

**A therapeutic arrangement and syllabus of *materia medica* / By James Johnstone, M.D.**

**Contributors**

Johnstone, James, M.D., of Birmingham, England, 1806-1869.

**Publication/Creation**

Philadelphia : Published by Haswell, Barrington, and Haswell ..., 1837.

**Persistent URL**

<https://wellcomecollection.org/works/phx66zc4>

**License and attribution**

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection  
183 Euston Road  
London NW1 2BE UK  
T +44 (0)20 7611 8722  
E [library@wellcomecollection.org](mailto:library@wellcomecollection.org)  
<https://wellcomecollection.org>

61663/P

50

A

# THERAPEUTIC ARRANGEMENT

AND

## SYLLABUS

OF

# MATERIA MEDICA.



BY JAMES JOHNSTONE, M.D.,

FELLOW OF THE COLLEGE OF PHYSICIANS, AND PHYSICIAN TO THE GENERAL  
HOSPITAL, BIRMINGHAM.



PHILADELPHIA:

PUBLISHED BY

HASWELL, BARRINGTON, AND HASWELL,  
ST. JAMES'S STREET.

1837.

48936

Suppl. P / JOTI

## INTRODUCTION.

In the first part of the work, medicaments are classed according to their therapeutic agency; in the second part, those derived from the animal and vegetable kingdoms are respectively arranged according to the systems of Cuvier and Jussieu, and the minerals are placed in alphabetical order.

I have chosen the systems of Cuvier and Jussieu in preference to that of Linnæus, because by the former the attention of the Pupil is directed to the structure and physiology of animals and plants, while the latter has reference to their external appearance alone.

In the therapeutic arrangement, it has been my endeavour to devise such a system as may be convenient for the purposes of lecturing, and may remind the Student of the various modes in which medicines operate upon the body. With this view, I have disregarded *their Chemical Properties*, which will be described in the Natural History arrangement, and have classed all medicinal substances according to their physiological action.

Thus are formed six classes, and these again are divided into orders.

I have as far as possible adhered to the Cullenian nomenclature, though there will be found a few exceptions to this rule in my tables. Thus, stimulants are divided into three orders; the first of which, namely, secretory stimulants, is new in therapeutics. That it is, however, impossible to dispense with this class, will be at once perceived, by considering the nature of the medicaments which it contains. Mercury is generally allowed to operate upon the whole glandular system. It acts upon the mesenteric glands, upon the liver, &c., and upon the salivary glands; indeed, this last effect is only symptomatic of its general operation. The medicinal action of iodine is not so well understood, but there is reason to suppose that it does not differ widely from mercury. It is said to have proved diuretic in dropsies, and to have removed disease of the liver, while its efficacy in bronchocele has been long ascertained. Iodine also acts upon the salivary glands, for when rubbed on the skin several days together it becomes perceptible to the taste.

In my arrangement, sedatives form the first *order* of medicines which act upon the *heart* and *arteries*. I have inserted them in this place because they perceptibly depress the circulation: nevertheless,

## THERAPEUTIC ARRANGEMENT.

## CLASS II.

MEDICINES WHICH ACT UPON THE GLANDULAR SYSTEM, AND UPON  
THE SECRETORY AND EXCRETORY VESSELS.

- ORDER 1st. *Secretory Stimulants*.—Medicines which act upon the whole glandular system.
- 2d. *Sialagogues*.—Medicines which increase the secretion of saliva.
- 3d. *Expectorants*.—Medicines which promote the excretion of mucus or pus from the bronchial tubes.
- 4th. *Errhines*.—Medicines which promote the secretion of mucus in the nostrils.
- 5th. *Diaphoretics*.—Medicines which excite cutaneous exhalation.
- 6th. *Diuretics*.—Medicines which increase the secretion of urine by exciting the action of the kidneys.
- 7th. *Emmenagogues*.—Medicines which promote the secretion of the menstrual discharge.
- 

## CLASS III.

## MEDICINES WHICH ACT UPON THE HEART AND ARTERIES.

- ORDER 1st. *Sedatives*.—Medicines which diminish the power and velocity of the circulation by their operation on the heart and large arteries.
- 2d. *Refrigerants*.—Medicines which diminish the heat of the body by their action on the extreme vessels.
- 3d. *Tonics*.—Medicines which invigorate the circulation, and thus relieve debility or atony.
- 4th. *Arterial Stimulants*.—Medicines which excite the circulation.
- 

## CLASS IV.

## MEDICINES WHICH ACT UPON THE BRAIN AND NERVOUS SYSTEM.

- ORDER 1st. *Narcotics*.—Medicines which, by their operation on the brain and nerves, diminish sensibility, and induce sleep.
- 2d. *Antispasmodics*.—Medicines which, by their operation on the nervous system, allay inordinate muscular action.
- 3d. *Nervous Stimulants*.—Medicines which excite the brain and nervous system, and thereby increase their irritability and energy.

## CLASS V.

## MEDICINES WHICH ACT UPON THE MUSCULAR FIBRE.

ORDER. *Astringents*.—Medicines which, by inducing contraction of the muscular fibre, restrain inordinate evacuations and hæmorrhages.

---

## CLASS VI.

MEDICINES WHICH ACT UPON THE SKIN AND EXTERNAL PARTS,  
BY APPLICATION TO THE SURFACE OF THE BODY.

ORDER 1st. *Epispastics*.—Medicines which excite external irritation.

2d. *Emollients*.—Medicines which allay external irritation by softening the skin.

NOTE.—All medicines externally applied (except those which belong to Class VI.) may be considered as stimulant, tonic, sedative, &c. &c., and are therefore arranged in their respective orders.

---

## CLASS I.

## ORDER 1.—EMETICS.

Anthemis.	Antimonium.
Ipecacuanha.	Cuprum.
Olivæ oleum.	Zincum.
Sinapis alba.	

## ORDER 2.—CATHARTICS.

Aloë.	Ricinus.
Cambogia.	Tabacum.
Colocynthis.	Tamarindus.
Elaterium.	Terebinthinæ oleum.
Helleborus niger.	Tiglii oleum.
Jalapa.	Veratrum.
Linum catharticum.	Potassæ sales.
Manna.	Hydrargyrum.
Pruna.	Magnesia, ejusque sales.
Rhamnus.	Soda, ejusque sales.
Rheum.	

## ORDER 3.—ANTHELMINTICS.

Allium.	Spigelia.
Assafœtida.	Tabacum.

Cambogia.	Tiglii oleum.
Dolichos.	Terebinthinæ oleum.
Filix mas.	Ferrum.
Granatum.	Hydrargyrum.
Helleborus fœtidus.	Stannum.
Jalapa.	Sulphur.
Scammonia.	

## ORDER 4.—ANTACIDS.

Ammoniæ subcarbonas.	Liquor potassæ
Liquor ammoniæ subcarbonatis.	Creta præparata.
Spiritus ammoniæ.	Liquor calcis.
Cornu ustum.	Magnesia.
Testæ præparatæ.	Magnesiæ subcarbonas.
Potassæ subcarbonas.	Sodæ subcarbonas.
Potassæ carbonas.	Sodæ subcarbonas exsiccata.
Liq. potassæ subcarbonatis.	Sodæ carbonas.

## ORDER 5.—DEMULCENTS.

Cetaceum.	Hordeum.
Cera.	Lichen.
Acacia.	Linum.
Althæa.	Malva.
Amygdalæ.	Oryza.
Amylum.	Olivæ oleum.
Avena.	Tragacantha.
Caricæ fructus.	Tussilago.
Cydoniæ semina.	Uvæ passæ.
Glycyrrhiza.	

## ORDER 6.—ANTIDOTES.

Albumen.	Saccharum.
Gallæ.	Acida.

Omnes medicinæ Ord. 4.

## CLASS II.

## ORDER 1.—SECRETORY STIMULANTS.

Iodina.	Hydrargyrum.
---------	--------------

## ORDER 2.—SIALAGOGUES.

Mastiche.	Tabacum.
Mezereum.	Hydrargyrum.
Pyrethrum.	

## ORDER 3.—EXPECTORANTS.

Cetaceum.	Lichen.
Mel.	Pix liquida.
Allium.	Linum.
Amygdalarum oleum.	Senega.
Ammoniacum.	Scilla.
Assafœtida.	Olivæ oleum.
Glycyrrhiza.	Antimonium.
Ipecacuanha.	Ammonia ejusque sales.

Omnia medicamenta Class I., Ord. 5.

## ORDER 4.—ERRHINES.

Asarum.	Tabaeum.
Euphorbiæ gummi resina.	Veratrum.

## ORDER 5.—DIAPHORETICS.

Ammonia.	Sassafras.
Camphora.	Sarsaparilla.
Colchicum.	Ulmi cortex.
Contrayerva.	Potassæ nitras.
Guaiacum.	Antimonium.
Ipecacuanha.	Sulphur.
Sambucus.	

## ORDER 6.—DIURETICS.

Cantharis.	Cubeba.
Cambogia.	Spartium.
Colchicum.	Resina flava.
Copaiba.	Pix liquida.
Dauci semina.	Acidum aceticum.
Digitalis.	Acidum malicum.
Dulcamara.	Acidum nitricum dilutum.
Juniperus.	Spiritus ætheris nitrici.
Sarsaparilla.	Potassa ejusque sales.
Scilla.	Soda ejusque sales.
Taraxacum.	Sapo.
Terebinthinæ oleum.	Hydrargyrum ?
Ulmus.	Iodina ?

## ORDER 7.—EMMENAGOGUES.

Aloë.	Ruta.
Assafœtida.	Iodina.
Galbanum.	Ferrum.
Helleborus niger.	Hydrargyrum.
Rubia.	Sabinæ folæ.
Myrrha.	Sagapenum.

## CLASS III.

## ORDER 1.—SEDATIVES.

Camphora.	Humulus.
Colchicum.	Digitalis.
Conium.	Tabacum.
Acidum hydrocyanicum.	Plumbi acetas.
Antimonium tartarizatum.	Potassæ nitrás.
Veratrum.	

## ORDER 2.—REFRIGERANTS.

Aqua frigida.	Potassæ sales.
Acidum aceticum.	E plumbō præparata.
Acidum citricum.	E zinco præparata.
Acidum tartaricum.	

## ORDER 3.—TONICS.

Absinthium.	Marrubium.
Acorus calamus.	Menyanthes.
Anthemis.	Myrrha.
Aurantii cortex.	Quassia.
Calumba.	Salix.
Cascarilla.	Simarouba.
Centaurium.	Acidum citricum.
Cinchona.	Acidum nitricum.
Cinchoniæ sulphas.	Acidum muriaticum.
Quininæ sulphas.	Chlorinum.
Cusparia.	Acidum sulphuricum.
Gentiana.	Alumen.
Helenium.	Argenti nitrás.
Humulus.	Arsenicum album.
Lupulina.	Bismuthi subnitras.
Krameria.	Cuprum.
Nux vomica.	Ferrum.
Strychnia.	Zincum.
Origanum.	

## ORDER 4.—ARTERIAL STIMULANTS.

Cantharis.	Resina flava.
Abietis resina.	Balsamum Tolutanum.
Anisum.	Benzoinum.
Acorus calamus.	Cajuputi oleum.
Armoracia.	Canella.
Balsamum Peruvianum.	Cardamomum.
Carui semina.	Capsicum.
Caryophylli.	Rosmarinus.

Cinnamomum.	Sabina.
Copaiba.	Serpentaria.
Coriandrum.	Styrax.
Cubeba.	Sinapis.
Cuminum.	Terebinthinæ oleum.
Elemi.	Zingiber.
Fœniculum.	Æther sulphurieus.
Guaiaeum.	Vinum.
Lavandula.	Alcohol.
Mastiche.	Chlorinum.
Mentha piperita.	Chloruretum calcis.
Mezereum.	Chloruretum sodæ.
Myristica.	Ferrum.
Olibanum.	Petroleum.
Pimenta.	Piper longum.
Pix.	Piper nigrum.
Pyrethrum.	

---

## CLASS IV.

## ORDER 1.—NARCOTICS.

Aconitum.	Lauri baccæ.
Belladonna.	Lactucæ extractum.
Conium.	Laetucarium.
Humulus.	Opium.
Lupulina.	Morphia.
Hyoscyamus.	Narcotia.
Camphora.	Stramonium.

## ORDER 2.—ANTISPASMODICS.

Ammonia.	Ipecacuanha.
Castoreum.	Opium.
Moschus.	Tabacum.
Assafœtida.	Stramonium.
Belladonna.	Valeriana.
Camphora.	Æther sulphuricus.
Cardamine.	Cuprum ammoniatum.
Conium.	Argenti nitras.
Galbanum.	Zinci oxydum.
Hyoscyamus.	Zinci sulphas.
Sagapenum.	

## ORDER 3.—NERVOUS STIMULANTS.

Ammonia.	Strychnia.
Allium porrum.	Opopanax.
Allium sativum.	Secale cornutum.

Anethum.	Valeriana.
Assafœtida.	Toxicodendron.
Galbanum.	Æther sulphuricus.
Nux vomica.	Sagapenum.

—  
CLASS V.

## ORDER 1.—ASTRINGENTS.

Cornu ustum.	Salix.
Bistorta.	Tormentilla.
Catechu.	Uva ursi.
Granatum.	Alumen.
Hæmatoxylon.	Acidum sulphuricum.
Kino.	Cupri sulphas.
Krameria.	Plumbi Acetas.
Quercus et Gallæ.	Zinci sulphas.
Rosa.	

—  
CLASS VI.

## ORDER 1.—EPISPASTICS.

Argenti nitras.	Acida.
Cantharis.	Pix Burgundica.
Ammonia.	Sabina.
Allium sativum.	Sinapis.
Euphorbia.	Antimonium.
Elemi.	Iodina.
Potassa fusa.	Potassa cum calce.

## ORDER 2.—EMOLLIENTS.

Cetaceum.	Aqua calida.
Olivæ oleum.	Adeps.
Sevum.	

## PART II.

### ARRANGEMENT OF ANIMALS, VEGETABLES, AND MINERALS,

ACCORDING TO THE CLASSES TO WHICH THEY BELONG IN NATURAL HISTORY.

---

### MEDICINAL SUBSTANCES DERIVED FROM THE ANIMAL KINGDOM,

ARRANGED ACCORDING TO CUVIER'S SYSTEM.

---

#### I.—VERTEBRATED ANIMALS.

---

##### CLASS.—MAMMALIA.

---

##### ORDER.—*Rodentia*.

###### CASTOR FIBER.—THE BEAVER.

*Officinal*.—Castoreum, Castor.

*Analysis*\*.—Volatile oil; *Castorine*; carbonate, benzoate, and urate of lime; resinoid of castor; resinoid, with traces of benzoate and urate of lime; resinoid extracted by æther; albumen and phosphate of lime; osmazome, with salts of potassa, soda, and lime; resinoid extracted by water; sulphate of potassa; carbonate of magnesia and ammonia and animal matter.

*Medicinal properties*.—Antispasmodic.

##### ORDER.—*Pachydermata*.

###### SUS SCROFA.—THE HOG.

*Officinal*.—Adeps, Hog's Lard.

*Analysis*†.—Stearine; elaine (or oleine).

*Medicinal properties*.—Demulcent, emollient.

\* Brandes.

† Chevreul, Annales de Chimie.

ORDER.—*Ruminantia.***BOS TAURUS ET VACCA.—THE BULL AND COW.**

*Officinal.*—*Fel Bovis*—Ox Gall. *Lac*—Milk.

*Ox Gall*—*Analysis\**.—Water; salts; oxide of iron; *picromel*; resinous matter; yellow matter.

*Medicinal properties.*—Anthelmintic, according to some authors; but it is never prescribed in this country.

*Milk*—*Analysist.*—Water; sugar of milk; curd with a little cream; muriate of potass; phosphate of potash; *lactic acid*; acetate of potash, with a trace of lactate of iron; earthy phosphates.

When milk has been exposed to the air during several hours, it spontaneously separates into cream, cheesy matter (commonly called curd), and whey.

*Medicinal properties.*—Demulcent.

It is a very nutritive food.

**MOSCHUS MOSCHIFERUS.—THE MUSK ANIMAL.**

*Officinal.*—Moschus, Musk.

*Analysis‡.*—Water; ammonia; gelatine; albumen; fibrin; carbonized matter, soluble in water, insoluble in alcohol; stearine; elaine; cholesterine; oleic acid, combined with ammonia; volatile oil; an acid, the nature of which is not ascertained; hydrochlorate of potassa; ammonia and lime; phosphate and carbonate of lime.

*Medicinal properties.*—Antispasmodic.

**CERVUS ELAPHUS.—THE STAG.**

*Officinal.*—Cornua, Hartshorns.

*Analysis§.*—A large portion of gelatine and phosphate of lime; spirit of ammonia and salts of ammonia are also obtained by distillation.

*Medicinal properties.*—Burnt hartshorn is used in some pharmaceutical preparations, but it is an inert substance. Spirit of hartshorn is antacid, and a nervous stimulant.

**OVIS ARIES.—THE SHEEP.**

*Officinal.*—Sevum, Mutton suet.

*Analysis||.*—Stearine; elaine.

*Medicinal properties.*—Demulcent, emollient.

ORDER.—*Cetacea.***PHYSETER MACROCEPHALUS.—SPERMACETI WHALE.**

*Officinal.*—Cetaceum, Spermaceti.

*Analysis.*—Yellow fatty matter; fluid oil; cetine.

*Medicinal properties.*—Demulcent, emollient.

\* Thenard.

† Berzelius.  
‡ Fée.

‡ Blondeau and Guibourt.  
|| Chevreul.

## CLASS—AVES.

—  
ORDER.—*Gallinaceæ.*

## PHASIANUS GALLUS.—THE COMMON FOWL.

*Officinal.*—Ovum, The egg.*Analysis\**.—The shell consists of animal matter, carbonate and phosphate of lime. The white consists of albumen, soda, and sulphur. The yolk consists of albumen, a bland oil, colouring matter, and, according to Prout, phosphorus, in a state of combination, but with what it is combined he does not know†.*Medicinal properties.*—The white is given as an antidote to corrosive sublimate. The yolk is a nutritious food. The shell is antacid.—  
CLASS—PISCES.—  
ORDER.—*Chondropterygii.*

## ACIPENSER STURIO.—THE STURGEON.

*Officinal.*—Ichthyocolla, Isinglass.*Analysis‡.*—Gelatine; a very small quantity of phosphate of lime, and soda.*Medicinal properties.*—Nutrient.—  
II.—NON-VERTEBRATED ANIMALS.—  
CLASS—MOLLUSCA.—  
ORDER.—*Acephala.*

## OSTREA EDULIS.—THE COMMON OYSTER.

*Officinal.*—Testæ, Oyster shells.*Analysis§.*—Carbonate of lime; animal matter, supposed to be coagulated albumen.*Medicinal properties.*—The oyster is a nutritious food, and the shell is antacid.

\* Duncan.    † Prout, in Philos. Trans. 1832.    ‡ Ure.    § Thomson.

## CLASS—INSECTA VEL ANIMALIA ARTICULATA.

—  
ORDER.—*Coleoptera.*

## CANTHARIS VESICATORIA.—THE SPANISH FLY.

*Officinal.*—Cantharides, blistering or Spanish flies.

