Thos. Robertson

SYLLABUS

OF

A COURSE OF LECTURES

ON THE

MATERIA MEDICA,

DELIVERED IN THE

MEDICAL COLLEGE OF THE STATE OF SOUTH-CAROLINA.

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PREFACE.

The following Syllabus of the Lectures on Materia Medica, has been prepared in the intervals from business, for the use of the Class in the Medical College of the State of South-Carolina.

Several reasons have operated with me in its preparation. The succession of Lectures with which the student is daily occupied, renders it proper that the course of studies be facilitated by every practicable method. A plan which presents him with the subject treated of, will, by a little exertion of memory and attention, enable him to recal the opinions of the Lecturer, and by association, impress upon his mind the reasoning which has been pursued. It may be considered as furnishing him with an abstract of the Lecture, the filling up of which can be accomplished by reflection, when he returns to the study.

Another advantage of no small moment is, that it spreads before the student the whole subject matter of the course, and enables him quickly to see its objects and extent.

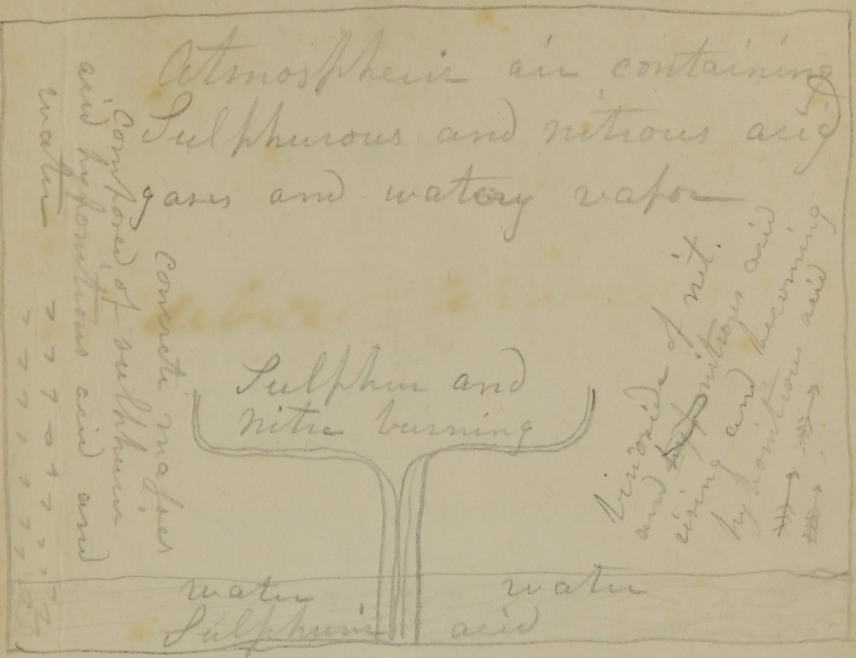
It further facilitates the taking of notes, or supersedes the necessity, and thus admits of more undivided attention to the Lecturer.

How the task has been executed, they must judge. My efforts have been exerted to accomplish all that the foregoing remarks could promise. In preparing the Syllabus, I have had reference to the most approved and latest authorities, and in my lectures, the sources of information shall be detailed.

To aid the student still further, drawings of *Exotic* plants have been prepared, upon a scale four times the natural size, illustrative of the several parts from which the medicinal substance is obtained.

Of *Indigenous* medicinal plants, dried specimens, and where they can be provided, the recent plants are always introduced, to make the student acquainted with their structure and appearance. A *Herbarium* of medicinal plants, prepared with much care and neatness at the establishment of the Friends at New Lebanon, New-York, will be presented the class the ensuing year.

Atmosphere air containing Sulphurous and nitrous acid gases and watery vapor



SYLLABUS.

INTRODUCTORY LECTURE.

THE objections to the Medical Profession considered—Its powers defined—The circumstances and conditions in which our remedies are as yet unavailing, and those in which they may be applied with the greatest certainty of benefit fairly brought to view.

General View of the Materia Medica.

Its connections with other branches of Science—Natural History—Pharmacy—Chemistry—Physiology, and the Practice of Physic. The substances employed as Medicines, derived from the three kingdoms of nature—Vegetables, Minerals, Animals—remarks upon each.—From the first, obtained in the greatest number. The choice of Plants—The period for gathering the roots, bark, leaves, seeds. The preservation of Plants. The means by which the Medicinal properties of Plants may be discovered. *(a)* The sensible qualities of Plants as determining their properties, color, taste and smell. *(b)* Botanical affinities, examples of Plants allied to each other by affinities, also agreeing in their operation. *(c)* Chemical Analysis *(d)*—Experience, this last not always conclusive—Sources of error. Medicines not simple substances, but will vary in their action according to the principles they contain. The effects which follow their application to the organized body. Remarks upon the Importance of a knowledge of Botany to the physician. The study enforced from several considerations.

