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Dorsey (J. O.)

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Dr. Gibson
with the best respects
of his friend The Author

SYLLABUS

OR

HEADS OF LECTURES

ON THE

MATERIA MEDICA,

Delivered in the University of Pennsylvania,

BY

JOHN SYNG DORSEY, M.D.

PHILADELPHIA:
PRINTED FOR THE AUTHOR, BY WILLIAM FRY.
1817.

TO MY CLASS.

GENTLEMEN,

A variety of considerations presented themselves to my mind, when I first projected the Memorandum Book, which is now placed in your hands.

The chief of these was a recollection of the embarassments sustained from the multiplicity of objects, demanding a Student's attention, during his attendance on a Course of Lectures. Each of my colleagues has endeavoured to lessen these embarrassments by selecting Text books, as aids to the memory: in this I have followed them, but have judged it adviseable to add a Syllabus, to assist you still more completely in recollecting the subjects of my Lectures. The branch of medicine which I teach differs from all others in the changes to which it is liable from the enlarged experience of practitioners.—Some medicines are to be expunged from the catalogue; others are to be added; and new virtues are often detected in old drugs, which render it necessary for a teacher of the Materia Medica to change from time to time the arrangement of his course: reserving to myself this right, I am still desirous of presenting to you a general view of the plan, which I conceive best adapted to the present state of medical science.

I have experienced too many proofs of your partiality to believe that you will ascribe this production to any other motive than a sincere desire, to discharge the duties of my station, in such a manner as shall best conduce to your interests.

I am, Gentlemen,

Your faithful servant,

J. S DORSEY.

November 1*st*, 1817.

PREFACE.

A CURSORY glance at the following pages will suffice to show, that a Course of Lectures upon the subjects they contain, must comprise much information not strictly included within the limits of the Materia Medica.

There is no province in Medical Science, however, of which the boundary lines are so indefinite as this. In attempts to define them with accuracy, encroachments on the kindred sciences are with difficulty avoided. This difficulty is inherent, and arises necessarily from the nature of the case. In one point of view, Materia Medica is little more than a mixture of Chemistry and Botany. In another it assumes a different form, and borrows large stores of practical matter. Without neglecting the former of these sciences, the author of the Lectures described in the present Syllabus, has no hesitation in acknowledging, that his main object has been to render his course as far as possible a practical one. In this he has the sanction of the very eminent teachers who have preceded him, and whose talents and labours have given to the chair of Materia Medica, in the University of Pennsylvania, a degree of relative im-

portance, far greater than has generally been attached to it in other schools.

For refusing to adopt entirely, the plans of his distinguished predecessors, the author could render many reasons which satisfy himself, but would not be important to the reader. The consideration of Aliments, *e. g.* he has always thought of primary importance, to an American physician,—*Prima dicte mihi summa dicende camœna!* He cannot but urge the study of it therefore, upon his class. Still in this part of the course he has endeavoured to avoid minute details, and to aim only at practical results. Blood-letting is another remedy in American diseases, to which he invites their attention, with a degree of earnestness commensurate with its importance. The merits of his plan and the manner of its execution, remain to be tested.

SYLLABUS

OR

HEADS OF LECTURES

ON

Materia Medica.

PHYSIOLOGICAL remarks illustrative of those vital functions, which adapt the human body to the action of medicines.

OF animal life:

Life not a forced state.

Proofs that it is not the result of stimulant impressions.

Sympathy—Incompatibility of a plurality of actions, in the same parts at the same time—Limitations of the doctrine.

MATERIA MEDICA

Includes a history of aliments as well as medicines—The necessity of a knowledge of diet to a physician—Many diseases cured by diet alone—An attention to it necessary in all.

Man an omnivorous animal, designed to subsist on vegetable and animal food—Proofs that he can subsist on either alone;—on both;—best on both.

Diseases resulting from a diet exclusively vegetable.
from one, exclusively animal.

OF VEGETABLE FOOD.

Its general properties;—not nutritious in proportion to the acid, sugar, and oil, it contains—Dr. Cullen's opinions on this subject refuted.

General remarks on vegetable alimentary matters.

Particular aliments from the vegetable kingdom.

The CEREALIA; or substances convertible into bread.

TRITICUM—wheat,
Bread, changes it undergoes.
Properties of unleavened bread,
leavened bread,
fresh bread,
stale bread.
Different properties of crust and crumb,
fresh and stale bread,
toasted bread,
toast and water.

SECALE—rye.
HORDEUM—barley.
ORYZA—rice.
AVENA—oats.
FAGOPYRUM—buckwheat.
ZEA—Maize;—Indian corn.

Table exhibiting the relative proportions of nutritive matter, in various cerealia.

CYCAS CIRCINALIS—sago.
ORCHIS MORIO—salep.

JATROPHA MANIHOT—Tapioca.
MARANTA ARUNDINACEA—Arrow root.
General account of other farinaceous substances.

Summer fruits:
Their general properties,
Uses in diseases,
Cases in which they are inadmissible,
Properties of various buds, fruits, and roots, used as food.

ANIMAL FOOD:
Its general properties,
Properties of particular articles of animal food,
Flesh of the Mammalia,
Beef,
Veal,
Mutton,
Lamb,
Pork.
Wild meats:
Birds,
Domestic fowls,
Wild fowls,
Eggs.
Fishes,
Shell fishes.
Reptiles.
Milk:
Cream—curd—whey—cheese, &c.
Butter milk—wine whey—milk punch, &c.

Cooking:
Its effects on alimentary matter,
Drying—pickling—salting—smoaking,
Boiling,
Soups—chicken broth, beef tea, &c.
Roasting,
Baking,
Broiling,
Frying,
Stewing.

Of drinks:
Water,
Vegetable infusions—mucilages, &c.
Fermented liquors,
Cider,
Malt liquors.
Wines,
Their properties, and composition.
Table to show the proportionate quantity of alcohol in the different kinds of wine.
Distilled liquors.
Of Coffee,
Tea,
Chocolate.
Practical application of the whole subject of aliments and drinks, with remarks on condiments.
Their uses in health and disease.
Diet proper in health,
a. In inflammatory diseases.
b. In those of feeble action.

