than the Ceylon, is in single quills, thicker, breaks with an abrupt fracture, - has a more pungent taste, and less sweet. -
We have also some commercial Cin. from the W. Indies. -

A mixture made with bit of Cinnamon, should not contain more than ½ drop to ℥i. —

It is also somewhat astringent in its operation, on account of a small portion of Tannin contained in it.

The principal constituents are a volatile oil & tannin, hence it unites astringent with aromatic properties. -

It imparts its virtues to Alc. - and with less facility to Water. - The oil does not rise by distillation of the Alcoholic Tinctures, hence we find it is not very volatile. - It is prepared in the E. Indies: - by macerating Cin. with Salt Water and distilling over the W. - salt being added to increase the temperature, - the oil & water rise together and separate upon coming over. When first procured, it is of a light yellow, which by age gradually turns to red. Its Sp. gr. greater than that of Water 1.035. It is excessively hot and pungent. It congeals below the freezing point & again becomes liquid at 41°. - It is apt to deposit Stearoptene. - It is Sol. in Alc. - often adulterated with Alc. & fixed oils. - - There is another oil prepared from Cassia, called Oil of Cassia, which is much cheaper, has a redder colour. -

Cinnamon is the most grateful of the aromatics, & acts as a cordial Stim. - It is usually given to conceal the taste of other medicines, or to increase their Stimulant & tonic powers. It is often associated with tonics and purgatives. - is applicable in diarrhea, & in flatulence. Dose X grs to ℈i -

There are two Oils,- Oil of Cassia & Oil of Cinnamon.-

The Magnesia which would dissolve in the Water would also precipitate some salts, which require to be given in the most minute quantities,- as Sulph. Morph. &c.-

An Infusion may be made of about ℈j bruised Cinnamon to ℥j Water.-

+ Indigenous.-
Sassaf. Rad. Cortex (U.S)-

There are 2 Off. Tinctures, a simple & a compound. Dose of them from ℥ss to ℥ij. – It is more used in making officinal preparations, than as a medicines. – The Oil is much employed for imparting its flavour to mixtures, & usually in the form of Aq. Cin. – which is made by rubbing up the oil ℥ss with a little Carb. Magnesia ℥ss and with ℔j Water then filtering. – Here it is proper to remark once for all, that Magnesia is in a slight degree dissolved by Water, hence it would be adviseable to prepare all the aromatic Waters with Carbonate of Magnesia. – The Off. Aq. Cin. is too strong to be prescribed without danger of inflammation, hence it should be directed to be diluted when given. Dose of the oil 2 to 6 gtt. in ℥ss with Sugar.

Cassia Buds have been known in commerce, They are the receptacles of the seeds, and possess properties similar to the bark, but are little, if at all used. – "

× Sassafras. Bark of the root. – The product of the Laurus Sassafras, a tree common to all parts of the U.S, and found even in Mexico & Brasil. – The tree is well known, – leaves, alternate, on red footstalks, oval, notched on one or both sides, or entire. Flowers in small racemes. Belongs to Class & Order, Enneandria, Monogynia.

By some, it is thought to be beneficial in Eruptive diseases:- as Scrofula,- Scurvy,- Syphilis &c.- but probably it acts merely as a general stimulant —

Sassaf. Medulla (U.S.)

This Infusion of about Ʒi Pith to Oj Water, makes a very pleasant drink in Dysentery. ——

flowers are dioecious. - Fruit is a druke, standing on a red receptacle, - it is of a purple glossy colour. -

All parts of the tree are somewhat aromatic, but the greatest virtues are found in the bark of the root.

In the Shops, it is usually in small fragments, of a reddish cin. colour & fragile. Its odour and taste depend upon a volatile oil, ~~which~~ which is imparted to boiling water and to Alc. It is yellow, turning red by ages. - Sp. gr. 1.094 - Has the property of dissolving Caoutchouc, as is well known by Chemists. - It is reddened by Nitric Acid. -

This bark is a pleasant Stimulant, and a warm infusion of it is diaphoretic. It is chiefly employed as an adjuvant. - Infusion is made by macerating ℥ss in a pt. of Water. - Dose of the bit 2 to 10 drops. -

There is another portion of this tree officinal, which is the Pith. - It is light white, inodorous, - mucilaginous taste, and an infusion of it in Water becomes exceedingly ropy, - ℥i of it forms a very thick mucilage with 1 pt. of Water, but it is not so good as a mucilage of G. Acacia. - It is employed as an application to inflamed eyes, & to diseased parts of the mucous membrane. ——

× Exotic

It is the most pungent of the Aromatics.-

A Decoction has less pungency.-

The Winters Bark was discovered by Capt. Winter.- the Sailors who
accompanied Drake in his voyage round the World.-
It grows on the borders of the Straits of Magellan.-

× Canella. The bark of the Canella Alba, - a tree which grows in the W. Indies, - in Jamaica. The bark of the branches is the part used. It is brought into our market with the epidermis removed, - of various sizes, of a light cinnamon externally and still lighter internally. It has an aromatic odour, - warm, very pungent, somewhat bitter taste. Powder is of a light yellow colour. - It imparts a portion of its virtues to boiling Water, but more freely to Alcohol. - They depend upon a volatile oil and extractive matter. -

It has the general properties of other aromatics, but is rather more stimulant. It is used as a corrigent for other medicines. - Also in Amenorhea. - Dose 10 to 20 grs.

There is a species of bark said to resemble the Can. Alba, which is called Winter's Bark, growing in the southern part of S. America. - It is not known or used in our market. -

Cortex Caryophyllatæ or Cassiæ Car. - is a tree growing in the W. Indies, which is supposed to be a species of Myrtus. It comes in cylindrical fasciculi, like the Ceylon Cin., of a brown colour., and a pungent taste, which together with the odour resembles that

of cloves, and might be used for the same purposes, tho' much more feeble. — — —

Twenty Fourth Lecture. Jan'y 14 1834

We now commence the subject of the leaves, and it may be proper, tho' at the same time it is difficult to give a definition of a leaf. It consists of an expansion and a footstalk which is continuous with the midrib. Thus when leaves have this footstalk, they are called peliolate, but as there are some which have not this, and are fixed directly on the stem, they are called sessile. The axil of the leaf is the point at which the leaf joins the stem. Leaves are divided into simple and compound, — Simple when the expansion is single or one, and compound, when the expansion consists of several smaller ones called leaflets. — The leaf itself properly consists of 3 portions, 1st The vessels which convey the fluid into & out of it, 2nd The cellular substance, which fills up the space between the vessels and 3rd The epidermis, covering the whole leaf.

There are 2 sets of vessels, — one, spiral tubes to convey the fluids into the leaf, & another, anastomosing membranous tubes to convey them back to the stem. — The cellular portion contained the juices or sometimes the solid secretions, — which are the active prin. of the plant usually.

The function of the leaf is carried on principally on the under surface by means of papillæ:—the upper, is polished & smooth.—

× Exotic.—

Linnæus thought that Senna was derived from one species only, which he called Cassia Senna.—

A characteristic mark of a Senna leaflet is the irregular obliquity of the base.—

The epidermis consists of 2 distinct coats - of which the exterior is inorganic, - while the interior is organic -

The office of the leaf is to perform for plants what the lungs do for animals, - for the juice is taken up by the roots, sent up thro' the stalk by the appropiate vessels, and penetrates the leaves to be brought very nearly in actual contact with the air and with light, - for light is requisite for the growth of plants, as evinced by their flourishing most towards the light, if planted in a shady or dark place, - and a leaf itself always turns a certain side towards the light. —

With these few cursory preliminaries, we proceed to the individual leaves, & first the Purgative Class. -

× Senna. This is derived from three different plants, - Cassia Acutifolia, - Cas. Obovata, - Cas. Elongata, - each of which contributes some to Commerce; and consequently needs a brief description. — The Cas. Acutifolia is a small Shrub from 1½ to 2 ft. in height, branching above with alternate, pinnate leaves, consisting of several pairs of opposite leaflets upon very short footstalks. - The leaflets are ovate lanceolate, acute. - Flowers some in axillary racemes, of a yellow colour. Fruit is a legume, flat, a

little curved, of a dark colour, and about 1 inch in length.

This plant grows in Nubia, Sennaar & Upper Egypt & comes to us through the Mediterranean Commerce. — It constitutes the Tripoli & a great part of the Alexandria Senna

Cassia Obovata. - This is distinguished from the former by the leaflet being shorter, obovate & mucronate. - The flowers are in axillary racemes on pedunculos which are longer than the leaves. - The pods are somewhat kidney-shaped This grows in Syria and Lower Egypt near the Mediterranean. - It contributes to the Alex. Senna & is called Aleppo. —

Cassia Obovata. - The chief difference of this from the others is in the comparative length of the leaves, they being more than an inch long and narrow. - This probably grows near Mocca, and is what we receive under the title of India Senna. — We may remark here as a distinguishing mark of the leaves of Senna, their irregular obliquity at the base. — — —

With these remarks respecting the botanical nature of the plants, we will next consider the three commercial varieties, viz. Alexandrian, Tripoli and India.

The Alexandrian derives its name from the port where it is ~~derived~~ shipped. - It consists principally of leaflets

It is too cheap to be considered as having been carried across the Desert from Nubia to Tripoli. - It is not found distinct in our market. -

of C. Acutifolia, and some from the C. Obovata, - which are mixed with the C. Acut. after it has been brought down up the Nile to a port near Cairo. - Besides this we sometimes find it mixed with Argel, which is the leaf of the Cynanchum Oleafolium. - This is more firm, of a lighter colour, much longer, & thicker, always more than an inch in length, - equal at the base, instead of obliqne, & the lateral veins of the leaf are almost entirely wanting - It is irritating to the bowels. - Besides these three which are universally found in Alexandria Senna, there are occasionally found leaflets, resembling those of the C. Elongata, together with footstalks and portions of stems, which should be rejected. - It would be well also to reject the legumes. By some thought to be purgative -

The Tripoli variety is so named from the Port of Tripoli on the Mediterranean Coast of Africa, whence it comes. It consists of the leaves of the Cas. Acut. - but they are much broken up, so that it is difficult to distinguish them. - It was formerly supposed that this came to Tripoli from Sennaar, but it is more probably collected from the vicinity of Tripoli. -

The India variety is brought from Calcutta, & from Eu-

The leaflets are long, narrow - dark colour (probably are the product of the C. Elongata

It is taken to India, in the Arab vessels, from Mocca.-

Infus. Sen. - is of a deep reddish brown colour. - It is rendered more efficient by adding Columbo. - This combination is excellent for dyspeptic cases. —

℞ - Senna ~~3ij~~
Magnesiæ
Magnes. Sulph. āā 3i
Sem. Fenic 3i
Aquæ Ofs. (hot)

Dose Wineglassful frequent.-

gland, where it was formerly carried by the monopoly of the E. India Company, but as this is now destroyed, probably we shall receive it from other sources also. —

It does not grow in India, but in Arabia. - It always contains a quantity of footstalks and legumes; hence it is less active as a medicine than the Alex. variety.

It will not be improper to take this occasion to mention that better drugs generally come from Egypt than from India, as for inst. - Myrrh, Gum Arabic, Senna &c, - because none but the best will pay the expense of transporting them to Egyptian Ports. -

~~The Asia~~ Senna had a faint, sickly odour, - a sweetish, nauseous taste. - Water and Alc. extract the virtues. The leaves yield to boiling Water about ½ their weight. One pint will exhaust the strength of an ounce. —

By exposure to the air, the infusion is said to become more griping & less active. - A decoction changes its nature and becomes less efficient. -

The most important constituent of Senna is Cathartin. It is uncrystallizable, - of a reddish yellow colour, - soluble in Water & Alc. & deliquesces on exposure to the air. - Precipitates are formed with it by Astringents and

No Cathartic is better than Senna for removing Constipation in Cholic. — Its griping may be prevented by adding 3i of Soluble Tartar, — Carb. Pot. — or Soda, — to each dose. —

Green Tea, infused with it, makes it more agreeable. —

A Syrup is made of Senna Tea Oj

Prunes lbss. —

Sugar q.s. — (Chapman) —

Confectio Sennæ. — is a very pleasant & excellent Laxative. — useful in convalescence, — in Piles &c. —

by the Sub acetate of Lead, but not by the Acetate of Lead and Tart. Ant. which form precips. with Senna itself.

Senna is a prompt and efficient Cathartic, acting also upon the intestines so as to increase their peristaltic motion, hence it acts with energy and promptness. The disposition it has to cause griping is obviated by the addition of some Aromatics or Salts as Epsom, Glauber's Cream of Tartar. - It is also increased in its efficacy by adding Bitters, but this must not generally be done. Dose of it XXX grs to ℈i in powder, but in this way seldom used. - It is generally given in the form of Infusion of ℈i in a pt. of Water with about ℈ij Fennel Seed. - ℈j Coriander.

D^r W. usually prescribes a compound infusion from

℈ss,	Senna	℈vj	A teaspoonful will generally operate in 4 or 5 hours, - if not, repeat. - or give a wineglassful every 2 or 3 hrs. -
℈j	Manna		
℈j	Mag. Sulphas (Salts) āā	℈i	
℈j	Fen. Fenic.	℈ij	
℈ss	Aqua bull.	℈vj	

A confection is made with the pulp of Cassia, pulp of Tamarinds. Prunes & Prune others. Dose of it as Cathartic ℈i to ℈iiij -

There are also Tinct. Sennæ, and a Tinct. Sen. et Jalap. which is called Elixir Salutis. — — —

These Tinct. both possess similar purgative properties and are given in about the same dose from ℈ij to ℈i. —

x Indigenous.

The leaflets should be gathered in Sept^r & carefully dried without exposure to the light.-

They generally come in packages,- from the Shakers.

Twenty Fifth Lecture Janr 16 - 1834 -

There is an indigenous species of the Genus Cassia, possessing similar properties with those before-mentioned, viz

* Cassia Marylandica. - Sometimes called American Senna. It has a perennial root, sending up annually numerous erect stems from 3 to 6 ft. high. - Leaves are alternate, pinnate, consisting of 8 or 10 prs of opposite, oblong-lanceolate, mucronate leaflets, - on short footstalks, with their upper surfaces green, - paler beneath. - and a characteristic of the plant is a stipitate gland on the footstalk near the axil of the leaf. - Flowers are of a beautiful yellow, - in axillary racemes at the upper part of the stem. - Calyx has 5 yellow leaves. - Corolla has 5 petals, 3 of which ascend and 2 descend - Belongs to the Class Decandria, - Order Monogynia. - The fruit is a long narrow legume, marked externally with the appearance of the seeds within. - The flowers appear in July and August. - It is not very abundant in the immediate vicinity of this City, but the situations in which it flourishes are in low flat places on the banks of fresh water streams, where it is sometimes overflown. - The leaflets as found in the Shops, are from 1/2 to 2 in. in length

× Exotic. –

Genus named from its pleasant odour. –

It is sometimes used also in Chronic Rheumatism, Cutaneous Affections &c. –

Tinct: (Ext:) used as a stimulating embrocation. –

thin and friable, of a feeble odour, - taste like Senna
Impart their virtues to boiling W. and Ale. - It is weaker than
the other Senna, and requires about ½ more to pro-
duce equal effects.

We next take up those leaves which may be
classed as Diuretics, and first of these is × Buchu Leaves
The leaves of the Diosma Crenata, or Agathosma Crenata
It is a small, evergreen shrub, 1 or 2 ft. high, growing in
the S. of Africa about the Cape of Good Hope. - The leaves
in the Shops, are from ¾ to 1 in. long, - oval, cuneiform or
more frequently ovate, - Serrate or crenate at the edges, and glandular crenatures
under part a no. of points, hence they are called punctate.
They have a strong, somewhat aromatic odour, & contain
a large quantity of a vol. oil, of a brownish yellow colour.
W. & Ale. extract their virtues, being vol. oil & extractive matter.

This is a gently stimulant diuretic, and under
proper circumstances diaphoretic. - Chiefly employed for
Gravel and other complaints of the urinary organs. -
Dose grs. XX or grs. XXX, 2 or 3 times a day. - It is usually
given, however, in the form of an infusion, made from
℥ss in a pt. boiling Water, - macerate till cool, - Dose
from f℥i to f℥ij - 3 times a day. —/——

†Exotic.-

It acts upon the uterus, not only as a stimulant, but also calls into operation its contractile power, so as sometimes even to produce abortion.- It is applicable only

* Sabina. Savine.- The leaves of the Juniperus Sabina. This is an evergreen shrub from 3 to 10 or 15 ft. high, with numerous, erect, branching, rough stems, with a reddish bark, but more green on the young branches.- leaves numerous, exceedingly small,- erect, opposite, pointed, embracing the extreme twigs,- imbricated in 4 rows.- The flowers are very small.- Belongs to Class Dioecia; Order Monadelphia. Fruit a blackish purple berry.- It is a native of the S. of Europe and the Levant, and is sometimes cultivated in this country, in gardens for ornament.