Modus Operandi of Medicines.

The subject intricate and obscure—The operations of Medicines dependent upon the vital actions with which the

body is endowed. Remarks upon life and its effects. The various parts or organs to which Medicines are applied.

1. The stomach and alimentary canal. The nature of the impression made upon these organs. *(a)* An increase of the vital energies of the part. *(b)* A change of action.

The secondary operations of Medicines, and their important results.

2. The circulation, another channel for the action of remedies—The opinion of very ancient date, originating with the advocates of the Humoral Pathology, and supported by many facts and experiments, particularly those of Magendie upon absorption; and confirmed and supported by Laurence and Coates of this country.

Examples of various foreign substances introduced into the circulation, and manifested in the secretions.

Examples of substances injected into the veins, producing effects corresponding to those following their introduction into the stomach.

Conclusions from the preceding observations in the treatment of diseases.

The subject continued—All Medicinal substances not equally susceptible of absorption—dependent upon the nature of the substance, and the state in which it is applied; as well as upon the condition of the surface favoring or retarding absorption—Examples.

3. The skin next considered, and what action Medicines exert through this medium. Experiments of Seguin, Currie, Klapp, Dangerfield, Rousseau, and others on this subject. Several articles enumerated with which their experiments were performed—Spirits of Turpentine—Per-chloride of Mercury, &c. Power of absorption possessed by the skin in a very limited agree, and only in particular situations Conclusions drawn.

4. The olfactory nerves—The action of foreign substances upon them considered—as Tobacco—the fumes of ardent spirits, &c.; these articles exerting no action upon the system when the nostrils are securely plugged, or closed.

Of other parts to which Medicines are applied—the bronchial passages of the lungs—the interior of the mouth—the urethra and vagina.

Remarks upon Sympathy completing the subject.

The advantages to be derived from a combination of Medicines.

The subject of much importance—and before entering upon its consideration, will speak of the constitution of a

Medical Formula. Consists of a base, auxiliary, corrective, and the form under which it is exhibited. Remarks upon each.

By combining Medicines, the energy of our practice will be much increased, (not but that many indications may be fulfilled by employing single substances) but by uniting them to *a proper extent*, greater activity will be afforded by the compounds not otherwise possessed, and in some instances we may give rise to remedies of entirely new powers.

Under 1st division, will be considered the advantages derived from the union of substances similar in their nature or action.—Examples drawn from cathartics—their action being more prompt, efficient, and attended with less uneasiness when *united*. The same with laxatives, with emetics, tonics, with alteratives, and particularly uniting the vegetable with the mineral.—Utility of the principle further illustrated by examples, in the preparation of food.

2d division—Union of substances of a different nature. Combinations of this description subservient to many useful purposes—*(a)* They enable us to contend with several symptoms of a disease, or to produce two or more different effects at the same time without oppressing the patient.—Examples. *(b)* Useful in promoting the operation of particular Medicines by a change in their composition.—Examples. *(c)* In some instances giving rise to remedies of entirely new powers.—Examples.

Bloodletting.

This subject properly preceding the consideration of those agents, which, acting upon the several organs of the body promote their secretions, and thereby lessen the mass of blood. History and importance of the remedy—Either palliative or curative. Utility of bloodletting in febrile diseases—Examples given—The extent to which it should be carried, and the cautions observed in its use. In inflammatory diseases—The time when employed : extent and suddenness with which drawn all important. Examples of inflammatory diseases in which the remedy is particularly useful. In these cases the effect to be obtained, or the impression made upon the system is to be the measure of what is drawn, rather than the apparent quantity—Objections to the lancet considered. The immediate effects of bloodletting upon the pulse — lessening its frequency and force—upon the brain, removing delirium, relieving pain, reducing

the temperature of the body, promoting the action of cathartic and other medicines, and inducing sleep.

Local Bloodletting.

Leeching and Cupping—Natural History of the Hirudo Medicinalis—Utility in various inflammatory affections—Manner of applying them. Of much utility in the same affections attacking Internal surfaces—as to the conjunctiva of the inner surface of the eyelid in ophthalmia—to inflamed tonsils—internal surface of the nostrils in affections of the brain. General remarks upon Leeches. Cupping, on many occasions a useful substitute–employed for the same purposes generally—Dry cupping, and with scarifications—Cups to poisoned wounds. Their modus operandi explained.

MATERIA MEDICA.