*Analysis\**.—A green oil, insoluble in water, soluble in alcohol ; a black matter, soluble in water, insoluble in alcohol ; a yellow matter, soluble in both menstrua ; a greasy matter, soluble neither in alcohol or water ; uric acid ; a peculiar crystalline substance, called *cantharidine*.

*Medicinal properties.*—Given internally, an arterial stimulant and diuretic ; applied externally, an episastic.

Cantharis, swallowed in large quantity, is an active poison. The symptoms usually caused by it are, a sense of burning in the throat and stomach ; blood or membranous flakes are vomited ; strangury, suppression of urine, or discharge of blood from the urethra, sometimes followed by headach, delirium, or convulsions.

*Post mortem appearances.*—The brain gorged with blood ; throat, stomach, intestines, kidneys, ureters, and the internal organs of generation inflamed.

ORDER.—*Hemiptera.*

## COCCUS CACTI.—COCHINEAL.

*Officinal.*—Coccus, Cochineal.

*Analysist.*—A peculiar animal matter, named *carmine* or cochenelline ; stearine, elaine ; an odorous oil ; phosphate of lime ; muriate of potassa ; phosphate of potassa ; potassa, combined with an acid.

*Medicinal properties.*—A colouring matter, used in pharmacy.

ORDER.—*Hymenoptera.*

## APIS MELLIFICA.—THE BEE.

*Officinal.*—Mel, Honey ; Cera, Wax.

*Analysis‡.*—Honey consists of crystalline sugar, insoluble in alcohol ; uncrySTALLizable sugar ; mucilage ; oxalic acid? Wax § consists of cerine and myricine.

*Medicinal properties.*—Wax is demulcent and emollient. Honey is slightly laxative.

—  
CLASS—ZOO PHYTA VEL ANIMALIA RADIATA.—  
ORDER.—*Spongia.*

## SPONGIA OFFICINALIS.—SPONGE ANIMAL.

*Officinal.*—Spongia, Sponge.

\* Robiquet.    † Pelletier and Caventou.    ‡ Proust.    § John.

*Analysis*\*.—Animal matter; chloride of sodium; *iodine*, in combination with a metal or earth; phosphorus; lime; magnesia; silex; iron; bromine.

*Medicinal properties*.—Burnt sponge is a secretory stimulant.

## MEDICINAL SUBSTANCES DERIVED FROM THE VEGETABLE KINGDOM,

ARRANGED ACCORDING TO THE SYSTEM OF JUSSIEU.

### ALGÆ.

#### FUCUS VESICULOSUS.—THE BLADDER WRACK.

LINN. Class *Cryptogamia*; Order *Algæ*.

*Officinal*.—Fucus, Bladder Wrack.

*Analysis*†.—Saccharine matter; albumen; green colouring matter; oxalate of potass; malate of potass; sulphate of potass; sulphate of soda; sulphate of magnesia; hydrochlorate of potass; hydrochlorate of soda; hydrochlorate of magnesia; hyposulphate of soda; carbonate of potass; carbonate of soda; *hydriodate* of potass; silica; subphosphate of lime; subphosphate of magnesia; oxide of iron, probably combined with phosphoric acid; oxalate of lime.

*Medicinal properties*.—Secretory stimulant.

IODINIUM, IODINA, or IODINE, being obtained from the ashes of sea-weed, I have inserted it in this place.

*Medicinal properties*.—Iodine and its compounds, iodides and hydriodates, belong to the class of secretory stimulants, diuretics, emmenagogues, and epispastics.

Iodine is a poison.

*Symptoms*.—Violent pain in the stomach, vomiting, bloody diarrhoea, coldness of the skin and rigor, with a quick pulse, may be the result of a single large dose. Small doses, frequently repeated, produce great emaciation and debility, sometimes accompanied by fever, irritation of the alimentary canal, tremors, fainting, and palpitation of the heart.

*Morbid appearances*.—The coats of the stomach and intestines red, and the villous coat excoriated; effusion of serum into the cavity of the abdomen.

\* Lewis, Geoffroy, Neumann, Tromsdorf, Duncan, Jonas, &c.

† Gaultier de Claubry.

## LICHENES.

LICHEN ISLANDICUS.—THE ICELAND MOSS.

LINN. Class *Cryptogamia*; Order *Lichenes*.*Officinal*.—Lichen, Iceland moss.*Analysis\**.—Syrup; bitartrate of potassa; tartrate and phosphate of lime; a bitter principle; green wax; gum; colouring matter; lees of lichen and starch.*Medicinal properties*.—Demulcent, expectorant, tonic.

## FILICES.

ASPIDIUM FILIX MAS.—THE MALE FERN.

LINN. Class *Cryptogamia*; Order *Filices*.*Officinal*.—Filicis radix, Root of male fern.*Analysis†*.—Brown resin; an aromatic fixed oil; an aromatic volatile oil; adipocere; a green colouring principle; brown matter; extractive; muriate of potassa; acetic acid.*Medicinal properties*.—Anthelmintic.

## AROIDEÆ.

ACORUS CALAMUS.—THE SWEET FLAG.

LINN. Class *Hexandria*; Order *Monogynia*.*Officinal*.—Calami radix, Sweet flag root.*Analysis‡*.—Extractive matter; gum; resin; a matter analogous to inuline; volatile oil, having the smell of camphor; woody fibre; water; salts.*Medicinal properties*.—Tonic.

## PIPERACEÆ.

PIPER NIGRUM.—THE BLACK PEPPER.

PIPER LONGUM.—THE LONG PEPPER.

PIPER CUBEBA.—THE CUBEB PLANT.

LINN. Class *Diandria*; Order *Trigynia*.*Officinal*.—Piperis nigri baccæ, Black pepper; Piperis longi fructus, Long pepper; Cubeba, Cubeb.

\* Berzelius.

† Peschier.

‡ Tromsdorff.

*Analysis*\*.—Black pepper contains a peculiar principle named *piperine*; a very acrid concrete oil; a balsamic oil; a gummy colouring matter; extractive; gallic acid; tartaric acid; starch; bassorine; woody fibre; a small quantity of earthy salts and alkalies. Long pepper† contains crystalline resinous matter; an acrid, concrete, fatty substance; volatile oil; extractive; starch; a large portion of bassorine; neutral salts. Cubebs‡ contain concrete volatile oil; resin, similar to that found in copaiba; a coloured resin; gummy matter; a principle like that in some purgative leguminous plants; saline substances.

*Medicinal properties*.—Long and black pepper are stimulant, cubebs diuretic and purgative, and are much used in gonorrhœa and leucorrhœa.

### GRAMINEÆ.

#### TRITICUM HYBERNUM.—WINTER WHEAT.

LINN. Class *Triandria*; Order *Digynia*.

*Officinal*. Farina, Wheat flour; Amylum, Starch.

*Analysis* §.—Wheat flour contains water; gluten; starch; saccharine matter; a gummy, glutinous matter.

*Medicinal properties*.—Wheat flour is a nutritious food; starch is demulcent.

#### HORDEUM DISTICHON.—THE BARLEY.

LINN. Class *Triandria*; Order *Digynia*.

*Officinal*.—Hordei semina, Barley.

*Analysis* ||.—Yellow resin; a gummy, saccharine extract; gluten; starch; hordeine.

*Medicinal properties*.—Barley, in the form of decoction, is demulcent.

By the process of brewing, ale and beer are obtained from barley: they are stimulants. *Cerevisiae fermentum*, yeast, is the scum which collects on the surface of beer while fermenting. Yeast is tonic and antiseptic, and is prescribed as a gargle and external application.

#### AVENA SATIVA.—THE OAT.

LINN. Class *Triandria*; Order *Digynia*.

*Officinal*.—Avenæ semina, Oats.

*Analysis* ¶.—Albumen; gum; sugar; bitter principle; a fatty, yellowish, green oil, soluble in boiling alcohol; fibrous matter; sediment.

\* Pelletier. † Dulong. ‡ Vanquelin. § Idem. || Proust. ¶ Vogel.

Davy discovered gluten in the oat ; and, according to Vanquelin, burnt oats contain phosphate of lime and silica.

*Medicinal properties.*—Gruel, made with the meal of the oat, is demulcent, and a good, nutritious food.

### SACCHARUM OFFICINALE.—THE SUGAR-CANE.

LINN. Class *Triandria*; Order *Digynia*.

*Officinal.*—Saccharum, Sugar, and Saccharum purificatum, Refined Sugar.

*Analysis.\**—Extractive ; uncrystallizable sugar ; crystallizable sugar ; an aroma like that of rum ; gum ; malic acid ; gypsum ; a green sediment.

*Medicinal properties.*—Laxative. Antidote to verdigris.

### SECALE CEREALE.—THE RYE.

LINN. Class *Triandria*; Order *Digynia*.

*Officinal.*—Secale Cornutum, Ergot of Rye.

*Analysis.†*—Gluten ; ammonia, or a peculiar alkali ; acetic acid ; a violet colouring matter ; resin ; fatty oil ; an alkali in combination with acetic acid.

*Medicinal properties.*—Nervous stimulant, exercising a peculiar power over the uterus.

Ergot of rye is a poison ; a single dose of which may excite headache, giddiness, flushed face, pain and spasms in the stomach, nausea, vomiting, purging, and a sense of weight and weariness in the limbs.

When, however, ergot has been mixed with bread, and used for a considerable period, the disease called "ergotism" is the result. Of this disorder there are two species :—1st. Convulsive ergotism, of which the symptoms are, dimness of sight, and giddiness, followed by cramps, convulsions, risus sardonicus, excessive thirst, pains in the chest and limbs, a weak pulse, and a sensation like that caused by insects crawling over the face and limbs. The disorder either terminates in recovery, when eruptions, suppurations, or anasarca come on ; or the patient dies amidst convulsions, or in a comatose state.

2d. Gangrenous ergotism commences with general debility, weariness, and the sensation as of insects creeping over the body. After some days the extremities become cold, stiff, benumbed, and insensible ; pains in the limbs, bleeding from the nose, fever, and headach, follow : finally, the limbs affected shrivel and drop off. A healthy granulation sometimes succeeds, but the patient usually dies from exhaustion before this stage of the disease.‡

### ORYZA SATIVA.—THE RICE PLANT.

LINN. Class *Triandria*; Order *Digynia*.

*Officinal.*—Oryza, Rice.

\* Proust.

† Mass.

‡ See Christison.

*Analysis\**—Sugar ; albumen ; fatty oil ; sediment.

*Medicinal properties*.—Nutritious food.

### COLCHICEÆ.

#### COLCHICUM AUTUMNALE.—THE MEADOW SAFFRON.

LINN. Class *Hexandria*; Order *Trigynia*.

*Officinal*.—Colchici radix et semina, the root and seeds of Colchicum.

*Analysis*.†—A fatty matter, composed of elaine, stearine, and an acid ; gallic acid, in combination with *veratria* ; yellow colouring matter ; gum ; starch ; inulin ; woody fibre.

*Medicinal properties*.—Diuretic, cathartic, diaphoretic, sedative. An acrid narcotic poison.

#### VERATRUM ALBUM.—WHITE HELLEBORE.

LINN. Class *Polygamia*; Order *Monæcia*.

*Officinal*.—Veratri radix, White Hellebore root.

*Analysis*.‡—Fatty matter composed of elaine, stearine, and an acid ; gallate of *veratria* ; yellow colouring matter ; starch ; woody fibre ; gum.

When burnt, salts having lime, potash, and silica, for their bases are found in the ashes.

*Medicinal properties*.—Errhine, cathartic, sedative.

Colechicum and Veratrum are acrid narcotic poisons, and as their deleterious properties depend upon *veratria*, which is contained in both plants, similar effects are produced by large doses of either of them. The *symptoms* are, burning in the throat and stomach, followed by nausea, dysuria, weakness of the limbs, giddiness, dilated pupil, faintness, convulsive respiration, vomiting, purging, and delirium.

*Morbid appearances*.—Redness of the stomach and small intestines. In some cases there is cerebral congestion.

### ASPARAGINEÆ.

#### SMILAX SARSAPARILLA.—THE SARSAPARILLA PLANT.

LINN. Class *Dioecia*; Order *Hexandria*.

*Officinal*.—Sarsaparillæ radix, Sarsaparilla root.

*Analysis*.§—Balsamic resin ; acrid extractive ; extractive resembling cinchonine ; albumen ; starch ; woody fibre ; moisture.

A peculiar substance, called *Parigline*, is said to have been disco-

\* Vogel.

† Pelletier and Caventou.

‡ Idem.

§ Pfaff.

vered by Pallotta, and another peculiar substance, termed *Smilacine*, is reported to have been found by Folchi.

*Medicinal properties.*—Nutrient, diuretic, and diaphoretic.

### LILIACEÆ.

**ALLIUM PORRUM.—THE LEEK.**

**ALLIUM SATIVUM.—THE GARLIC.**

**LINN.** Class *Hexandria*; Order *Monogynia*.

*Officinal.*—*Porri radix*, Leek root or bulb; *Allii radix*, Garlic root or bulb.

*Analysis.*\*—A white, acrid, volatile, and odoriferous oil combined with sulphur; crystallizable sugar; mucilage similar to gum Arabic; a vege-to-animal matter coagulable by heat, and analogous to gluten; phosphoric acid; phosphate of lime; a combination of citric acid and an earth; fibrous matter.

*Medicinal properties.*—Antispasmodic, nervous stimulant, expectorant.

**SCILLA MARITIMA.—THE SQUILL.**

**LINN.** Class *Hexandria*; Order *Monogynia*.

*Officinal.*—*Scillæ radix*, Squill root.

*Analysis.*†—A very volatile pungent principle; gum; uncry stallizable sugar; fatty matter; an excessively bitter and acrid substance, called *Scillitine*, in which the properties of the plant reside.

*Medicinal properties.*—Diuretic and expectorant.

Squill is a poison, causing sickness, vomiting, diarrhoea, bloody urine, and sometimes comatose symptoms.

*Post mortem appearances.*—Stomach inflamed, or partially eroded.

**ALOE SPICATA.—THE SPIKEED OR SOCOTRINE ALOE.**

**ALOE VULGARIS.—THE COMMON OR HEPATIC ALOE.**

**LINN.** Class *Hexandria*; Order *Monogynia*.

*Officinal.*—*Aloës spicatae extractum*, Extract of aloes.

*Analysis.*‡—Bitter extractive; resin; coagulated albumen; traces of gallic acid. On the former of these the smell, taste, and medicinal power of aloes depend.

*Medicinal properties.*—Cathartic; emmenagogue.

### IRIDEÆ.

**CROCUS SATIVUS.—THE SAFFRON CROCUS.**

**LINN.** Class *Triandria*; Order *Monogynia*.

*Officinal.*—*Croci stigmata*, the stigmas of the saffron.

\* Fourcroy and Vauquelin.

† Tilloy.

‡ Tromsdorff.

*Analysis\**.—Gum; albumen; wax; volatile oil; a colouring matter called *polychroite*.

*Medicinal properties*.—Slightly stimulant.

### AMOMEÆ.

#### MATONIA CARDAMOMUM.—THE CARDAMOM.

LINN. Class *Monandria*; Order *Monogynia*.

*Officinal*.—Cardamomi semina, Cardamom seeds.

*Analyst*.—Volatile oil; resinous extract; watery extract.

*Medicinal properties*.—Arterial stimulant.

#### ZINGIBER OFFICINALE.—THE GINGER PLANT.

LINN. Class *Monandria*; Order *Monogynia*.

*Officinal*.—Zingiberis radix, Ginger root.

*Analysist*.—Resinous matter; a sub-resin; a bluish-green volatile oil; acetic acid; acetate of potassa; osmazome; gum; vegeto-animal matter; sulphur; starch; woody fibre.

*Medicinal properties*.—Arterial stimulant.

### ARISTOLOCHIÆ.

#### ARISTOLOCHIA SERPENTARIA.—THE VIRGINIAN SNAKE Root.

LINN. Class *Gynandria*; Order *Hexandria*.

*Officinal*.—Serpentariae radix, Serpentary root.

*Analysist*.—Volatile oil; yellowish gummy matter; saponaceous extractive matter; gummy extract; woody fibre; water.

*Medicinal properties*.—Stimulant.

#### ASARUM EUROPÆUM.—THE ASARABACCA.

LINN. Class *Dodecandria*; Order *Monogynia*.

*Officinal*.—Asari folia, Asarabacca leaves.

*Analysist*.—Concrete volatile oil, analogous to camphor; a fatty liquid oil, which is very acrid; a yellow matter, soluble in water, similar to cytisine, very nauseous, and exciting vomiting; ulmine; earthy salts; silica; iron; sediment.

*Medicinal properties*.—Errhine; stimulant.

### THYMALEÆ.

#### DAPHNE MEZEREUM.—THE MEZEREON TREE.

LINN. Class *Octandria*; Order *Monogynia*.

*Officinal*.—Mezerei cortex, The bark of mezereon root.

\* Bouillon Le Grange, and Vogel.  
§ Buchholz.

† Neumann.  
|| Lassaigne and Feneulle.

‡ Morin.

*Analysis\**.—*Daphneine*; resin; wax; red colouring matter; uncrystallizable sugar; malic acid; malates; gum; lignine; brown colouring matter.

*Medicinal properties*.—Stimulant; sialagogue.

*Mezereon* is a poison, causing diarrhoea, vomiting, and sometimes haemoptysis, as stated by Linnaeus.

## POLYGONEÆ.

### POLYGONUM BISTORTA.—THE BISTORT.

LINN. Class *Octandria*; Order *Trigynia*.

*Officinal*.—Bistortæ radix, Bistort root.

*Analysis*†.—Tannin; gallic acid; oxalic acid; sediment.

*Medicinal properties*.—Astringent.

### RUMEX ACETOSA.—THE COMMON SORREL.

LINN. Class *Hexandria*; Order *Trigynia*.

*Officinal*.—Acetosæ folia, Common sorrel leaves.

*Analysis*‡.—Superoxalate of potassa; tartaric acid; mucilage; sediment.

*Medicinal properties*.—Refrigerant.

### RHEUM PALMATUM.—THE RHUBARB PLANT.

LINN. Class *Enneandria*; Order *Trigynia*.

*Officinal*.—Rhei radix, Rhubarb root.

*Analysis*§.—Resin; extractive; gum; starch; malate of lime; phosphate of lime; oxalate of lime; lignine; water.

Some chemists are of opinion that the extractive is a peculiar principle, which Pfaff has named *rhabarbarine*. Mr. Henderson mentions a peculiar acid, which he names *rheumic acid*.

*Medicinal properties*.—Cathartic; when roasted, tonic and astringent.

## LAURINEÆ.

### LAURUS NOBILIS.—THE BAY TREE.

LINN. Class *Enneandria*; Order *Monogynia*.

*Officinal*.—Lauri baccæ et folia, Bay berries and leaves.

*Analysis*||.—Volatile oil; a crystalline substance, called *laurina*; fatty oil; stearine and wax; resin; bassorine; gummy extract; sugar; acid, whose nature is not determined; albumen; spongy matter; sediment.

*Medicinal properties*.—The oil or infusion of the berries is, when applied externally, stimulant; internally, narcotic, but is never used.