Scale of diet generally adapted to these various diseases.

c. Diet adapted to particular diseases, as Scurvy;—Cholera;—Dysentery;—Dyspepsia;—Gout, &c.

SECTION II.

Of the Materia Medica Propria.

Observations on medicinal articles, and the means employed in the investigation of their properties.

Therapeutical observations on the nature of diseased actions,

Observations on the nature of the actions produced by remedies.

Remedies sometimes employed simply, to lessen existing actions; sometimes to augment them.

Explanations of the nature of Stimulant and Sedative agency.

A direct sedative has no existence in the strictest sense of the term; but many medicines are employed, which produce an ultimate sedative operation;—illustrated in the effects of evacuating medicines;—of the various passions and emotions of mind;—in the effects of cold and heat;—As a general principle, whatever produces a deviation from the natural condition of an animal body, occasions new actions; and in this limited sense is a

stimulus. But the term Stimulant is reserved to designate a class of medicines used expressly for the purpose of augmenting the motions or powers of the body.

MODUS OPERANDI of medicines:

1. Medicines act primarily on the solids; chiefly the stomach and skin;—proofs.
2. It is not to be denied that medicinal articles occasionally enter the blood-vessels;—proofs.
3. Wherever the primary impression may be made, the subsequent effects result from sympathy; (sympathy defined action from remote impression;)—illustrations.

Division of the Materia Medica Propria into two general sections.

1st. EVACUANTS; those by which fluids are drawn out from the body, or by which its powers and actions are diminished; (including classes of medicines, not strictly entitled to their place, but which cannot so well be arranged in the 2d division.)*

2. STIMULANTS; those which increase its actions and powers.

§ I. EVACUANTS.

1. Blood-letting.
2. Emetics.
3. Cathartics.

* These are, Antilithics, Anthelmintics, and Epispastics.

4. Diuretics.
5. Antilithics.
6. Diaphoretics.
7. Emmenagogues.
8. Sialagogues.
9. Anthelmintics.
10. Epispastics.*

§ II. Stimulants.

1. Stimulants used for the alone purpose of stimulating; (i. e. of increasing action.)
2. Narcotics.
3. Antispasmodics.
4. Tonics.
5. Astringents.

EVACUANTS.

I. Blood-letting:

History of blood-letting,
Its general use,
Objections to it considered,
Its effects in health,
in diseases,
Circumstances which demand, and which contra-indicate it in diseases,
Practical application to particular diseases.†

* Errhines and Expectorants are omitted, for reasons deemed sufficient: the expectorant virtues of such articles as are supposed to possess these qualities are not however neglected.

† In treating of the use of this and the following remedies in diseases, the Nosology of Cullen is used simply as a catalogue; however objectionable for most purposes, it sufficiently answers this.

LOCAL BLOOD-LETTING.

a. Scarification.

b. Cupping.

c. Leeches.

Practical application of each.

II. EMETICS;—Definition:

Physiology of vomiting,

Stomach active in vomiting; this action extends to the duodenum, and other viscera;—proofs.

General effects of emetics:

Practical application; use of emetics in various diseases; particular directions for the exhibition of emetics; directions to obviate their ill effects, and to lessen their inordinate operation; circumstances which contra-indicate their exhibition.

Of particular Emetics,

§ I. Those from the vegetable kingdom.

I. CALLICOCCA IPECACUANHA or CEPHAELIS EMETICA. (Ipecacuanha.)

History; pharmaceutic treatment, and modes of exhibition. Root powdered; (dose, 15 to 30 grains.) N.B. Large doses are safe, because easily evacuated. Practical application to the various diseases, in which Ipecacuanha is employed.*

* Where nothing interferes, to prevent the mode of treating a medicinal article here pursued, it is adopted.—The doses are always mentioned for adults unless otherwise specified.

II. GILLENIA STIPULACEA et TRIFOLIATA, or SPIRÆA TRIFOLIATA. (Indian physic.)

History, &c. Average dose, 30 grains and upwards.

III. NICOTIANA TABACUM. (Tobacco.)

History, &c. Dose said to be from 4 to 6 grains. Not a safe emetic.

IV. SCILLA MARITIMA. (Squill.)

History, &c. Dose 4 to 8 grains of dried root; (chiefly however, used in smaller and merely nauseating doses.) See Diuretics and Diaphoretics.

§ II. Of mineral Emetics.

V. STIBIUM vel ANTIMONIUM. (Antimony.)

General history:

TARTRIS ANTIMÓNII. (Tartar Emetic.)

Chemical history; pharmaceutic treatment and modes of exhibition: average dose 2 to 5 grains; (safest in divided doses.)

Remedies to be used, when excessive doses have been taken, or when the effects of an ordinary dose are too violent.

Practical application in various diseases.

Kermes mineral; James' powder and various antimonial preparations.

VI. SULPHAS ZINCI. (White Vitriol).

Chemical history; pharmaceutic treatment and modes of exhibition. Practical application to diseases. Average dose, 10 to

15 grains, in solution; (in case of poisons taken into the stomach ʒj. to ʒij. may be given, if necessary.)

VII. SULPHAS CUPRI. (Blue Vitriol.)

Average dose, 2 to 5 or 10 grains in solution.

Remarks on various Mercurial emetics.

III. CATHARTICS;—Definition.

General History,

Physiological and Therapeutical remarks,

Usual effects of cathartics,

Practical application to the cure of diseases.

Particular Cathartics,

§ I. From the vegetable kingdom.

I. SINAPIS; NIGRA. (Mustard.)

Average dose, unbruised seeds, ℥ss. to ℥j.

II. FRAXINUS ORNUS: the concrete juice. (Manna;) ℥ss. to ℥ij.

III. JUGLANS CINEREA. (Butternut.)

Extract; dose 6 to 10 grains.

IV. PODOPHYLLUM PELTATUM. (May apple.)

Root; dose 25 to 30 grains.

V. OLEUM RICINI COMMUNIS. (Castor oil.)

Dose, ℥j.

VI. CASSIA SENNA et CASSIA LANCEOLATA. (Senna.)*

* Mr. Nectoux has proved that these two plants together with the Cinanchum Oleæfolium, are contained in the common parcels of Senna in the shops.