Divided into aliments and medicines—Definition—Brief account of the various plans of arrangement which have been pursued—First in point of time and simplicity is the *alphabetical* arrangement of medicines---remarks upon it.

Another mode was founded on the class of bodies or kingdoms, to which the different substances belonged.

Another upon an investigation of the sensible and most obvious qualities of the medicinal substances.

Another upon the medicinal operation of the article upon the system.

A fifth, into classes, according to the systems of the body upon which their action is exerted.

The arrangement preferred, will be as follows---with remarks in explanation.

Division 1.

Medicines which irritate the stomach and duodenum.

Emetics—Definition—Immediate effects of these substances upon the mucous membrane, and the physiological phenomena following their employment. Effects upon the secretories of the stomach--of the serous vessels, and mucous follicles.

Vegetable Emetics

Calycoca Ipecacuanha
Spirea Trifoliatta
Euphorbia Ipecacuanha
Euphorbia Corollata
Nicotiana Tabacum
Scilla Maritima
Lobelia Inflata
Sanguinaria Canadensis

Effects upon the secretion of the Liver and Pancreas—Mechanism of Vomiting—Effects upon the general system—

1. Upon the brain and nervous system.
2. Upon the circulation.
3. Upon the secretions---(*a*) as expectorants---(*b*) as diaphoretics (*c*) promoting the action of the absorbents---(*d*) as diuretics---Rules to be observed in their administration and treatment when too active.

Application of this class to diseases---the subject considered in detail, and those selected in which emetics are particularly useful.

Occurrences in diseases rendering their employment improper---and those in which they may be administered with the utmost advantage.

Objections of Broussais and others to this class, considered.

VEGETABLE EMETICS.

Family *Rubiaceæ* — Calycocca Ipecacuanha — Natural History—Chemical History—Emetin, preparation and operation—Properties of Ipecacuanha as an Emetic—useful in all cases where a mild article is required—Employed in small doses in Dysentery, Diarrhœa, and in Dyspepsia—Useful in Hemorrhages, and in excited states of the vascular system—In Pulmonic Affections, Catarrh, Chronic Coughs, Asthma.

Officinal Preparations–Incompatible Substances–Adulterations.

Dose as an Emetic ℈i to ʒss
Diaphoretic 1 to 2 grs.
Expectorant 1-2 gr.
Alterative 1-4 to 1-2 gr.

General Remarks upon the Doses of Medicines.

Family *Rosaceæ*—Spiræa Trifoliata—vel Gillenia T. or Indian Physic—Indigenous—Natural History—Character as an Emetic—Employed as the preceding.

Dose ʒss to ℈ii.

Family *Euphorbiaceæ*—Euphorbia Ipecacuanha, Ipecacuanha Spurge.—Indigenous—Natural History — Effects upon the system, similar to the preceding, but more active.

Dose ℈i to ʒss

Euphorbia Corollata—indigenous—Natural History—Operation upon the system.

Dose ℈i to ʒss

Family *Solaneæ*—Nicotiana Tabacum—naturalized—Natural and Chemical History—Effects upon the system—seldom employed. Externally used in the form of cataplasm, and in the preparation of enemata.

Family *Liliaceæ*—Scilla Maritima or squills—naturalized—Natural History—Analysis, Scillatin—Effects upon the system—powers diversified. Officinal preparations.

Dose vi to viii grs.

Other articles enumerated, but seldom employed.

MINERAL EMETICS.

Antimony, Natural and Medical History.

Preparations of Antimony--Kermes Mineral, or Sulphuret of Antimony—or according to the French nomenclature a Sub-Hydro-Sulphate of Antimony—Preparation—Action of this article upon the stomach and alimentary canal—upon the secretions of the skin and lungs—Employed in Febrile affections, in coughs, catarrhs, and other Inflammations of the lungs after more active measures have been practised—Formula.

Effects of this article more uniform and energetic than the Pulvis Antimonialis, as ordinarily prepared.

Dose vi grs to ℈ss

Golden Sulphuret, or Sulphuretted Sub Hydro Sulphate of Antimony of the French. Preparation—Employed as the preceding.

Antimonium Tartarisatum, or Antimoniated Tartrate of Potash—Preparation—Character as an emetic—Operation upon the secretions of the system--Employed in Intermittent, Remittent, and continued Fevers. From its sedative and febrifuge properties used in small doses in Pneumonia—Phthisis—Rheumatism, and other inflammatory affections. Brief account of the Italian or counterstimulant practice. Useful in chronic affections of the skin, and superficial ulcerations. Externally applied to several obstinate forms of disease in the state of ointment, viz.: Mania, Hypocondriasis, Pulmonary affections, Rheumatism, Pertussis, &c.* Used in the formation of enemata. Poisonous operation—Symptoms—Treatment when large doses have been taken. Antidotes—Gallic Acid—contained in all astringent infusions--a Gallate of Antimony being formed which is not possessed of emetic properties.