\* Gmelin. † Scheele. ‡ Merat and De Lens. § Brandes. || Bonastre.

## LAURUS CINNAMOMUM.—THE CINNAMON TREE.

LINN. Class *Enneandria*; Order *Monogynia*.

*Officinal*.—Cinnamomi oleum et cortex, Cinnamon oil and bark.

*Analysis\**.—Volatile oil; tannin, combined with vegeto-animal matter, soluble in water by means of an acid; mucilage; yellow colouring matter; resin; sugar; and, according to Planche, starch.

*Medicinal properties*.—Stimulant and astringent.

## LAURUS CAMPHORA.—THE CAMPHOR LAUREL.

LINN. Class *Enneandria*; Order *Monogynia*.

*Officinal*.—Camphora, Camphor.

*Analysis†*.—Charcoal; volatile oil, called oil of camphor.

*Medicinal properties*.—Sedative; narcotic.

Camphor, in large doses, is a poison, causing giddiness, loss of memory, followed by insensibility, convulsions, delirium, or frenzy.

*Post mortem appearances‡*.—The alimentary canal inflamed; the brain injected with blood; the membrane lining the stomach red, or covered with gangrenous spots; the ureters, urethra, and spermatic cord inflamed.

## LAURUS SASSAFRAS.—THE SASSAFRAS LAUREL.

LINN. Class *Enneandria*; Order *Monogynia*.

*Officinal*.—Sassafras lignum et radix, The wood and root of sassafras.

*Analysis§*.—Woody fibre, &c.; essential oil, of a pale-yellow colour, acrid taste, and strong smell.

*Medicinal properties*.—Diaphoretic.

## EUPHORBIACEÆ.

## EUPHORBIA OFFICINARUM.—EUPHORBIA TREE.

LINN. Class *Monœcia*; Order *Monandria*.

*Officinal*.—Euphorbiæ gummi resina, Euphorbium.

*Analysis||*.—Resin; wax; malate of lime; malate of potassa; bassorine; woody fibre; water; and, according to Buchner and Herberger, a resin called euphorbiin.

*Medicinal properties*.—Escharotic; errhine; emetic; cathartic. Euphorbium is an acrid vegetable poison.

The *symptoms* usually caused by it are heat in the throat, violent vomiting, griping, and purging, followed by exhaustion.

*Post mortem appearances*.—Inflammation of the intestines, and gangrenous spots in the stomach; the mucous coat of the whole alimentary canal is red, or nearly black.

\* Vauquelin.

† Bouillon Le Grange.

‡ See Christison and Orfila.

§ Bonastre.

|| Pelletier.

## CROTON CASCARILLA.—THE CASCARILLA.

LINN. Class *Monœcia*; Order *Monadelphia*.

*Officinal*.—Cascarillæ cortex, Cascarilla bark.

*Analysis\**.—Resin; mucilage; bitter principle; essential oil; water; vegetable fibre.

*Medicinal properties*.—Tonic.

## CROTON TIGLIUM.—PURGING CROTON.

LINN. Class *Monœcia*; Order *Monadelphia*.

*Officinal*.—Oleum Tiglii, Oil of Croton seeds.

*Analysis†*.—Volatile oil; a peculiar acid, called *crotonic acid*; an alkaline substance; colouring matter; stearine; wax; resinous matter; inulin; gum; gluten; adragantine; albumen; starch; earthy salts.

Pelletier and Caventou found a fixed oil, and Nimmo discovered an *acrid* resinous principle, which he calls *tigline*.

*Medicinal properties*.—A very powerful cathartic, which in over doses causes the usual symptoms of acrid vegetable poisoning.

## RICINUS COMMUNIS.—COMMON RICINUS.

LINN. Class *Monœcia*; Order *Monadelphia*.

*Officinal*.—Ricini semina et oleum, Castor oil and seeds.

*Analysis‡*.—A peculiar solid matter; a volatile oil without colour, crystallizable by cold; three new acids, *acrid* and soluble in alcohol, called *oleo-ricinic*, *ricinic*, and *stearo-ricinic*.

*Medicinal properties*.—Cathartic.

The seeds of the ricinus are poisonous, causing vomiting, hiccup, pain in the stomach, purging, and faintness. These effects are produced by the acridity of the cotyledons. After death the stomach and intestines present marks of inflammation§.

## CUCURBITACEÆ.

## CUCUMIS COLOCYNTHIS.—THE BITTER APPLE.

LINN. Class *Monœcia*; Order *Monadelphia*.

*Officinal*.—Colocynthidis pulpa, Pulp of the bitter apple.

*Analysis||*.—Resinous matter soluble in ether; fatty oil; extractive; gum; *colocynthine*; salts.

*Medicinal properties*.—Cathartic.

In an over dose colocynth is an acrid vegetable poison, causing the usual symptoms¶.

\* Tromsdorff.

§ See Orfila.

† Brandes.

|| Vauquelin.

‡ Bussy and Lecanu.

¶ See Euphorbium.

## MOMORDICA ELATERIUM.—THE WILD CUCUMBER.

LINN. Class *Monæcia*; Order *Monadelphia*.

*Officinal*.—Elaterii pepones, Fruit of the wild cucumber.

*Analysis\**.—Water; extractive; starch; gluten; woody fibre; a peculiar bitter principle, named *elatine*.

According to Paris, it is not a *bitter* principle.

*Medicinal properties*.—Hydragogue cathartic.

Both elaterium and elatine belong to the class of acrid vegetable poisons. They are more powerful than colocynth, but in other respects their operation is similar.

## MYRISTACEÆ.

## MYRISTICA MOSCHATA.—THE NUTMEG TREE.

LINN. Class *Diæcia*; Order *Monadelphia*.

*Officinal*.—Myristicæ nuclei, Nutmegs.

*Analysis†*.—Stearine; elaine; volatile oil; gum; acid; woody fibre; sediment.

*Medicinal properties*.—Stimulant.

The oil in large doses is narcotic, causing stupor and insensibility.

—  
ULMACEÆ.

## ULMUS CAMPESTRIS.—COMMON ELM.

LINN. Class *Pentandria*; Order *Digynia*.

*Officinal*.—Ulmi cortex, Elm bark.

*Analysis*.—Carbonate of lime; acetate of potassa; mucilage; ulmine.

*Medicinal properties*.—Diaphoretic, diuretic.

—  
URTICEÆ.

## DORSTENIA CONTRAJERVA.—CONTRAJERVA.

LINN. Class *Tetrandria*; Order *Monogynia*.

*Officinal*.—Contrajervæ radix, Contrajerva root.

*Analysis*.—Neumann obtained a watery and an alcoholic extract, but a more complete analysis is yet wanting.

*Medicinal properties*.—Diaphoretic.

## FICUS CARICA.—THE FIG TREE.

LINN. Class *Polygamia*; Order *Triæcia*.

*Officinal*.—Caricæ fructus, Figs.

*Analysis‡*.—Sugar; mucilage.

*Medicinal properties*.—Expectorant, demulcent.

\* Pallas.

† Bonastre.

‡ Fée.

## MORUS NIGRA.—THE MULBERRY.

LINN. Class *Monœcia*; Order *Tetrandria*.*Officinal*.—*Mori baccæ*, Mulberries.*Analysis\**.—Mucilage; sugar; tartaric acid.*Medicinal properties*.—Slightly refrigerant, but never prescribed.

## HUMULUS LUPULUS.—THE HOP.

LINN. Class *Diœcia*; Order *Pentandria*.*Officinal*.—*Humuli strobili*, Strobiles, or flowers of the hop.*Analysis†*.—Resin; bitter matter; *lupuline*; essential oil; silica; gum; malic acid; salts, having potassa and lime for bases; oxide of iron; sulphur; osmazome.*Medicinal properties*.—Narcotic; sedative; tonic.

Lupuline is a narcotic poison, producing vertigo and stupor; but post mortem examinations have hitherto presented nothing worthy of note. The experiments have been made upon dogs.

—  
CUPULIFERÆ.

## QUERCUS PEDUNCULATA.—COMMON WHITE OAK.

LINN. Class *Monœcia*; Order *Polyandria*.*Officinal*.—*Quercûs cortex*, Oak bark.*Analysis‡*.—Gallic acid; tannin.*Medicinal properties*.—Astringent.

## QUERCUS INFECTORIA.—DYER'S BARK.

LINN. Class *Monœcia*; Order *Polyandria*.*Officinal*.—Gallæ, Galls.*Analysis§*.—Tannin; gallic acid, combined with mucilage; extractive, and matter rendered insoluble by evaporation; carbonate of lime; salts; according to Braconnet, ellagic acid.*Medicinal properties*.—Astringent; an antidote to antimonium tartarizatum.—  
SALICINEÆ.

## SALIX CAPREA.—THE WILLOW.

LINN. Class *Diœcia*; Order *Diandria*.*Officinal*.—*Salicis cortex*, Willow bark.*Analysis*.—The salix caprea has not been analyzed, but the salix alba, which to all appearance resembles it, yields|| tannin; bitter resin; extractive; gluten; *salicine*.*Medicinal properties*.—Tonic.

\* Fée.    † Payen and Chevalier.    ‡ Fée.    § Davy.    || Thomson.

## CONIFERÆ.

## PINUS ABIES.—THE SPRUCE FIR.

LINN. Class *Monœcia*; Order *Monadelphia*.

*Officinal*.—*Abietis resina*, Resin of the spruce fir. *Pix abietina*, Burgundy pitch.

## PINUS SYLVESTRIS.—THE SCOTCH FIR.

*Officinal*.—*Terebinthina vulgaris*, Common Turpentine. *Terebinthinae oleum*, Oil of turpentine. *Resina flava*, Yellow resin. *Pix nigra*, Pitch. *Pix liquida*, Tar.

## PINUS BALSAMEA.—HEMLOCK FIR.

*Officinal*.—*Terebinthina Canadensis*, Canada balsam.

*Analysis\**.—Turpentine contains volatile oil; succinic acid; resin. Tar contains empyreumatic oil; resin; acetic acid.

*Medicinal properties*.—Turpentine is stimulant, cathartic, diuretic, anthelmintic, and epispastic. Tar is stimulant, expectorant, and diuretic.

## JUNIPERUS COMMUNIS.—THE COMMON JUNIPER.

LINN. Class *Diæcia*; Order *Monadelphia*.

*Officinal*.—*Juniperæ baccæ et cacumina*, Juniper berries and tops.

*Analysis†*.—Sugar; mucilage; essential oil.

*Medicinal properties*.—Diuretic.

## JUNIPERUS SABINA.—THE SAVINE.

*Officinal*.—*Sabinæ folia*, Savine leaves.

*Analysis‡*.—Essential oil; resin.

*Medicinal properties*.—Stimulant; emmenagogue; epispastic.

It is an acrid, vegetable poison, causing the same symptoms and post mortem appearances as euphorbia; and miscarriage is also said to have been produced by it.

## JUNIPERUS LYCIA,

Supposed to produce Olibanum, which will be noticed when I speak of the *Boswellia serrata*.

## SCRÖFULARIÆ.

## DIGITALIS PURPUREA.—THE PURPLE FOXGLOVE.

LINN. Class *Didynamia*; Order *Angiospermia*.

*Officinal*.—*Digitalis folia*, Foxglove leaves.

*Analysis§*.—Extractive; green oil; *digitaline*; salts.

\* Thomson.

† Fée.

‡ Huffman.

3\*

§ Le Royal.

*Medicinal properties.*—Sedative and diuretic.

Digitalis is a narcotico-acrid poison. When this medicine has been taken for several days, even in moderate doses, it frequently excites nausea, vomiting, giddiness, want of sleep, sense of heat throughout the body, and all external objects assume a green appearance; general depression, sometimes salivation, diarrhoea, or convulsions. The pulse is always feeble, and frequently intermits. When a single large dose of digitalis has been given, vomiting, purging, depression of the pulse, dilatation of the pupils, faintness, cold sweats, swelling of the face, and convulsions or coma are usually the consequence.

*Post mortem appearances.*—The membranes of the brain injected with blood; the mucous coat of the stomach of a red colour.

## LABIATÆ.

**ROSMARINUS OFFICINALIS.—OFFICIAL ROSEMARY.**

LINN. Class *Diandria*; Order *Monogynia*.

*Officinal.*—Rosmarini cacumina, Rosemary tops.

*Analysis\**.—Bitter extractive; resinous matter; essential oil, containing camphor.

*Medicinal properties.*—Slightly stimulant, but never prescribed.

**MENTHA PIPERITA.—PEPPERMINT.**

**MENTHA VIRIDIS.—SPEARMINT.**

**MENTHA PULEGIUM.—PENNYROYAL.**

LINN. Class *Didynamia*; Order *Angiospermia*.

*Officinal.*—The whole herbs.

*Analysis†.*—Extractive; volatile oil, containing camphor; a crystallizable matter, analogous to camphor.

*Medicinal properties.*—Slightly stimulant.

**LAVANDULA SPICA.—LAVENDER.**

LINN. Class *Didynamia*; Order *Angiospermia*.

*Officinal.*—Lavandulæ flores, Lavender flowers.

*Analysis‡.*—Extracto-resinous matter; essential oil, containing camphor.

*Medicinal properties.*—Stimulant.

**MARRUBIUM VULGARE.—THE WHITE HOREHOUND.**

LINN. Class *Didynamia*; Order *Angiospermia*.

*Officinal.*—Marrubium, Horehound leaves.

*Analysis§.*—Bitter extractive; volatile oil; gallic acid.

*Medicinal properties.*—Tonic.

\* Proust. † Gaubius, Proust, Phillippe. ‡ Alibert, Proust. § Stephenson.

## ORIGANUM VULGARE.—THE COMMON MARJORAM.

LINN. Class *Didynamia*; Order *Angiospermia*.

*Officinal*.—Origanum, Common marjoram leaves.

*Analysis\**.—A volatile oil, containing camphor; extractive matter; gummy, resinous matter; colouring matter.

*Medicinal properties*.—Tonic.

## CONVOLVULACEÆ.

## CONVOLVULUS JALAPA.—THE JALAP PLANT.

LINN. Class *Pentandria*; Order *Monogynia*.

*Officinal*.—Jalapæ radix, Jalap root.

*Analysis†*.—Water; resin; gummy extract; sediment; albumen; woody fibre; phosphate of lime; carbonate of iron; silica; salts; and, according to Hume, *jalapine*.

*Medicinal properties*.—Drastic cathartic, and anthelmintic.

## CONVOLVULUS SCAMMONEA.—THE SCAMMONY PLANT.

LINN. Class *Pentandria*; Order *Monogynia*.

*Officinal*.—Scammoneæ gummi-resina, Scammony.

*Analysis‡*.—Resin; gum; extractive; vegetable matter; earthy matter.

*Medicinal properties*.—Drastic cathartic, and anthelmintic.

## SOLANEÆ.

## SOLANUM DULCAMARA.—THE BITTER-SWEET.

LINN. Class *Pentandria*; Order *Monogynia*.

*Officinal*.—Dulcamaræ caules, the Stalks of Bitter-sweet.

*Analysis*.—Defosses discovered a *peculiar principle*, named *solanine*, combined with malic acid. Citric acid was obtained from it by Scheele; and Pfaff mentions a volatile narcotic principle, and a peculiar bitter principle, having the smell of honey, and leaving a sweet taste in the mouth, called *picro-glycion*.

*Medicinal properties*.—Narcotic, diaphoretic, diuretic.

## ATROPA BELLADONNA.—THE DEADLY NIGHTSHADE.

LINN. Class *Pentandria*; Order *Monogynia*.

*Officinal*.—Belladonnae folia, Deadly Nightshade leaves.

*Analysis§*.—Gum; starch; greenish resin; wood fibre; a *peculiar principle* named *atropine*, or *atropia*, combined with malic acid.

\* Merat and De Lens. † Cadet. ‡ Bouillon Le Grange, and Vogul. § Brandes.

*Medicinal properties.*—Narcotic.

Belladonna is a narcotico-acrid poison, the effects of which are dryness in the throat, delirium, dilated pupil, and afterwards coma. Convulsions sometimes, though very rarely, occur.

*Post mortem appearances.*—The body is swollen, and covered with livid spots; a few hours after death putrefaction commences. The vessels of the head are gorged with fluid blood, which usually flows from the nose, mouth, and ears. Sometimes the internal surface of the stomach is ulcerated, the lungs are livid and filled with venous blood, and marked with black spots.

## HYOSCYAMUS NIGER.—THE BLACK HENBANE.

LINN. Class *Pentandria*; Order *Monogynia*.

*Officinal.*—*Hyoscyami semina et folia*, The seeds and leaves of henbane.

*Analysis\**.—A peculiar alkaline extract called *hyoscyama*; gallic acid; resin; mucilage; salts.

*Medicinal properties.*—Narcotic, antispasmodic.

*Hyoscyamus* is a narcotic poison.

*Symptoms.*—Loss of speech, dilatation of the pupils, coma, and delirium.

*Post mortem appearances.*—The brain congested with blood. The internal coat of the stomach inflamed, and sometimes covered with gangrenous spots.

## NICOTIANA TABACUM.—THE TOBACCO PLANT.

LINN. Class *Pentandria*; Order *Monogynia*.

*Officinal.*—*Tabaci folia*, Tobacco leaves.

*Analysis†.*—Resin; albumen; red animalized matter, soluble in water and in alcohol; a peculiar acrid principle; a volatile principle in which the properties of the plant reside, called *nicotia*; woody fibre; acetic acid; salts.

*Medicinal properties.*—Narcotic, sedative, cathartic, errhine, sialagogue.

Tobacco is a narcotico-acrid poison.

*Symptoms.*—Nausea, faintness, vomiting, stupor, stertorous breathing, spasms, dilatation of the pupils.

*Post mortem appearances‡.*—The omentum red. The coats of the intestines red and gorged with blood, with patches of extravasation on the mucous coat. Vessels of the abdomen unusually empty. Stomach and brain natural, lungs pale, and the cavities of the heart empty.

## DATURA STRAMONIUM.—THE THORN APPLE.

LINN. Class *Pentandria*; Order *Monogynia*.

*Officinal.*—*Stramonii folia et semina*, The leaves and seeds of thorn-apple.

\* Brandes.

† Vauquelin.

‡ See Christison.

*Analysis\**.—The leaves contain gum ; extractive matter ; sediment ; albumen ; resin ; salts.

Brandes has discovered in the seeds a peculiar principle which he calls *daturine*.

*Medicinal properties*.—Narcotic.

The effects of a poisonous dose of stramonium are, delirium, dilatation of the pupil, and stupor, sometimes accompanied or followed by paralysis.

*Post mortem appearances*.—Congestion of the brain and sinuses. In animals, the stomach is inflamed, and the lungs loaded with black fluid blood.

#### CAPSICUM ANNUUM.—THE CAPSICUM PLANT.

LINN. Class *Pentandria* ; Order *Monogynia*.

*Officinal*.—*Capsici baccae*, Capsicum berries, or Cayenne pepper.

*Analysis†*.—Cinchonine ; resin ; mucilage ; an alkaline principle called *capsicine*.

*Medicinal properties*.—Stimulant.