The extremities of the branches with the adhering leaves are the parts used.- When dried, without exposure to the light, they preserve their colour and are probably more efficient.- Our supply is brought chiefly from Europe, and is comparatively feeble. They have a strong, heavy, disagreeable odour, and a bitter acrid taste, and unless we find them possessing these properties, they are not good.

We take, extract their virtues which depend upon a volatile oil, of a yellow colour, limpid and light.- Ol. Sabinae.-

Savine is highly stimulant, and tends to act on the skin, uterus and kidneys.- In large doses, it is dangerous, producing inflammation in the stomach and bowels.- It

when the action of the system is below the natural standard.
Also in Leucorrhea, - Chronic passive hemorrhages &c - -

It is generaley an ingredient in Worm Tea, - but should always be in very small quantities, because it is so active. -

× Indigenous. —

× Indigenous. -

has been used in Chronic Rheumatism, - Amenorrhea, and in Worms. - Dose 5 to 10 grs. - The leaves however are so uncertain as to their Strength, that it is much better to the use the Ol. Sab. as this is of a uniform Strength. - The dose of it is from 2 to 5 drops. - The powder is sometimes used externally rubbed up with Cerat. Resina & Lard as an ointment to keep open blisters. - Sometimes also it is applied in powder or solution aft. to Warts, indolent ulcers, tinea capitis &c.

We have another species of this genus which is indigenous, - Juniperus Virginiana - Red Cedar. - This is very abundant, and is too well known to need any particular description. - The wood is very durable. - The leaves much resemble those of Savine, but sometimes arranged in ternaries instead of opposite. - They are readily distinguished by their taste and smell, being less strong and with a much less degree of acrimony. - The fruit called the Cedar Apple has been much employed as a vermifuge but is now almost entirely out of use. —

Uva Ursi. The leaves of the Arbutus Uva Ursi. Bearberry. - This is a low, evergreen shrub, having the main stem lying along the ground, sending up branches 2 or 3 in. high. Leaves are obovate, acute at the base, of a deep green on the

It grows in a sandy soil, - gravel hills &c. - Leaves should be gathered in Autumn. - They are apt to be associated with Pipsissewa, - which possesses somewhat similar properties.

It was known to the ancients & long employed by them. - It is used in Catarrhus Vesicæ, - Diabetes, - &c. -

* Indigenous. -

upper surface, but the under surface is lighter, and covered with a network of veins. The flowers terminate the stems in clusters of 3 or 4 together, of a reddish cast. Belongs to Class Decandria. - Order, Monogynia. - Corolla is a tube, ovate, with five small segments at the border of a reddish colour. - Calyx 5 parted. - Fruit is a red berry with a sweetish taste. — It is a native of this country, - N. of Europe, N. of Asia, grows in N. Eng. & N. Jersey, and our market is principally supplied from Jersey. - The leaves become darker by being kept, are of a firm texture, glossy above, reticulated beneath. The odour is like that of hay, taste bitterish, astringent, followed by sweetness. - Its principal constituents are tannin, bitter extractive and gallic acid.

It is astringent, tonic and somewhat diuretic. - It is useful in complaints of the urinary passages. - Dose of the powder from ℈i to ℈i. - A decoction is made from ℈i to ƒ℥xx - boiled to a pint. Dose, ƒ℥i to ƒ℥ij. 3 or 4 per day

Our next may be considered as Aromatic. - It is the + Gaultheria. Partridge-berry. The leaves of the G. Procumbens. This has a creeping root, along under the surface of the ground, sending up at intervals, one or 2 reddish stems,

This peculiar odour exists in some other plants, - as Sweet Birch &c

Mexotic
& In -

which are bare at the base, but leafy towards the top, - the leaves being variable in size, ovate or obovate sometimes obscurely serrate, shining and firm. - The flowers are 2 or 3 on each stem on nodding pedunculos at the top of the stem. - Calyx 5 cleft, Corolla, monopetalous, of a whitish pink colour. - Belongs to Class Decandria, - Order, Monogynia. - Fruit is a red berry It grows in all parts of the U. S. - in dry barren sands, under the shade of laurels &c, and is found abundantly in the Pines of Jersey. - It has a peculiar flavour, owing to a volatile oil, - and an astringitate. The oil is separated by distillation with W. - is of a yellowish colour, has the od. & flavour of plant, - is the heaviest of the ess. oil, having Sp. gr. of 1.17, & from this fact, we can readily detect adulterations. -

It is chiefly used to conceal the taste of other med. - is an ingredient in Comp. Syrup of Sarsaparilla. - Leaves have the properties of Aromatics. - Sometimes the infusion is used in Chronic Diarrhea. —

Twenty-Sixth Lecture - January 18th - 1834

Digitalis. Foxglove. Leaf of the Dig. Purpurea. - This is a biennial or perennial plant, - having a fibrous root, -

The leaves should be dried separately, & not packed together as we generally receive them from the Shakers. –

The European leaves, however, are the best. –

Digitalis was used empirically, long before it was introduced into regular practice, – & it is not yet used by many practitioners. – It is a direct stimulant diuretic, has an influence in diminishing the force of circulation, hence we can by this judge of its action upon the system. It has been said that those under its influence, have a slow pulse when lying down, which becomes more frequent when sitting, & still more so when standing. – But this, we can easily understand, happens to the pulse at all times for the increase of exertion requisite to sustain these

with a single, erect stem - 1, 2 or 5 ft high, with radical leaves as well as those of the stem. - The radical are very long, ovate with short petioles, and they gradually decrease from these to the top of the stem. - The flowers are in a terminal spike, hanging down on one side, of a reddish purple colour. - Calyx, 5 cleft, - Corolla monopetalous, ventricose, shaped something like the finger of a glove, hence the plant receives its name. Its colour is purple, - inner surface marked with black spots upon a white ground. Belongs to Class Didynamia, - Order - Angiospermia. - Seeds are in capsules. - It is a native of the S. of Europe, and is cultivated in our gardens. - Leaves are the officinal portions. - These are somewhat variable in their activity, depending upon their place of growth & the care taken in collecting them. The best is that which grows on dry and sunny hills, where the soil is not very rich. When it is good, the leaves should be of a greenish colour, never brown. - It has a narcotic, peculiar odour, - a nauseous, bitter taste. - Upon its odour and taste, as well as the green colour, which it should present, we must rely as tests of its excellence. - The powder is green but, like the leaves, should not be exposed to light or air. -

different positions, must increase the action of the heart.
A caution is necessary respecting its use, - for, after having been given for some time without producing any effect, its accumulated power suddenly breaks forth & produces a violent impression upon the system: hence we must give it in small & divided doses, & if it do not operate in 1 or 2 weeks, suspend it until sufficient time may have elapsed, for the danger to pass. -
When its effect is once felt, - suspend the medicine & the operation of it will still continue. - It has been recommended as a diuretic in febrile cases, - in coagulability of urine by heat &c. - It must be suspended when it produces pain in the head, - vomiting or diuresis. -
It has been used in Inf. affections, but cannot be substituted for the Lancet, - but is merely an adjuvant to it. -
Also in febrile cases, where the frequency of the pulse is owing to no other cause than Nervous Irritation, - & is increased by V. S.
Also in some forms of Scarlet Fever, - Hemoptysis, - Consumption, - Rheumatic & Gouty Affections of the Heart from Metastasis, - will sometimes prevent Organic Lesions. -

It imparts its virtues to Water & Alcohol. -
It is a Narcotic, Sedative and Diuretic. - Its most remarkable property is that of reducing the pulse. - Sometimes the patient complains of vertigo, delirium, pain in the head &c. - and then the dose must be suspended. - It is a fact worthy of notice, that this medicine does not act immediately, but it requires to be given for a long time in moderate doses, very gradually increased. In overdoses, it produces death by a prostration of all the vital powers. - These effects are counteracted by Stimulants.
It is used most efficiently in the cure of dropsy, - diseases of the heart &c. - Dose of powder 1 gr. - 2 or 3 times a day, usually given in the form of a pill. - An Infusion is made by macerating ℥i in ℔ss of boiling water, with some ℥ss Cinn. water. - Cinnamon. The Dose of this is ℥ss. 2 or 3 times a day. - A Tincture is made by macerating ℥iij in 2 pts. Alc. for 2 wks. Dose is 6 drops 2 or 3 times a day. Doses to be gradually increased. ℳℳX = 1 gr.

Tabacum. Tobacco. This is derived from different species of Nicotiana. - The greater portion of it, however, from the Nicotiana Tabacum, which is so largely cultivated in the Southern Section of the U. States. - It is an annual plant with an erect stem 2 or 3 ft. in height, - leaves are alternate,

Indigens

and flowers in loose terminal panicles. Belongs to Class Pentandria,- Order, Monogynia. Flowers are of a pink colour.- It is a native of America, especially, of the Southern portion,- and is now cultivated over the whole globe, wherever the climate is suitable.- Its properties vary, with the soil, climate and mode of culture. That is said to be the best which grows on land not previously cultivated.- The seed is first sown, and the sprouts afterwards transplanted.- After the plant has grown to some height, it is topped, so that the leaves will increase in size. At the latter part of Summer, the leaves are cut, or stripped off, & packed in hogsheads.- It contains two active principles- One of which was called by Vauquelin Nicotin, but afterwards received from Hermstadt, the name of Nicotianin,- and the other is an alkaline principle lately discovered by 2 German Chemists,- a colourless, limpid fluid,- with a narcotic odour, and an acrid, burning, permanent taste. one drop of which is sufficient to kill an animal, and by them was called Nicotin, tho' it is not the same with the former. It is soluble in W. while the other- Nicotianin is insol. in W.- When Tobacco is exposed to a distilling temperature,- above

Taken internally in small doses, it has a soothing effect, & hence is much used in every part of the world. In larger doses it produces vertigo, nausea, anxiety & great prostration. It operates directly upon the Brain, as has been proved by Brodie in experiments upon decapitated animals, sustaining life by artificial respiration. -

It is very analogous to Digitalis

A Cataplasm of snuff was recommended by Godman for Croup. - Useful also for Spasms, Colica Pictonum. &c. -

that of boiling Water, a Smoke comes over, in which is contained an Empyreumatic Oil - having the odour of old pipes. It is very poisonous, - one drop of it, injected into the rectum of a cat, proved fatal in 5 minutes.

Tobacco is Narcotic, Emetic & Diuretic. - It is, however, more used in medicine as an external than as an Internal Remedy, or in the form of injection, for which purpose it should be of the strength of ℈ss to a pt. and never exceed ℥i - Half to be given at once. - In Spasm of the rima glottis, in Asthma & Croup, the Smoke may be used with advantage, and sometimes for the purpose of producing a general relaxation of the muscles. - To show its beneficial effects in this manner, he related an Anecdote of Dr Physick's, which occurred in his practice. - It was the case of a Lady who had been salivated to a great excess, & that her tongue by its tumefaction, had pushed her jaw out of joint. - After trying various means, he resorted to the use of Gin in order to produce Intoxication & relax the muscles, - but when, much to his astonishment, he had given one pint, without producing the desired effect, he gave the Lady a segar, and soon after smoking, the desired effect followed, & the jaw was returned to its proper place. -

Chapman says a cataplasm is sometimes resorted to ~~Dept~~
in cases of poison, - but that this is not proper when the
poison has debilitated the system. - Useful in Croup. -

Has been found amid the ruins of Ticonderoga. -

Dose of this as an Emetic is 5 or 6 grs. - Externally it is applied as a Cataplasm, or as an ointment made either from Snuff or the oil with Lard. - Tinct Capsici - This is rather dangerous especially if applied to ulcerated surfaces. - There is also a vinous Tincture made from ℥i to the pint, - The dose of which is about thirty drops. —

Twenty-Seventh Lecture Jan'y 21st 1834

Hyoscyamus. Henbane. The leaves of the Hyos. Niger. This is a biennial plant, with long, tapering, white, somewhat branching root, bearing some resemblance to parsley, - the stem rises to various heights, is herbaceous, - leaves ovate oblong, deeply notched, and each lobe pointed, - embracing the stem, & both the stem & leaves covered with a viscid substance & hairy. - The flowers are yellowish, in a long, leafy spike at the end of the stem, Calyx 5 lobed, - Corolla monopetalous with 5 segments at the border. Belongs to Class Pentandria, Order Monogynia. Fruit is a capsule with a small covering, & invested with the Calyx. Seeds are numerous. -

It is a Native of Europe, - is found also in U. S. - in some parts of the Eastern States, - in old graveyards or in foundation of old houses &c. - All parts of the plant

At first it produces a stimulant effect, - afterwards the patient becomes drowsy, - giddy, - confused mind, - with some dilatation of pupils, - producing effects similar to, but less, than, Opium. - It has some tendency to the Skin, & is slightly Catative. - It is often useful in Catarrhal affections

are active, - the leaves only are officinal in U.S. Phar. -
Their efficiency depends very much upon the time when
they are gathered. - It should be during the second year
of their growth. - The recent leaves when bruised, have a
strong narcotic odour, - taste, mucilaginous and acrid.
The dried leaves, however, have very little of either. - When
thrown into the fire, they produce a crackling noise. -
Imparts their virtues to diluted Alcohol. - - The root
is more poisonous in the second year than in the first.
It is an Anodyne & Soporific. - In large quantities it produces serious and even fatal consequences.
It is employed much in the same manner as Opium,
and has the advantage over that of not constipating
the bowels, but has rather a contrary effect. - Dose of
the leaves from 5 to 10 grs. in powder. - The Tincture is
a good form for administering it. Dose ʒi to ʒij -
The Extract is prepared from the fresh leaves by ~~expr~~
pressing the juice & evaporating to a proper consistence.
Here it may be proper to give a general view of
the manner & care which should be taken in preparing
extracts in general. - They are not frequently or care-
fully prepared in this country, because we rely pri-

cipally upon our supply from abroad. - There are two sets of Extracts, - those obtained from evaporating Infusions, Decoctions or Tinctures, which are called Aqueous, Alcoholic or Spirituous, according to the Solvent employed, - & those obtained by evaporating the expressed juices, which are called Inspissated Juices. (Succi Inspissati) —

The latter should be obtained by expressing the juice from fresh leaves, & carefully evaporating. The former must also be evaporated with much care, after having dissolved the substance in the menstruum used. -

The term Apothegm means an insoluble extractive matter, which is rendered so by the action of the Ox. of the Atmosphere upon it. — —

Maceration is performed with Cold Water. —

Infusion - by pouring on boiling Water. -

Decoction, - by continuing to boil the substance in the Water, but this is apt to injure the virtues of the plant. - After the extracts have been obtained, they should be preserved from the action of the atmosphere by keeping them in glazed earthern, or glass vessels, filled & well covered, - or sometimes in oiled bladders, to prevent the access of air. — —

The Extract of Hyoscyamus is almost always imported from England, - is of a dark, olive colour, - sometimes green, or even black, according to the care taken in preparing it. - Has a narcotic odour, - bitterish, nauseous taste, slightly saline, - is of various strengths, depending as already remarked, upon the age of the plant, and the care taken in preparing it, - hence it is always adviseable to be cautious in its administration, commencing with a Dose of 2 or 3 grs. and gradually increasing, till its strength is ascertained.

Stramonii Folia. Thorn Apple Leaves.
Stramonii Semen. Thorn Apple Seed. } Jamestown Weed

The product of the Datura Stramonium. - This is an annual plant, with a spindle-shaped root, sending off a no. of white fibres. - Stem, round, green, smooth, dichotomous above. - Leaves spring from the divisions of the Stem; are irregular, and have an unequal base. Flowers are at the axils, simple, with a peculiar 5 angled Calyx which is tubular, and a large, funnel-shaped Corolla, with plaited border, - of a white, sometimes purplish colour. - Belongs to Class Pentandria, Order Monogynia. - The calyx falls off when the

Probably it came originally from Asia. - It was first found here in the neighborhood of Jamestown, - hence its name. -

Dilatation of the pupils is also a prominent symptom. -

fruit forms, except the lower part, which remains attached to the fruit. This fruit is an ovate-oblong capsule, surrounded with prickles, and divided into 4 cells, each of which contains a number of kidney shaped downy seeds.