Dose, ℥ss. infused, and given in divided portions. Tincture, ℥ss. to ℥j.

Remarks on other formulæ.

VII. CASSIA MARILANDICA.

Used in place of the last, and in similar doses.

Remarks on various vegetable cathartics not worthy to be retained in the Materia Medica.

VIII. RHEUM PALMATUM, also R. compactum and R. undulatum. (Rhubarb.)

Root; dose ℈j. to ℈ij.

IX. CONVOLVULUS JALAPA vel IPOMEA MACRORHIZA. (Jalap.)*

Root. Dose, 15 grains to ʒss.

X. ALOE PERFOLIATA, A. SPICATA. (Aloes.)

Extract. Dose, 5 to 15 grains.

XI. STALAGMITIS CAMBOGIOIDES. (Gamboge.)

Gum. Dose, 2 to 10 grains.

XII. CONVOLVULUS SCAMMONIA. (Scammony.)

Dose, 3 to 10 grains.

XIII. CUCUMIS COLOCYNTHIS (vel COLLOQUINTIDA.) (Collocynth.)

Fruit or extract. Dose, 3 to 6 grains.

XIV. HELLEBORUS NIGER. (Black Hellebore.)

Root. Dose, 10 grains to ℈j.

* The botanists seem to have established their identity; perhaps, however, the dispute is *adhuc sub judice.*

Extract, 5 to 10 grains.

Tincture, ʒss. to ʒjss.

XV. VERATRUM ALBUM. (White Hellebore.)

Root. Dose, 10 to 15 grains.

XVI. CUCUMIS AGRESTIS;—Vel MOMORDICA ELATERIUM. (Elaterium or Squirting Cucumber;) the most drastic of all the purgatives.

Expressed juice dried. Dose, half a grain every hour till the effect is produced.

Remarks on COLCHICUM AUTUMNALE and other articles, which have Cathartic properties, but blended with narcotic and other virtues; more minutely described in other parts of the course.

XVII. CARBO LIGNI vel CARBO VEGETABILIS. (Charcoal.)

Dose, ʒj. and more.

♄ II. Mineral Cathartics.

XVIII. CALOMEL (SUB-MURIAS HYDRARGYRI.)

Dose, very various;—5 to 15 grains.*

XIX. SULPHUR. (Flowers of Sulphur.)

Dose ʒj. to ℥ss.

XX. MAGNESIA. (Magnesia, Calcined Magnesia.)

Dose, ℈j. to ʒj.

* Much difficulty in settling the dose of Calomel. A gentleman, for experiment sake, took 3 grains and 80, at proper intervals, with precisely similar effects. In the southern States larger doses are demanded than in the middle and eastern.

§ III. Saline Cathartics.

XXI. SULPHAS SODÆ. (Glauber's Salt.)
Dose, ℥j.

XXII. SULPHAS MAGNESIÆ. (Epsom Salt.)
Dose, ℥j.

XXIII. TARTRIS POTASSÆ et SODÆ. (Rochelle Salt.)
Dose, ℥j.

XXIV. SUPER TARTRIS POTASSÆ. (Cream of Tartar, or powdered Chrystals of Tartar.)
Dose, ℥j.

XXV. TARTRIS POTASSÆ. (Soluble Tartar,) (Cream of Tartar saturated with Potash.)
Dose, ʒj. to ℥ss.

XXVI. PHOSPHAS SODÆ. (Phosphate of Soda.)
Dose, ℥j.

(Observations on combinations of purgative medicines.)—On Enœmata (Glysters.)

IV. DIURETICS;—Definition.

General History,

Physiological investigations, respecting the secretion of urine;—Discussion of the questions;—Are diuretics absorbed into the circulation?—Do they act by stimulating the stomach and kidneys, sympathetically?—Do they enter the bladder by a route independent of the blood-vessels?—Darwin's opinions of retrograde action of the absorbents refuted;—Sir Everard Home's experiments canvassed;—the author's opinions advanced.

Practical remarks on the use of Diuretics in various diseases.

Of Particular Diuretics,

I. POTASSA. (The vegetable fixed alkali or Potash.)

Sub-carbonate of Potash.—Dose, ℈j. to ʒss.

Caustic Potash;—no longer used.

II. SODA. (Mineral fixed Alkali.)

Sub-carbonate. Dose, 10 grains to ʒss.

Remarks on acetate of Potash and other saline articles.

III. NITRAS POTASSÆ. (Nitre; Salt Petre.)

Dose, 8 grains to ʒss.

IV. SUPER TARTRIS POTASSÆ. (Cream or chrystals of Tartar.)

Dose, ℥ss. to ℥j. in solution; given in divided doses, in the course of a day.

V. SPIRITUS ETHERIS NITROSI. (Sweet Spirits of Nitre.)

Dose, 30 to 60 drops.

Vegetable Diuretics.

VI. DIGITALIS PURPUREA. (Foxglove.)

Dose, powdered leaves, half a grain to 3 grains;—infusion or decoction, ℥ss.

Tincture, 15 to 20 drops;—Darwin's saturated tincture, 10 to 15 drops.

VII. NICOTIANA TABACUM. (Tobacco.)

(Infusion) ℥j. of leaves, to ℔j. water. Dose 50 to 60 drops.

VIII. SCILLA MARITIMA. (Squill.)
Dried-root, 1 to 3 grains.
Syrup, ʒj. to ʒiij.
Oxymel, ʒss. to ʒij.
Vinegar, ʒss. to ʒij.

IX. COPAIFERA OFFICINALIS. (Balsam Copaiva.)
Dose, 20 to 30 drops.

X. PINI OLEUM VOLATILE. (Oil or Spirit of Turpentine.)
Dose, 15 to 20 drops.

XII. RESINA PINI, vel RESINA FLAVA. (Common Rosin.)
Dose, 10 grains.
Remarks on other Resins.

XIII. POLYGALA SENEGA.(Seneka Snake-root.)
Root, 10 grains to ℈j.
Infusion, (℥j. to ℔j. water.) Dose, ℥j.
Remarks on numerous vegetable Diuretics of slender virtues.

Diuretics from the Animal kingdom.