#### JASMINEÆ.

##### OLEA EUROPÆA.—THE OLIVE TREE.

LINN. Class *Diandria* ; Order *Monogynia*.

*Officinal*.—*Oleum olivæ*, Olive oil.

*Analysis‡*.—Stearine ; elaine.

*Medicinal properties*.—Cathartic, emollient, demulcent, anthelmintic.

#### FRAxinus ORNUS.—THE FLOWERING ASH.

LINN. Class *Diandria* ; Order *Monogynia*.

*Officinal*.—Manna, The concrete juice of the flowering ash.

*Analysis§*.—*Mannite* ; sugar ; a nauseous yellow matter, which is purgative ; mucilage.

*Medicinal properties*.—Laxative.

#### GENTIANEÆ.

##### GENTIANA LUTEA.—THE YELLOW GENTIAN.

LINN. Class *Pentandria* ; Order *Digynia*.

*Officinal*.—Gentianæ radix, Yellow gentian root.

*Analysis||*.—A volatile colouring principle ; a bitter yellow crystalline substance, called *gentianine* ; glutinous matter ; green fixed oil ; acid ; uncryallizable sugar ; gum ; yellow colouring matter ; woody fibre.

*Medicinal properties*.—Tonic.

\* Promnitz.

† Forchhammer.

§ Fourcroy and Vauquelin.

‡ Merat and De Lens.

|| Henry and Caventou.

CHIRONIA CENTAURIUM, OR ERYTHRREA CENTAURIUM.—THE COMMON CENTAURY.

LINN. Class *Pentandria*; Order *Monogynia*.

*Officinal*.—Centaurii cacumina, The tops or flowering heads of centaury.

*Analysis\**.—An acid; a slimy matter; bitter extract.

Duncan also thinks it contains gentianine, but this substance has not been found in centaury.

*Medicinal properties*.—Tonic.

MENYANTHES TRIFOLIATA.—THE BUCKBEAN, OR MARSH TREFOIL.

LINN. Class *Pentandria*; Order *Monogynia*.

*Officinal*.—Menyanthes, The leaves of buckbean.

*Analysis†*.—Feculent matter, composed of albumen; green resin; bitter azotized extractive matter; brown gum; white sediment of a peculiar nature; malic acid; woody fibre; salts.

*Medicinal properties*.—Tonic.

SPIGELIA MARILANDICA.—THE CAROLINA PINK, OR WORM GRASS.

LINN. Class *Pentandria*; Order *Monogynia*.

*Officinal*.—Spigeliæ radix; Worm grass root.

*Analysis‡*.—Fatty oil; volatile oil; resin; a bitter substance, supposed to be the active part of the plant; mucus; albumen; gallic acid; woody fibre; malate of potassa and lime; silica; oxide of iron.

*Medicinal properties*.—Anthelmintic.

APOCINEÆ.

STRYCHNOS NUX VOMICA.—THE POISON NUT TREE.

LINN. Class *Pentandria*; Order *Monogynia*.

*Officinal*.—Nux vomica, The seeds or poison nut.

*Analysis§*.—Malate of lime; gum; fixed oil; yellow colouring matter; salts: *strychnine*, *brucine*, *igasuric acid*.

*Medicinal properties*.—Nervous stimulant.

Nux vomica and strychnine are poisons, which excite violent tetanic spasms and convulsions, and the patient frequently dies from difficulty of breathing, caused by spasms of the diaphragm and muscles of the chest.

*Post mortem appearances* are various. The vessels of the brain are distended with blood, the heart is flaccid, the intestines and

\* Fée.

† Tromsdorff.

‡ Feneuille.

§ Pelletier and Majendie.

stomach inflamed, and sometimes livid and gangrenous. Effusion has been observed on the surface of the cerebellum, and the cortical substance of the brain softened. The spinal cord softened and the lungs gorged with blood.

### DYOSPYREÆ.

#### STYRAX OFFICINALE.—THE STYRAX TREE.

LINN. Class *Decandria*; Order *Monogynia*.

*Officinal*.—*Styracis balsamum*, *Storax balsam*.

*Analysis\**.—Resin; benzoic acid; empyreumatic oil.

*Medicinal properties*.—Stimulant, expectorant.

#### STYRAX BENZOIN.—THE BENZOIN OR BENJAMIN TREE.

LINN. Class *Decandria*; Order *Monogynia*.

*Officinal*.—*Benzoinum*, Benzoin.

*Analysis†*.—*Benzoic acid*; resin; matter similar to balsam of Peru; a peculiar aromatic principle, soluble in water and alcohol; woody sediment.

*Medicinal properties*.—Stimulating expectorant. Benzoic acid possesses the same properties, but it is seldom prescribed.

### ERICINEÆ.

#### ARBUTUS UVA URSI.—THE BEAR BERRY TREE.

LINN. Class *Decandria*; Order *Monogynia*.

*Officinal*.—*Uvæ ursi folia*, The leaves of the bear berry.

*Analysis‡*.—Tannin; mucus; bitter extractive; gallic acid; resin; oxygenated extractive; woody fibre; lime.

*Medicinal properties*.—Astringent.

#### PYROLA UMBELLATA.—THE WINTER GREEN.

LINN. Class *Decandria*; Order *Monogynia*.

*Officinal*.—*Herba*, The whole herb.

*Analysis§*.—Bitter extractive; tannin; fibre; earthy salts.

*Medicinal properties*.—Diuretic.

### CORYMBIFERÆ.

#### ANTHEMIS NOBILIS.—THE CHAMOMILE PLANT.

LINN. Class *Syngenesia*; Order *Polygamia superflua*.

*Officinal*.—*Anthemidis flores*, Chamomile flowers.

\* Fée.

† Bucholtz.

‡ Melandri and Moretti.

§ Wolf.

*Analysis\**.—Volatile oil ; a gummi-resinous principle ; tannin.  
*Medicinal properties*.—Emetic ; stomachic ; tonic ; antispasmodic.

### ANTHEMIS PYRETHRUM.—THE PELLITORY.

LINN. Class *Syngenesia* ; Order *Polygamia superflua*.

*Officinal*.—Pyrethri radix, Pellitory root.  
*Analysis†*.—Volatile oil ; fixed oil ; yellow colouring matter ; gum ; inulin ; muriate of lime ; woody fibre.  
*Medicinal properties*.—Stimulant, sialagogue.

### ARTEMISIA ABSINTHIUM.—WORMWOOD.

LINN. Class *Syngenesia* ; Order *Polygamia superflua*.

*Officinal*.—Absinthium, Leaves and flowering tops of wormwood.  
*Analysis‡*.—A very bitter azotized matter ; an insipid azotized matter ; a bitter matter, having the appearance of resin ; green volatile oil ; chlorophylle ; albumen ; sediment ; salts of potassa ; woody fibre ; water.

*Medicinal properties*.—Tonic, anthelmintic.

### INULA HELENIUM.—ELECAMPANE.

LINN. Class *Syngenesia* ; Order *Polygamia superflua*.

*Officinal*.—Helenii radix, Elecampane root.  
*Analysis§*.—Bitter extractive matter ; acetic acid ; crystallizable resin ; albumen ; a white matter somewhat resembling volatile oil and camphor ; fibrous matter ; inulin, discovered by Rose.

*Medicinal properties*.—Stimulant.

### TUSSILAGO FARFARA.—COLTSFOOT.

LINN. Class *Syngenesia* ; Order *Polygamia superflua*.

*Officinal*.—Tussilago, Coltsfoot leaves and flowers.

*Analysis||*.—Tannin ; extractive.

*Medicinal properties*.—Tonic, demulcent.

## CICHORACEÆ.

### LACTUCA SATIVA.—THE LETTUCE.

LINN. Class *Syngenesia* ; Order *Polygamia æqualis*.

*Officinal*.—Lactuca, Leaves and expressed juice of the garden lettuce.

*Analysis¶*.—Wax ; resin ; caoutchouc ; an acid analogous to oxalic acid ; a narcotic principle like that of hyoscyamus, named *lactucarine*.

\* Féé.

† Gauthier.

‡ Braconnot.

§ Funke.

|| Merat and De Lens.

¶ Klink and Pfaff.

*Medicinal properties.*—Sedative and narcotic.

The poisonous effects of lactucarine are similar to those of opium.

### LEONTODON TARAXACUM.—THE DANDELION.

LINN. Class *Syngenesia*; Order *Polygamia æqualis*.

*Officinal.*—*Taraxaci radix*, root of dandelion.

*Analysis.*—Caoutchouc was detected by John, and Thomson thinks the root probably contains extractive; gluten; a bitter principle; and tartaric acid.

*Medicinal properties.*—Diuretic, laxative.

### VALERIANÆ

#### VALERIANA OFFICINALIS.—THE WILD VALERIAN.

LINN. Class *Triandria*; Order *Monogynia*.

*Officinal.*—*Valerianæ radix*, Wild Valerian root.

*Analysis.\**—A peculiar principle, soluble in water, but insoluble in alcohol or ether; resin; volatile oil; gummy matter; woody fibre; sediment.

*Medicinal properties.*—Antispasmodic, tonic, emmenagogue.

### RUBIACEÆ.

#### RUBIA TINCTORUM.—DYERS MADDER.

LINN. Class *Tetrandria*; Order *Monogynia*.

*Officinal.*—*Rubiæ radix*, Madder root.

*Analysis.†*—A red colouring matter called (by Robiquet) *alizarine*; a yellow colouring matter termed *xanthine*; woody fibre; vegetable acid; mucilage; vegeto-animal matter; gum; sugar; a bitter substance; resin; salts.

*Medicinal properties.*—Emmenagogue.

### CHIOCOCCA RACEMOSA.

LINN. Class *Pentandria*; Order *Monogynia*.

*Officinal.*—*Chiococcæ radix*, Chiococca root.

*Analysis.‡*—A peculiar alkaline principle nearly allied to emetine, together with vegetable matter.

*Medicinal properties.*—Diuretic, Emetic, cathartic.

#### CINCHONA CORDIFOLIA.—YELLOW OR HEART-LEAVED BARK.

LANCIFOLIA.—LANCE-LEAVED OR PALE BARK.

OBLONGIFOLIA.—OBLONG-LEAVED OR RED BARK.

LINN. Class *Pentandria*; Order *Monogynia*.

*Officinal.*—*Cinchonæ Cordifoliae cortex*. Heart-leaved or yellow

\* Tromsdorff.

† Kuhlman.

‡ Brandes.

cinchona bark; *Cinchonæ lancifoliæ cortex*, Lance-leaved or pale cinchona bark; *Cinchonæ oblongifoliæ cortex*, Oblong-leaved or red cinchona bark.

*Analysis.\**—Yellow bark contains *kinate of quinine*; yellow fatty matter; red colouring matter; tannin; yellow colouring matter; *kinate of lime*; starch and woody fibre. Pale bark contains *kinate of cinchonine*; green fatty matter; red colouring matter; tannin; yellow colouring matter; *kinate of lime*; gum; starch and woody fibre. Red bark contains *kinate of cinchonine*; *kinate of quinine*; red fatty matter; red colouring matter; tannin; *kinate of lime*; yellow colouring matter; starch; woody fibre.

*Medicinal properties.*—Tonic.

#### CEPHAE LIS VEL CAL利COCCA IPECACUANHA.— IPECACUANHA.

LINN. Class *Pentandria*; Order *Monogynia*.

*Officinal.*—Ipecacuanha radix, Ipecacuanha root.

*Analysis.†*—*Emetine*; fatty matter; vegetable wax; gum; starch; woody fibre; gallic acid.

*Medicinal properties.*—Emetic; diaphoretic; expectorant; anti-spasmodic.

#### CAPRIFOLIACEÆ.

##### SAMBUCUS NIGRA.—THE ELDER TREE.

LINN. Class *Pentandria*; Order *Trigynia*.

*Officinal.*—Sambuci flores, The flowers of common elder.

*Analysis.‡*—Fatty oil and ammonia have been detected in the flowers. The berries contain sugar; malic acid.

*Medicinal properties.*—Diaphoretic, cathartic.

#### UMBELLIFERÆ.

##### PIMPINELLA ANISUM.—THE ANISE PLANT.

LINN. Class *Pentandria*; Order *Digynia*.

*Officinal.*—Anisi semini, Anise seed.

*Analysis.§*—Fatty oil, soluble in alcohol; *anisulmine*; acetate of lime; hydro-chlorate of lime; malate of lime; *phyteumacolle*; mucus; gum; malic acid; salts; resin; subresin; volatile oil; silica; oxide of iron; *gommine*.

*Medicinal properties.*—Stimulant, stomachic.

##### CARUM CARUI.—THE CARAWAY PLANT.

LINN. Class *Pentandria*; Order *Digynia*.

*Officinal.*—Carui semina, Caraway seeds.

\* Pelletier and Caventou. † Pelletier. ‡ Fée. § Brandes and Reimann.

*Analysis.*—No accurate analysis has been made, but their medical properties probably depend upon the volatile oil contained in the seeds.

*Medicinal properties.*—Stimulant and stomachic.

#### ANETHUM FÆNICULUM.—FENNEL.

LINN. Class *Pentandria*; Order *Digynia*.

*Officinal.*—Fæniculi semina, Sweet fennel seeds.

*Analysis.*\*—Green volatile oil; mucilaginous extract; resinous extract.

*Medicinal properties.*—Stomachic.

#### ANETHUM GRAVEOLENS.—DILL.

LINN. Class *Pentandria*; Order *Digynia*.

*Officinal.*—Anethi semina, Common dill seed.

*Analysis.*†—Volatile oil; resinous extract; mucilaginous extract.

*Medicinal properties.*—Stomachic.

#### CUMINUM CYMINUM.—THE CUMIN.

LINN. Class *Pentandria*; Order *Digynia*.

*Officinal.*—Cumini semina, Cumin seed.

*Analysis.*—A large quantity of a yellow volatile oil, upon which the sensible and medicinal properties depend.

*Medicinal properties.*—Stomachic, and, applied externally, stimulant.

#### CORIANDRUM SATIVUM.—THE CORIANDER.

LINN. Class *Pentandria*; Order *Digynia*.

*Officinal.*—Coriandri semina, Coriander seed.

*Analysis.*—Volatile oil, and probably a foetid volatile principle.

*Medicinal properties.*—Stomachic.

#### CONIUM MACULATUM.—THE COMMON HEMLOCK.

LINN. Class *Pentandria*; Order *Digynia*.

*Officinal.*—Conii folia, Hemlock leaves.

*Analysis.*‡.—*Coneine* or *cicutine*; odoriferous volatile oil; albumen; resin; colouring matter; salts.

*Medicinal properties.*—Narcotic, antispasmodic, sedative. Applied externally to cankers.

Hemlock is a narcotico-acrid poison, which when taken in a large dose causes delirium, vertigo, convulsions, coma, and sometimes paralysis.

*Morbid appearances.*—The vessels of the head congested, and the blood in a fluid state.

\* Neumann.

† Neumann.

‡ Brandes.

## DAUCUS CAROTA.—THE CARROT.

LINN. Class *Pentandria*; Order *Digynia*.

*Officinal*.—Dauci (*hortensis*) radix, The root of the garden carrot; Dauci (*agrestis*) semina, The seeds of the wild carrot.

*Analysis\** of the root—mucilage; sugar. Of the seeds—volatile oil; liquid sugar; malate of lime; yellow colouring matter; sediment.

*Medicinal properties*.—Root emollient, antiseptic; seeds—carminative, diuretic.

## BUBON GALBANUM.

LINN. Class *Pentandria*; Order *Digynia*.

*Officinal*.—Galbani gummi-resina, The gum-resin of the galbanum.

*Analysis†*.—Resin; gum; volatile oil; malate of lime.

*Medicinal properties*.—Antispasmodic, emmenagogue.

## HERACLEUM GUMMIFERUM.—THE AMMONIACUM TREE.

LINN. Class *Pentandria*; Order *Digynia*.

*Officinal*.—Ammoniacum, Ammoniac.

*Analysis‡*.—Gum; resin; glutinous matter; water.

*Medicinal properties*.—Stimulant, expectorant.

## PASTINACA OPOPANACIS.

LINN. Class *Pentandria*; Order *Digynia*.

*Officinal*.—Opopanax gummi-resina, Opopanax.

*Analysis§*.—Resin; gum; starch; malic acid; extractive; woody fibre; wax; volatile oil; caoutchouc.

*Medicinal properties*.—Emmenagogue.

## FERULA ASSAFŒTIDA VEL PERSICA.

LINN. Class *Pentandria*; Order *Digynia*.

*Officinal*.—Assafœtidæ gummi-resina, Assafœtida.

*Analysis*.—Volatile oil; phosphorus; sulphur; resin; a resinoid substance; gum; acetate, malate, sulphate and phosphate of potassa and lime; tragacanthine; extractive, with malate of potassa; malate of lime with resin; carbonate of lime; oxide of iron; alumina; water.

*Medicinal properties*.—Antispasmodic; expectorant; emmenagogue; nervous stimulant; anthelmintic.

From the Ferula Persica, Sagapenum has been by some authors supposed to be obtained.

\* Bouillon Le Grange.

† Pelletier.

‡ Braconnot.

§ Pelletier.

*Officinal*.—*Sagapenum*, The gum-resin *sagapenum*.

*Analysis\**.—Resin; gum; malate of lime; bassorine; volatile oil; and a peculiar substance in which its medicinal properties reside.

*Medicinal properties*.—Antispasmodic, expectorant, emmenagogue.

## RANUNCULACEÆ.

### HELLEBORUS NIGER.—THE BLACK HELLEBORE.

LINN. Class *Polyandria*; Order *Polygynia*.

*Officinal*.—*Hellebori nigri radix*, Root of black hellebore.

*Analysis†*.—Volatile oil; fatty oil; resinous matter; wax; an acid; bitter principle; mucus; alum; gallate of potassa; gallate of lime; salts having ammonia for a base.

*Medicinal properties*.—Drastic cathartic, and emmenagogue.

### HELLEBORUS FŒTIDUS.—BEARSFOOT.

LNNI. Class *Polyandria*; Order *Polygynia*.

*Officinal*.—*Hellebori fœtidi folia*, Leaves of the stinking hellebores.

*Analysis*.—The fœtid hellebore, according to Vauquelin, contains the same substances as black hellebore; it is, however, less acrid.

*Medicinal properties*.—Drastic cathartic, and anthelmintic.

The black and the fœtid hellebore are narcotico-acrid poisons causing pain in the stomach, vomiting, giddiness, delirium, and convulsions.

*Morbid appearances*.—The stomach of a black colour; the lungs gorged with blood; marks of inflammation in the alimentary canal.

### ACONITUM NAPELLUS.—THE MONKSHOOD.

LINN. Class *Polyandria*; Order *Trigynia*.

*Officinal*.—*Aconiti folia*, Leaves of the monkshood.

*Analysis‡*.—Green sediment; an odoriferous gaseous substance; hydro-chlorate of ammonia; carbonate and phosphate of lime; a peculiar alkali, called *aconitine*, has been discovered by Brandes.

*Medicinal properties*.—Narcotic.

Monkshood is a narcotico-acrid poison.

*Symptoms*.—Numbness or tingling of the lips, with a sensation of swelling of the face; subsultus tendinum; locked jaw; delirium, convulsions, vomiting, purging, swelling of the abdomen, and burning of the throat.