Stramonium is found all over the world, in the vicinity of cultivation, and is very abundant in U. S. —

There are two varieties of it, - one has a green stem & white flowers, - the other has a purplish stem & purplish flowers, but they are probably the same species. —

The leaves should be gathered after the appearance of the flowers, but before frost. - Taste is bitter & nauseous. They impart their virtues to W. and Alcohol. - The seeds are male-kidney-shaped, - dark brown, almost black.

Stramonium is a very powerful narcotic, producing when taken in sufficient quantity to affect the system vertigo, headach, perverted vision, delirium, & a species of intoxication with a variety of gestures & actions. - Sometimes it increases the secretion of urine and perspiration. - It is employed in Neuralgic Affections - Rheumatism, epilepsy, - and in Asthma it has enjoyed considerable reputation in the form of smoking the seeds in a pipe, but this is somewhat dangerous. —

An Ointment is made by boiling the fresh leaves in Sand-

The extract applied to the eye, dilates the pupil, hence it is employed by Surgeons in operating for cataract.-

The seeds are the most powerful.- Dose of them about 1 gr twice a day.- The leaves vary in Strength, & the dose to begin with is 2 or 3 grs. – Dose of Tinct. 10 to 20 m.

The extract is prepared from the inspissated Juice (U.S. Phar).- from the Seeds (Lon.) – Dose of U.S. is variable, beginning with 1 gr. night & morning, and gradually increasing.- Dose of the Extract from the Seeds should not be more than 1/4 of a grain. —//—

Twenty Eighth Lecture Jan.y 23.- 1834

Belladonna.- Deadly Nightshade.- The leaves of the Atropa Belladonna.- This is an herbaceous, perennial plant, with a thick, fleshy root, which sends up several erect stems, branching at top, about 3 feet high.- The leaves are in pairs, ovate, lanceolate, unequal in size, & the flowers are supported on long pedunckles, from the axils of the leaves.- Calyx 5 segments. Corolla - bell shaped of a livid red internally, brighter or paler red externally

Belongs to Class Pentandria, Order Monogynia.- Fruit is a berry, first green, then red, afterwards purple or nearly black.- Leaves are officinal in U. S. Phar.-

It is the most efficient narcotic for relieving neuralgic affections

This plant is a Native of Europe, growing in shady places, along walls, rubbish &c.- flowers in June & July.-

When dry the leaves have a dull green colour,- an acrid, nauseous taste, & a faint narcotic odour.- It is not usually imported to us in the leaf, but generally in the form of the Extract.- It imparts its active prop. to W. & Alcohol.- Active prin. supposed to be Atropia.-

It is a powerful narcotic, with some diuretic & diaphoretic properties.- When given in sufficient quantities to bring the System under its influence, it produces a slight dryness of the fauces (constriction), which gradually increases,- little giddiness,- pain over the eyes,- sometimes perverted vision, or slight defect of hearing (buzzing), showing that the nervous system is effected by it;- and it should generally be administered until some one of these effects are shown.- In an overdose it becomes a fatal narcotic.- It was formerly much used in Cancer, but it is not relied upon in such cases at present. It seems better adapted to, and more employed in, neuralgic affections,- tic douloureux- nervous complaints,- hooping-cough,- Convulsions,- Scarlet Fever &c.- Even when applied ext. to the eyelid, it dilates the pupil, hence it is used in

The first effect upon the system to be watched for is the affection of the throat & deglutition. - Commence with 5 gr & increase till this is perceived. -

Europe, by surgeons, in operating for Cataract. —

Dose of the powdered leaves 1 gr. - gradually increased.
An Infusion is made from ℈i to ℥ℓ W. - Dose - wineglass
The Extract is the form generally used, but of this, there
is a great diversity of power. - It is the Inspissated
Juice, - of a dark brown colour, & soft consistence. —

A Plaster is sometimes made from ℈i Ext. - to ℈ij of
Soap Plaster, or Adhesive Plaster melted and mixed in a mortar im-
mersed in boiling Water, then rubbed till cool. - This
is useful for local rheumatism, neuralgia &c. —

Conium. Hemlock. - The leaves of the Con. maculatum
This was formerly but improperly called Cicuta. —
It is an umbelliferous plant, with a biennial, spindle
shaped root, which annually sends up an erect, stria-
ted stem, marked with purple spots. - The lower leaves
are tripinnate, attaching to the joints of the stem by
sheathing petioles. - The upper leaves are bipinnate, -
and inserted at the divisions of the branches & much
incised. - Flowers are in terminal compound um-
bels, appearing in June & July, when the plant emits
a fetid odour. - Seeds are in two portions, which form
when united, an ovate roundish mass. — It is a

Native of Europe, but has become naturalized in the U. S. - and is found along the roads, and in the neighborhood of old settlements &c. - The most active plants are those which grow in hot & dry places. - The leaves are officinal in U. S. Phar. - They should be gathered when the plant is in flower, - footstalks should be rejected, - quickly dried by the fire or Sun. - They are very small when dried, curl up, & of a dirty green colour. - They should be kept in tin cases, excluded from the air, - or a better plan, is to powder them & preserve the powder in opague, well stopped bottles. - They have a strong, heavy, narcotic odour. - bitter & nauseous taste. - Virtues are not readily extracted by Water, consequently a decoction is almost inert. - They are yielded to Alcohol & Ether. -

Hemlock is a narcotic, - neither stimulant or sedative. - When it affects the System, it produces vertigo, - perverted vision, - nausea, - debility &c. - In large doses, the pupils are dilated, - hiccup, cold extremities, - Delirium, - Stupor - & even death follow. - This was once used by Baron Stoerk for Cancer, but it is now known that it merely allays pain &c. - It is more efficient in Scrofulous Sores, - Syphilitic rheumatism, - neural-

The dose should always be urged till there is a slight giddiness; sometimes this does not happen until 3i is taken. Dr Chapman says he has given 3ss of the powder or Extract.

sia, chronic rheumatism, cutaneous affections &c.-
Dose of the powdered leaves is from 3 to 4 grs. - gradually increased till a slight vertigo or nausea is produced.-
To maintain a given effect, the dose of this narcotic must be more rapidly increased than that of any other,- hence we may learn, that great caution is necessary in administering it, when the parcel is changed.
The form generally used is that of the Extract, which is the Inspissated Juice.- Dose is 3grs. twice a day, gradually increased, given in pills or in Sol. in Water.-
An Ointment is sometimes applied to Ulcers,- made either from the Extract or the Fresh Leaves. -
Tinct. is off. in Dub. & Ed. Phar.- Dose from 30 m. to ʒi.-
It is a fact worthy of notice that tho' this plant is so poisonous to some animals & to man, it may be eaten with impunity by other animals,- as horses, goats &c and hence the milk of goats upon which some families subsist, may become poisonous.- This should be borne in mind when called to cases of poison in the outskirts of the City. —
We shall conclude this Lecture with some general remarks respecting Flowers,- some of which will be merely a repetition of what we have already stated.-

The flower is the part upon which the plants depends for propagation. It consists of a Corolla, Calyx, Stamens & Pistils. The corolla is usually the most conspicuous part, and that upon which the colour & beauty depend. It may be monopetalous or polypetalous.

The monopetalous Corolla may be Bellshaped, as in Belladonna. - funnel-formed as Stramonium, - Salver-form ⊤, - Labiate, - lobed at the border called Limb, or these lobes extend nearly to the bottom of the Corolla as in Crocus Sativa. - appearing almost like several petals, which constitute the Polypetalous.

Calyx is outside or beneath the Corolla; may be monophyllous as in Stramonium or Polyphyllous. - It is generally green, or when of any other colour, it is said to be coloured. It receives different names from its relative position, as Perianth, when close at the bottom of the flower, - or an Involucre, when the leaflets are at a distance below the Corolla, as in the umbelliferous plants, - Conium for inst. -

Spathe is a membrane embracing the flower before it expands, - when it breaks thro' leaves it as Parlic. - Sometimes the Calyx may be wanting, - sometimes the Corolla. - Sometimes there is another part present

called the Nectary, which is a process within the flower. — The Stamens are the Male Organs of the plant. — They consist of filaments & Anthers either on the top of the Filaments or Sessile, — and covered with a dust called Pollen, which is the fructifying portion of the flower. —

The Pistil or Female Organ, consists of a Germ at the bottom, generally green, — from which proceeds a Stile, upon which is the Stigma, which is an expansion at the summit; — sometimes it is sessile. — The Stigma receives the Pollen from the Anthers, & consequently is necessary for fructification. —

Flowers are either Simple; — or Compound as Chamomile, — Dandelion, — Semi Flower &c. — The compound flowers consist of a central part called the disc, & an exterior called the Rays. — Sometimes the flowers contain pistils only & are called pistillate, — sometimes contains only Stamens, — called Staminate. — Some have both and are called Perfect or Hermaphrodite, & others have pistils on one & Stamens on the other, and hence bear no fruit unless near enough together for the Pollen to be received by the Stigma. —

When the flowers rest on the stem they are said to be Sessile, - on footstalks, - Pedunculed. -

Scape is a flower stem rising from the root, but bears no leaves. - Flowers are said to be arranged in Whorls, or Verticilate, when they are around footstalks at the same point. - Racemes, - when each has a distinct footstalk, but afterwards all unite in one. - Spike, - when they have a common footstalk, around which they are all arranged without pedicells. Panicles, when the flowers are in a divided form - Umbels, arranged even on footstalks. -

Cymes - are something like umbels, but the footstalks divide irregularly. - - Corymt is an assemblage which looks like Umbels, but the Pedunceles start from various points. —

Twenty Ninth Lecture. Janf. 25th 1834

There are two modes of Classifying plants; - one of which is artificial or sexual as adopted by Linnaus, and the other is natural, as advocated by Jussieu.

The Linnean system is called Artificial, because many plants are connected together which have no natural similarities, - while, by the natural system

those are collected together which have the same affinities, and similar properties. —

Linnaeus made 24 classes, some of which have since been abolished by other botanists. — viz. —

1. Monandria. — According to the nr. of Stamens. —
2. Diandria
3. Triandria and so on to the eleventh class which is
11. Dodecandria
12. Icosandria — Stamens attached to calyx — 20 or more in nr.
13. Polyandria. — Stamens, 20 or more, attached to Receptacle. —
14. Didynamia — named from relative length. — 2 longer than other 2 —
15. Tetradynamia — 4 longer than the other 2 —
16. Monadelphia. — Filaments collected in one brotherhood —
17. Diadelphia — " " two brotherhoods
18. Polyadelphia — " " many "
19. Syngynesia. — Plants having compd. flowers, — florets on a common receptacle; in the disc & in ray — Sunflower &c —
20. Gynandria: Stamens are inserted in, or rest on, some part of the pistil. —
21. Monoecia. Distinct Stamens & pistils on the same plant. —
22. Dioecia. — Same plant has either Stamens or pistil, — not both. —
23. Polygamia. — Plant having some perfect, some imperfect flowers. —
24. Cryptogamia. — Fructiferous parts cannot be distinguished —

These Classes are subdivided into Orders as follows. —

1. to 13 Class inclusive, are divided into orders according to the number of pistils; - thus each class has order Monogynia to Polygynia. -

14 Class. - 1. Gymnospermia. - naked seeds - named from fruit pistils being neglected —
2. Angiospermia - seeds in capsules. —

15. - 1. Siliculosa. - named from Pods. — as long as broad —
2. Siliquosa — " — longer than broad. -

16. 1. Triandria &c. - upon number of Stamens. -

17 1. Decandria &c. " " "

19. Order founded upon the relative character of the florets in the disc and in the ray. - Thus. -
1. Equalis. - Perfect flowers in the disc & in the ray. -
2. Superflua. - Flowers in disc perfect, - in ray, pistillate. -
3. Frustanea. " " disc perfect - in ray neutral. -
4. Necessaria. " " " Staminate - " " pistillate -
5. Segregata. - Each floret has a distinct Calyx or Perianth. -

20. 1. Monandria &c - according to nº. of Stamina —

The Natural System by Jussieu is divided into two great divisions according to the character of the seeds. - depending upon the Cotyledon, which is the white, - nutritious portion of the seeds. - Thus they are called Monocotyledonous and Dicotyledonous. —

Each of these is subdivided into Classes according to the relative position of the seeds: — and these classes are again subdivided into Orders according to the natural affinities, properties &c. of the plant. —

In both Systems, the Orders are subdivided into distinct Genera and Species. ——

With these observations we proceed to consider the individual flowers which are used in Medicine. These are so very few, that they do not admit of Classification. — The first that we shall notice is the Rose. Rosa Centifolia: This belongs to the Class Polyandria, - Order Polygynia. - The genus is so well-known that a description is unnecessary. - This plant has a prickly stem, from 3 to 6 ft. high. - Leaf is pinnate, and composed of 2 or 3 pairs of leaflets and one terminal which are ovate, serrate, downy on the under surfaces. Flowers are large, with many petals, supported on short, bristly pedunicles. - The germ is ovate, and the segments of the calyx, semipinnate. - This is not the same with the Damask Rose as some have asserted. — The petals are the officinal ~~preparation~~ portions. — These have a fragrant odour, - with a sweetish, slightly

acidulous, somewhat bitterish taste.- These properties depend upon a volatile oil which is obtained by distillation with Water. 1lb of the leaves yield about 3ij of the Otto or Essence, consequently it commands a very high price. — The petals are slightly laxative, but chiefly used on account of their pleasing odour, or for the purpose of making Aqua Rosarum.- This is obtained by distillation from the fresh roses, or from those which have been kept packed in Salt, —

If the Rosewater once distilled only, be long kept it is apt to deteriorate, hence it should be redistilled.

It is used medicinally, chiefly as a vehicle for disagreeable substances, — for Collyria, - Gargles &c. - Ung. Aq. Ros. - Cold Cream. - Used for chapped lips &c. -

Rosa Gallica. Red Rose. This is a smaller plant than the former, and the prickles of the stem are shorter: - petals, more spread out & are obcordate. Belongs to the Class Icosandria, Order Polygynia. Colour is of a beautiful crimson, both of the flower and fruit. - This is a native of Europe, - but cultivated in gardens in the U. S. - The unblown petals deprived of the calyx, are the Vf. portions. -

hence they are cut off, before the flower is expanded. The odour is less fragrant than that of the former, it is improved by drying. - It is distinguished by its astringent taste. -

Red Roses are slightly astringent & tonic. Generally used in Infusion as a Vehicle for other medicines. -

Inf. Ros. Comp. - made by infusing ℥ss in Oiss of boiling W. & add dil. Sulp. Acid ƒ ℥iij and Sugar ℥iss. It is given in night sweats, hectic fever &c. - or as a Gargle - Dose ƒ ℥ij to ƒ ℥iiij -

Confect. Ros. - formed by the unblown petals in a recent state beat up with Sugar. This is imported into our country from Britain - Used for pills &c. -

The Pulp of the Dog Rose is sometimes used in Europe, mixed with Sugar, for the same purpose or for its flavour as a vehicle ~~for~~ powders, pills &c -

Thirtieth Lecture Jan. 28 - 1834 -

Anthemis. Chamomile. - The flowers of the Anthemis Nobilis. - This is an herbaceous plant with a perennial root, which sends up stems that are at first trailing, & then proceed erect branches, about 6 inches in height, round & hairy. - The leaves are bipinnate, with pointed, three-lobed

They are imported from England & Germany. —
The imported flowers are always kept in the shops. —
A diversity of opinion exists respecting the relative virtues of the single & double flowers. —
It was employed as a medicine by the ancient Egyptians & Greeks. — It is used in all those cases where diseases depends upon a debilitated state of system, — in dyspepsia when simple, — convalescence &c. — in recovery from vernal & autumnal fevers, — & for these they are usually prescribed in cold infusion. —
If taken warm, in large draughts, it vomits. —
In substance, it is sometimes powdered & given for intermittents, — dose ℈ss to ℈i, 2 or 3 times a day; if it purge use some astringent with it. —
Infusion is made from ℈j to ℔j Cold Water. — Wineglassful.

leaflets. The flowers are terminal & compound, - solitary, - with a yellow convex disc & white rays. Belongs to Class Syngynesia, - Order Superflua. - The whole herb has a peculiar fragrant odour, and a bitterish aromatic taste, but the flowers only are the officinal portions. - It is a native of Europe, but cultivated in some of our gardens. - In Europe the rays multiply by culture, but it is said that they do not in this country. - This species, in France and Germany is called the Roman Chamomile to distinguish it from the Matricaria Chamomilla, which very much resembles the Anth. - but the flowers are smaller and less doubled, and considerably weaker. -

Chamomile owes its virtues to a vol. oil and a bitter extractive, which it yields readily to hot Water, - but with less facility to Cold Water. - The oil when first procured is of a skyblue colour, but becomes yellow by age. -

There is another species belonging to this Genus, - the Anthemis Cotula - May Weed, which is very abundant in the U.S. - found in waste grounds, along the roadside &c. The flowers appear in the Spring & Summer very much resemble the Cham-flower. - It is called by European Authors - Stinking Chamomile. -

Chamomile is a mild tonic, - in large doses excites nausea and even vomiting. - As a tonic it is generally given in the form of Infusion, drank when cold, - but to favour an emetic, - it is given strong and warm. - It is useful in weak digestion, - after fevers &c. - Dose of powder ℈ss to ℈i - Infusion is made ℈ss to 1℔t. Water - Dose f℥ij several times a day. -

An Extract is prepared, but it must of course be destitute of the vol. oil, and hence is only a feeble bitter tonic. - It is not used.