XIV. MELOE VESICATORIUS seu CANTHARIS. (Spanish-fly.)
Tincture, (ʒj. to ℔j. of spirit;) 10 to 20 drops.

XV. MELOE AMERICANA. (Nearly the same in virtue.)
Dose similar.

V. ANTILITHICS;—Definition.
Pathological remarks on calculous concretions;

—Chemical analysis of urinary calculi;—Action of chemical agents upon them;—of injecting into the bladder fluids capable of dissolving stone;—experiments with gastric liquor;—difficulties in this mode of treatment;—remedies for a fit of the stone;—various modes of operation of different Antilithics.

Particular Antilithics.

I. POTASSA. (Potash.)

1. AQUA POTASSÆ, or (Caustic ley.)
   Dose, 15 to 20 drops.
2. SUB-CARBONAS POTASSÆ.
   Dose, 10 to 20 grains.
3. AQUA SUPER-CARBONATIS POTASSÆ.
   ℥vj. to ℥xvj.

II. SODA.

1. CARBONAS, 10 grains to ʒj. (By Bostock gradually increased to ℥iij. a day.)
2. AQUA SUPER-CARBONATIS; ℥vj. to ℥xvj.

III. CALX. (Lime.)

Aqua Calcis, ʒiv. to ℔j. in a day.

IV. MAGNESIA.

10 grains to ℈j.

V. ACIDUM CARBONICUM. (Carbonic acid.)

Aqua æris fixi, ℥viij. to ℔j. often repeated.

VI. ACIDUM NITROSUM. (Nitrous acid.)

10 to 50 drops, greatly diluted.

VII. ACIDUM MURIATICUM. (Muriatic acid.)

10 to 50 drops greatly diluted.

Remarks on bitters and astringents, as Antilithics.

VIII. ARBUTUS UVA URSI. (Bear's grape.)
Leaves. Dose, ʒss. to ʒj.

XI. HUMULUS LUPULUS. (Hop.)
Saturated Infusion, ℔j. a day.
Tincture, ℥ss. thrice a day.

X. OLEUM VOLATILE PINI. (Spirit of Turpentine.)
10 to 20 drops.
Remarks on the alliaceous plants as Antilithics.
Remarks on fictitious diseases, (morbi simulati;)—extraordinary histories of deceptions;—tests of urinary calculi.

VI. DIAPHORETICS;—Definition;—(including the feebler remedies of the class.)
Physiological account of the perspiration;—mode of operation of Diaphoretics;—direction for treating patients before and after the operation of diaphoretics;—practical directions for their employment in disease.

Of Particular Diaphoretics,
Description of various means employed for the purpose of augmenting the quantity of perspiration;—application of heat;—various modes of applying heat;—generally—locally—aided by friction, warm drinks, &c.—Cold, as a diaphoretic.

Articles, which taken into the stomach produce sweating, or in a feebler degree occasion an increased discharge of perspirable fluid.

Remarks on Emetics as Diaphoretics.

I. ANTIMONY,

Alone;—in combination with saline medicines.

Tartar Emetic.

Dose, one eighth to one fourth of a grain.

Antimonial wine;—much used for the diseases of children.

Dose for an adult, 20 to 60 drops;—for a child at birth to one month old, one drop;—a month to a year old, 5 drops;—a year to 10 years, 2 or 3 to 20 drops.

II. IPECACUANHA.

Dose, half a grain to two grains.

III. COMMON SALINE DRAUGHT.

(Sub-carbonate of Potash saturated with citric or acetic acid.)

N. B. In a state of effervescence this is the common anti-emetic mixture. Dose ℥ss.*

IV. NITRAS POTASSÆ.

Dose, 10 to 20 grains, (generally given with Antimonials or Ipecacuanha.)

General remarks on the other neutral salts.

* See the Recipe at the end of the book.

V. PAPAVER SOMNIFERUM. (Opium.)

Dose, one quarter of a grain to a grain.

Dover's powder, Opium with Ipecacuanha.

Dose, 10 grains, containing one of each, and 8 grains of vitriolated tartar.

Opium with tartar emetic.

One grain of the former, and one eighth of a grain of the latter.

Remarks on Camphor, Musk, Sulphur, &c.

VII. EUPATORIUM PERFOLIATUM. (Bone set, Thorough wort, &c.)

Dose not well defined, strong infusion, as much as the stomach will bear.

VIII. POLYGALA SENEGA,

when used as a Diaphoretic, is given in infusion, and largely diluted.

IX. LAURUS SASSAFRAS. (Sassafras.)

Root. Dose indefinite; strong infusion, ad libitum.

X. GUAIACUM OFFICINALE. (Gum Guaiacum.)

The wood and gum resin are used;—the shavings of the wood boiled, ℔ss. to 3 quarts of water. Dose, ad libitum.

Gum resin. Dose 10 grains to ʒss.

Tincture; ʒij. to ℥ss.

Volatile or ammoniated tincture; ʒj. to ℥ss.

Uses of Guaiacum in various diseases.

XI. DAPHNE MEZEREUM. (Mezereon.)

Bark of the root. One to ten grains.
Decoction, ℔j.
Remarks on Lisbon diet drink and various "decoctions of the woods."
Remarks on Sarsaparilla and other articles employed in these drinks.

XII. JUNIPERUS SABINA. (Savine.)
Leaves; 10 grains to ℥ij.

VII. SIALAGOGUES;—Definition.
Division into Masticatories and internal Sialagogues;—the former of no use; the latter only entitled to attention; and of these, Mercury alone is to be confided in.
Medical History of Mercury.
Chemical History;—Modus Operandi of Mercury;—Question of absorption discussed.
Particular preparations of Mercury.

I. MISTURA HYDRARGYRI MUCILAGINOSA. (Pienck's Solution.)
Used chiefly as a gargle.

II. PILULÆ HYDRARGYRI. (Blue pill;—Mercurial pill.)
Mode of preparation. Dose, 1 to 10 grains.

III. UNGUENTUM HYDRARGYRI.
Mode of preparation.
Remarks on the Sulphurets of Mercury; viz. Ethiops mineral, and Red Cinnabar;
Their uses.

IV. CALOMEL. Reasons for preferring this name. (Sub-muriate of mercury.)

Dose, half a grain to two grains.