*Morbid appearances*.—Alimentary canal red; brain and lungs gorged with blood.

\* Pelletier.

† Feneuille and Capron.

‡ Steenacher.

## DELPHINIUM STAPHISAGRIA.—STAVESACRE.

LINN. Class *Polyandria*; Order *Trigynia*.

*Officinal*.—*Staphisagriæ semina*, Stavesacre seed.

*Analysis*\*.—A brown bitter principle; volatile oil; fatty oil; albumen; animal matter; a sweet mucus; a yellow bitter principle; an alkali termed *delphine*; salts.

*Medicinal properties*.—Drastic cathartic.

## MENISPERMEÆ.

## COCCULUS PALMATUS.—THE CALUMBA.

LINN. Class *Diæcia*; Order *Hexandria*.

*Officinal*.—Calumba, Calumba root.

*Analysis*†.—Starch; azotised matter; bitter yellow matter, which is not precipitated by metallic salts; volatile oil; woody fibre; salts of lime and potassa; oxide of iron; silica.

*Medicinal properties*.—Tonic.

## PAPAVERACEÆ.

## PAPAVER SOMNIFERUM.—THE WHITE POPPY.

LINN. Class *Polyandria*; Order *Monogynia*.

*Officinal*.—*Papaveris capsulæ*, Opium, Poppy-heads and opium.

*Analysis*‡.—*Narcotine*; *morphine*; *meconic acid*; *meconine*; *narceine*; *paramorphine*; fatty oil; a peculiar resin; a brown acid and extractive matter; bassorine; gum lignine.

*Medicinal properties*.—Narcotic.

Opium is a narcotic poison.

*Symptoms*.—Heat of the skin and nausea, followed by giddiness, stupor, and insensibility. The countenance is pale, the tongue brown and dry, and the pulse, which in the first instance is excited, becomes feeble, and at length imperceptible. Sometimes convulsions succeed the use of opium, but this very seldom occurs. Copious perspiration, suppression of urine, and constipation, frequently accompany these symptoms.

*Morbid appearances*.—Vessels of the brain congested; watery effusion into the ventricles, and on the surface of the brain; lungs full of blood; stomach red; skin livid; blood unusually fluid. The body putrifies soon after death, and petechiæ are sometimes observed.

## PAPAVER RHŒAS.—THE RED POPPY.

LINN. Class *Polyandria*; Order *Monogynia*.

*Officinal*.—*Rhœados petala*, Petals of the red poppy.

\* Lassaigne and Feneuille.

† Planche.

‡ Pelletier.

*Analysis\**.—A thick yellow matter; red colouring matter; gum; vegetable fibre.

*Medicinal properties*.—A colouring matter.

### CRUCIFERÆ.

SINAPIS NIGRA.—BLACK OR COMMON MUSTARD.

SINAPIS ALBA.—WHITE MUSTARD.

LINN. Class *Tetradynamia*; Order *Siliquosa*.

*Officinal*.—*Sinapis semina*, Mustard seeds; *sinapis albæ semina*, White mustard seed.

*Analysist*.—Fixed oil; volatile oil; vegetable albumen; mucilage; sulphur; azote; sulphate of lime; phosphate of lime; silica. A peculiar acid, termed *sulpho-sinapic*, has been obtained from the fixed oil contained in white mustard seed.

*Medicinal properties*.—Stimulant, emetic, epispastic.

COCHLEARIA ARMORACIA.—THE HORSE RADISH.

LINN. Class *Tetradynamia*; Order *Siliquosa*.

*Officinal*.—*Armoraciæ radix*, Horse Radish Root.

*Analysist*.—Volatile oil; albumen; sulphur; azote; phosphates, &c.

*Medicinal properties*.—Stimulant.

CARDAMINE PRATENSIS.—THE CUCKOO PLANT.

LINN. Class *Tetradynamia*; Order *Siliquosa*.

*Officinal*.—*Cardamines flores*, Cuckoo flowers.

*Analysist*.—Volatile oil; fixed oil; sugar; azotized matter.

*Medicinal properties*.—Diuretic, antispasmodic.

### GUTTIFERÆ.

STALAGMITIS CAMBOGIOIDES.—GAMBOGE TREE.

LINN. Class *Polygamia*; Order *Monacia*.

GARCINIA GAMBOGIA.—THE GAMBOGE TREE.

LINN. Class *Dodecandria*; Order *Monogynia*.

*Officinal*.—Cambogia, Gamboge.

*Analysist*.—Red resin; acid gum. By distillation it yields acetic acid; light oil; brown water; a heavy brown fatty oil; charcoal.

*Medicinal properties*.—Drastic, hydragogue, cathartic; anthelmintic; diuretic.

\* Riffard.

† Thibierge.

‡ Merat and de Lens.

|| Branconnot.

**DRYOBALANOPS CAMPHORA.—THE CAMPHOR TREE OF SUMATRA.**

LINN. Class *Polyandria*; Order *Monogynia*.

*Officinal*.—Camphora, Camphor.

The analysis and medical properties of this drug are the same as those of camphor obtained from the laurus camphora.

**AURANTIACEÆ.**

**CITRUS AURANTIUM.—THE SEVILLE ORANGE TREE.**

LINN. Class *Polyadelphia*; Order *Icosandria*.

*Officinal*.—Aurantii baccæ et cortex, The fruit and outer rind of the Seville orange.

*Analysis\**.—The rind contains a volatile aromatic oil. The pulp is composed of citric acid; malic acid; citrate of lime; mucilage; albumen; sugar; water.

*Medicinal properties*.—The juice of Seville orange is refrigerant and antiseptic. The rind is tonic and stomachic.

**CITRUS MEDICA.—THE LEMON TREE.**

LINN. Class *Polyadelphia*; Order *Icosandria*.

*Officinal*.—Limones, Lemons. Limonum cortex et oleum, The rind and essential oil of lemons.

*Analysis†*.—The rind contains an essential oil. The juice consists of *citric acid*; malic acid; mucilage.

*Medicinal properties*.—The juice, refrigerant and antiseptic; the rind, tonic and stomachic.

**ACIDUM CITRICUM.**

Citric acid is obtained from lemon juice.

*Medicinal properties*.—Refrigerant and antiseptic.

**MELIACEÆ.**

**CANELLA ALBA.—The CANELLA TREE.**

LINN. Class *Dodecandria*; Order *Monogynia*.

*Officinal*.—Canellæ cortex, Canella bark.

*Analysis‡*.—Resin; volatile oil; extractive matter; colouring matter; gum; starch; albumen; acetate of potassa; acetate of lime; hydrochlorate of magnesia; oxalate of lime.

*Medicinal properties*.—Tonic and stimulant.

\* Fée.

† Fée.

‡ Henri.

## VINIFERÆ.

## VITIS VINIFERA.—THE VINE.

LINN. Class *Pentandria*; Order *Monogynia*.

*Officinal*.—Uvæ passæ, Raisins.

*Analysis*.—Malic acid; supertartrate of potassa; mucilage; sugar.

*Medicinal properties*.—Demulcent.

Wine and alcohol are obtained from grape juice which has undergone fermentation. They are stimulants.

By the action of the mineral acids on alcohol, the æther nitricus (nitric ether) and æther sulphuricus (sulphuric ether) are obtained. They are stimulants, diuretics, and antispasmodics.

Supertartrate of potassa is also a product of the grape. In small doses it is diuretic, in large doses cathartic.

By exciting the acetous fermentation in wine, acetum (vinegar) is produced. Distilled vinegar is called *acetic acid*, but this acid is most commonly distilled from wood. Vinegar and acetic acid are refrigerant and diuretic.

—  
OXALIDEÆ.

## OXALIS ACETOSELLA.—WOOD SORREL.

LINN. Class *Decandria*; Order *Pentagynia*.

*Officinal*.—Acetosella, Wood sorrel.

*Analysis*.—Superoxalate of potassa in very large quantities; vegetable substances.

*Medicinal properties*.—Diuretic; refrigerant.

Oxalic acid, which may be obtained from this plant, is an acrid poison.

*Symptoms*.—Violent pain in the stomach and throat, vomiting, inflammation of the tongue and mouth, and sometimes bloody diarrhoea; the pulse is feeble and the skin cold.

*Morbid appearances*.—The mucous coat of the alimentary canal eroded, and red or purple; the outer coat of the stomach and intestines inflamed. In some instances the mucous coat of the stomach is destroyed; in other cases it has been found in a healthy state.

The *antidote* is carbonate of lime, which forms, with the oxalic acid, an insoluble inert salt.

—  
MALVACEÆ.

## MALVA SYLVESTRIS.—THE COMMON MALLOW.

LINN. Class *Monadelphia*; Order *Polyandria*.

*Officinal*.—Malva, Common Mallow.

*Analysis*.—This plant is almost entirely composed of mucilage, upon which its medicinal properties depend.

*Medicinal properties*.—Demulcent; expectorant.

## ALTHÆA OFFICINALIS\*.—THE MARSH MALLOW.

LINN. Class *Monadelphia*; Order *Polyandria*.

*Officinal*.—Althææ folia et radix, Leaves and root of the marsh mallow.

*Analysis†*.—Mucus, with malates and other salts, having lime and magnesia for their bases; extractive, with salts of silica; inulin; sediment; woody fibre; gluten; resin.

*Medicinal properties*.—Expectorant; demulcent.

—  
POLYGALÆ.

## POLYGALA SENEKA.—THE SENEKA, OR RATTLESNAKE PLANT.

LINN. Class *Diadelphia*; Order *Octandria*.

*Officinal*.—Senegæ radix, Senneka root.

*Analysis‡*.—Fatty oil; volatile oil; gallic acid; wax; an acrid matter; yellow colouring matter; azotised matter; salts. A peculiar principle termed *polygaline*, and an acid called *polygalinic acid*, have been discovered by Peschier.

*Medicinal properties*.—Stimulant; expectorant.

## KRAMERIA TRIANDRA.—THE RHATANY.

LINN. Class *Tetandria*; Order *Monogynia*.

*Officinal*.—Krameriae radix, Rhatany root.

*Analysis§*.—Tannin; gum; sediment; woody fibre; gallic acid; water. A peculiar acid called *krameric acid* is said to have been discovered by Peschier.

*Medicinal properties*.—Astringent; tonic.

—  
SIMARUBEÆ.

## QUASSIA SIMARUBA.—THE SIMAROURA TREE.

LINN. Class *Decandria*; Order *Monogynia*.

*Officinal*.—Simarubæ cortex, Bark of the mountain damson.

*Analysis||*.—Resinous matter; volatile oil, having the smell of benzoin; acetate of potassa; ammoniacal salts; malic acid; gallic acid; *quassine*; malate and oxalate of lime; mineral salts; oxide of iron; silica; alumina; woody fibre.

*Medicinal properties*.—Tonic.

## QUASSIA EXCELSA.—THE QUASSIA TREE.

LINN. Class *Decandria*; Order *Monogynia*.

*Officinal*.—Quassiæ lignum, Quassia wood.

\* See l'Annuaire de Stoltze, 1825–6. † Idem. ‡ Folchi. § Vogel. || Morin.

*Analysis\**.—The medicinal properties depend upon the bitter extractive called *quassine*.

*Medicinal properties*.—Tonic.

### RUTACEÆ.

#### RUTA GRAVEOLENS.—RUE.

LINN. Class *Decandria*; Order *Monogynia*.

*Officinal*.—Rutæ folia, Leaves of rue.

*Analysis*.—Volatile oil; vegetable substances.

*Medicinal properties*.—Antispasmodic; stimulant; emmenagogue.

#### GUAIACUM OFFICINALE.—THE GUAIACUM.

LINN. Class *Decandria*; Order *Monogynia*.

*Officinal*.—Guaiaci resina et lignum, Guaiacum resin and wood.

*Analysis of the resin†*.—Acidulated water; thick brown oil; empyreumatic oil; charcoal; carbonic acid gas; carburetted hydrogen.

*Medicinal properties*.—Diaphoretic; diuretic; purgative; stimulant.

#### CUSPARIA FEBRIFUGA.—THE ANGUSTURA.

#### BONPLANDIA TRIFOLIATA.

LINN. Class *Pentandria*; Order *Monogynia*.

*Officinal*.—Cuspariæ cortex, Angustura or cusparia bark.

*Analysis‡*.—Resin; a peculiar extractive; carbonate of ammonia; volatile oil.

*Medicinal properties*.—Tonic; stimulant.

### LINACEÆ.

#### LINUM USITATISSIMUM.—THE COMMON FLAX.

LINN. Class *Pentandria*; Order *Pentagynia*.

*Officinal*.—Lini usitatissimi semina, Linseed.

*Analysis§*.—Fatty oil; mucilage and salts; extractive and salts; starch and salts; wax; soft resin; colouring matter with salts; resin; albumen; gluten.

*Medicinal properties*.—Demulcent, expectorant.

#### LINUM CATHARTICUM.—PURGING FLAX.

LINN. Class *Pentandria*; Order *Pentagynia*.

*Officinal*.—Linum Catharticum, Purging flax.

\* Thomson.

† Brande.

‡ Thomson.

§ Meyer.

*Analysis\**.—Bitter green resin ; extractive matter.  
*Medicinal properties*.—Cathartic.

### MYRTINEÆ.

MYRTUS PIMENTA.—THE PIMENTA TREE OR PUMAKE.

LINN. Class *Icosandria* ; Order *Monogynia*.

*Officinal*.—Pimentæ baccæ, Jamaica pepper.

*Analysis†*.—Volatile oil ; resin ; extractive ; tannin ; gallic acid.  
*Medicinal properties*.—Stimulant, tonic.

EUGENIA CARYOPHYLLATA.—THE CLOVE TREE.

LINN. Class *Icosandria* ; Order *Monogynia*.

*Officinal*.—Caryophylli et oleum, Cloves and their essential oil.

*Analysis‡*.—Volatile oil ; extractive and astringent matter ; gum ; resin ; vegetable fibre ; water.

A fixed oil, and a peculiar sub-resin called *Caryophylline*, have been discovered by Lodibert.

*Medicinal properties*.—Stimulant.

MELALEUCA CAJUPUTI.—THE CAJEPUT.

LINN. Class *Polyadelphia* ; Order *Icosandria*.

*Officinal*.—Cajeputi oleum, Cajeput oil.

*Analysis*.—Volatile oil ; vegetable substances.

*Medicinal properties*.—Antispasmodic, stimulant.

PUNICA GRANATUM.—THE POMEGRANATE.

LINN. Class *Icosandria* ; Order *Monogynia*.

*Officinal*.—Granati cortex, Pomegranate bark.

*Analysis§*.—Tannin ; matter analogous to wax ; saccharine matter, part of which is soluble in alcohol and crystallizable, and part soluble in water, and analogous to mannite ; gallic acid.

*Medicinal properties*.—Astringent, anthelmintic.

### ROSACEÆ.

ROSA CANINA.—THE DOG ROSE.

LINN. Class *Icosandria* ; Order *Polygynia*.

*Officinal*.—Rosæ caninæ pulpa, Pulp of the fruit of the dog rose.

*Analysis||*.—Saccharine matter ; citric acid.

*Medicinal properties*.—Used to make a confection which has no medicinal property.

\* Thomson.      † Idem.      [‡ Tromsdorff.      § Mitouart.      || Duncan.

## ROSA CENTIFOLIA.—THE HUNDRED-LEAVED ROSE.

LINN. Class *Icosandria*; Order *Polygynia*.

*Officinal*.—*Rosæ centifoliæ petala*, The petals of the hundred-leaved rose.

*Analysis*.—A fragrant volatile oil; colouring matter; gallic acid, &c.

*Medicinal properties*.—Slightly laxative.

## ROSA GALlica.—THE RED ROSE.

LINN. Class *Icosandria*; Order *Polygynia*.

*Officinal*.—*Rosæ gallicæ petala*, Petals of the red rose.

*Analysis\**.—Tannin; gallic acid; colouring matter; volatile oil; fatty matter; albumen; soluble salts of potassa; insoluble salts of lime; silica; oxide.

*Medicinal properties*.—Astringent, tonic.

## TORMENTILLA OFFICINALIS.—THE COMMON TORMENTIL.

LINN. Class *Icosandria*; Order *Polygynia*.

*Officinal*.—*Tomentillæ radix*; Tormentil root.

*Analysis†*.—Myricine; cerine; resin; tannin; red colouring matter; gummy extract; gum; extractive; volatile oil; woody fibre.

*Medicinal properties*.—Astringent.

## PRUNUS DOMESTICA.—THE FRENCH PLUM.

LINN. Class *Icosandria*; Order *Monogynia*.

*Officinal*.—Pruna, Prunes.

*Analysis*.—Mucus; saccharine matter; malic acid, &c.

*Medicinal properties*.—Laxative.

## AMYGDALUS COMMUNIS.—THE ALMOND TREE.

LINN. Class *Icosandria*; Order *Monogynia*.

*Officinal*.—*Amygdalæ amaræ et dulces*, Bitter and sweet almonds.

*Analysis*.—Of sweet almonds‡: water; an astringent principle; fixed oil; albumen; liquid sugar; gum; fibrous matter; acetic acid.

Bitter almonds contain volatile oil and prussic acid in considerable quantity.

*Medicinal properties*.—Sweet almond emulsion is expectorant and demulcent; bitter almonds are narcotic and sedative.

Hydrocyanic or prussic acid is a most powerful narcotic poison.

*Symptoms*.—A small dose excites nausea and salivation, with pain in the head, with hurried pulse, succeeded by a feeling of anxiety; ulceration of the mouth is frequently caused by a long continued

\* Cartier.

† Meisner.

‡ Boullay.

use of this medicine. When a large dose has been taken, the person staggers, groans, is convulsed, and dies ; the eyes are prominent and the breathing convulsive ; tetanus is sometimes among the symptoms.

*Morbid appearances.*—The eyes bright and staring, the blood fluid, and exhaling an odour of hydrocyanic acid ; the brain gorged with blood ; the villous coat of the stomach red, and the liver gorged ; the arteries and left side of the heart empty ; the veins and right side full.

### PYRUS CYDONIA.—THE QUINCE TREE.

LINN. Class *Icosandria* ; Order *Pentagynia*.

*Officinal.*—*Cydoniæ semina*, Quince seeds.

*Analysis.*—A very large quantity of mucus ; malic acid ; sediment.

*Medicinal properties.*—Demulcent.

### LEGUMINOSÆ.

#### ASTRAGALUS VERUS.—THE ASTRAGALUS.

LINN. Class *Diadelphia* ; Order *Decandria*.

*Officinal.*—*Tragacantha*, Gum tragacanth.

*Analysis\**.—A substance analogous to gum arabic ; tragacanthine.

*Medicinal properties.*—Demulcent, expectorant.

#### GLYCYRRHIZA GLABRA.—THE LIQUORICE.

LINN. Class *Diadelphia* ; Order *Decandria*.

*Officinal.*—*Glycyrrhizæ radix*, Liquorice root.

*Analysis†.*—*Glycyrrhizine* ; agédoite ; starch ; albumen ; a fatty resinous acrid oil ; phosphate of lime ; malate of lime and magnesia ; woody fibre.