Caryophyllus - Cloves. - The product of a plant which has received various names - Caryophyllus Aromaticus (Linn) - Eugenia Caryophyllata. - This is a small beautiful, evergreen tree, with opposite leaves, and flowers in terminal panicles. - It is a native of Moluccas, but it has since been introduced into Cayenne & the W. Indies, - whence our market is supplied. Recognized by Linnæus 6 yrs old, - lives 25 yrs -

The unexpanded flower-buds are the parts used. They resemble a nail in shape. - Their colour, dec℔ brown externally, - reddish internally. - Odour strong and agreeable, - taste pungent and aromatic. -

The best cloves are large, heavy, brittle, & present an

oily appearance, when scraped with the nail. - The inferior are soft, light, wrinkled, - paler colour & slight taste. - Their virtues depend upon a vol. oil, an astringent extractive matter, - gum, - resin, & a fixed oil. - Of which the vol. oil & resin are the active principles.

Cloves impart their odour & some taste to Water, - but all their properties to Alcohol. - The vol. oil is obtained by distillation with Salt Water. - At first it is fluid & colourless, but is generally found in the Shops, - yellowish or even brown. - It is heavier than Water, which may be a test of its adulteration. - Nitric Acid imparts to it a deep red colour. -

Cloves are employed as the other aromatics; - to relieve nausea, cover the taste of other medicines &c. - Dose in substance 5 to 10 grs. - but this is rarely given. - Dose of the oil 2 to 6 drops. - Placed in a carious tooth, it will lessen the pain of toothach. — a —

Rosmarinus. - Rosemary. - The tops of the Ros. Officinalis. - An evergreen Shrub, 3 or 4 ft. high, with an erect stem, divided into numerous branches. - The leaves are opposite, linear, an inch or more in length, - blunt at the summit, - covered on their under surface with a

white down - edges revolute. - Belongs to Class, Diandria, Order Monogynia. - The whole flowering summit is the officinal portion. - It grows on the borders of the Mediterranean. - It is cultivated in Europe and sometimes in U S. - It has a strong balsamic odour, - bitter and camphorous taste. - It imparts these virtues in some measure to W - but much better to Alc. - They depend upon a vol. oil. - It deteriorates and becomes inodorous by age. - The oil is colourless, lighter than W. - very soluble in Alcohol. - is sometimes adulterated with Oil of Turpentine, which can be detected by dissolving in Alc. - For obtaining this oil & the Spirit, is the only use made of Rosemary in this country.

It is a Stimulant emmenagogue. - but it is chiefly used as a rubefacient addition to Liniments &c. When given internally, the dose is from 3 to 6 drops. -

Lavandula. Lavender. The product of the Lav. Spica of Linnaeus, - which includes two distinct species of other botanists. viz Lav. Angustifolia or Lav. Vera - and Lav. Latifolia or Lav. Spica - the former which is the officinal plant. - This has a narrow leaf, is a perennial shrubby plant, - Stem

The oils differ very much according to the different places where the plant grows, whence they are obtained:

Sp. Lav. Comp. is much used for flatulent Colic; Indigestion - Faintneds &c. —

about one foot in height, divided into numerous Strait, herbaceous branches, furnished with leaves of a light green colour, and above with a spike of bluish purple flowers. Belongs to the Class Didynamia, - Order Gymnospermia. - It is a native of the South of Europe, and is abundantly cultivated in the gardens in the U.S. - The flowers appear in August. The Spikes should be cut when they begin to bloom. - They have a strong delightful odour, and retain their fragrance long after they have been dried. - Virtues depend upon a vol. oil, of a lemon yellow colour, aromatic taste & very light, - is obtained by distillation with Water.

The Lav. Latifolia or Lav. Spica, has a broad leaf, & branching Spikes. - It grows in the S. of France. - It is less pleasantly aromatic, - yields Oil of Spike. - Is not used to any extent in medicine

Lavender is a pleasant aromatic, - seldom used in a crude state, but principaley for obtaining the oil and Spirit, which are used in medicine & Perfumery. -

Sp. Lav. Comp. - exceedingly pleasant aromatic - Dose 3ℓm to ʒi. - The Lavender Water is incorrectly named, because it is a solution of the oil in Spirit, instead of in Water, as the name implies. ——

Thirty-First Lecture Jany 30 - 1834

Crocus. Saffron. - The Stigmas of the Crocus Sativa. - This is a bulbous, perennial plant, upon which a delicate, purple coloured flower appears in the Autumn, resting on a long white tube. The leaves appear in the Spring, are long and linear, with a white furrow on their upper edge. Belongs to the class Triandria, Order Monogynia.

The Stigmas are the officinal portions, - they are of a deep orange colour, - slightly convoluted, & notched at their broad extremity. - This plant is a Native of Greece & Asia Minor, is cultivated in Spain, France and England & sometimes as an ornament in our gardens.

In the shops the stigmas are sometimes found matted together, - sometimes dried loosely, and are best thus. -

The English Saffron is better and dearer than that from the Mediterranean Ports. - Its high price subjects it to adulteration, - with Safflower, Marygold, fibres of dried beef, - Stamens, - oil - Water & some mineral subst. -

These can be detected by throwing it in Water & observing the shape it assumes. - The Stamens also are yellow. - The Safflower upon close examination is a tube, with a Stamen in it. - If bought in cakes, they should be tough, not

easily tore asunder, - not dry and easily powdered. -
It should have strong odour & taste, and if it does not colour the fingers when rubbed, - or has a black, yellow, or white colour, - it should be rejected. -
It should be kept in well stopped vessels. - It has a peculiar aromatic odour, - a warm, pungent, somewhat bitter taste, and colours the Saliva when chewed. -
Its active prop. depend upon a vol. oil, which is obtained by distillation with Water. - -
It was formerly considered as highly stimulant & antispasmodic, but it is now ascertained that it possesses little energy as a medicine. - It is used by old women & nurses as a tea to bring out eruptive diseases. -
Chiefly used to impart colour & flavour to tinctures &c. -
Carthamus. Dyers Saffron or Safflower. - Flowers of the Carth. Tinctorius. - an annual plant, with an erect stem, 1 or 2 ft. in height. - The flowers are compound, in a large, terminal, solitary head, - the florets of an orange yellow colour. - It is a native of the Levant & Egypt, and is cultivated in some parts of U.S. and brought to market under the name of American Saffron.
Safflower is of a red colour, diversified by the yellow

filaments contained in the tube of the Corolla.-
It has a peculiar, slightly aromatic odour,- feeble
rather bitter taste,- & its colour depends upon a colouring
matter which is insol. in Ale & Water, but sol. in alka-
line solution,-(hence it is used for dyeing) called Car-
thamite,- and another col. matter insol. in Water.-
Used as Saffron, but is more feeble.- An infusion is
made from Zij to a pt. boil. W. & drank ad libitum —
The next class which we shall consider contains the
Fruits.- A Fruit includes a Seed and a Pericarp or Cov-
ering.- There are seven kinds of fruits known to botanists.-
1. Siliqua or Pod, which consists when ripe of a dry Peri-
carp, usually longer than broad,- divided by a longitudi-
nal partition, along which the seeds are arranged alter-
nately as in Mustard.— 2. Legume,- which consists of
2 valves without a partition, as different species of Cassia.
3. Capsule,- which has a Pericarp neither a Leg.- or a Siliqua
but immediately embracing the seed- as Cardamum.-
4. Drupe,- in which the Pericarp is thick and fleshy or
Coriaceous,- and encloses a nut, as Plum, Hickory Nut &c.-
5. Pome or Apple,- in which the seeds are in a capsule sur-
rounded by thick, fleshy, succulent pericarp,- as Apple.-

6. Berry,- when the seeds are imbedded in the succulent or fleshy matter, without any capsule, as Raspberry &c.-
7. Strobele or Strobulus,-which is an ament consisting of woody or fleshy scales attached to a central column, and having the seeds at the point of attachment, as in the Hop,- Pine &c.- Sometimes seeds are naked.-
The seed itself consists of several distinct portions.-
1. Cotyledon,-which is the fleshy mass, usually white.-
2. Corcal.- which is the rudiment of the young plant.-
3. Tegument or Covering.-and 4. Hilum.- which attaches the seed to the Pericarp, as the Eye of a Bean.-
Seeds are sometimes Acotyledonous,- Monocotyledonous, or Dicotyledonous, and upon this Jussieu founds his natural System of Classification. - -

With these cursory observations, we proceed to consider individual fruits,- and the first we shall take up, is that of the Cassia Fistula.- Purging Cassia. This is a large tree, 40 or 50 ft. high, with numerous branches towards the top.- Leaves are pinnate, with opposite pairs of leaflets.- Flowers are in long yellow racemes.- Fruit is a Legume, woody externally,-and internally divided by transverse partitions into a number of cells,- each cell

Our supplies are from E. Indies. –

The Pulp lines the partitions; is obtained by bruising the pods, boiling, evaporating &c. –

containing a seed, surrounded by a pulp which shrinks when dried. - It grows in the E. and W. Indies. - That of the W. Indies, has larger and longer fruit. - The legume is long & cylindrical, slightly curved, of a dark colour, has 3 longitudinal ridges running from one end to the other. - These legumes with transverse partitions are sometimes called Lomenta or Lomentums. —

The heavier the pods, - the better. - If the seeds within, rattle much, they are too dry, & inferior. - The Pulp should be black and shiny, - sweetish taste & sickly odour. It is off. in Lon. Dub. & U.S. Phar. - Used as a gentle Laxative - Dose ℥ij to ℥i, - but is apt to occasion nausea &c. — Used in this country as an ingredient in the Confection of Senna, - the dose of which is ℥i or ℥ij. —

Tamarindus - Tamarinds. Fruit of the Tam. Indica. This is a large & beautiful tree, growing in the W. & E. Indies. The leaves are pinnate. - The fruit is a legume, of a light reddish brown colour, - consisting of an external shell which is very fragile & easily separated, & in this are strings running the whole length of the fruit, - & within these is a thick tough membrane, enclosing the seeds. - As found in the market, they are deprived of the shells

and introduced into Molasses or boiled in Sugar, which destroys their acid taste. - The pulp is extracted by boiling, Straining and evaporating. - Its principal constituents are Citric, Malic and Tartaric Acids & Supertartrate of Potassa. Hence besides their laxative properties, an infusion of them in Water is a very grateful, cooling drink in febrile diseases. - It is used also in Infus. & Confection of Senna. —

Thirty Second Lecture. Feb. 1 - 1834. - -

Ficus. Figs. - Fruit of the Ficus Carica. - A small tree growing in the Levant, and in all warm countries of the Mediterranean, - also on the Am. Continent, even in this latitude in favorable situations. Leaves are palmate, 5 lobed; - the fruit is peculiar, - and is properly a receptacle of the flowers which are inside, & afterwards become seeds. - When ripe it is picked & dried - and it is said, moulded or mixed by women and children &c. with dirty hands &c - Our market is supplied chiefly from Smyrna. - The principal constituents are mucilage and Sugar. -

Figs are Nutritive, Laxative & Demulcent. -

Uva Passa. Raisins. The dried fruit of the Vitis Vinifera. The species which produces the raisins of commerce is

cultivated in Spain and the South of France. - There are several varieties. - The Malaga Grape is ordinarily employed. - The Smyrna has a yellow colour. - Raisins contain a great quantity of Sugar, of a peculiar kind, called Sugar of Grapes, - not so sweet as ordinary Sugar. - They are Demulcent, Nutritive & Slightly Laxative. -

Prunum. Prunes. These are merely dried Plums. the fruit of the Prunus Domestica. - There are several varieties - The Prunes in our market, are not, however, prepared in this country, but are brought from the S. of France, - from Bourdeaux. - They like the two former, are Demulcent, Nutritive & Slightly Laxative. -

The Pulp only is used in Medicine; which is obtained by boiling them & straining them thro' sieves. —

Colocynthis. Colocynth or Bitter Cucumber. The product of the Cucumis Col. - an annual, herbaceous vine, much resembling that of the garden cucumber. - The stem is rough, & spreads along on the ground, bears triangular, lobed leaves, - & yellow flowers. - Fruit is a large round berry. - When ripe, it is of the size & colour of a small orange, - when dried, it has internally a spongy medullary substance, filled with seeds. - As found in the

If the fruit be very large, and the seeds black & acutely pointed, they are said to be inferior.

The green fruit, pickled, is said to be used as an article of diet, at the Cape of Good Hope. —

It contains a bitter principle, which it yields to Water & Alcohol. —

It was formerly prescribed in Dropsy, Mania, Apoplexy, Coma & Palsy, but now seldom given alone. —

In overdoses, it produces hypercathartis, severe pain in the bowels, — bloody discharges, & convulsions.

Shops, it is this Spongy portion, deprived of the external rind. - It is a native of Turkey, - various parts of Africa & Asia, - & indeed, many other parts of the Eastern Hemisphere.

In the Shops, it is in whitish balls, - very light and Spongy, - containing a great number of seeds, they making about 3/4 of the weight, and are of a yellowish white colour. -

It has a feeble odour, - nauseous, extremely bitter taste, - depending on Colocynthin (by Vauquelin). -

An infusion of it has a yellowish colour, and when cooled, assumes a gelatinous consistence. -

Colocynth is a powerful drastic, hydragogue Cathartic. In large doses, it gripes violently - It is seldom used alone but generally combined with other Cathartics - whereby, its violence modified, while its efficiency is retained. -

The dose of it is from 5 to 10 grs. - It is much used in the preparation called Ext. Col. Comp. - which is prepared by digesting the pulp in dil. Alcohol, for several days - then strain & add Aloes & Scammony powdered, - Soap; - & powdered Cardamom to qualify its griping - Dose of it 5 to 30 grs.

It is used also in combination with Calomel - and is an ingredient in Pil: Cath. Comp. of Phar. - of which 3 pills, - containing little more than 10 grs - are a dose. -

Sinapis. Mustard Seed.- Of which there are 2 varieties.- The Sin. Nigra & Sin. Alba.- derived from plants of the same name.- The Sin. Nigra is an annual plant, from 2 to 4 ft. high,- branching at top.- The leaves below are irregularly cordate, rough on the under surface,- above, they are entire & hang down.- The flowers are yellow,- in racemes, & monopetalous. Belongs to the Class- Tetradynamia, & Order Siliquosa. The Siliques are 4 sided & upright, close to the stem.- The Sinapis Alba does not grow so high as the former;- is an annual plant, with pinatifid leaves. The flowers are in racemes.- The fruit differs in position and shape.- It stands out more directly from the stem, and has a long cuniform beak.-

These plants are natives of Europe, but are cultivated in our gardens,- and the Black has become naturalised,- flowers in June.- - The seeds are used either whole or powdered.- The Black are smaller than the White and are of a brown colour,- while the white are yellowish.- When whole they are inodorous,- but if powdered & moistened with water & vinegar, they have a peculiar odour.- Taste is bitter, hot and pungent.- The external rind contains a mucilage which it imparts to Water.

The seeds contain also a volatile oil, which is soon produced vesication. — This, however, cannot really be said to exist in the Mustard, but there is in it a certain principle, which when mixed with Water, becomes an oil. — They also contain Mucilage in the husk

Black mustard, when mixed with Water forms the principle above alluded to, - but with the White, it forms a peculiar fixed principle; but not an oil, as with the Black. — The oil from the Black is volatile, from the white - is fixed. —

* About ℥i of powdered Mustard Seed, mixed with Warm Water, & given when the powers of the system are much depressed by poison, often has a very happy effect.

Sinapisms is made with Water or Vinegar. - Water is the best, because Vinegar has a tendency to counteract the effects of the Mustard. - Sometimes it is made with Mustard alone, as, for application to the Stomach in violent spasms, - at others, it is made with ½ or more Rye Meal, - as when applied to the extremities. —

Water is absolutely necessary.