V. CORROSIVE SUBLIMATE. Reasons for preferring this name. (Muriate of mercury.)

Dose, one sixteenth to one fourth of a grain.

VII. RED PRECIPITATE, or (Red Oxyde by nitric acid.)

Half a grain to a grain.

Chiefly used externally. (See Epispastics.)

VIII. MERCURIUS CINEREUS. (Grey Oxyde of Mercury.)

Dose, 2 or 3 grains.

IX. SUB-SULPHAS HYDRARGYRI. (Turpeth mineral.)

Not recommended as a Sialagogue.

X. CALX HYDRARGYRI ALBA. (White precipitate.)

Chiefly used externally.

Practical application.—Extensive views of the use of Mercury.

Enquiry into the morbid effects resulting from the use of mercury;—General view of the usual symptoms of a salivation;—the more unusual effects;—sloughing of the cheeks;—necrosis or death of the teeth and alveolar sockets;—Erethismus mercuriale, of Pearson;—Eczema mercuriale, of Pearson; or Hydrargyrium of Mr. Alley;—Proofs that these are very

rare effects of mercury, but that they are occasionally met with;—Mr. Hunter's account of the poisonous or morbid effects of mercury explained and defended;—Proofs that many mischiefs have been ascribed to mercury, which do not result from it; especially the diseases said to resemble syphilis;—Mr. Matthias's doctrines on this subject refuted.

Directions for treating patients, during a mercurial course;—of mercurial unctions, fumigations, &c.

VIII. EMMENAGOGUES;—Definition.

Pathology of Amenorrhœa,

Proofs that it is generally symptomatic of other diseases;—general uncertainty of Emmenagogues.

Of Particular Emmenagogues.

I. ALOES; as a Cathartic. (Vide Cathartics.)

II. HELLEBORUS NIGER. (Vide Cathartics.)

TINCTURA MELAMPODII.

Dose, 30 drops, to be augmented to ʒj. and more.

III. GUAIACUM OFFICINALE.

Dose, vol. tincture ʒj.

IV. POLYGALA SENEGA.

(See Diuretics.)

V. SECALE CORNUTUM. (Ergot.)

Dose, ℈j. to ʒss.

VI. JUNIPERUS SABINA.

Dose, ʒss. to ℥ss.

Remarks on various other vegetables supposed to be Emmenagogues.

VII. HYDRARGYRUS. (Mercury as a Sialagogue.)

VIII. FERRUM. (Iron;—See Tonics.)

General remarks to prove that a careful attention to existing symptoms of diseases or "the state of the system," should regulate every prescription for Amenorrhœa;—and that when this is kept in view, there is scarcely an article of the Materia Medica which does not occasionally act as an Emmenagogue.

IX. ANTHELMINTICS;—Definition.

General account of various parasytic animals found in the human alimentary canal;—a more minute description of those most frequently met with;

I. ASCARIS LUMBRICOIDES; or (Lumbricoid worm.)

II. ASCARIS VERMICULARIS. (Maw or thread worm.)

III. TRICHURIS; (called also thread worm.)

IV. TENIA; or (Tape worm.)

Called when in detached pieces CUCURBITINUS.

Modes of operation of Anthelmintic medicines.

Remarks on Cathartics as Anthelmintics;—espe-

cially Calomel, Scammony, Gamboge, and Aloes.

Particular Anthelmintics.

I. CHENOPODIUM ANTHELMINTICUM. (Jerusalem oak; Worm-seed.)

Leaves and seeds. Dose, 6 to 8 drachms, of a strong infusion. (N. B. This is a safe dose for children 4 or 5 years old.)

Seeds in powder. A table spoonful. (For children from 4 to 8 years old.)

Essential oil far preferable.

For a child under 2 years; dose, 5 drops.
2 to 5 years; 5 to 10 or 15 drops.

Dose for an adult, 20 to 30 drops.

II. SPIGELIA MARILANDICA. (Carolina Pink-root.)

Root. Dose, 5 to 10 grains for a child 2 to 5 years old.

For adults, ℈j. to ʒj.

Infusion; (℥j. to a pint of water.)

℥ss. to ℥j. for a child.

℥j. to ℥iv. for an adult.

III. MELIA AZEDARACH. (Pride of India, &c.)

Dose, of the root.

Saturated decoction, ℥j. to ℥vj. for adults, ℥ss. to ℥ij. for children.

IV. GEOFFREA INERMIS. (Cabbage tree, &c.)

Dose, (bark,) ℈j. to ℈ij.

V. POLYPODIUM FILIX MAS. (Male Fern.)

Dose, (root,) ʒj to ʒij.

VI. DOLICHOS PRURIENS. (Cowhage.)

The spiculæ which cover the pod.

Dose, 5 to 10 grains.

VII. OLEUM VOLATILE PINI. (Oil of Turpentine.)

ʒj. to a child 4 years old.

℥ss. to ℥ij. for adults; chiefly in cases of tænia.

VIII. FERRUM. (Iron. See Tonics.)

XI. MURIAS SODÆ. (Common salt.)

Dose, ʒss.

X. STANNUM. (Tin.)

Filings, or powder. Dose, ʒj. to ʒij.

(A dry amalgam with quicksilver;—acts in smaller dose; 10 grains to ℈j.)

Remarks on Helleborus Fœtidus, and other articles used as Anthelmintics;—glysters adapted to cases of Ascarides;—Camphor; Tobacco; Spirit of Turpentine; Assa fœtida; Aloes; Infusion of Tenacetum Vulgare (Tansey); Hepar Sulphuris, (Liver of Sulphur.) Certain mercurial preparations; Corrosive Sublimate, Æthiops Mineral;—Sulphate of Iron, solution of Muriate of Soda, &c.

X. EPISPASTICS;*—Definition.

Etymology and convenience combine to include in the definition three distinct subdivisions;

* This class might be included either under the section Evacuantia, or Stimulantia, since it combines the properties of both.

1. Rubefacients.
2. Epispastics, strictly so called, or Vesicatories.
3. Caustics or Escharotics.

1. RUBEFACIENTS.

Description of various methods of exciting an increased action or inflammation on the skin; mechanical and chemical;—various modes of friction, heat;—stimulants applied to the surface.