*Medicinal properties.*—Expectorant.

#### DOLICHOS PRURIENS.—COWHAGE.

LINN. Class *Diadelphia* ; Order *Decandria*.

*Officinal.*—Dolichi pubes, The hairs of the cowhage pod.

*Analysis†.*—Tannin ; resin.

*Medicinal properties.*—Anthelmintic.

#### SPARTIUM SCOPARIUM.—COMMON BROOM.

LINN. Class *Diadelphia* ; Order *Decandria*.

*Officinal.*—*Spartii cacumina et semina*, The tops and seeds of broom.

\* Bucholz.

† Robiquet.

‡ Martius. See Merat and De Lens.

*Analysis.*—There is no analysis of the spartium scoparium, but the genista tinctoria, another species of broom, which possesses similar medicinal properties, and probably contains the same substances, has been analysed\*, and yields fatty matter; colouring matter; brown matter; chlorophylle; albumen; mucilage; saccharine matter; wax; a peculiar astringent principle; vegetable osmazome; concrete volatile oil; fibrous matter.

*Medicinal properties.*—Diuretic, laxative. \*

#### PTEROCARPUS SANTALINUS.—THE RED SAUNDERS TREE.

LINN. Class *Diadelphia*; Order *Decandria*.

*Officinal.*—Pteroçarpi lignum, Red Saunders wood.

*Analysis†.*—A red colouring matter called *santaline*; resinous juice, &c.

No medicinal properties, but is used as a colouring matter.

#### PTEROCARPUS ERINACEA.—THE KINO TREE.

LINN. Class *Diadelphia*; Order *Decandria*.

*Officinal.*—Kino, kino.

*Analysis‡.*—Tannin in very large quantity; lime.

*Medicinal properties.*—Astringent.

#### COPAIFERA OFFICINALIS.—COPAIBA TREE.

LINN. Class *Decandria*; Order *Monogynia*.

*Officinal.*—Copaiba, Copaiba balsam.

*Analysis§.*—Volatile oil; brown glutinous resin; yellow resin; yellow resin with extractive.

*Medicinal properties.*—Stimulant, diuretic, cathartic.

#### MYROXYLON PERUIFERUM.—THE PERUVIAN BALSAM TREE.

LINN. Class *Decandria*; Order *Monogynia*.

*Officinal.*—Balsamum Peruvianum, Peruvian balsam.

*Analysis||.*—Brown resin nearly insoluble; brown resin soluble; a peculiar volatile oil; benzoic acid; extractive matter.

*Medicinal properties.*—Stimulant, expectorant.

#### MYROXYLON TOLUIFERUM.—THE TOLU BALSAM TREE.

LINN. Class *Decandria*; Order *Monogynia*.

*Officinal.*—Balsamum tolutanum, balsam of Tolu.

*Analysis¶.*—Resin; benzoic acid; volatile oil.

*Medicinal properties.*—Stimulant, expectorant.

\* See Cadet de Gassicourt. † Pelletier. ‡ Duncan. See Merat and De Lens.  
§ Stoltze. || Idem. ¶ Tromsdorff.

## CASSIA SENNA.—THE SENNA TREE.

*Officinal.*—*Sennæ folia*, Senna leaves.

*Analysis\**.—*Cathartine*; chlorophylle; fatty oil; volatile oil; albumen; yellow colouring principle; mucus; malate and tartrate of lime; acetate of potassa, and mineral salts.

*Medicinal properties.*—Cathartic.

## CASSIA FISTULA.—THE PURGING CASSIA.

LINN. Class *Decandria*; Order *Monogynia*.

*Officinal.*—*Cassiae pulpa*, Cassia pulp.

*Analysis†.*—Sugar; gum; a kind of tannin; gluten; colouring matter; water.

*Medicinal properties.*—Cathartic.

## TAMARINDUS INDICA.—THE TAMARIND TREE.

LINN. Class *Monadelphia*; Order *Triandria*.

*Officinal.*—*Tamarindi pulpa*, The pulp of tamarinds.

*Analysis‡.*—Citric acid; tartaric acid; malic acid; supertartrate of potassa; sugar; gum; vegetable gelatine; spongy matter; water.

*Medicinal properties.*—Laxative.

## HÆMATOXYLON CAMPECHIANUM.—LOGWOOD.

LINN. Class *Decandria*; Order *Monogynia*.

*Officinal.*—*Hæmatoxyli lignum*, Logwood.

*Analysis§.*—Volatile oil; woody fibre; oxide of manganese; tannin; oxide of iron; albumen; phosphate of lime; brown colouring matter; animalized matter; a peculiar resinous matter called *Hæmatine*; acetic acid; phosphate and acetate of lime; chloruret of potassium; sulphate of lime; acetate of potass.

*Medicinal properties.*—Astringent.

## ACACIA VERA.—THE ACACIA.

LINN. Class *Polygamia*; Order *Monœcia*.

*Officinal.*—*Acaciæ gummi*, Acacia gum, or gum Arabic.

*Analysis||.*—Pure gum; acetate, malate, and phosphate of lime; oxide of iron.

*Medicinal properties.*—Nutrient; demulcent.

## ACACIA CATECHU.—THE CATECHU.

LINN. Class *Polygamia*; Order *Monœcia*.

*Officinal.*—*Catechu extractum*, Extract of catechu.

*Analysis¶.*—Tannin; extractive matter; mucilage; insoluble sediment.

*Medicinal properties.*—Astringent.

\* Lassaigne and Feneuille.

§ Chevreul.

† Henry.

|| Vauquelin.

‡ Vauquelin.

¶ Davy.

## TEREBINTHACEÆ.

## BALSAMODENDRON MYRRHA.—THE MYRRH TREE.

LINN. Class *Octandria*; Order *Monogynia*.*Officinal*.—Myrrha, Myrrh, a gum-resin.*Analysis\**.—Ethereal oil; soft resin; subresin; tragacanthine; gum, with traces of benzoic and malic acids; phosphate and sulphate of potassa; salts of lime; animal matter.*Medicinal properties*.—Stimulant; expectorant; tonic; emmenagogue.

## BOSWELLIA SERRATA.—THE FRANKINCENSE TREE.

LINN. Class *Dodecandria*; Order *Monogynia*.*Officinal*.—Olibanum, a gum-resin, frankincense.*Analysis†*.—Volatile oil; resin; gum; glutinous matter.*Medicinal properties*.—Stimulant.

## PISTACIA TEREBINTHUS.—THE TREE WHICH YIELDS CHIAN TURPENTINE.

LINN. Class *Diæcia*; Order *Pentandria*.*Officinal*.—Terebinthina Chia, Chian turpentine.*Analysis*.—Volatile oil; resin, &c.*Medicinal properties*.—Stimulant; diuretic; anthelmintic; cathartic.

## PISTACIA LENTISCUS.—THE MASTICH TREE.

LINN. Class *Diæcia*; Order *Pentandria*.*Officinal*.—Mastiche, Mastick.*Analysis‡*.—Resin; a peculiar substance resembling caoutchouc.*Medicinal properties*.—Slightly stimulant.

## RHUS TOXICODENDRON.—THE POISON OAK OR SUMACH.

LINN. Class *Pentandria*; Order *Trigynia*.*Officinal*.—Toxicodendri folia, Leaves of the sumach or poison oak.*Analysis§*.—Gum; resin; gallic acid; tannin; green fæcula; hydrocarbon, very combustible.*Medicinal properties*.—Epispastic; nervous stimulant.

The poison oak is an acrid poison, which produces nearly the same effects as euphorbium, &amp;c.

\* Brandes.

† Braconnot.

‡ Van Mons.

§ Van Mons.

## AMYRIS ELEMIFERA.—THE ELEMI TREE.

LINN. Class *Octandria*; Order *Monogynia*.*Officinal*.—Elemi, Elemi.*Analysis\**.—Resin; a resinoid substance; volatile oil; bitter extractive; an acid.*Medicinal properties*.—Stimulant.—  
RHAMNEÆ.

## RHAMNUS CATHARTICUS.—THE PURGING BUCKTHORN.

LINN. Class *Pentandria*; Order *Monogynia*.*Officinal*.—Rhamni baccæ, Buckthorn berries.*Analysis*.†—Acetic acid; malic acid; green colouring matter; brown colouring matter.*Medicinal properties*.—Cathartic.—  
MEDICINAL SUBSTANCES

## DERIVED FROM THE MINERAL KINGDOM.

—  
ALUMEN.—ALUM.*Officinal*.—ALUMEN; SUPERSULPHAS ALUMINÆ ET POTASSÆ.—Alum.*ALUMEN EXSICCATUM*.—Dried Alum.*LIQUOR ALUMINIS COMPOSITUS*.—Compound Solution of Alum.*Medicinal properties*.—Astringent.

The compound solution of alum, which is a combination of alum and zinc, is only used externally.

—  
AMMONIA.—AMMONIA.*Officinal*.—AMMONIÆ MURIAS.—Muriate of Ammonia, or, Sal Ammoniac.*Medicinal properties*.—Stimulant, refrigerant, cathartic, diaphoretic.

\* Bonastre.

† Hubert.

**LIQUOR AMMONIÆ.**—Solution of Ammonia.

**AMMONIÆ SUBCARBONAS.**—Subcarbonate of Ammonia.

**LIQUOR AMMONIÆ SUBCARBONATIS.**—Solution of Subcarbonate of Ammonia.

**AMMONIÆ CARBONAS.**—Carbonate of Ammonia.

*Medicinal properties.*—These preparations of ammonia are nervous stimulants, diaphoretics, antaeids, antispasmodics.

**LIQUOR AMMONIÆ ACETATIS.**—Solution of Acetate of Ammonia.

*Medicinal properties.*—Acetate of ammonia is diaphoretic, diuretic, and refrigerant.

*Note.*—As ammonia and potassa resemble minerals in most of their properties, I have placed them among substances belonging to the mineral kingdom, notwithstanding the former is an animal as well as a mineral production, and the salts of the latter are obtained from vegetables.

### ANTIMONIUM.—ANTIMONY.

*Officinal.*—**ANTIMONII SULPHURETUM PRÆCIPITATUM.**—Precipitated Sulphuret of Antimony.

*Medicinal properties.*—Precipitated sulphuret of antimony is diaphoretic.

**ANTIMONIUM TARTARIZATUM.**—Tartarized Antimony.

**VINUM ANTIMONII TARTARIZATI.**—Wine of Tartarized Antimony.

*Medicinal properties.*—Diaphoretic, emetic, cathartic, or sedative, according to the dose.

**PULVIS ANTIMONIALIS.**—Antimonial Powder.

*Medicinal properties.*—Diaphoretic.

Tartarized antimony is a poison which excites bloody vomiting, diarrhoea, burning pain at the pit of the stomach, colic, and a sense of tightness in the throat.

*Morbid appearances.*—Redness of the stomach and intestines.

### ARGENTUM.—SILVER.

*Officinal.*—**ARGENTI NITRAS.**—Nitrate of Silver.

*Medicinal properties.*—Stimulant, tonic, epispastic, caustic.

Nitrate of silver is a corrosive poison, which excites violent irritation in the stomach and intestinal canal.

*Morbid appearances.*—The villous coat of the stomach softened, and corroded with greyish spots.

### ARSENICUM.—ARSENIC.

*Officinal.*—**ARSENICUM ALBUM SUBLIMATUM.**—Sublimed White Arsenic.

**LIQUOR ARSENICALIS.**—Arsenical solution.

*Medicinal properties.*—White arsenic is used for the purpose of making liquor arsenicalis, which is a tonic. Arsenic is a corrosive poison.

*Symptoms.*—Burning in the throat, with a sense of constriction in the œsophagus; nausea; vertigo; pain in the stomach; vomiting, which is frequently bloody; tongue parched; pulse quick; violent thirst; respiration difficult; tremors; cramps; flushed countenance; the body spotted and swollen; and, in some cases, delirium and convulsions, with or without intestinal disturbance. Should the patient recover, a vesicular eruption usually appears.

When a large portion of arsenic is applied externally, a local inflammation is induced, together with the constitutional symptoms.

*Morbid appearances.*—Redness and ulceration of the villous and other coats of the alimentary canal; effusion of coagulable lymph on the inner coat of the stomach, and extravasation of blood among its contents; congestion of the lungs; redness of the pleura, and of the lining of the trachea: the blood is fluid.

**BISMUTHUM.—BISMUTH.**

*Officinal.*—**BISMUTHI SUBNITRAS.**—Subnitrate of Bismuth.

*Medicinal properties.*—Antispasmodic.

It is an active poison.

*Symptoms.*—Burning in the throat; vomiting; purging; cramps; intermittent pulse; cold extremities; dryness of the membrane of the nose; difficult deglutition, and suppression of urine; hiccup; laborious respiration; and swelling of the face and belly.

*Morbid appearances.*—The pharynx and alimentary canal red, livid, or gangrenous.

**CALX.—LIME.**

*Officinal.*—**LIQUOR CALCIS.**—Lime Water.

*Medicinal properties.*—Antacid.

**CALCIS MURIAS.**—Muriate of Lime.

**LIQUOR CALCIS MURIATIS.**—Solution of Muriate of Lime.

*Medicinal properties.*—Tonic.

**CRETA PRÆPARATA.**—Prepared Chalk.

*Medicinal properties.*—Antacid and astringent.

**CUPRUM.—COPPER.**

*Officinal.*—**CUPRUM AMMONIATUM.**—Ammoniated Copper.

*Medicinal properties.*—Tonic, antispasmodic.

**LIQUOR CUPRI AMMONIATI.**—Solution of Ammoniated Copper.  
*Medicinal properties.*—Epispastic, tonic.

**CUPRI SULPHAS.**—Sulphate of Copper.

*Medicinal properties.*—Tonic, astringent, emetic.

The salts of copper are poisonous.

*Symptoms.*—Vomiting; purging; colic; insensibility; convulsions; and sometimes tetanus or palsy.

*Morbid appearances.*—Redness, ulceration, or gangrene of the villous coat of the stomach and intestines.

### FERRUM.—IRON.

*Officinal.*—**FERRI SULPHAS.**—Sulphate of Iron.

**FERRI SUBCARBONAS.**—Subcarbonate of Iron.

**TINCTURA FERRI MURIATIS.**—Tincture of Muriate of Iron.

**FERRUM AMMONIATUM.**—Ammoniated Iron.

**TINCTURA FERRI AMMONIATI.**—Tincture of Ammoniated Iron.

**LIQUOR FERRI ALKALINI.**—Solution of Alkaline Iron.

**FERRUM TARTARIZATUM.**—Tartarized Iron.

**VINUM FERRI.**—Wine of Iron.

*Medicinal properties.*—All the salts and preparations of iron are tonic, emmenagogue, and anthelmintic.

### HYDRARGYRUM.—MERCURY.

*Officinal.*—**HYDRARGYRUM CUM CRETA.**—Mercury with Chalk.

*Medicinal properties.*—Cathartic, secretory stimulant.

**HYDRARGYRI OXYDUM RUBRUM.**—Red Oxide of Mercury.

*Medicinal properties.*—Cathartic and secretory stimulant. Its operation being very violent, it is seldom prescribed.

**HYDRARGYRI NITRICO-OXYDUM.**—Nitric Oxide of Mercury.

*Medicinal properties.*—Epispastic.

**HYDRARGYRI OXYMURIAS.**—Corrosive Sublimate. Oxymuriate, or Perchloride of Mercury.

*Medicinal properties.*—Secretory stimulant.

**LIQUOR HYDRARGYRI OXYMURIATIS.**—Solution of Oxymuriate of Mercury.

*Medicinal properties.*—Secretory stimulant, and epispastic.

**HYDRARGYRI SUBMURIAS.**—Submuriate or Protocloride of Mercury. Calomel.

*Medicinal properties.*—Cathartic, secretory stimulant, anthelmintic.

**HYDRARGYRI OXYDUM CINEREUM.**—Grey Oxide of Mercury.

*Medicinal properties.*—Secretory stimulant, epispastic.

**HYDRARGYRUM PRÆCIPITATUM ALBUM.**—White Precipitated Mercury.

*Medicinal properties.*—Epispastic.

**HYDRARGYRI SULPHURETUM NIGRUM.**—Black Sulphuret of Mercury. An inert preparation.

**HYDRARGYRI SULPHURETUM RUBRUM.**—Red Sulphuret of Mercury.

*Medicinal properties.*—Used for fumigation. It is a secretory stimulant.

The acrid preparations of mercury, such as corrosive sublimate, are active poisons, which cause heat in the pharynx and œsophagus, violent pain in the stomach, vomiting and purging, often of blood, salivation, anxiety, swelling of the internal part of the mouth, tremors, cold perspirations, and convulsions.

The milder preparations excite salivation, and swelling of the lower jaw, accompanied by fever; and sometimes sloughing of the soft parts of the body, and disease of the bones are consequences of long perseverance in the use of this metal.

Another effect of mercury is the Shaking Palsy; the *symptoms* of which are, tremors of the limbs, difficulty in walking or speaking, loss of memory, sleeplessness, and delirium. The skin is dry, and has a brown hue; the pulse usually, though not always, slow. Death rarely occurs from this disease.

### MAGNESIA.—MAGNESIA.

**Officinal.**—**MAGNESIÆ SUBCARBONAS.**—Subcarbonate of Magnesia.

*Medicinal properties.*—Magnesia and its subcarbonate are antacid and cathartic.

**MAGNESIA SULPHAS.**—Sulphate of Magnesia.

*Medicinal properties.*—Cathartic.

### PHOSPHORUS.—PHOSPHORUS.

*Medicinal properties.*—Stimulant.

**ACIDUM PHOSPHORICUM.**—Phosphoric Acid.

*Medicinal properties.*—Refrigerant, tonic.

Phosphorus is a poison, which excites vomiting, with pain in the stomach, and tenderness and distension of the abdomen, sometimes accompanied by bloody urine, convulsions, and delirium.

*Morbid appearances.*—Similar to those which are caused by other corrosive poisons.

## PLUMBUM.—LEAD.

*Officinal.*—PLUMBI ACETAS.—Acetate of Lead.

*Medicinal properties.*—Astringent and sedative.

LIQUOR PLUMBI SUBACETATIS.—Solution of Subacetate of Lead.

*Medicinal properties.*—Refrigerant when applied externally.

Lead is a poison, which may excite irritation in the alimentary canal, or palsy, with pain and tenderness of the parts affected, and colic, may result from exposure to its influence. This disease is the Colica Pictonum, Colic of Poitou, or Lead Colic. In some cases palsy exists without colic; in others, colic without any paralytic affection. In all the diseases caused by lead, delirium, convulsions, and coma usually precede death.

*Morbid appearances.*—When there have been symptoms of irritation of the alimentary canal the villous coat of the stomach and intestines are marked by inflammation. When colic has been the leading symptom, the colon has been found much contracted, while the mucous coat of the intestines is perfectly healthy.

In those who have been affected by the paralytic symptoms, the muscles are of a peculiar pale colour; and when the disease is of long duration, mesenteric disease is observed.

## POTASSA.—POTASH.

*Officinal.*—POTASSÆ SUBCARBONAS.—Subcarbonate of Potash.

*Medicinal properties.*—Antacid and diuretic.