The virtues are extracted by Water better than by Alc.-
The seeds afford a fixed oil, which is bland to the taste, while the residue contains the pungency.

With Alcohol,- mustard becomes inefficient,- but the best addition to make it a rubefacient is Water —

The whole seeds are Laxative, & moderately Stimulant. Useful in constipation, flatulence &c. - Dose - a table-spoonful every night, for which the White are generally used. — In powder, a teaspoonful or more, accompanied with warm drinks, becomes Emetic*. - In smaller quantities it is Stimulant. — A whey is made from 3ss. (boil & strain) of powder in 1pt. of Milk - Dose a wineglassful. —

It is most used as a rubefacient plaster,- but such should not be left on longer than 3/4 of an hour, as it then becomes intolerable,- even producing ulceration &c.-

Carota. Carrot Seed.- The officinal seeds are those of the Wild Carrot, but these are similar to the domestic, except stronger in their medical properties. — Both are the seeds of the Daucus Carota.- This is a biennial plant, with a spindle shaped root,- which of the domestic is red & fleshy,- of the wild is white,- has an erect round stem,- leaves at the bottom bipinnate,- at the top, bipinnate

The seeds are flat on one side, & convex on the other. - It have 4 ridges, each armed with little bristles. -

Scraped burnt Cuttles for Indolent Ulcers. -

* Exotic

The flowers are in compound terminal umbels, - white. Belongs to the Class Pentandria Order Digynia. - Thes flower have 7 linear involucres. - Seeds are joined two together by flat surfaces. - are of an ash colour, - very light.

This grows abundantly in the U.S. - in old fields &c. - The root of the cultivated plant is sometimes employed.

The seeds have an aromatic odour, - pungent taste, - by distillation, they give off a vol. oil, which contains their virtues. - The root is very different in its effects, whether it be boiled or scraped. - the former being a mild poultice, - while the latter is pungent & irritating.

Carrot Seed is a gentle diuretic, and slightly stimulant to the stomach. - Useful in chronic complaints of the kidneys & bladder. - Dose 30 grs. to ℥i. -

An infusion is made from ℥ss or ℥i in a pt. of water, a dose of which is a wineglassful.

Thirty Third Lecture Feby 4th 1834

x Juniperus. Juniper. - The fruit of the Jun. Communis. - This is of the same genus, with the Savine, Red Cedar &c. - It is a small evergreen Shrub, 12 to 15 ft. with a number of very close, thickly covered branches, and slender, pointed at the top. The leaves are longer than the fruit, pointed, channelled on the upper surface,

2

attached 3 together to the stem.- The flowers are in small
aments. Belongs to Class Diœcia, Order Monodelphia.-
Fruit is a round berry covered with a purplish bloom,-
it ripens in the 2nd year.- It is a native of Europe, but
has been introduced so as to grow wild in this country.
In the northern part of the U.S.- is a plant which re-
sembles this, except that it is a creeping plant.- Bigelow
thinks it a variety of this.

The berries are usually imported from abroad.- The best
come from the Med. Ports:= Trieste and Italy.- They
are globular, dark coloured,- at one extremity is a di-
vision indicating 3 distinct parts united,- and at the
bottom is the calyx with 5 small divisions.- The pulp
internally is of a brownish red.- They have an agreeable
aromatic odour,- and a sweetish, warm, terebinthinate
taste.- Their medical properties reside chiefly in a
volatile oil (greenish colour,) which is separated by distillation with W.-
They impart their virtues to boiling W. & Alc.- The oil is
colourless, or of a light greenish yellow,- has a terebinth. od.
& an acrid taste.- Sp. gr. 911- It is not very sol. in Alc.- &
hence from these prop. we perceive it may be adulterated
with Ol. Terebr.- which can be detected by Sp. gr. being lighter.

Comp. Spt. Junip. - is occasionally used as an Adjuvant to other Diuretics, where stimulants are needed, - as in Drumpsy &c

x Indigenous

Malt is that state, when the seeds have commenced germination, & the Hordein is converted into a saccharine substance, - which produces the Malt Liquors &c. -

Pearl Barley, - Hordeum (U.S). -

It is of the utmost importance that Barley be kept pure, as it generally requires to be administered to a very weak & irritable stomach. -

Juni. berries are slightly stim. & diuretic, and impart the odour of violets to the urine. - They are not depended on solely for diuretic effects, but are given chiefly as an adjuvant to other remedies in dropsy. - The dose in substance, beat up with a little sugar, is from 3i to 3ij - 3 or 4 times a day.
An inf. is made from 3i bruised, to a pt. boiling Water. - The pint taken in the course of the day - The oil may be substituted for berries. Dose 5 to 15 drops - 3 times a day. -

We next come to the demulcent seeds. - First. -

× Hordeum. - Barley. - Derived from two species. - Hordeum vulgare, and H. Distichon, of which the former has the seeds in 4 rows, & the latter in 2 - This Barley is cultivated every where, & the seeds are the part used. - It is found in commerce in different states, - either 1. Whole, 2. as Malt, - 3. as hulled Barley, 4. Barley Meal, or as generally found in the Shops as Pearl Barley. (Hord. Perl.) in which the seeds have been rounded in a mill. - They are small roundish oval, with a depression on one side. - They abound in Starch, with some gluten and gum. - Saccharine matter - Are apt to become injured from the air & worms. -

A decoct. of these, (Barley Water) is usually employed, and forms an excellent drink in febrile & inflammatory diseases. - It thus

Recipe for Barley Water.- Take a Tablespoonful of Barley, scald it,- then add to it 6ij boiling Water & boil it till the Barley becomes soft:- after this, set it aside till it settles,- then decant the clear liquor.- To this,- add Lemon Juice & Sugar to suit the taste of the patient.- Jackson.

x Indigenous

Berzelius considers the mucilage of Flax Seed, analogous to Bassorin.- It is precipitated from its suspension in Water by Alcohol,- Sol. of Subacetate of Lead,- & also by Acet. of Lead, which latter distinguishes it from Gum.-

be made by first washing about ℥ij with Cold W.- then boil for a short time with ℔ss of W. - so as to free it from must, - dirt &c - throw these washings away, & add Oiij W. & boil down to Oij and Strain. —

× Linum. Flax Seed - Fruit of the Lin. Usitatissimum. This is an annual plant, which sends up a single stem, dividing at the top, - bearing delicate, solitary, blue flowers at the ends of the branches. - Belongs to Class Pentandria, Order Pentagynia. - Fruit is a globular capsule about the size of a pea, containing 10 distinct seeds. - It is cultivated almost every where. - The seeds yield a fixed oil by expression, which when exposed to the air becomes dry & brittle hence it is used in painting. - also a mucilaginous matter (contained in them) to boiling Water. - Flax seed meal is a tenacious powder, and with warm water forms an excellent soft poultice for hastening the suppuration of tumours &c. -

Flax Seed is an excellent demulcent & emollient. - A tea made by pouring 1 pt. boil. W. on ℥ss is a very pleasant drink, - much used in diarrheas, catarrhal, - and affections of the mucous membrane. - Equal parts of Linseed oil & Lime W. - form a useful liniment, for application to recent burns. - Lin. Calcis. —

Exotic.-

Bitter Almonds are said to come indirectly from Morocco to us.

Almonds are blanched by first immersing them in hot Water
then rubbing off the external coating.-

× Amygdalus Almonds. - The product of the Amygdalus Communis. - A Tree 15 or 20 ft. high, of the same genus with the Peach. - Leaves are lanceolate, serrate at the edges, & the lower serratures have glands attached to them. - The flowers are arranged in twos on the sides of the stem, - of a rose or whitish colour with red Calyx. -

Belongs to Class Icosandria. Order Monogynia. - Fruit is a drupe, - consisting of a kernel, - a shell, & an outer coriaceous covering. - There are 2 varieties the Bitter & the Sweet, - differing in the taste of the kernel. We have also the Soft & the Hard Shell Almond. - Almond Tree is a native of Persia, Syria & Barbary & is cultivated in the S. of Europe. - Our supplies of Sweet Almonds are chiefly from Spain & the S. of France. - Both the Sweet & the bitter contain a fixed oil. - about 54 pr. ct. in the sweet, and 24 pr. ct. in the bitter. -

Milk of Almonds is made by rubbing Almonds with W. - It resembles very closely the Milk of Animals, but becomes sour in a shorter time. 2 or 3 days Oil of Almonds is generally of a greenish colour, but when pure should be colourless, - has a bland sweetish taste, remains liquid below 32°, - is lighter than Water. - Sweet Almonds may be employed as a demulcent. - A confection is made by rubbing blanched Almonds

Almond Emulsion better made by rubbing the Almonds with Water & G. Arabic.

The vol. oil & Prussic Acid do not originally exist in the Almonds, but by adding Water to them, such a reaction ensues as will produce them. - Prussic Acid is not essential to the peculiar odour of the oil, as was formerly supposed, for when deprived of the Acid, the odour still remains. -

The oil is yellow, - & on standing deposites Benzoic Acid by union with Oxygen. -

It might be beneficially employed in medicine, because it retains Prussic Acid of the same strength for a long time. - Hence besides being demulcent, it is also sedative, - in Coughs &c.

with Gum Arabic and Sugar. - Mist. Amyg. is made from ℥i confect. - with Ofs of Water. -

The Bitter Almonds resemble Peach Kernels in appearance and properties. - It has been supposed that they owe their sensible properties of taste & smell to the Hydrocyanic Acid contained in them, - but it has been ascertained that these depend upon a volatile oil. - This vol. oil contains also Prussic Acid, which can be procured by a chemical process. - The Oil is heavier than W. - It is supposed to be the best form of administering Prussic or Hydrocyanic Acid, as it contains it of more uniform strength. It is a powerful poison. - The Bitter Almonds themselves are apt to prove fatal in large doses. —

Thirty-Fourth Lecture. Feby 6th. 1834

Granatum. - The external rind of the Pomegranate. - The Product of the Punica Granatum. - This is a Shrubby tree, with opposite leaves, which are oblong lanceolate, pointed at each end. Flowers are terminal - consist of a beautiful crimson corolla divided into several circular segments + Calyx of a deep red, - divided at top into several segments. - Belongs to Class Icosandria. - Order Monogynia. - The flower is followed by a large globular fruit, like an orange, and has at the

The European physicians have given very favourable accounts
the bark of the Root,-
of it as an Anthelmintic.- It was known by the Ancients.
Decoction according to Chevalier, is made by macerating ℥ij
of the bruised root for 24 hrs. in ℔ij Water,- then boil it down
to ℔j.- This is to be taken in 3 doses,- the 2 first will prob-
ably be vomited, while the 3rd purges & expels the Tænia.-

top, the calyx.- Its colour is brownish.- It is a native of the countries bordering on the Mediterranean, & is cultivated in tropical climates.- The Fruit has an acid & sweetish taste.

The Rind comes to us in small irregular pieces,- hard, -dry- of a yellowish brown colour,- almost inodorous,- astringent, slightly bitter taste.- Imparts its virtues to Water by Decoction, & in this form is employed as an Ast. Gargle.- It is very seldom used however in this country.

The bark of the root is said to be an excellent Anthelmintic.

The dried flowers are called Balaustines:- they are less efficacious than the Rind, but used for the same purposes. Dose of them or of the Rind from 20 to 30 grs.- Decoct. is made from ℥i to 1 pt. W.- Dose, Wineglassful.-

Humulus. Hops. Product of the Hum. Lupulus.- This has a perennial root, with an herbaceous stem, which is climbing, slender, angular, rough, & flexible.- The leaves are on long footstalks,- the lower ones are 5 lobed, & upper 3 lobed.- Some are cordate,- all are serrate & very rough.- Belongs to Class Diœcia, order, Pentandria.- The male flowers are arranged in panicles at the axils of the leaves, & the female in aments.- These are followed by seeds, embraced at the base of the scales, and thus a fruit results which is called

Boiling drives off the Vol. oil & hence renders the Hops less efficient. –

A pillow of Hops moistened with Spirits of Turpentine proved serviceable in producing sleep in Fevers &c. – Such was said to have been the case with George III of England. –

Hop Poultice often relieves Tooth Ache –

a Strobile, and is the fructual portion. - This plant grows spontaneously in the Eastern & Western Continent & is cultivated abundantly in the U.S. - especially in N. Eng. - whence our market is principally supplied. - The odour is strong & peculiar, - taste, bitter, aromatic, & slightly astringent. - They impart their bitterness & aroma to W. by decoction. - The activity of Hops resides in a yellow powder, which is scattered over the surface of the leaves in granules, called Lupulin. - It may be separated by rubbing or threshing the Hops. - It is sometimes mixed with fragments of the leaves or scales. - Its chief constituents are resin, volatile oil & a bitter principle called Lupulin by the French writers. - It imparts its virtues to W. more readily to dil. Alcohol. -

Both the Hops and Lupulin are tonic & mod. narcotic. They are given advantageously in debility attended with wakefulness, dyspepsia, - nervous tremors, - morbid vigilance of drunkards preceding mania a potu. - Hops are too bulky to be given in substance, hence an infusion is usually made from ℥i in a pt. of boil. W. - Dose Wineglassful. -

Tinct. Humuli - made by macerating Hops in dil. Alc. and expressing them. - Dose of Lupulin 6 to 12 grs. —q—

Very useful in flatulence of Children. —

We next come to the Aromatic Seeds, - and the first we shall notice is Foeniculum. - Fennel Seed. The product of Anethum Foenic. - Sometimes called Sweet Fennel. - This has a perennial root, & sends up a stem which is round, smooth, striated, - 2 or 3 ft. high, jointed, - with leaves standing at the joints on sheathing footstalks, - very much divided. - Flowers in compound umbels. - Belongs to Class Pentandria Order Digynia. - Fruit has 2 seeds attached by a flat surface, which separate when ripe. - Each seed has five ridges of a light yellow colour, while the intervals between are darker. - It is a native of the S. of France, but is cultivated in this country. - The Am. seeds are the best, because they are the most recent. - They have a fragrant odour, - warm, sweetish & aromatic taste; - The Am. are sweeter than the imported. - They impart their virtues to W. but better to Alc. Alcohol. - The oil is separated by dist. with Water, and is ℥ß. - The seeds yield about 2½ pr. ct. - It is ordinarily of a yellowish colour, - nearly as heavy as Water, - partially congeals at 50°. - Fennel Seed is used as an aromatic addition to purgatives & tonics. - Also as a tea to correct flatulence &c, made by pouring 1 pt. boil. W. on ℥ij or ℥iij. - Dose of oil 5 to 15 drops. - Seeds ℈j to ℥ß. -

The seeds are generally brought from Spain, Malta &c —

Anethum Graveolens - produces the Dill Seeds, - which are smaller than Fennel Seed, - pounder, - have a membranous border. - The odour is strong and aromatic, but less agreeable than that of Fennel Seed, hence, they have been superseded by the latter & are seldom used - Dose 15grs to ℥i.

Anisum. Aniseed. - The seeds of the Pimpinella Anisum. This is a small annual plant, which grows in Egypt, - N. of Africa & Med. Coast. - The seeds usually come to us with their footstalks attached, & 2 together. - Their colour resembles earth, hence they are apt to be adulterated with Clay &c. - Their odour is fragrant & increased by friction, - taste, warm & aromatic. - They impart their virtues to boiling W. - better to Alc. - as they reside in a vol. oil, which can be obtained by distillation with Water. The seeds are not much used in medicine, - but the oil is frequently - It is colourless or yellowish. - Both the oil & the seeds have sim. properties with Fennel, & are used for similar purposes. - Dose of Seeds 20 to 30 grs. —

The oil is chiefly imported from Canton, and is said to be procured from the Star aniseed, - the fruit, consisting of a no. of capsules in a starlike form, - of the Illicium anisatum, which grows in China, Japan &c. - Dose 5 to 15 drops.