I. ALKALI VOLATILE:

Pure, or mixed in various proportions with olive oil.

II. OLEUM VOLATILE PINI. (Spirit of Turpentine.)

N. B. Sometimes camphor is dissolved in it, which acts chiefly by disguising the unpleasant smell. This may also be done by oil of sassafras.

Remarks on all the essential oils;—all occasionally used as rubefacients;—Alcohol and other chemical irritants.

III. Resinous plasters;

Adhesive plaster; Diachylon; Burgundy pitch, &c. &c.

It is placed last of the first section, because blisters are generally an important part of an antiphlogistic or evacuating course of medicines.

Tartar Emetic, dusted over adhesive plaster, one of the best modes of local irritation;—Cases to which it is adapted.

Remarks on various Cataplasms;—Scale of stimulating cataplasms, with remarks on garlic, mustard, horse-radish, capsicum, (red pepper,) &c.

Practical application.

§ II. VESICATORIES.

Remarks on numerous articles excluded from this division of the class; which ought only to contain those best adapted to raising blisters.

I. CANTHARIS, SEU MELOE VESICATORIA. (Spanish fly.)

Modes of preparing blisters.

Forms adapted to various parts of the body; (models exhibited.)

Modes of dressing blisters.

Practical rules for the use of blisters in disease;—effects of blisters;—Strangury;—methods of treating strangury from blisters.

II. LYTTA VITTATA. (American blistering fly.)

History.

It great similarity to the preceding article established.

Remarks on other blistering insects.

§ III. Caustics and Escharotics.

Remarks on the actual cautery.

Burning of moxa; not approved except by a few French surgeons and physicians.

Setons and Issues;—modes of forming them; —uses in diseases.

I. PURE POTASH.

II. MINERAL ACIDS.

III. LUNAR CAUSTIC.

Remarks on various others; Red Precipitate, Blue Vitriol, Corrosive Sublimate, Butter of Antimony, Verdigrease, &c. Savine ointment, Citrin ointment, &c.

§ II. STIMULANTS.

I. Stimulants;—Definition, and history.

General remarks on the cases in which heat, cold, friction, electricity, and galvanism, are used as stimulants; (i. e. simply to excite action, or to increase action, or power of action.)

Of Particular Stimulants.

I. AMMONIA. (Volatile Alkali.)

Concrete volatile alkali or Carbonate of Ammonia.

Dose, 5 to 15 grains.

Aqua Ammoniæ puræ.

Dose, 10 to 20 drops.

Aqua Carbonatis Ammoniæ.

Dose, 15 to 30 drops.

(Salt and Spirit of Hartshorne containing animal oil.

Doses similar.)

II. ALCOHOL.

Effects on the system;—various modes of using it, in fermented and distilled liquors.

Dose indefinite.

III. ÆTHER SULPHURICUS. (Sulphuric Æther.)

Dose, 20 drops to ʒj.

IV. SPIRITUS ÆTHERIS VITRIOLICI COMPOSITUS. (Hoffman's Anodyne liquor.)

Dose, ʒss. to ʒij. (less stimulating.)

V. SPIRITUS ÆTHERIS NITROSI. (Sweet Spirits of Nitre.)

Dose, ʒss. to ʒij.

VI. OLEUM VOLATILE PINI. (Oil of Turpentine.)

Dose, 10 drops to ʒij.

Remarks on Narcotics as Stimulants.

VII. CAPSICUM ANNUUM. (Cayenne Pepper.)

Dose, (fruit,) 2 to 10 grains.

VIII. PIPER NIGRUM. (Black Pepper.)

Dose, (berries,) 5 grains to ℈j.

IX. AMOMUM ZINGIBER. (Ginger.)

Dose, (root,) 5 grains to ʒss.

Remarks on the various spices; Cinnamon, Cloves, Nutmeg, Mace, Alspice;—The Alliaceous and Siliquose plants; Calamus

Aromaticus, and other stimulating vegetables.

§ II. NARCOTICS;—Definition.
General History.

Particular Narcotics.

I. PAPAVER SOMNIFERUM. (Poppy;—Opium.)
History.

Chemical analysis;—pharmaceutical preparations;—effects on the human body;—poisonous effects;—means for preventing fatal effects;—emetics, &c.—manner of washing out stomach;—cases successfully treated in this manner;—various other remedies necessary;—effects of long continued use of opium;—remedies.

Practical remarks on the use of Opium in diseases.

Average doses, dried extract in substance, (pill or powder,) 1 grain.

Tincture, (Laudanum.)
(Cautions respecting old laudanum.)

Doses for an adult		25 drops.
for a person aged	15 years,	15 to 20
	10 to 15,	10 to 20
	5 to 10	5 to 15
	2 to 5	2 to 8
	1 to 2	1 to 5
under a year old	half a drop to 2 or 3	
at birth, or within a month after,	half a drop.	

Remarks on other formulæ, in which opium is the most active ingredient.

External use, in various forms.

Anodyne glysters.

II. HYOSCYAMUS NIGER. (Henbane.)

Extract. Dose, 1 to 5 grains.

III. PRUNUS LAURO CERASUS. (Cherry laurel.)

Saturated tincture, 5 to 10 drops. } Unsafe.
Distilled water, doubtful. }

IV. ATROPA BELLADONNA. (Deadly Night-shade.)

Extract. Dose, 1 to 2 grains.

Dried leaves, 2 to 3 grains.

V. CONIUM MACULATUM. (Hemlock; Cicuta.)

Powdered leaves, or fresh extract.

Dose, 2 to 5 grains; increased gradually to ʒj. or more in a day.

VI. DATURA STRAMONIUM. (Jamestown Weed.)

Dose, leaves or seeds, or extract, 1 to 5 grains.

VII. NICOTIANA TABACUM. (Tobacco.)

Leaves; gr. ss. to gr. v.

VIII. HUMULUS LUPULUS. (Hop.)

Dose, 3 to 5 grains.

Saturated tincture, ℥ss.

Remarks on the other Narcotics.

§ III. ANTISPASMODICS;—Definition.

Nature of Spasm, and of the remedies suited to remove it;—most medicines occasionally Antispasmodic.

Particular Antispasmodics.