POTASSÆ CARBONAS.—Carbonate of Potash.

*Medicinal properties.*—Antacid, diuretic.

LIQUOR POTASSÆ.—Solution of Potash.

*Medicinal properties.*—Antacid, diuretic.

POTASSA FUSA.—Fused Potash.

POTASSA CUM CALCE.—Potash with Lime.

*Medicinal properties.*—Epispastic, caustic.

Caustic potass is a corrosive poison.

POTASSÆ HYDRIODAS.—Hydriodate of Potash.

*Medicinal properties.*—Secretory stimulant.

POTASSÆ ACETAS.—Acetate of Potash.

*Medicinal properties.*—In small doses diuretic, in large ones cathartic.

POTASSÆ SUPERTARTRAS.—Supertartrate of Potash.

*Medicinal properties.*—In small doses diuretic, in large ones cathartic.

From supertartrate of potash, ACIDUM TARTARICUM—Tartaric Acid, is obtained.

*Medicinal properties.*—Refrigerant.

**POTASSÆ TARTRAS.**—Tartrate of Potash.

*Medicinal properties.*—Cathartic.

**POTASSÆ SUPERSULPHAS.**—Supersulphate of Potash.

*Medicinal properties.*—Cathartic.

**POTASSÆ SULPHAS.**—Sulphate of Potash.

*Medicinal properties.*—Cathartic.

**POTASSÆ NITRAS.**—Nitrate of Potash.

*Medicinal properties.*—Diuretic, refrigerant.

**ACIDUM NITRICUM.**—Nitric Acid is obtained from nitre.

*Medicinal properties.*—Strong nitric acid is a caustic, but when diluted it is tonic and refrigerant.

Nitric acid is a corrosive poison, which produces the same effect upon man as oxalic acid. The muriatic and sulphuric acids, of which I shall presently speak, resemble nitric acid in their operation, both as medicines and poisons.

### SODA.—SODA.

**Officinal.**—**SODÆ BORAS.**—Borate of Soda or Borax.

*Medicinal properties.*—Diuretic, but principally used as a stimulant application to aphthæ in the mouth.

**SODÆ SUBCARBONAS.**—Subcarbonate of soda.

**SODÆ CARBONAS.**—Carbonate of soda.

**SODÆ SUBCARPONAS EXSICCATA.**—Dried subcarbonate of soda.

*Medicinal properties.*—The subcarbonate, carbonate, and dried subcarbonate of soda are diuretic and antacid.

**SODÆ MURIAS.**—Muriate of soda.—Common Salt.

*Medicinal properties.*—Cathartic.

**ACIDUM MURIATICUM.**—Muriatic Acid is obtained from common salt.

*Medicinal properties.*—Tonic, refrigerant.

**SODÆ SULPHAS.**—Sulphate of Soda.

*Medicinal properties.*—Cathartic.

**SODA TARTARIZATA.**—Tartarized soda.

*Medicinal properties.*—Cathartic.

### STANNUM.—TIN.

**Officinal.**—**LIMATURA STANNI.**—Tin Filings.

*Medicinal properties.*—Anthelmintic. It is, however, seldom prescribed. The salts of tin are poisonous, and excite vomiting, colic, and diarrhoea.

*Morbid appearances.*—Signs of irritation in the stomach; the villous coat having a peculiar tanned appearance.

### SULPHUR.—SULPHUR.

*Officinal.*—OLEUM SULPHURATUM.—Sulphurated Oil.

*Medicinal properties.*—Epispastic.

POTASSÆ SULPHURETUM.—Sulphuret of Potash.

*Medicinal properties.*—Cathartic, diaphoretic.

SULPHUR LOTUM.—Washed Sulphur.

SULPHUR PRÆCIPITATUM.—Precipitated Sulphur.

*Medicinal properties.*—Diaphoretic, cathartic.

ACIDUM SULPHURICUM.—Sulphuric Acid is obtained from sulphur.

*Medicinal properties.*—Diluted sulphuric acid is tonic and refrigerant.

### ZINCUM.—ZINC.

*Officinal.*—CALAMINA PRÆPARATA.—Prepared Calamine.

*Medicinal properties.*—Astringent.

ZINCI SULPHAS.—Sulphate of Zinc.

*Medicinal properties.*—Tonic, astringent, emetic.

ZINCI OXYDUM.—OXIDE of ZINC.

*Medicinal properties.*—Tonic.

Sulphate of zinc is a poison, occasioning pain in the stomach, vomiting, and diarrhoea.

*Morbid appearances.*—Marks of inflammation in the stomach and intestines, which are sometimes contracted.

### SUCCINUM.—AMBER,

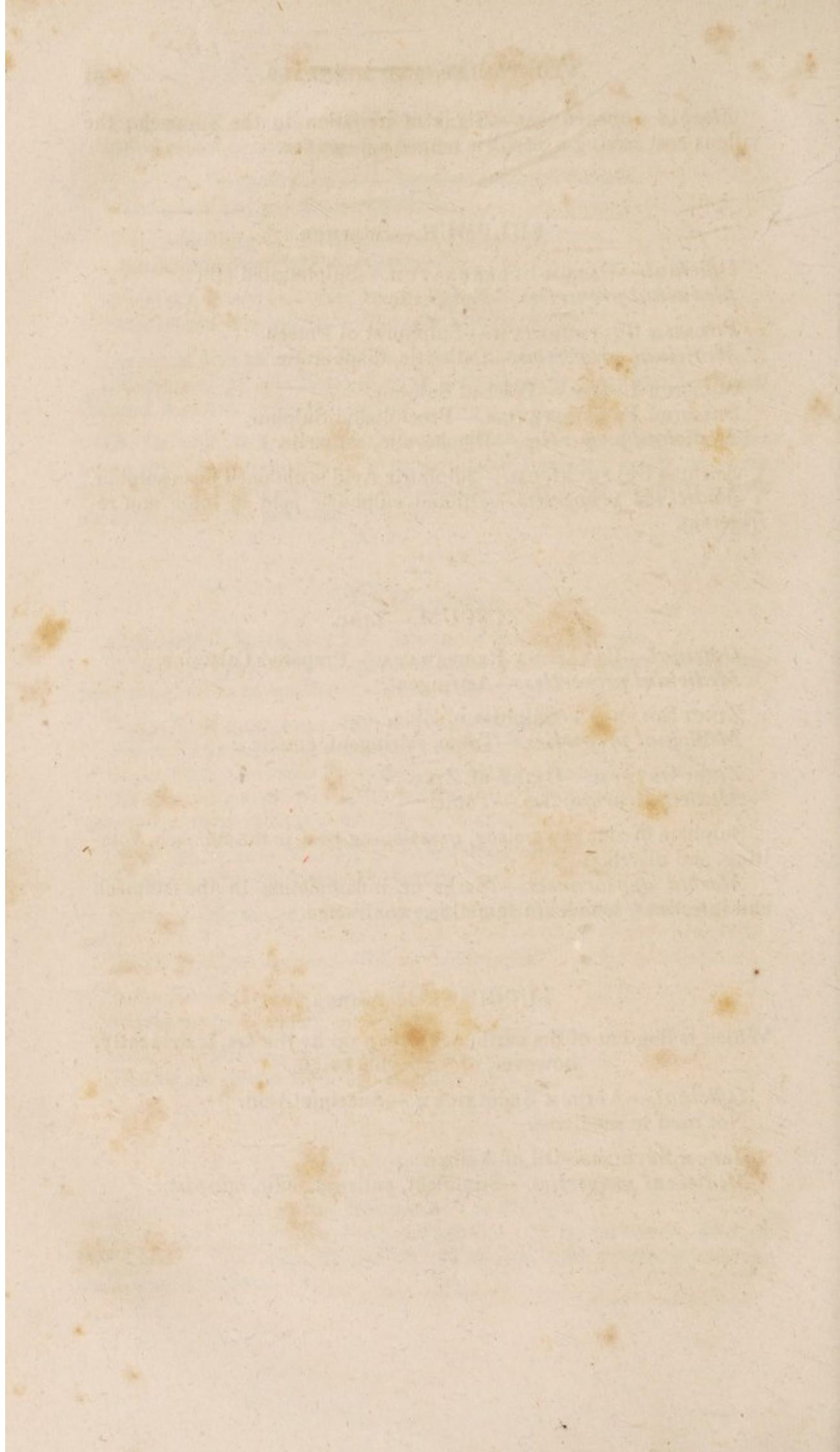
Which is dug out of the earth, or thrown up by the sea, is evidently, however, of vegetable origin.

*Officinal.*—ACIDUM SUCCINICUM.—Succinic Acid.

Not used in medicine.

OLEUM SUCCINI.—Oil of Amber.

*Medicinal properties.*—Stimulant, antispasmodic, epispastic.



## POSOLOGICAL TABLE.\*

Absinthium . . . . .	ij. to 3ij.
Acaciæ gummi . . . . .	ij. to 3ij.
Acetum colchici . . . . .	mxx. to f3j.
Acetum scillæ . . . . .	f3ss. to f3j.
Acidum aceticum dilutum† . . . . .	f3j. to f3rj.
Acidum benzoicum . . . . .	gr. x. to 3ss.
Acidum citricum . . . . .	gr. x. to 3ss.
Acidum muriaticum . . . . .	m v. to mxx.
Acidum phosphoricum . . . . .	m x. to f3ss.
Acidum nitricum dilutum . . . . .	m x. to m xl.
Acidum tartaricum . . . . .	gr. x. to 3ss.
Acidum prussicum (Ph. Dub.) . . . . .	m ss. to m ij.
Acidum sulphuricum dilutum . . . . .	m x. to m xl.
Aconiti folia . . . . .	gr. j. to gr. v.
Æther rectificatus . . . . .	f3ss. to f3ij.
Ærugo vel cupri subacetas . . . . .	gr. $\frac{1}{2}$ to gr. ij.
Allii radicis succus . . . . .	f3j. to 3ij.
Aloes spicatæ extractum . . . . .	gr. v. to gr. xv.
Alumen . . . . .	gr. v. to ij.
Ammoniacum . . . . .	gr. x. to ij.
Ammoniæ murias . . . . .	gr. x. to ij.
Ammoniæ subcarbonas . . . . .	gr. v. to ij.
Anethi semina . . . . .	gr. xv. to 3j.
Anisi semina . . . . .	gr. xv. to 3j.
Anthemidis flores . . . . .	ij. to 3ij.
Antimonii sulphuretum . . . . .	gr. v. to gr. x.
Antimonii sulphuretum præcipitatum . . . . .	gr. j. to gr. iij.
Antimonium tartarizatum, <i>diaphoretic</i> . . . . .	gr. $\frac{1}{2}$ to gr. ss.
Antimonium tartarizatum, <i>emetic</i> . . . . .	gr. j. to gr. ij.
Aqua anethi . . . . .	f3j. to 3iv.
Aqua carui . . . . .	f3j. to 3iv.
Aqua cinnamomi . . . . .	f3j. to 3iv.
Aqua foeniculi . . . . .	f3j. to 3iv.
Aqua menthæ piperitæ . . . . .	f3j. to 3iv.
Aqua menthæ viridis . . . . .	f3j. to 3iv.

\* For the manner of preparing drugs, see Phillips's Translation of the London Pharmacopœia. The doses mentioned in this table are for adults, those for children being much smaller.

† The acids should be considerably diluted when taken.

Aqua pimentæ . . . . .	f $\frac{2}{3}$ j. to $\frac{2}{3}$ iv.
Aqua pulegii . . . . .	f $\frac{2}{3}$ j. to $\frac{2}{3}$ iv.
Argenti nitras . . . . .	gr. $\frac{1}{2}$ to gr. ij.
Arsenicum album sublimatum . . . . .	gr. 1-12 to gr. $\frac{1}{2}$ .
Armoraciæ radix . . . . .	$\frac{2}{3}$ j. to $\frac{2}{3}$ j.
Assafœtidæ gummi resina . . . . .	gr. v. to $\frac{2}{3}$ j.
Balsamum Peruvianum . . . . .	gr. x. to $\frac{2}{3}$ ss.
Balsamum Tolutanum . . . . .	gr. x. to $\frac{2}{3}$ ss.
Belladonnæ folia . . . . .	gr. ss. to gr. v.
Benzoinum . . . . .	gr. x. to $\frac{2}{3}$ ss.
Bismuthi subnitras . . . . .	gr. v. to gr. x.
Bistortæ radix . . . . .	gr. x. to $\frac{2}{3}$ j.
Cajuputi oleum . . . . .	$\frac{1}{2}$ j. to $\frac{1}{2}$ iv.
Calami radix . . . . .	gr. x. to $\frac{2}{3}$ j.
Calumbæ radix . . . . .	gr. x. to $\frac{2}{3}$ j.
Cambogia . . . . .	gr. v. to gr. x.
Camphora . . . . .	gr. ij. to $\frac{2}{3}$ ss.
Canellæ cortex . . . . .	gr. x. to $\frac{2}{3}$ ss.
Cantharis . . . . .	gr. ss. to gr. j.
Capsici baccæ . . . . .	gr. ij. to gr. x.
Cardamines flores . . . . .	$\frac{2}{3}$ j. to $\frac{2}{3}$ ij.
Cardamomi semina . . . . .	gr. v. to $\frac{2}{3}$ j.
Carui semina . . . . .	$\frac{2}{3}$ j. to $\frac{2}{3}$ j.
Caryophylli . . . . .	gr. v. to $\frac{2}{3}$ j.
Caryophylli oleum . . . . .	$\frac{1}{2}$ j. to $\frac{1}{2}$ v.
Cascarillæ cortex . . . . .	gr. x. to $\frac{2}{3}$ ss.
Cassiae pulpa . . . . .	$\frac{2}{3}$ ij. to $\frac{2}{3}$ j.
Castoreum . . . . .	gr. v. to $\frac{2}{3}$ j.
Catechu extractum . . . . .	gr. x. to $\frac{2}{3}$ ij.
Centaurii cacumina . . . . .	$\frac{2}{3}$ j. to $\frac{2}{3}$ j.
Cetaceum . . . . .	gr. xv. to $\frac{2}{3}$ ss.
Cinchonæ cordifoliæ cortex . . . . .	gr. x. to $\frac{2}{3}$ ij.
Cinchonæ lancifoliæ cortex . . . . .	gr. x. to $\frac{2}{3}$ j.
Cinchonæ oblongifoliæ cortex . . . . .	gr. x. to $\frac{2}{3}$ j.
Cinchoninæ sulphas . . . . .	gr. ij. to gr. vj.
Cinnamomi cortex . . . . .	gr. v. to $\frac{2}{3}$ j.
Cinnamomi oleum . . . . .	$\frac{1}{2}$ j. to $\frac{1}{2}$ iv.
Colchici radix . . . . .	gr. j. to gr. v.
Colocynthidis pulpa . . . . .	gr. iij. to $\frac{2}{3}$ ss.
Confectio amygdalarum . . . . .	$\frac{2}{3}$ ss. to $\frac{2}{3}$ j.
Confectio aromatica . . . . .	gr. x. to $\frac{2}{3}$ j.
Confectio aurantiorum . . . . .	$\frac{2}{3}$ j. to $\frac{2}{3}$ j.
Confectio cassiae . . . . .	$\frac{2}{3}$ j. to $\frac{2}{3}$ j.
Confectio opii . . . . .	gr. x. to $\frac{2}{3}$ ij.
Confectio piperis nigri . . . . .	$\frac{2}{3}$ ss. to $\frac{2}{3}$ j.
Confectio rosæ caninæ . . . . .	$\frac{2}{3}$ j. to $\frac{2}{3}$ j.
Confectio rosæ gallicæ . . . . .	$\frac{2}{3}$ j. to $\frac{2}{3}$ j.
Confectio scammoneæ . . . . .	$\frac{2}{3}$ j. to $\frac{2}{3}$ j.

Confectio sennæ	.	.	.	.	3j. to 3ss.
Conii folia	.	.	.	.	gr. ij. to gr. x.
Contrajervæ radix	.	.	.	.	gr. x. to 3ss.
Copaiba	.	.	.	.	m̄xv. to 3ss.
Coriandri semina	.	.	.	.	3j. to 3j.
Creta præparata	.	.	.	.	gr. x. to 3ss.
Cubeba	.	.	.	.	3ss. to 3jss.
Cumini semina	.	.	.	.	3j. to 3j.
Cupri sulphas, <i>tonic</i>	.	.	.	.	gr. $\frac{1}{2}$ to gr. j.
Cupri sulphas, <i>emetic</i>	.	.	.	.	gr. v. to gr. xv.
Cuprum ammoniatum	.	.	.	.	gr. ss. to gr. iij.
Cuspariæ cortex	.	.	.	.	gr. v. to 3j.
Dauci semina	.	.	.	.	3j. to 3j.
Decoctum aloes compositum	.	.	.	.	f 3ss. to f 3jss.
Decoctum cinchonæ	.	.	.	.	f 3j. to 3ij.
Decoctum dulcamaræ	.	.	.	.	f 3ss. to f 3j.
Decoctum lichenis	.	.	.	.	f 3ij. to f 3ij.
Decoctum sarsaparillæ	.	.	.	.	f 3ij. to f 3iv.
Decoctum sarsaparillæ compositum	.	.	.	.	f 3ij. to f 3iv.
Decoctum senegæ	.	.	.	.	f 3j. to f 3ij.
Decoctum ulmi	.	.	.	.	f 3ij. to 3iv.
Digitalis folia	.	.	.	.	gr. ss. to gr. iij.
Dolichi pubes	.	.	.	.	gr. v. to gr. x.
Extractum aconiti	.	.	.	.	gr. ss. to gr. ij.
Extractum aloes	.	.	.	.	gr. v. to gr. xv.
Extractum anthemidis	.	.	.	.	gr. x. to 3j.
Extractum belladonnæ	.	.	.	.	gr. ss. to gr. ij.
Extractum cinchonæ	.	.	.	.	gr. x. to 3j.
Extractum cinchonæ resinosum	.	.	.	.	gr. x. to 3j.
Extractum colocynthidis	.	.	.	.	gr. v. to 3j.
Extractum celocynthidis comp.	.	.	.	.	gr. v. to gr. xv.
Extractum conii	.	.	.	.	gr. ij. to gr. x.
Extractum elaterii	.	.	.	.	gr. ss. to gr. j.
Extractum gentianæ	.	.	.	.	gr. v. to 3j.
Extractum hæmatoxyli	.	.	.	.	gr. x. to 3ss.
Extractum humuli	.	.	.	.	gr. v. to 3j.
Extractum hyoscyami	.	.	.	.	gr. ij. to gr. x.
Extractum jalapæ	.	.	.	.	gr. x. to 3j.
Extractum lactucæ	.	.	.	.	gr. ij. to gr. x.
Extractum opii	.	.	.	.	gr. j. to gr. iij.
Extractum papaveris	.	.	.	.	gr. ij. to gr. x.
Extractum rhei	.	.	.	.	gr. v. to 3j.
Extractum sarsaparillæ	.	.	.	.	gr. x. to 3j.
Extractum stramonii	.	.	.	.	gr. $\frac{1}{2}$ to gr. j.
Extractum taraxaci	.	.	.	.	gr. x. to 3j.
Ferri sulphas	.	.	.	.	gr. j. to gr. v.
Ferri subcarbonas	.	.	.	.	gr. v. to 3j.
Ferrum ammoniatum	.	.	.	.	gr. iij. to gr. x.