Cardamomum. Cardamom. - There are several kinds of fruit of this name, as the Card. Majus, - Medium & Minus - the round - the long, & the Madagascar Card. - but these are not distinguished in our market. - The Card. Minus is the variety in use, in this country and in Europe. -

The plant producing these seeds has several Synonymes: Amomum Cardamomum (Lin) - Amomum Repens (Sw) Elletaria Card (Maton) - Matonia Card (Eng. writer) & Alpinia Card. (Roxburgh) by which it is now recognised. -

Thirty-Fifth Lecture Feb 28 - 1834 -

The Cardamom plant sends up from 12 to 20 stems, with alternate, long, lanceolate leaves resembling those of Corn. - From the base of the stem, - trailing along on the ground, runs a stalk to which the flowers are attached, & these are followed by the fruit in capsules. - It grows abundantly in the mountainous regions of Malabar, - and is employed as a spice in the East. - The capsules are the part designated as Card. - They are 3 sided, with rounded angles, of a yellowish white colour, - have 3 cells, each containing a number of seeds, which are of a dark colour, & rugle on the surface. - They are more aromatic than the capsules themselves. - When directed for use, the capsules

When given in combination in Infusions, add about Zi Cord. Seeds to Oj. —

Should be bruised, and the seeds separated by sifting. - They have a fragrant odour, - warm & aromatic taste. - Impart their virtues to W. - more readily to Alcohol. Their virtues depend on a vol. oil, which can be sep. by dist. - Card. is a warm & grateful aromatic, - and is used chiefly as an addition to Tinct. of Tonic & Purg. medicines. Tinct. Car. comp. (Lon) is an excellent comp. of aromatics. -

Carum. caraway. - The product of the Carum Carui. This is a biennial, umbelliferous plant, with an erect stem & bipinnate leaves. - The flowers are in compound umbels, & have no involucres. Belongs to Class Pentandria. Order Digynia. - The flowers are of a white colour, - The seeds are joined together by a flat surface; - are oval, with ridges which are yellow, while the intermediate is darker - usually curved, - shorter than Fennel Seed, - are aromatic, with a peculiar taste and smell. - Their virtues, which depend upon a vol. oil, are imparted to Alc. better than to W. - Ol. Cari is prepared by our distillers, - is somewhat viscid, - of a pale yellow. - Sp gr. - 946. -

It is a very pleasant Stomachic & carminative. Dose ℥ss to ℥j. Usually given in an infus. of ℥ij to a pt. - Dose of the oil, from 1 to 10 drops. - Sometimes given in pills. -

Coriandrum. Coriander. The seeds of the Cor. sativum - is an annual, erect, umbelliferous plant, with leaves much divided, - bearing whitish flowers. - The seeds are joined 2 together, & when thus united are round. - The plant is a native of Italy, - and other parts of Europe. -

The seeds are obscurely ribbed, - of a grey, - ash, - or brown col. externally, - and sometimes have the calyx & stigma attached to them. - Their virtues, - depending upon a vol. oil, - are imparted to W. & Alcohol. -

Nutmeg. Myristica. The product of the Myr. Moschata. This is a tree 20 or 30 ft. high, which resembles the orange tree in appearance. - It is much branched, - leaf, ovate oblong, - & coloured like that of the orange tree. - The flowers are male & female on different plants. - the male, in small clusters. - Belongs to Class Dioecia. - Ord. Monadel. -

Fruit is at first small & green & gradually increases to the size of a Lime. - It consists of a coriaceous covering in which is the nut surrounded with an orange coloured membrane. The nut consists of a shell containing a kernel which is the proper Nutmeg. - The membrane is Mace. -

The tree is a native of the Moluccas, and like the Clove, was naturally restricted to very narrow limits. -

Oil of Mace, as it is incorrectly called, is the fixed oil of the Nutmeg, obtained by expression by an elevated temperature, together with the true vol. oil.

Pitch. - Burg. & Hunt. - B. from P.
Ol - Resin, - remains after oil distilled
from Turp. - Mix & Yellow - Mass
has been mixed with Water beyond -
Pure Yellow - is wood bark Secretions
Yr altered heat - Chem props as Resin
Od. - Taste - Used in Oint & Plast -
Base of Basilic Oint. - Adhes. Plaster -
Resin prunes for Chronic Cutaneous
Sea or Shore, - Thick fumes inhaled -
Vapours of Tar, also - cure from Ab.
sence of Lungs kept 2 or 3 mo. - symptoms to
subside. Recovery -
Ol. Terebinth - most important - obt. by
dist. - add Water - limpid Colless -
lighter than W. - Od. - Taste, - Spec Wt.
in Cold Alc - prod. by boil - some small
portion of Succinic Acid. Steam
of them Acid - cold. - Acts Energetic
determine to Urin Organs. - Pain, -
Heat od. to kidneys - Bloody Urine -
In Dropsy only when Skin - Chronic
Affn - Kidneys, Heart, - Chronic Debil
of Urin. organs -
Sciatica & that proceeds by bone - In
Chronic Rheum - Rheumatism of Joints
with Debil - Dose 10, 15 or 20 gtt. or Sup
or Emulsion - & Chronic 2 to 3 per Day
Acute 1 or 2 hrs - 3 ss to 3i - bowels
Repl, absorbs Oxygen from Resins - Can be pu-

The whitish colour externally of the Nutmeg, is probably owing to the Lime Water in which it has been washed.

It is of a roundish oval form, - obtuse at the ends. - into a nr of whitish indentations, running from one end to the other. - & when broken is seen to consist of a solid mass, much variegated in colour. — It has a fragrant odour, - warm, grateful aromatic taste. - Imparts its virtues to Ale. - Ether & partly to Water. - Its principal constituents are a fixed & vol. oil. - The vol. oil. is obtained by distillation - is of a pale straw colour, & limpid. - The fixed is obt. by expression, with heat, and on cooling, becomes a solid, soft, unctuous mass, of a yellow, orange col. - called Oil of Mace. It is imported from E. Indies, - has the od. & taste of Nutmeg but is used only as an external application. - " —

Nutmegs are sometimes brought into the market, after they have been deprived of their ess. oil by means of a hole bored in them & afterwards filled up with Sassafras root &c. - They are also apt to be injured by worms. — Those should be preferred which are round, small & solid. -

Mace is of an orange or reddish colour, & contains a vol. & fixed oil. - differs in flavour from the Nutmeg. — It is inferior, - when it is brittle, of a white or yellow colour —

Nutmeg combines with aromatic, some narcotic powers. It is employed principally for flavouring liquid aliments. – Dose in substance – 5 to 20 grs. both of this & of Mace. – Vol. oil 2 or 3 drops.

Pimenta: Pimento. Fruit of the Myrtus Pimenta (Lin.) & Pimenta vulgaris (Lindley) – A tree about 30 ft. high, – leaves opposite, glossy green, – oval, – obtuse. – The flowers are small, in panicles at the axils of the leaves. – Fruit is a small berry. It is a native of W. Indies, – Mexico & some parts of S. America, & is called Jamaica Pepper. – The berries are of various size & colour, – somewhat wrinkled, – have 2 cells, each containing a seed, – a fragrant odour, & an aromatic taste, resembling a combination of Cin. – Cloves & Nutmeg, – hence it is generally known under the name of Allspice. – It imparts its flavour to W. & Ale. – Vol. oil is obt. by dist. with W. It has an aromatic, pungent taste which depends upon a peculiar oleaginous fixed principle. – The vol. oil is of a brownish red colour in the Shops, but when first obtained is said to be colourless, – has the odour & taste of Pimento, – becomes red by Nitric Acid & is heavier than Water. –

Pimento is aromatic, but less agreeable than some of the other Aromatics, & is generally used as an adjuvant. – Dose of the oil from 3 to 6 drops, – of Pim. 10 to 20 grs or more. –

Pepper is a powerful gastric excitant, given in a bad
fluid state of the stomach, or with deficient di
to digest. Sometimes the grains given whole are passed
by stool, it has been used in intermittents, giving
from 5 to 8 of the grains, with advantage, per day.

Thirty Sixth Lecture Feby. 11th 1834.

Piper. Black Pepper. - The berries of the P. Nigrum, - a vine about 12ft high: smooth jointed stem - leaves ovate, nerved, of a bright green colour, - flowers very minute, - in spikes. - Fruit also arranged in spikes, consisting of berries which are at first green, then red, & become black by drying. - It is a native of E. Indies. The best is said to come from Malabar, - but our supplies are chiefly received from Java & Sumatra. - They are taken from vines 3 or 4 yrs. old, being collected before they are ripe. - White Pepper is the berry deprived of its skin by maceration & friction, & afterwards dried in the Sun. -

Piper is a small globular berry, with an aromatic warm pungent taste. - It imparts its virtues readily to Alc. - but more readily to Ale. than to Water. The active matter consists in a soft resin or a concrete oil. - The princ. called Piperin (by Prof. Oersted of Copenhagen) has been found to be inert. - The vol. oil is obtained by dist. - is limpid & colourless, but becomes yellow by age, - has a strong odour, - taste less acrid than Pepper. - The concrete oil is very acrid. - Black P. is a warm caminative stimulant. - Seldom used in medicine, - it sometimes given to expel flatus, obviate griping. Dose from 5 to 30 grs. - most efficient in form of powder. - Dose of Piperin 1 to 5 grs. - but not used. -

Piper Longum. Long Pepper. Fruit of P. Longum; - a vine with cordate leaves. - Flowers are in small & compact spikes of a green colour. - Fruit is a nº of berries, embedded in a pulp, which are first green, - afterwards red; - are collected before they are ripe. - It is a native of E. Indies & Bengal, & very little of it is imported. - It is in pieces of various lengths, - nearly cylindrical, - with numerous jutting points. Properties & uses similar to those of Black Pepper. —

Cubeba. Cubebs. Fruit of the Piper Cubeba; - a climbing perennial plant. - Flowers form long, pendent spikes. - Fruit consists of berries in clusters. - It grows in Java & other parts of E. Indies. - The berries are small & round, - about the size of a pea; - dark coloured, - each having a footstalk attached & from this veins proceed over the whole surface of the berry. - Each berry has an outer shell, within which is a seed surrounded by a dark coat. - Odour is peculiar, - taste warm, aromatic, bitter & camphorous, leaving a sense of coolness like Mint. - Powder is dark & has an oleaginous appearance. - Cubebs contain a vol. oil & a resin. - The virt. chiefly depend on a vol. oil, hence the powder deteriorates by keeping; - it is separated by dist. - is colourless or greenish, about the consistence of Almond Oil, - has a warm &

Cubebs are useful in Gonorrhea. - Gleet. - Leucorrhea &
though by no means a specific in the former disease
as was once supposed. -

They are introduced by the Arabians. -

The active principle of Capsicum, differs from that of
other spices by not being volatile

camphorous taste.- Cubebs are a gentle stimulant, with a tendency to act upon the urinary organs, & when injudiciously used to produce inflammation of the testicles.- In large doses they produce nausea & purging.- Dose from ℈i to ℈iij. Tinct. Cub. (Cubebæ) - Dose from ƒ℈i to ƒ℈ij.- Oil sometimes employed.

Capsicum: Cayenne Pepper. Fruit of the Cap. Annuum. There are several species of Cap.- growing in tropical climates, which are used to prepare the Cayenne of Commerce. The C. Annuum is an annual plant,- very extensively cultivated in Europe & America,- with a smooth, thick, branching stem,- & ovate leaves.- Flowers are solitary, white, with a wheel-shaped corolla, & appear in July & August.- Belongs to Class Pentandria, Order Monogynia.- The Cap. is distinguished as a genus by its wheel-shaped corolla, & pitchless berry.- The fruit is various in shape,- being ovate & compressed at the extremities,- Apple-shaped.- small & spherical like a cherry,- but the off. form is long, pointed, conical & somewhat recurved. It is of a bright red clr.- contains a no. of seeds internally, & the calyx is persistent.- It is a native of the warm regions of America & Africa, & is cultivated very extensively.- Ripens here in October.- Powder is of a bright red,- but fades to a pale or yellow on exposure to the light.- Odour is peculiar,

In prostrate forms of fever, - it raises the influence of the Stomach, & prevents a coldness of the alimentary canal.

When applied externally, it has a very stimulating effect. It may be either by infusion in Hot Spirits or by making a Decoction of it with Spirits & should be applied while hot. - In this way, it sometimes succeeds in exciting a rubefacient effect when mustard fails. - It never vesicates. —

It is usefully applied also in form of powder, dusted in stockings or flannel socks to Cold Feet arising from Gout, Dyspepsia, - Rheumatism &c. &c. —

No application is more beneficial to the Sore Throat appearing in Scarlet Fever, &c. than an infusion of Caps. in Water or Vinegar & Water. - When it is very malignant, put a tablespoonful of it in ℥j warm water or Vinegar & Water & let the patient gargle it, - or if he cannot, apply it with a large camel's hair pencil. -

In ordinary cases, ℈ss to ℥j is sufficiently strong: —

In torpor of the Stomach, it is often combined with Tonics & Purgatives. - A good form for administration in Malig. Scarlet Fever, is to take 2 Tablespoonfuls of Caps. - make it into a paste with ½ teaspoon. fine salt, - infuse this in ℔ss. boiling Water, - Strain when cool, & add ℥ss. Vinegar.

taste, bitter, acrid, burning & very durable. - Its properties depend on a principle, which is soluble in Alc, - W. & Ether, & precipitated by Inf. galls. - & some salts - called Capsicin

Capsicum is a powerful stimulant, - heating the stomach, & producing a general glow over the whole system, & increasing the action of the heart & arteries, - without any narcotic effects upon the brain. - It is much used as a condiment, especially in tropical climates. — It is used in Malignant Scarlet Fever & Malig. Sore Throat, - & as a stimulant in cases of drunkards. - Externally it is a powerful rubefacient. - Dose int. from 5 to 10 grs. - An inf. is made by pouring ℥ss boil W. on ℥ij. - Dose. Tablespoonful. —

A gargle is sometimes made for sore throat, very weak, from ℥ss in a pt W. - also from Tinct. Caps. - with Water. —

Aurantiaceae Orange. Fruit of the Citrus Aurantium. There are several species, all small evergreen trees, growing in tropical climates, - very much branched, - with ovate, pointed leaves standing on winged footstalks. The flowers are on peduncles at the axils of the leaves, - have several petals, & a 5 cleft calyx. - Belongs to Class Polyadelphia, - Order. Icosandria. - The fruit & flowers are found in various stages on the same plant. - When ripe

Aurantii Cortex. —

its appearance is well known; - has a number of cells, each containing 3 seeds. - The Rind is the best fitted for use, when deprived of the whitish portion, for the virtues reside in the outer portion. There are 2 varieties of Oranges, - the Seville or Bitter Orange & the Sweet. - The former from Spain, & the latter from Sicily, Havana, & Florida. - It is cultivated in all the tropical climates. -

The Rind is the off. portion, but other parts are used in those countries where the tree grows. - That of the Bitter O. should generally be used in the preparation of Tonics. -

It is a mild tonic & carminative, & an excellent adjuvant to tonic & purgative medicines. - Inf. Should never be prepared by boiling, because its virtues depend on a vol. oil, residing in small cells in the peel, from which it can be forced by pressure. - Fresh Orange Peel eaten in large quantities, is apt to prove dangerous. - The peel of one orange has been known to cause the death of a child. - Aq. Aurant. is used a vehicle for med. - Confect. is formed by beating up the grated peel with sugar. - It is a good vehicle for powders -

Syrup is made by making an infusion & adding Sugar, or by adding the Tinct. to Simple Syrup, & driving off the Alcohol by heat. - " -

Lemon. Lemon - The fruit of the Citrus Medica. This is naturally a small tree, - branched, leaves resembling the orange, - but distinguished by not having winged footstalks. Flowers have a red colour on the outside of the petals. Fruit has several cells, each containing 3 seeds. - This also contains a vol. oil in the Peel, like the Orange, - and the best mode of obtaining it, is by grating & expressing it. —

Thirty Seventh Lecture Feby 13. 1834

The Rind of the Lemon is the officinal portion in the British Colleges, - and is employed as that of the Orange, but is inferior in properties. - The part most used in our country is the juice. This is sharply acid, with a very grateful flavour. - Its Sourness depends on Citric Acid. - Various methods have been devised for preserving the juice of Lemons. - one is, to expose it to a freezing temperature, whereby the W. is frozen & the juice left in a more concentrated state, - this is filtered, & put into bottles, - covered over with Almond Oil. - Another is to make it up in the form of Syrup. - But the best & most convenient method is to bring it to Citric Acid. - a solution of ℥i of this in a pt. of W. - with about 4 drops of Ol. Lim. is equal to the Lemon juice. -

The Rind as well as the vol. oil is employed for its flavour &

Lemon Juice is a refrigerant, diminishing febrile excitement, & is an excellent drink in form of Lemonade.

The Neutral mixture, made by saturating Lemon Juice with Carb. Pot. - makes an excellent diaphoretic - Effervescing draught by adding a tablespoonful of Pot. & Pot. to the same quantity of Lemon juice & Water. - Sometimes the effervescence will not take place, on account of the weakness of the Acid, - consequently more must be added. -

A precipitate is often formed in the Mixture, which is a Silicate of Potassa. -

Nux Vomica. The seeds of the fruit of the Strychnos Nux Vomica. - This is a middle sized tree, bearing fruit about the size of a small orange, - having an orange red colour externally, - and containd a pulp within which are the seeds.