I. LAURUS CAMPHORA. (Camphor.)
Chemical history.
Pharmaceutical treatment;—uses in disease;—
External uses.
Dose, 3 grains to ℈j.

II. MOSCHUS (Musk.)
Dose, 5 grains to ℈j.

III. CASTOREUM. (Castor.)
Dose, 10 to 30 grains.

IV. OLEUM SUCCINI. (Oil of Amber.)
Dose, 10 to 20 drops.

V. FERULA ASSA FŒTIDA. (Assa Fœtida.)
Dose, 5 grains to ʒss.
Remarks on Gum Ammoniac, &c.

VI. VALERIANA OFFICINALIS. (Valerian root.)
Dose, ℈j. to ʒj.

Remarks on the Essential oils, and a variety of vegetables, used as Antispasmodics of doubtful efficacy.

VII. ALLIUM SATIVUM. (Garlick.)
Dose, indefinite.

VIII. WARM BATH.

§ IV. TONICS;—Definition.
Explanations of the nature and effects of Tonics.
Proofs that Tonics act not only on the muscular fibres, but on the brain and nerves, blood-vessels, alimentary canal, skin, cellular texture, absorbents, and every part of the body.

Of Particular Tonics.

§ I. Vegetable Tonics.

I. CINCHONA OFFICINALIS. (Peruvian Bark.)

History of the numerous species of Cinchona; three only in common use.

1. C. LANCIFOLIA; which affords the (Pale Bark.)
2. C. OBLONGIFOLIA; (The Red Bark.)
3. C. CORDIFOLIA; (The Yellow Bark.)

Descriptions of these varieties;—their Chemical analysis, and Pharmaceutical treatment;—Practical uses in diseases; —various modes of exhibition.

Average dose, in powder, ʒj.

II. GENTIANA LUTEA. (Gentian.)

Dose, gr. x. to ℈ij.

III. FRAZERA OFFICINALIS. (American Columbo.)

Root. Dose, ℈j. to ℈ij.

IV. COLUMBO.

Dose, (root,) ʒss. to ʒij.

V. QUASSIA.

Three species;—Amara, Polygama, and Simarouba.

Dose, (wood,) 10 to 30 grains.
(bark,) ʒss. to ʒj.

Infusion, (℥j. chipped wood to 1 quart of water) ℥j. to ℥ij.

Extract in pills, 3 to 5 grains.

VI CUSPARIA FEBRIFUGA. (Angustura Bark.)

Dose, (bark,) ℈j. to ʒj.

VII. SERPENTARIA VIRGINIANA. (Virginia Snake root.)

Dose, (root,) in powder, ℈j. to ℈ij.

Infusion, (℥j. to a pint of water,) dose, ℥ij.

VIII. PRUNUS VIRGINIANA. (Wild Cherry tree.)

Bark. Dose, ʒj.

Infusion, (℥j. in a pint, boiled to half a pint of water,) Dose, ℥j. to ℥ij.

IX. ANTHEMIS NOBILIS. (Chamomile.)

Dose, (flowers,) ℈j. to ʒj.

X. CHIRONEA ANGULARIS. (Centaury.)

Dose, ℈j. to ʒj. leaves and summits of the plants.

XI. CORNUS FLORIDA. (Dogwood.)

Dose, (bark.) ʒj.

XII. CORNUS SERICEA. (Red Willow—Red Dogwood.)

Dose, (bark,) ʒj.

XIII. EUPATORIUM PERFOLIATUM. (Thoroughwort; Bone set.)

Leaves and stems in cold infusion, ℥j. to a pint of water. Dose, ℥j.

Remarks on various other tonics of complicated properties, or inferior virtues.

Gentiana Centaureum;—Lichen Islandicus;—Carduus Benedictus;—Lupulus Communis;—Meneanthes Trifoliata;—Centaurea Benedicta;—Fumaria Officinalis;—Helleborus Trifolius;—Rheum Palmatum;—Tenacetum Vulgare;—Artemisia Absinthium;

—Aristolochia Longa;—Croton Eleutheria; —Arnica Montana;—Amygdalus Amarus; —Citrus Aurantium;—Magnolia Glauca; Liriodendron Tulipifera;—Salix Alba;—Esculus Hypocastanum;—Swietenia Mahogania, &c.

§ II. Mineral Tonics.

XIV. FERRUM. (Iron.)

Filings of iron, 5 to 10 grains.

Carbonate, or rust of iron, gr. x. to ℈j.

Sulphate, gr. ij to 5.

Muriate, (the tincture,) Dose, 5 to 20 drops. (Not a good tonic; it nauseates.)

Tartrite of iron and potash, gr. x. to 30.

XV. CUPRUM. (Copper.)

Its effects on the system;—Poisonous effects of large doses;—Remedies for these effects; —use in diseases.

Dose, Ammoniuret, half a grain, gradually increased to 5 grains.

Sulphate, dose, half a grain to 2 grains;—in large doses is emetic.

XVI. ARGENTUM. (Silver.)

Nitrate, dose, one fourth of a grain to 2 grains.

XVII. PLATINUM. (Platina.)

Dissolved in Nitro-muriatic Acid.

Small doses; not yet ascertained.

XVIII. AURUM. (Gold.)

Dose, Metallic gold, grs. iv.

Oxyde, half a grain to 2 grains.

Dose, Muriate, one sixteenth to one tenth of a grain.

XIX. ZINCUM.

Dose, Oxyde, 2 grains.

Sulphate, 2 to 6 grains.

Use in injections for Gonorrhœa, dose 2 to 5 grains in ℥viij. water. Cautions respecting its employment.

Acetate used in a similar way, 4 to 8 grains, in ℥viij.

XX. BISMUTHUM. (Bismuth.)

Oxyde, 2 to 5 grains.

XXI. ARSENICUM.

Regulus inert.

Effects of oxyde or acid.

Its poisonous effects;—Remedies;—cases illustrative of their efficacy;—use in diseases.

Oxyde, one sixteenth of a grain up to one fourth.

Fowler's solution, 10 to 15 drops.

XXII. ACIDUM SULPHURICUM. (Sulphuric Acid.)

Elixir vitriol, dose 10 to 15 drops.