Ferrum tartarizatum	.	.	.	gr. v. to 3j.
Filicis radix	.	.	.	3j. to 3ij.
Fœniculi semina	.	.	.	3j. to 3j.
Galbani gummi-resina	.	.	.	gr. v. to gr. xv.
Gentianæ radix	.	.	.	gr. v. to 3j.
Granati cortex	.	.	.	3j. to 3j.
Guaiaci resina	.	.	.	gr. x. to 3j.
Helenium	.	.	.	gr. x. to 3ij.
Hellebori fœtidi folia	.	.	.	gr. v. to 3j.
Hellebori nigri radix	.	.	.	gr. v. to 3j.
Humuli strobili	.	.	.	gr. iij. to 3j.
Hydrargyri oxydum cinereum	.	.	.	gr. i. to gr. iij.
Hydrargyri oxydum rubrum	.	.	.	gr. ss. to gr. j.
Hydrargyri oxymurias	.	.	.	gr. $\frac{1}{2}$ to gr. $\frac{1}{2}$ .
Hydrargyri submuriæ, <i>alterative</i>	.	.	.	gr. ss. to gr. j.
Hydrargyri submuriæ, <i>cathartic</i>	.	.	.	gr. iij. to gr. x.
Hydrargyri sulphuretum nigrum	.	.	.	gr. v. to 3j.
Hydrargyrum cum cretâ	.	.	.	gr. iij. to gr. x.
Hyoscyami folia	.	.	.	gr. iij. to gr. x.
Jalapæ radix	.	.	.	gr. x. to 3j.
Infusum anthemidis	.	.	.	f3j. to f3ij.
Infusum armoraciæ compositum	.	.	.	f3j. to f3ij.
Infusum aurantii compositum	.	.	.	f3j. to f3ij.
Infusum calumbæ	.	.	.	f3j. to f3ij.
Infusum caryophyllorum	.	.	.	f3j. to f3ij.
Infusum cascarillæ	.	.	.	f3j. to f3ij.
Infusum catechu compositum	.	.	.	f3j. to f3ij.
Infusum cinchonæ	.	.	.	f3j. to f3ij.
Infusum cuspariæ	.	.	.	f3j. to f3ij.
Infusum digitalis	.	.	.	f3j. to 3ss.
Infusum gentianæ compositum	.	.	.	f3ss. to f3ij.
Infusum quassiae	.	.	.	f3ss. to f3ij.
Infusum rhei	.	.	.	f3ss. to f3ij.
Infusum rosæ compositum	.	.	.	f3ss. to 3ij.
Infusum sennæ compositum	.	.	.	f3ss. to 3ij.
Infusum simaroubæ	.	.	.	f3ss. to f3ij.
Ipecacuanhæ radix, <i>diaphoretic</i>	.	.	.	gr. ss. to gr. ij.
Ipecacuanhæ radix, <i>emetic</i>	.	.	.	gr. v. to 3j.
Iodina	.	.	.	gr. ss. to gr. iij.
Juniperi baccæ	.	.	.	3j. to 3j.
Kino	.	.	.	gr. x. to 3ss.
Lauri baccæ et folia	.	.	.	gr. x. to 3j.
Lichen	.	.	.	3j. to 3j.
Linum catharticum	.	.	.	3j. to 3j.
Liquor ammoniæ	.	.	.	m.v. to m.xx.
Liquor ammoniæ acetatis	.	.	.	f3ij. to f3ss.
Liquor ammoniæ subcarbonatis	.	.	.	m.xx. to f3j.
Liquor arsenicalis	.	.	.	m.v. to m.xx.

Liquor calcis	.	.	fʒj. to fʒvj.
Liquor calcis muriatis	.	.	mxx. to ʒj.
Liquor ferri alkalini	.	.	fʒss. to fʒj.
Liquor hydrargyri oxymuriatis	.	.	fʒss. to fʒij.
Liquor potassæ	.	.	mviж. to fʒss.
Liquor potassæ subcarbonatis	.	.	mх. to fʒj.
Liquor potassæ hydriodatis	.	.	mх. to mxx.*
Magnesia	.	.	Đj. to ʒj.
Magnesiæ subcarbonas	.	.	Đj. to ʒj.
Magnesiæ sulphas	.	.	ʒj. to ʒj.
Malva	.	.	Đj. to ʒj.
Manna	.	.	ʒj. to ʒj.
Mastiche	.	.	gr. x. to ʒss.
Marrubium	.	.	Đj. to ʒj.
Menyanthes	.	.	Đj. to ʒj.
Mezerei cortex	.	.	gr. j. to Đss.
Mistura ammoniaci	.	.	fʒss. to fʒij.
Mistura assafœtidæ	.	.	fʒss. to fʒij.
Mistura camphoræ	.	.	fʒss. to fʒij.
Mistura cornu ustii	.	.	fʒss. to fʒij.
Mistura cretæ	.	.	fʒss. to fʒij.
Mistura ferri composita	.	.	fʒss. to fʒij.
Mistura guaiaci	.	.	fʒss. to fʒij.
Mistura moschi	.	.	fʒss. to fʒij.
Morphia	.	.	gr. $\frac{1}{8}$ to gr. $\frac{1}{4}$
Moschus	.	.	gr. ij. to Đj.
Mucilago acaciae	.	.	fʒj. to fʒss.
Myristicæ nuclei	.	.	gr. v. to Đss.
Myrrha	.	.	gr. x. to Đj.
Oleum amygdalarum	.	.	fʒss. to fʒj.
Oleum anthemidis	.	.	mj. to mв.
Oleum anisi	.	.	mj. to mв.
Oleum carui	.	.	mj. to mв.
Oleum caryophylli	.	.	mj. to mв.
Oleum cinnamomi	.	.	mj. to mв.
Oleum juniperi	.	.	mj. to mв.
Oleum lavandulæ	.	.	mj. to mв.
Oleum menthae piperitæ	.	.	mj. to mв.
Oleum menthae viridis	.	.	mj. to mв.
Oleum origani	.	.	mj. to mв.
Oleum pimentæ	.	.	mj. to mв.
Oleum pulegii	.	.	mj. to mв.
Oleum ricini	.	.	fʒij. to fʒj.
Oleum rosmarini	.	.	mj. to mв.
Oleum succini	.	.	mв. to mх.

\* fʒj. of this solution contains gr. xxxvi. of hydriodate of potash.

Oleum terebinthinæ rectificatum, <i>diuretic</i>	. . . . .	m. x. to f. 3ss.
Oleum terebinthinæ rectificatum, <i>anthelmintic</i>	. . . . .	f. 3j. to f. 3ss.
Oleum tiglii	. . . . .	m. ss. to m. ij.
Olibanum	. . . . .	gr. x. to 3j.
Opium	. . . . .	gr. $\frac{1}{2}$ to gr. iij.
Opopanax	. . . . .	gr. x. to 3j.
Origanum	. . . . .	gr. x. to 3j.
Oxymel simplex	. . . . .	f. 3j. to f. 3ss.
Oxymel scillæ	. . . . .	f. 3ss. to 3ij.
Pilulæ aloes compositæ	. . . . .	gr. v. to gr. xv.
Pilulæ aloes cum myrrhâ	. . . . .	gr. v. to gr. xv.
Pilulæ cambogiæ compositæ	. . . . .	gr. v. to gr. xv.
Pilulæ ferri compositæ	. . . . .	gr. v. to gr. xv.
Pilulæ galbani compositæ	. . . . .	gr. v. to gr. xv.
Pilulæ hydrargyri, <i>alterative</i>	. . . . .	gr. ij. to gr. v.
Pilulæ hydrargyri, <i>cathartic</i>	. . . . .	3ss. to 3j.
Pilulæ hydrargyri submuriatis compositæ	. . . . .	gr. ij. to gr. v.
Pilulæ saponis cum opio	. . . . .	gr. iij. to gr. viij.
Pilulæ scillæ compositæ	. . . . .	gr. v. to 3ss.
Pimentæ baccæ	. . . . .	gr. v. to 3j.
Piperis longi fructus	. . . . .	gr. v. to 3j.
Piperis nigri baccæ	. . . . .	gr. v. to 3j.
Piperina	. . . . .	gr. ss. to gr. ij.
Plumbi acetas	. . . . .	gr. ss. to gr. ij.
Porri radicis succus	. . . . .	3j. to 3ss.
Potassæ acetas	. . . . .	3j. to 3j.
Potassæ carbonas	. . . . .	3ss. to 3ss.
Potassæ nitras	. . . . .	gr. v. to 3j.
Potassæ subcarbonas	. . . . .	3ss. to 3ss.
Potassæ sulphas	. . . . .	3j. to 3ij.
Potassæ supersulphas	. . . . .	3j. to 3ij.
Potassæ supertartras	. . . . .	3j. to 3ij.
Potassæ tartras	. . . . .	3j. to 3ss.
Pulvis aloes compositus	. . . . .	gr. v. to gr. xv.
Pulvis antimonialis	. . . . .	gr. j. to gr. viij.
Pulvis cinnamomi compositus	. . . . .	gr. v. to gr. x.
Pulvis contrajervæ compositus	. . . . .	gr. x. to 3ss.
Pulvis cornu usti cum opio	. . . . .	gr. v. to 3ss.
Pulvis cretæ compositus	. . . . .	gr. xv. to 3ss.
Pulvis cretæ comp. cum opio	. . . . .	gr. x. 3j.
Pulvis ipecacuanhæ compositus	. . . . .	gr. v. to gr. xv.
Pulvis kino compositus	. . . . .	gr. v. to 3j.
Pulvis scammoneæ compositus	. . . . .	gr. v. to gr. xv.
Pulvis sennæ compositus	. . . . .	3j. to 3j.
Pulvis tragacanthæ compositus	. . . . .	gr. x. to 3ss.
Pyrethri radix	. . . . .	gr. iij. to 3ss.
Quassiae lignum	. . . . .	gr. x. to 3ss.
Quercus cortex	. . . . .	gr. x. to 3ss.

<i>Quininæ sulphas</i>	.	.	.	.	gr. j. to gr. iv.
<i>Rhamni baccæ</i>	.	.	.	.	3j. to 3j.
<i>Rhei radix</i>	.	.	.	.	gr. v. to gr. xv.
<i>Rosæ caninæ pulpa</i>	.	.	.	.	3j. to 3j.
<i>Rosmarini cacumina</i>	.	.	.	.	gr. x. to 3ss.
<i>Rubiæ radix</i>	.	.	.	.	3ss. to 3ss.
<i>Ruteæ folia</i>	.	.	.	.	3j. to 3ij.
<i>Sibinæ folia</i>	.	.	.	.	gr. v. to gr. x.
<i>Sagapenum</i>	.	.	.	.	gr. x. to 3j.
<i>Secale cornutum</i>	.	.	.	.	gr. v. to 3ss.
<i>Salicis cortex</i>	.	.	.	.	gr. x. to 3ss.
<i>Sapo durus</i>	.	.	.	.	gr. v. to 3j.
<i>Sarsaparillæ radix</i>	.	.	.	.	3j. to 3j.
<i>Sassafras lignum</i>	.	.	.	.	3j. to 3j.
<i>Scammoneæ gummi-resina</i>	.	.	.	.	gr. v. to gr. xv.
<i>Scillæ radix recens</i>	.	.	.	.	gr. iij. to gr. x.
<i>Scillæ radix exsiccata</i>	.	.	.	.	gr. j. to gr. iv.
<i>Senegæ radix</i>	.	.	.	.	gr. x. to 3ss.
<i>Sennæ folia</i>	.	.	.	.	3j. to 3j.
<i>Serpentariæ radix</i>	.	.	.	.	gr. x. to 3j.
<i>Simaroubæ cortex</i>	.	.	.	.	3ss. to 3ss.
<i>Sinapis semina</i>	.	.	.	.	3j. to 3ij.
<i>Soda tartarizata</i>	.	.	.	.	3j. to 3j.
<i>Sodæ carbonas</i>	.	.	.	.	3ss. to 3ss.
<i>Sodæ subcarbonas</i>	.	.	.	.	3ss. to 3ss.
<i>Sodæ subcarbonas exsiccata</i>	.	.	.	.	gr. iij. to gr. xv.
<i>Sodæ sulphas</i>	.	.	.	.	3j. to 3j.
<i>Spartii cacumina (in decoction)</i>	.	.	.	.	3j. to 3j.
<i>Spigeliæ radix</i>	.	.	.	.	gr. x. to 3ij.
<i>Spiritus ætheris aromaticus</i>	.	.	.	.	f3ss. to f3j.
<i>Spiritus ætheris nitrici</i>	.	.	.	.	f3ss. to f3j.
<i>Spiritus ætheris sulphurici</i>	.	.	.	.	f3ss. to f3j.
<i>Spiritus ætheris sulphurici compositus</i>	.	.	.	.	f3ss. to f3j.
<i>Spiritus ammoniæ</i>	.	.	.	.	f3ss. to f3j.
<i>Spiritus ammoniæ aromaticus</i>	.	.	.	.	f3ss. to f3j.
<i>Spiritus ammoniæ fetidus</i>	.	.	.	.	f3ss. to f3j.
<i>Spiritus ammoniæ succinatus</i>	.	.	.	.	m <sub>x</sub> . to m <sub>xx</sub> .
<i>Spiritus anisi</i>	.	.	.	.	f3ss. to f3j.
<i>Spiritus armoraciæ compositus</i>	.	.	.	.	f3j. to f3ss.
<i>Spiritus carui</i>	.	.	.	.	f3j. to f3ij.
<i>Spiritus cinnamomi</i>	.	.	.	.	f3j. to 3ij.
<i>Spiritus colchici ammoniatus</i>	.	.	.	.	f3ss. to f3j.
<i>Spiritus juniperi compositus</i>	.	.	.	.	f3j. to 3ss.
<i>Spiritus lavandulæ compositus</i>	.	.	.	.	f3ss. to f3ij.
<i>Spiritus menthæ piperitæ</i>	.	.	.	.	f3ss. to f3ij.
<i>Spiritus menthæ viridis</i>	.	.	.	.	f3ss. to f3ij.
<i>Spiritus myristicæ</i>	.	.	.	.	f3ss. to f3ij.
<i>Spiritus pimentæ</i>	.	.	.	.	f3ss. to f3ij.

Spiritus pulegii	fʒss. to fʒij.
Spiritus rosmarini	fʒss. to fʒij.
Spongia usta	ʒss. to ʒj.
Stannum	ʒj. to ʒij.
Strychnia	gr. ½ to gr. j.
Staphisagriæ semina	gr. iij. to gr. x.
Styracis balsamum	gr. x. to ʒss.
Sulphur lotum	ʒss. to ʒij.
Sulphur præcipitatum	ʒss. to ʒü.
Syrupus altheæ	fʒj. to fʒij.
Syrupus aurantiorum	fʒj. to fʒij.
Syrupus limonum	fʒj. to fʒij.
Syrupus papaveris	fʒss. to fʒij.
Syrupus rhamni	fʒj. to fʒj.
Syrupus sennæ	fʒj. to fʒss.
Tamarindi pulpa	ʒss. to ʒj.
Terebinthina Canadensis	ʒss. to ʒj.
Terebinthina Chia	ʒss. to ʒj.
Terebinthina vulgaris	ʒss. to ʒj.
Tinctura aloes	fʒj. to fʒij.
Tinctura aloes composita	fʒj. to fʒij.
Tinctura assafœtidæ	fʒj. to fʒij.
Tinctura aurantii	fʒj. to fʒij.
Tinctura benzoini composita	fʒj. to fʒij.
Tinctura calumbæ	fʒj. to fʒij.
Tinctura camphoræ composita	fʒj. to fʒij.
Tinctura cantharidis	m̄x. to fʒj.
Tinctura capsici	m̄x. to fʒj.
Tinctura cardamomi	fʒj. to fʒij.
Tinctura cardamomi composita	fʒj. to fʒij.
Tinctura cascarillæ	fʒj. to fʒij.
Tinctura castorei	fʒj. to fʒij.
Tinctura catechu	fʒj. to fʒij.
Tinctura cinchonæ	fʒj. to fʒij.
Tinctura cinchonæ ammoniata	fʒj. to fʒij.
Tinctura cinchonæ composita	fʒj. to fʒij.
Tinctura cinnamomi	fʒj. to fʒij.
Tinctura cinnamomi, composita	fʒj. to fʒij.
Tinctura digitalis	m̄x. to fʒss.
Tinctura ferri ammoniati	fʒss. to fʒij.
Tinctura ferri muriatis	m̄v. to fʒss.
Tinctura gentianæ composita	fʒj. to fʒij.
Tinctura guaiaci	fʒss. to fʒij.
Tinctura guaiaci ammoniata	fʒss. to fʒij.
Tinctura hellebori nigri	m̄xv. to fʒj.
Tinctura humuli	fʒss. to fʒij.
Tinctura hyoscyami	m̄xv. to fʒj.
Tinctura iodinii (Ph. Dub.)	m̄xv. to m̄xl.

Tinctura jalapæ	f 3j. to 3ij.
Tinctura kino	f 3j. to f 3ij.
Tinctura myrrhæ	f 3ss. to f 3j.
Tinctura opii	m v. to m xl.
Tinctura rhei	f 3j. to f 3ss.
Tinctura rhei composita	f 3j. to f 3ss.
Tinctura scillæ	m x. to f 3ss.
Tinctura sennæ	f 3j. to f 3ij.
Tinctura serpentariæ	f 3j. to f 3ij.
Tinctura spartii seminum*	f 3j. to f 3iiss.
Tinctura valerianæ	f 3j. to f 3ij.
Tinctura valerianæ ammoniata	f 3j. to f 3ij.
Tinctura zingiberis	f 3j. to f 3ij.
Tormentillæ radix	3ss. to 3ss.
Toxicodendri folia	gr. ss. to gr. iv.
Tragacantha	gr. x. to 3j.
Valerianæ radix	3j. to 3j.
Veratri radix	gr. j. to gr. ij.
Vinum aloes	f 3j. to f 3ss.
Vinum antimonii tartarizati	m xx. to f 3ij.
Vinum colchici	m xx. to 3j.
Vinum ferri	f 3j. to f 3ss.
Vinum ipecacuanhæ, <i>diophoretic</i>	m x. to f 3ss.
Vinum ipecacuanhæ, <i>emetic</i>	f 3ij. to f 3ss.
Vinum opii	m v. to m xl.
Vinum veratri	m v. to 3ss.
Ulmi cortex	3j. to 3j.
Uva ursi	gr. x. to 3ss.
Zinci oxydum	gr. j. to gr. v.
Zinci sulphas, <i>tonic</i>	gr. j. to gr. iij.
Zinci sulphas, <i>emetic</i>	gr. x. to 3j.
Zingiberis radix	gr. v. to 3ss.

\* Dr. Pearson directs that this tincture shall be made in the following manner:—

R. Spartii juncei seminum contusorum, 3ij.

Spiritus tenuioris, f 3vij.

Maceræ per dies decem, et colla.