It is a native of the E. Indies. - The seeds are nearly flat and circular, from ½ to 1 inch in diameter, - of a yellow ash colour, - with a little prominence in the centre of one surface, showing the point of attachment, & the external surfaces are covered with a kind of down. -

The Kernel possesses the properties of the seeds, - is very hard, & presents the appearance of Horn. - They are very difficult to pulverize, - should be first rasped, then heated

by steam & dried, & then rubbed in the mortar. - They are inodorous, with an intensely bitter taste, which is strongest in the kernel. - They impart their virtues sparingly to W. but much more readily to Alc. - The virtues reside chiefly in Strychnia & Brucia, - both alkaline, discovered by Pelletier & Caventou. - Strychnia was first discovered in Faba St. Ignatii, in which it is more abundant than in Nux Vomica. Pure it is crystallizable, - usually it is in the form of a white powder, - exceedingly bitter, leaving an after taste somewhat metallic. - One part of it communicates a taste to 60000 parts of W. - It is neither vol. nor fusible, but is decomposed by a high heat, & then fused, - is sol. in Alc. & the vol. oils, - very sparingly in W. - With acids it forms crystallizable salts, - which are bitter & sol. in W. —

Brucia was first discovered in False Angustura Bark, - it is crystallizable, inodorous, very bitter, - sol. in Alc, - not very sol. in W. - fusible, - & forms crystallizable salts with acids. - Nit. Acid changes it to red. - It is about 1/2 the strength of Strychnia, when it is pure. —

Nux vomica and its principles are very peculiar in their operations upon the System, - producing a contraction of the voluntary muscles, - heat in the stomach, - tightness of the

Nux Vomica probably acts upon the Spinal Marrow.-
It produces an involuntary, permanent, muscular
contraction similar to Tetanus.-

Strychnia may be used endermically in Amaurosis,
by applying it on blistered surface on the Temple.-

chest & abdomen, - and in large doses - fatal. It is said to produce death, by the patient or animal not being able to breathe, - hence we may conjecture, that if artificial respiration were kept up, the animal might live till the effects of the poison had passed off. —

It is given in different forms of Palsy, after the inflammatory stage has past, but not in the early stages, - & produces the twitches in the palsied limb sooner than in other parts of the body. - The dose of powdered Nux vomica 5 grs. - 3 or 4 times a day & grad. increased but it is rather uncertain in strength. - The Alc. Extract is more certain. - Dose ½ gr to 2 grs. 3 or 4 times a day. - But the best prep. is the Strychnia. Dose ⅛ gr to ⅙ gr. 2 or 3 times a day & gradually increased. - Dose of the Brucia, is 2 grs 3 or 4 times a day, but it is seldom or never used. —

Faba Sancti Ignatii. Beans of St. Ignatius. - This is not official, but deserves notice on account of the Strychnia it contains. - It is the fruit of the Strychnos Ign. - A small tree growing in the Philippine Islands, - bearing a fruit about the size of a pear, containing the seeds embedded in the pulp. —

The seeds are convex on one side, - on the other, angular, - of a greyish colour externally, - somewhat translucent, & very hard & covered with a slight down. - Same prop. with Nux vomica & are employed chiefly for obtaining Strychnia. — —

Dolichos. Cowhage. - Product of the Dolichos Pruriens. - This is a perennial climbing plant, growing in the E. Indies. Flowers are of a purple colour, - in racemes, - resembling those of the Pea, & are followed by fruit shaped like S - The offic. portion is the down or bristles with which the pod is covered. - They are of a reddish brown col. & sep. by introducing the pod into Molasses or Syrup & scraping off - this forms a kind of confect. - of which a teaspoonful is a dose for a child, - a tablespoon for an adult.

It is a powerful Anthelmintic, said to operate by piercing the worms, & thus destroying them. —

Chenopodium. Wormseed. Fruit of Ch. Anthelminticum sometimes called Jerusalem Oak. A perennial, herbaceous plant, 2 or 3 ft. high, with ovate leaves, sinuate & toothed at the margin, having short or no footstalks. - Flowers are in spikes which are branched, - green & compact, - & appear from July to Sept^r. - It is abundant in all parts of the U.S. - grows in the commons, streets &c. - There is another variety sometimes collected for this, but can be distinguished by its weaker odour. - The seeds should be collected in October. - They are about the size of a pin's head, of a brownish or yellow colour, - each having a coat, which when separated, leaves the seed of a dark, shining

Wormseed of Europe, (Sem. Santonici) means the unexpanded
flower buds of different species of Artemisia: —

colour, - with a bitter, somewhat aromatic & pungent taste.
The vol. oil is off. obtained by dist. with W. - It is of a light yellow colour, becomes darker by keeping. - The oil is usually employed. Dose 5 to 10 drops 2 or 3 times a day for 2 or 3 days in succession, then followed by a dose of Calomel. -
Dose of the seeds 20 to 40 grs - used & followed as the oil. -
The fresh juice is sometimes used. - Dose Tablespoonful. -
Decoct. from ℥i in a pt. of Milk. - Dose Teacupful. -
The wormseed of European Books, is not the Wormseed of this country, but is the prod. of diff. Species of Artemisia. -

Thirty Eighth Lecture. Feby 15th 1834 ---

Secale cornutum. Spurred Rye or Ergot. This a morbid growth which takes place in common Rye & sometimes in Corn.
There are different opinions respecting its nature. - The most rational opinion seems to be that it is a disease of the grain, - De Candolle considers it a fungous plant, - while others assert that it is partly the altered grain, & partly fungous growth.
It generally grows on the plant, in poor & wet soils, or in rainy seasons. - It is solid, brittle, somewhat flexible, from ¾ an in. to 1 inch in length, - thick in the middle, - somewhat curved like a Cocks Spur, hence its name Ergot. - 3 sided, furrowed like Rye, - of a dark col. ext. - but light internally.

It excites the contractile power of the womb when in an unprejudiced state. - It is perhaps, the only article in the Mat. Med. possessing this power. - - While it relieves the Mother however, it may sometimes destroy the child, by the continual contraction arresting the circulation. - This, many do not apprehend, - among them, Dr Chapman. - Dr Dewees does think it dangerous. - It is valuable for driving off the Placenta; - or for checking uterine hemorrhage. - It may operate by constricting the vessels thro' which the blood escapes. Hence we may conjecture that the reason of its producing the Dry Gangrene is that it constricts or arrests the capillary action of the extremities. - It can lay no claims however to Emmenagogue properties. -

In mass, it has a peculiar & disagreeable odour. - taste is at first slight, but afterwards acrid & disagreeable. Powder is of a dark grey colour. - Imparts its virtues to Water. When taken, it produces no obvious effects upon the System of the male, but has a strong tendency to the contractile power of the uterus in the female. - In large and long continued doses, however, its effects are evident. Epidemics, called Dry Gangrene, or by the French Ergotism, have been produced in Europe, by the use of Rye Bread made from Rye with which this Ergot was mixed. - It is used chiefly by obstetricians. - Dose of powder, from 15 to 20 grs. - An inf. is made from ℥i in ƒ℥iv ℞ about ½ taken for a dose. - Should not be kept powdered in Shops. -

Lobelia. Indian Tobacco. The prod. of Lobelia Inflata. An annual or biennial plant, 1 or 2 ft. high, - having a single hairy stem, - branching at the middle, but the top proceeds higher than the branches. - Leaves are ovate, serrate, hairy & pointed. Flowers are in racemes at the ends of the stems & branches, - blue, small & delicate, with a 5 toothed Calyx, an irregular Corolla. - Belongs to Class Pentandria, Order, Monogynia, & a distinguishing mark of Lob. is that the Anthers are collected into a cube, thro' which the pistil passes

Men given in doses sufficient to produce vomiting, it causes great relaxation of the System. — In over doses, it is apt to prove fatal. ——

Inner organs of plant. —

Fruit is an inflated capsule, with a persistent calyx at the top, - has 2 cells, & a number of brown seeds. - This plant is indigenous, & is found abundantly on the sides of the roads &c. in the vicinity of the city. - Flowers appear from July till cut off by frost. - The whole herb is off. - Should be collected in August or Sept. & carefully dried. - It has a slight irritating odour, & when chewed tho' at first it has little taste, it afterwards becomes burning, acrid, nauseous & very permanent, - increasing the flow of the saliva. - It imparts its virtues to Water & Alcohol. Both is greenish.

It is Emetic & Narcotic, producing excessive nausea, & sometimes prostration, giddiness &c. - When it does not vomit the patient, it is dangerous to repeat the dose. - It is sometimes given as a nauseating Emetic & Narcotic in Asthma. Dose of powder from 5 to 20 grs. - Dose of Tinct. in Asthma from ℥ss to ℥ij - as an Emetic ℥ss. — give in small doses frequent.

Chimaphila. Pipsissewa. Chim. Umbellata, formerly Pyrola Umbellata. An evergreen plant, with a creeping perennial root, sending up several stems, which are ligneous at the bottom. - Leaves are cuneate-lanceolate, & arranged in whorls, - are serrate at the edges. Flowers are in terminal corymbs, - 5 petals of a rosy colour. Belongs

This has long been a popular remedy in Rheumatism, Scrofula &c. - It is tonic as well as diuretic, - and is thought by many to be an excellent remedy in Scrofulous Affections. - Here we may remark, that in treating this disease, - before the ulcers appear, we should use low diet & active purging, - but after the ulcers, - better diet & less purging. -

In early Stage of Scrof. - when the glands of the Neck, &c. are swelled, as in Children, - keep them on low diet, purge with Salts about twice a week, - & let them drink freely during the day of Spirit. Nit. -

to Class Decandria, Order, Monogynia. Fruit is a spherical capsules.- It grows in sandy woods &c. and is abundant over in Jersey opposite the City. -

The Chim. Maculata is more abundant on the Schuylkill banks.- resembles the C. Umb.- except that it has the leaves spotted with white, & less cuneate. -

Pipsis. has an astringent, bitter taste, but not disagreeable.- Imparts its virtues to boil. H. & Alc.- They consist of Tannin & a bitter Extractive. — It is tonic, astringent & deuretic.- Used in dropsy accompanied with feeble digestion formerly,- but now it is given generaley in Scrofulay affections. The Decoct. is usually given,- made from boiling ℥i in 1½ pts. down to a pt.- which is done for an adult in 24 hrs. Dose powder 20 or 30 grs 3 times a day, but seldom used thus.

Erigeron Philadelphicum. Phil. Fleabane —

Erigeron Heterophyllum. Various-leaved Fleabane. commonly, though improperly called Scabious.-

Erig. Phil.- is a plant from 1 to 2 or 3 ft. high, with a perennial root, sending up numerous stems, which are purple at the bottom & green towards the top.- Leaves proceed from the root & from the stem.- The radical leaves are on long footstalks ovate lanceolate,- the upper ones have no footstalks & entire.-

Dr. Physick & Parrish are very partial to it in nephritic diseases. —

Flowers in terminal panicled Corymbs, - 2 or 3 on each petstalk. - Belongs to Class Syngenesia. order Superflua. the ray florets are blue or white & the disc florets yellow. It is an indigenous plant, growing in old fields, & flowers in June & July. The Eric. Heteroph. is distinguished by its leaf, which is broader, more ovate & sinuated, & the flowers are more compact. Flowers about the same time.

These plants should be gathered when in flower. They have a slight odour & taste, & impart their properties to boil. W.

Fleabane is diuretic, agreeable to the stomach, & is employed in gravel & arthritic diseases. — Given in inf. or decoct. - of ℥i to a pt. boil. W. - taken in 24 hours. —

Monarda. Horsemint. Mon. Punctata. an herb from 1 to 2 ft. high, with a downy, whitish stem, & smooth, punctate leaves. Flowers are yellow, in whorls, - appearing from June to Sept. It is an indigenous plant, growing in gravelly & sandy soils. Has an aromatic odour, & a warm pungent, bitterish taste, which depend on a vol. oil, separated by distillation. The oil is the part usually employed - is of a reddish yellow colour, & inflames the skin when rubbed upon it. - Has the od. & taste of the plant. - Dose inst. as the other arom. oils, from 2 to 3 drops, sufficiently diluted. - Given in Flatulent Colic &

Lichen grows upon dry rocks, & sandy plains. - It sometimes in meadows, when it is of a larger size. -

Its principal constituents are, a peculiar bitter principle, (about 2 pr. ct.) - Sol. in Water, - or in a solution of Carb. Pot. or Sod. - a small portion of Gum, - & a large proportion of a peculiar kind of Starch

It is used as a palliative in Phthisis. - It also forms an excellent diet in Bronchitis, - Diarrhea, - Dysentery, & some forms of Dyspepsia. - In Iceland, it is used as food - showing that it is Nutritive. -

Fucus Crispus, - Carrageen or Irish Moss - similar -

Lichen. Iceland Moss. Cetraria Islandicus, or Lichen Islandicus. - This plant rises 2 or 3 inches high, having leaves very sinuous & much divided; - green, ciliated:- The fructification is on the surface of the leaves. - It is a native of Asia, Europe & America, growing in high lat. & mountainous country. - It is found in N. England & is abundant in Iceland, hence its name. - When dried, it is of various, grayish white, brown or red, - inodorous with a mucilaginous, bitter taste. - It absorbs more than its own wt. of water & swells. - Boiling Water extracts all the active matter, & the decoction, if made from a sufficient quantity, gelatinises on cooling. This prin. is somewhat analogous to Starch. - it also contains a bitter prin. - Slightly sol. in W. - very sol. in an alkaline solution. - The plant is sometimes used for food in the northern countries. - - In medicine, it is used as a tonic, nutritive & demulcent. - Given in Chronic Catarrhs, - approaching Consumption &c. - & in Dyspepsia. - Decoct. usually of ℥i in 1/2 pt. boiled to 1 pt. - for 24 hours. -

Thirty Ninth Lecture Feb'y 18th 1834

Eupatorium Perfoliatum. Thoroughwort, - or as it is more commonly called Boneset, from its having been used in

It is used also in Catarrhal Fevers, - Remittents &c. -
It is sometimes advantageous in the forming stage of Intermittents, or in preventing a paroxysm, - by being given warm, - So as to vomit. —
Its virtues have been much extolled & much exaggerated. - It is adapted to Intermittents & Remittents approaching Intermittents. - The Infusion is given in such quantities as even to produce emesis

catarrhal fevers attended with an aching of the bones.-

It is a perennial plant, sending up numerous stems,- which are erect, round & hairy.- Leaves are perfoliate at bottom, & connate (2 leaves joining at base, embracing the stem) at top,- long,- tapering,- serrate at the borders, & decussate each other.- The stem is divided towards the top, into 3 branches, hence is trichotomous,- & the branches terminate in a corymb of flowers, which are small & white, & appear from July to October. Calyx is tubular & imbricated,- contains a no. of florets which are perfect, & the stamens are in a tube thro' which the pistil passes.

Belongs to Class Syngenesia, Order Æqualis.- It is an indigenous plant,- abundant in the vicinity of the City, in moist, meadowy places, & is found in all parts of U.S.-

It has a very bitter, & spicy taste.- Virtues depend upon a bitter extractive matter, which it imparts to W. & Alcohol.

It is tonic,- & has the power of acting upon the bowels & vomiting in large doses; & is also diaphoretic.- In order to produce tonic effects, it should be given in powder or cold infusion;- as diaph:- warm infusion;- as Emetic warm decoct. in large doses.- Dose pow. ℈ss to ℈ss grs.- Infus. made from ℈i in 1 pt.- f℥ij dose 3 or 4 times a day.-

* Indigenous & Exotic.-

* Indigenous.

Chironia Centaurium is the Eur. Centaury.-

× Marrubium White Horehound. - Mar. Vulgare, a perennial herbaceous plant, sending up a number of Stems 12 to 18 in. high, which are quadrangular, whitish, downy & branching at a short distance from the roots. Leaves are broad ovate, serrate, & opposite. Flowers in thick whorls at the axils of the leaves in the upper part of the stems & branches. Calyx is tubular, with 10 strice & 10 divisions at the top, each curved in the form of a hook. - Corolla is labiate. - Belongs to Class Didynamia, order, - Gymnospermia.