XXIII. ACIDUM NITRICUM.

Dose, 5 to 10 drops.

XXIV. ACIDUM MURIATICUM.

Dose, 5 to 10 drops.

XXV. COLD BATH.

History.

Uses in disease, &c. Salt bath, &c.

§ V. Of Astringents;—Definition.
Effects on the human body;—Chemical account of Astringents.

Particular Astringents.

§ I. Vegetable Astringents.

I. MIMOSA CATECHU.
Dose, grs. xv. to ʒss.
External use in ulcers, &c.

II. KINO.
Dose, 10 grains to ℈j.

III. QUERCUS ROBUR. (Oak.)
Bark, gr. xv. to ʒss.
Oak galls, gr. x. to ʒss.

IV. HEMATOXYLON CAMPECHENSE. (Log-wood.)
Wood, infusion, ℥j. to a pint of water.
Dose, ℥ij.
Extract, ℈j. to ℈ij.

V. GERANIUM MACULATUM.
Infusion, ℥j. to ℔j. water. Dose, ℥j. to ℥ij.

VI. UVA URSI.
Dose, ʒss. to ʒj.
Remarks on Prinos Verticellatus (Black Alder,) Rubus Trivialis, Rubus Villosus, &c. (black berry, dew berry.)

§ II. Of the Mineral Astringents.

I. IRON.—See Tonics.

II. COPPER.—See Tonics.

III. ZINC.—See Tonics.

IV. LEAD.

Astringent effects;—Poisonous effects;—Colica Pictonum;—Use of lead in diseases.

Acetate; Dose 3 to 10 grains; various external applications of the preparations of lead.

V. ALUMINIS SULPHAS.

Dose, 10 grains to ℈j.

VI. CARBONATE OF LIME. (Prepared Chalk and other Carbonates.)

N. B. Not strictly Astringents, but introduced here most conveniently.

Dose, 10 grains to ʒj.

Remarks on Muriate of Lime;—Muriate of Barytes, &c.

As many of the Students of Medicine in the University of Pennnsylvania have received no medical instruction, previously to their attendance on Lectures, the following table of weights and measures is subjoined.

Apothecaries Weight.

20 grains,	(marked gr.)	equal to	1 scruple,	(℈j.)
3 scruples,	(℈iij.)	=	1 dram,	(ʒj.)
8 drams,	(ʒviij.)	=	1 ounce,	(℥j.)
12 ounces,	(℥xij.)	=	1 pound,	(℔j.)

The following are the most useful abbreviations, used in writing prescriptions.

℞ Recipe, take.

ℳ Misce, mix.

F. Fiat, or fiant; Let there be made.
S. Signe, mark (or scribe, write.)
Pulv. Powder, or powders.
Pill. or pillul. Pills.
Haust. haustus, a draught.
Mist. mistura, a mixture.
Solut. a solution.
Collyr. collyrium. Eye water.
Garg. gargarysma, a gargle.
Gutt. gutta a drop, or guttæ, drops.
Ppt. Preparata, prepared.
Coch. cochlear, a spoonful.
parvum, a tea-spoonful.
magnum, a table or large spoonful.
Ss. Semi, half; as ℥ss. half an ounce.
aa. ana. of each.
q. s. quantum sufficit, a sufficient quantity.

N. B. In Europe, where the Latin language is more generally employed, the directions are commonly written in that language, and many abbreviations are employed, which are not used in America.

I earnestly recommend to my pupils who send their prescriptions to apothecaries to write all their directions in legible English, as our apothecaries are too often bad linguists, and commit many blunders in their attempts to decypher them.

As illustrating the mode of writing prescriptions which I approve, and as memoranda also of very useful medicines, I subjoin the following Formulæ.

A Cretaceous Julep.

℞ Cret: ppt: ℥ss.
Gum: Arab: ʒij.
Laud: liquid * gtt. lx.
Ol. cinnam: gtt. vj.
Aq: fluvial,† ℥vj.

M. S. To take a table-spoonful every two hours.

(It is usual to begin prescriptions by writing first the article which is employed in largest quantity and the remainder in the order of their quantities, except in solutions in which the menstruum is added last.)

Antimonial Powders.

℞ Sal: Nitri:‡ ʒj.
Tart: Emet: gr. j.
M. f. pulv. viij.

S. To take a powder every two hours, in water.—N. B. If Calomel be added to this prescription, jelly or molasses is a better vehicle than water.

Pills of Calomel.

℞ Calomel, ʒss.
Conserv: Rosar: q. s.
M. f. pilul: æqual. xxx.

S. To take a pill every night at bed time.

* Or Tinct: Thebaic: or Tinct: Opii.

† Or Aq: fontan. (N. B. If this word be written *font.* let the *n* be well formed, as aqua fortis has been used by mistake.)

‡ I do not think the new chemical nomenclature essential in *any case*, and in many certainly wrong. Calomel and Corrosive Sublimate for instance, are so nearly alike, as to be easily confounded if that mode be adopted.

Neutral mixture, or Saline draught.

℞ Succi: Limonis: ℥ij.
Sal: Tartar:
(Carbonatis Potassæ.) q. s. ad.
Saturand.
Sacchar: Alb: ʒj.
Aq: fontan: ℥iv.

M. S. To take a table-spoonful every hour.

S.

I am aware that drops are considered a very incorrect way of administering liquids. It is, however, a very convenient one, and not likely to be laid aside. Whenever great precision is necessary, it is easy to dilute the active medicine, and give it in form of a mixture. If sixty grains be diffused in six ounces of water, for instance, each half ounce (about equal to a table-spoonful,) will contain five.

There is no good general rule for regulating the proportionate doses of medicine for children, and therefore, I dwell particularly on this subject in my lectures when I find it necessary. I subjoin, however, a a table sufficient for common purposes.

Ages.		Doses.
Months,	2	one fifteenth.
	7	one twelfth.
	14	one eighth.
	28	one fifth.
Years,	3	one fourth.
	5	one third.

Ages.	Doses.
Years, 7 - - -	one half.
14 - - - - -	two thirds.
From this to advanced age, -	one.

In very advanced age, from sixty-five upwards, rather less; but often we have to exhibit larger doses in old persons than in the middle aged.