It is a native of Europe, - grows also in this country on sides of roads, - edges of cultivated lands &c. -

It has a strong agreeable odour when fresh, but it is lost by keeping. taste is bitter & pungent: & it imparts its virtues to boiling Water & Alcohol. - —

It is tonic, - in large doses laxative; & given in warm infusion is diaphoretic. - used in domestic practice for Catarrhs &c. in form of tea. - Also as a Syrup, - made from the Decoction. - also as Candy, which however is not better than other similar candies as Lemon &c. — An inf. is made from ℥i to ℥ss. Dose Wineglassful. — " —

× Sabbatia American Centaury. Product of Sabbatia Angularis. - an annual or biennial, herbaceous plant,

It is a slight aromatic bitter.- Its properties are similar to Nat. of Alcohol.- Used as the simple Bitters.-

with an erect ~~triangular~~ quadrangular winged stem 1 or 2 ft. high, & trichotomous. Leaves are ovate, smooth, pointed, opposite & slightly curved, embracing the stem; - are comparatively very few. Flowers in terminate corymbs, of a beautiful rose color - Calyx has 5 narrow leaves. - Corolla looks like 5 petals, but consists of one petal with 5 divisions & is of a rose col, somewhat lighter in the middle of each. - Belongs to Class Pentandria, Order, Monogynia. - The pistil is bent downwards, instead of being erect. - Fruit a capsule. It is a native of U.S. - grows in large quantities in N.J. where our market is supplied. - Flowers appear in July & August. It has a strong & bitter taste. - It is purely tonic, employed in cases of remittent fevers approaching to intermittent, - in dyspepsia &c. - Generally given in Inf. ℥i in a pint of boil. W. - Dose wineglassful every 2 hours. - Dose pow. 30grs. to ℥i. -

Mint. - There are two species of Mint used in this country - Mentha Piperita & Men. Viridis; - but in Europe there is also Men. Pulegium. - The mints belong to Class Didynamia, - Order, Gymnospermia. - The Genus is characterised by the corolla being divided into nearly 5 equal segments, - & the one which is somewhat larger than the other is slightly notched at the apex, - also by the stamens being erect, & at some distance apart. -

× Indigenous. –

The flowers form an interrupted spike. –

It is used to correct nausea, check vomiting &c. – Sometimes the bruised herb bound over the Stomach has a very happy effect in Cholera Infantum &c.

The Oil, after long standing, deposites a substance, which by some is supposed to be Camphorous: – but it has been ascertained that the deposition of the vol. oils consists chemically of a combination of the Oil with Water. –

x Mentha Piperita. Peppermint. - a perennial herbaceous plant, sending up a quadrangular stem with suckers, jointed, purplish & somewhat hairy. - Leaves are opposite, ovate, serrate, pointed, on footstalks (ns) - the stem divides into several branches - each terminating in whorls of flowers, - small, purple, - appearing in August. - The plant sends out runners along the ground, which take root & send forth a new plant. It is a native of G. Britain, but has been introduced into this country, growing along sides of fences, - on the banks of the Schuylkill, - and is cultivated also very extensively for its oil, - near Burlington N.J. - in N. Eng. - N. York & Ohio. - It should be cut in dry weather in Aug. - It has a penetrating, grateful, aromatic & camphorous odour, & an aromatic warm & pungent taste with coolness. - Its virtues depend on a vol. oil, which can be sep. by dist. with W. - & are imparted to W. - more readily to Alc. - It is used chiefly as a corrigent of other medicines, or in flatulent cholic.

Ol. Men. Pip. - is of a greenish-yellow colour, - becomes reddish by keeping, - has the sensible prop. of the plant. - Sp. gr. 907 to 920. - It is more employed than the herb, & more so than any other vol. aromatic oil. - Dose from 1 to 3 drops, rubbed up with Sugar & W. - or mixed with Alc. so as to form

An Essence should consist of ℥ij of an Oil to Oj Alcohol.–

x Indigenous.– When the term Mint alone is employed, Spearmint is meant, – not Peppermint.–

x Exotic.–
The oil is occasionally imported to this country.–

the Essence, & dropped on Sugar. - We may here remark that the proper for forming an essence are 3 Bij of the Oil to 1 pt. of Alcohol. - Dose is from 10 to 20 drops. — Aq. Men. Pip. is often employed as a vehicle. - & should be made by rubbing the oil with Carbonate of Magnesia, then adding the proper quantity of Water & filtering. — Spir. Men. Pip. — —

Mentha Viridis. Spearmint, commonly called Mint. This sends up quadrangular Stems, & differs from the former in having narrower leaves, - longer, lighter colour, ovate lanceolate & sessile. - Flowers are in whorls also, but closer & more like a spike, spear like Colour nearly the same, but of this, & of the plant in general we may say it is brighter ~~xxxx~~ The stamens show themselves outside the corolla. - Flowers appear in August. - It is a native of G. Britain, - also is found in this county growing along sides of the roads &c. & is cultivated in gardens. - Od. is strong & aromatic. - taste less pungent, than Peppermint. - Its properties depend on a vol. oil, which is analogous to the plant in prop. - Sp. gr. 913 to 975. - Dose 2 to 5 drops. - Ed. as before. Dose 25 to 30 gr.

× Mentha Pulegium. European Pennyroyal. - This is not cultivated nor employed in this county. - Its oil possesses properties similar to the other Mints. —

× Indigenous.—

× Indigenous.—

Hedeoma. American Pennyroyal. Hed. Pulegioides.
This is a different plant from the former. - It is annual, [illegible] ft. high, with numerous branches. - Leaves are opposite, - lanceolate, - slightly serrate & pointed. - Flowers are in whorls at the axils of the leaves, with a small green calyx & small blue Corolla. - Belongs to Class Diandria Order Monogynia. - Calyx has 2 lips. - It is an indigenous plant, abundant in poor light soils, - open woods scenting the surrounding atmosphere with its peculiar odour. - Taste is warm & pungent. - Its virtues depend on a vol. oil & are imparted to Water. - Ol. Hed. - is of a light yellow col. - with the od & taste of the herb. - Its properties resemble those of Mint. - Dose of the Oil from 2 to 10 drops. - Water & Ess. made as Mint. -

Origanum. - Common Marjoram. Orig. Vulgare.
This is a beautiful, herbaceous, perennial plant, sending up angular, purplish stems, 1½ ft high, - bearing opposite leaves on footstalks, having small oval leaflets at the point of insertion, & terminating in beautiful reddish purple flowers, which appear from June to October. Belongs to Class Didynamia, Order Gymnospermia. - Calyx is tubular & Corolla projects & is bilabiate. - The pistil is bifid,

H. Orig. is chiefly imported from Europe. –

+Exotic

It is sometimes used in cookery. –

projecting beyond the flower. – It is a native of Europe & U.S. – and abundant in the vicinity of the City, in the Lanes crossing Ridge Road. –
It has a pleasant od. & a warm, aromatic taste, depending upon a vol. oil, which is sep. by dist. – It is of a yellowish col. – with an acrid, camphorous taste. The plant is gently stim. & tonic, but little used int. – The oil is a rubefacient, – an introd. in Opsodeldoc. –

Fortieth Lecture. Feb. 20th 1834. –

× Origanum Marjorana. Sweet Marjoram. An undershrub, with woody, branching Stem, with opposite, ovate, obtuse leaves. – Flowers are small & white, in compact globular Spikes, 3 of which are placed at the end of each branch. Belongs to Class Didynamia, Order Gymnospermia. – It is a native of Portugal & Spain & cultivated in the Gardens N. of Europe & of this Country. – It has a pleasant od. with a warm, arom. bitterish taste. – yields its virtues to W. & Alc. – They depend on a vol. oil of a lemon yellow colour, having a camphorous odour & taste. – It is tonic & gently Stimulant, – but little used except in domestic practice, when it is given in the form of tea to bring out eruptions, as in measles &c. – –

We have yet one more herb, which is worthy of notice.

× Exotic

It grows in the S. of Europe & is cultivated in our gardens

× Exotic. –

*Melissa Officinalis. Balm. An herbaceous perennial plant, sending up several quadrangular stems 1 or 2 ft. high. Flowers are white or yellowish, in whorls. - appear in July, having a feeble odour resembling that of lemons, but it disappears when dried, - taste is slightly arom. & astringent, & it contains only a very small quantity of vol. oil. -

It is slightly acidulated used chiefly as a refreshing drink in febrile diseases, but cannot be said to produce any medicinal effect. -

The next subject in order is, the Secretions of different plants, or the Products of their Vital Action, - Juices &c. -

× Manna. The product of different species of Fraxinus, of which the F. Ornus only is recognised in the Phar. - This grows in Calabria, in S. of Italy, Sicily, Greece. - Manna, however is not exclusively the product of this tree, but is derived also from other trees. - F. Ornus is a branching tree 20 or 30 ft. high, with smooth, grey bark, with opposite, petiolate leaves, & white flowers in close panicles. - The juice exudes spontaneously & concretes on the bark, or something arranged for the purpose. - This is facilitated by longitudinal incisions, & is best in dry weather It is gathered during July & August. - This forms the purest kind, called Flake Manna, but there are also 2 other varieties in commerce, Common & Fat Manna. ——

Flake Manna exudes spontaneously in the dry, hot summer months & concretes on the bark of the tree. It is generally in oblong, whitish cakes. —

Manna in sorts, of the Shops is a mixture of both the Flake & the Fat Manna — It has a slight, peculiar odour, & a sweetish taste. —

Flake Manna is in pieces of various Shapes, generally presenting on one surface an appearance of bark. - Its colour is white or yellowish white, - is of a loose consistence, light, brittle, - with a sweetish, slightly nauseous taste. -

Common Manna is collected in Sept. & October, when the heat of the weather begins to moderate, so that it does not concrete as fast as it exudes. - It appears like a mixture of fragments of Flake Manna, with a darker matter or Fat Manna. - Fat. is procured later, in Oct. or Nov. when the rains become more common. - It is brown & full of impurities, - more viscid, soft & nauseous than the other varieties. - It is a very inferior variety. -

Manna melts when exposed to heat, - & takes fire, burning with a blue flame. It is sol. in 3 pts. Cold & its own Wt. of boil. Water, - in hot Alc. - precip. on cooling. - It contains about 75 pr. Ct. Mannite, also Sugar, mucilage & a nauseous matter. Mannite is a peculiar, crystallisable, saccharine principle, white, inodorous, sol. in 5 prts. Cold Water - scarcely sol. in Cold Alc. - but readily by hot, - is not susceptible of the vinous fermentation, thus differing from Sugar. - It is gently laxative. - Manna itself is slightly laxative, - usually operates pleasantly, but sometimes produces flatulence. It is

A very pleasant preparation of Manna is a solution of it in Fennel Seed Tea with the addition of a little Carb. of Magnesia. — Made as follows.

℞ Manna ℥i
Sem. Foenic. ℥i
Aq. boilient. ℔ij
Strain & set aside to cool, then add
Magnes Carb. ℈ij
S. — Take about ℔ss at a dose. —

seldom given alone, but generally combined with Senna to qualify its operation & conceal its taste. It is well adapted to Children, when other medicines would not be so acceptable. — Dose for an adult ℥j. — Used in Piles.

Aloë. Aloes. The species which affords this extract to Commerce are the Aloë Spicata, A. Soccotrina & A. Vulgaris. — They are all succulent, fleshy, juicy, evergreen plants. — The several varieties known in Commerce are the Cape Aloes, which is by far the most abundant. — the Soccotrine Aloes, which is rather rare, — the Hepatic Aloes, which may be considered as inferior Soc. & the Caballine Aloes, which seldom, if ever, reaches this country.

Cape Aloes is so named from the Cape of Good Hope, whence it is derived. — German name is Shining Aloes. — It is the product of the A. Spicata, which grows in the vicinity of the Cape. — It is obtained either by cutting off the leaves & placing them one above another so that the juice will run down the gutter formed, into a vessel below, — or by cutting the leaves breaking them, gently expressing, & evaporating the juice by heat. — Hitherto we have received our supply from Great Britain, but as our Commerce is now open with C. of G. Hope, it is probable that we shall receive it directly from there. —

The masses of Caput Mortuum in the Museum are usually covered with a greenish yellow powder. –

Sacot. is more yellow, when recent, than the Caput. –
It becomes darker & more brittle by exposure –

It is found in masses of various sizes, - with a brilliant, glossy surface, resembling Anthracite Coal, - of a deep olive almost black colour, sometimes tinged with a reddish hue, - brittle in cold weather, but soft in warm, - affording a greenish yellow powder, - has a strong & peculiar od. - & a very intensely bitter taste.

Socotrine Aloes is considered the most valuable, & hence the name has also been applied to the best varieties of the Aloes in W. Indies, - which is obtained by spontaneously evaporating the juice which exudes from the leaves when cut. - Soc. Aloes derives its name from the Island of Socotora, which lies in the Straits of Babelmandel, near the Coast of Africa, where it is prepared & thence sent to E. Indies & the European Ports, whence we derive our supplies. - It is of a reddish brown colour, - surface somewhat glossy, but less so than the Cape, & a recent fracture is lighter col. - slightly translucent at the edges. - It has an aromatic odour, - exceedingly bitter taste, - brittle when cold, but soft in warm weather. - Powder is of a golden yellow colour. - It is perhaps the best variety of Hepatic Aloes, - & is not superior in medicinal properties to the best Cape Aloes, which is ordinarily employed. —

The Hepatic Aloes comes from both the East & West Indies
- that from the latter has been termed Barbadoes. -.-

The chemical constituents of Aloes are an Extractive matter and an insoluble portion which some consider as resin, but others as altered Extractive by combination with Oxygen, - called by Berzelius Apothème.
When dissolved in boiling Water, the resin is precipitated on cooling. - Diluted Alcohol is its best menstruum. -

Hepatic Aloes derives its name from its colour resembling that of the Liver.- It was originally derived from the neighborhood of the Socotrine & hence would appear to be only an inferior variety of this species.- It is sometimes called Barbadoes, from the island of the same name.- It is darker, more impure, less glossy, less aromatic odour than the Socotrine.- It is procured in the W. Indies from A. Vulgaris.

Caballine, Fetid or Horse Aloes, is a black, disagreeable mass, given only to Horses, & to them very seldom.-

Aloes has a very bitter taste, is very tenacious, & when powdered, the particles of it floating in the air are easily detected by the senses.- It was formerly considered a gum-resin, but it is now considered as consisting of a peculiar Ext. matter, 75 pr. ct., sol. in W. — Aloes yields its active matter to Cold W. by long maceration,- also sol. in Alc.- By long boiling the Extractive matter becomes insoluble.- Alkalies, Carbonated Alk., & Soaps render it less apt to gripe.- It is inflammable.— Its watery solution resists putrefaction.

Aloes is a purgative, which operates slowly, but certainly,- & stimulates the system, also having a tendency, in small doses, to act upon the lower part of the bowels, rather than the upper.- In large doses or when

It seems to increase the peristaltic motion of the intestines, as well as the secretions.. — very slightly

It is apt to produce irritation & hence is unfitted to be given alone in inflammatory complaints.

It is useful in habitual costiveness, dyspeptic without piles; combined with Rhubarb

This is the chief constituent of the "Dinner Pills" Aloes & Mastich

It is an excellent Emmenagogue & found in all the remedies for that class of diseases. — Its efficacy in them has been ascribed to the irritation which it produced in the rectum, being extended by Sympathy to the Uterus, but we may more rationally suppose that Aloes has a specific tendency to act upon those Organs in the Pelvis. —

It is sometimes given in large doses, for the purpose of exciting hemorrhoidal discharges, as in diseased Splee

It is used in a variety of combinations; we will only mention Pil. Al. et Assafet. — which is an excellent laxative in constipation accompanied with flatulence in aged persons. — Hooper's Pills - emmenagogue

Pulv. Al. et Canellæ, or Hiera Picra, — of about 4 parts Aloes & 1 part Can. — much used as an Emmenagogue. Sometimes called vulgarly, Hickory Picary. —

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long continued it is apt to produce piles. - Even when applied to a denuded surface or by enemas, it has the same effect as when taken internally, showing that it probably enters the circulation. - It is used in Constipation of Bowels also as an Emmenagogue. - Dose as a laxative 2 or 3 ps. As a Cathartic from 10 to 20 grs. - generally given in the form of pills mixed up with Soap, which qualifies its actions - It enters into a variety of pharmaceutical preparations. Decoction injures its medicinal virtues. - Tinctures of it are off. Dose as Lax. ℥ss to ℥i - as Stomachic ℥i or ℥ij. -

℞ Aloes, et Myrrh. - (Elix. Proprietatis) -

Increased Dose of Aloes does not produce correspondent increase of discharge; for the obvious reason that it produces but very little secretion & discharges only what is contained in the lowest portion of the intestines. - The irritation, of course, is greater. -