Mineral Emetics
Preparations of Antimony

Sulphuret of Antimony - Kermes -
Golden Sulphuret of Antimony
Tartrate of antimony and Potash
Sulphate of Cupri or Copper
Sulphate of Zinc

Dose as an Emetic, ij to iv grs.
Purgative, 1-2 gr. repeated.
Diaphoretic, 1-4 to 1-2 gr. do.
Expectorant, 1-10 to 1-12 gr. do.

Sulphas Cupri—Deuto Sulphate of Copper—Preparation—Character as an Emetic—employed in Cynanche Trachealis, after the Narcotic poisons have been taken—rarely employed otherwise. Poisoning from the salts of copper—Symptoms—Treatment—Antidotes—Albumen and Sugar. Dose ii to vi grs.

Sulphas Zinci—Preparation—Found impure in commerce—purified. Character as an Emetic—Employed for the general purposes of this class, but particularly when a prompt evacuation of the stomach is required—Entered into the composition of Moseley's vitriolic solution, a remedy applied to various diseases, but now seldom employed.

Dose, ℈i to ʒss.

Remarks upon the pathology of Asthma, and upon the utility of Emetics in relieving this disease.

Division 2.

Medicines which irritate the internal surface of the alimentary canal.

CATHARTICS.

Cursory view of the structure of the alimentary canal—The effects which follow the action of a cathartic, depend upon its impression upon the internal surface of the intestinal canal. That it is of an irritating nature, is proved, by the dejections in many instances. The effects which follow this irritation upon the different secretory surfaces. *(a)* The exhalents pour out a more abundant discharge of serous fluid. (*b*) The mucous follicles furnish a more copious secretion. (*c*) The several ducts which terminate in the duodenum, have this action extended to their organs, and these are excited to pour out their fluids more freely. (*d*) The muscular fibres are stimulated to action—Utility as evacuants, and in equalizing the circulation. Divided into Laxatives and Purgatives. Cathartics differ not only in heir degrees of irritation, but also the parts of the canal upon which their action is exerted. This depends not only on the peculiarity of the stimulus, but the readiness with which it undergoes solution in the bowels—Hence the discharges will be different. Explanation of certain terms which have been employed, as hydragogues, chologogues, phlegmagogues, &c.

Effects of Cathartics upon the general system---(*a*) upon the pulse, (*b*) upon the secretions, (*c*) upon the animal functions---and a view of the objects accomplished by this class of Medicines.

1, as evacuants of the alimentary canal.

2, augmenting the secretions of the liver, pancreas, mucous glands, and serous vessels, they deplete the abdominal viscera, and relieve congestions, and inflammation of these organs.

3, as revulsive remedies.

4. The impression made upon the nerves of the alimentary canal, and extended by means of the sympathetic to all parts of the system ; " To this operation, are we to attribute the results which often take place in disease---the actions excited in remote parts, the alteration which takes place in the secretions---the renewal of action--the change the whole system undergoes.

These diversified operations entitle this class to be considered *alterative* remedies of great value, and illustrate the very necessary aid they afford in diseases of almost every description.

Rules to be observed in their administration.

Practical Application of this class to diseases, with remarks upon the abuses practised with these articles, and general directions in their employment.

Utility of Cathartics in Febrile Diseases.

In advocating the utility of Cathartics in Febrile diseases, it is proper to state to you, and even to admonish you, that in many instances they are abused or injudiciously employed. The remarks that I can make, must of necessity be very limited---practical views will be fully unfolded to you from another quarter---to me, alone, belongs the Therapeutical applications of Medicines, and the cautions to be observed.

1. Cathartic Medicines, then, are abused, or injudiciously employed when active, or drastic articles, are continued after the stercoraceous and acrid secretions of the bowells are discharged---Under these circumstances, with the contents of the bowells, the mucous secretion, which lines and protects the tender surface of the internal membrane, has also been removed ; and the continuance of active articles can have no other effect than to wound and irritate this surface, to excite griping and distressing pains, followed by a frequent desire to evacuate the bowells---with small, thin,

serous passages, attended with a painful and distressing tenesmus. The stercoraceous and offensive secretions from the bowells being removed without subduing the disease--- it will be proper to discontinue these medicines, and excite some other secretion into action. When further evacuations are required, it will be advisable to excite them *by milder preparations*, as they will most commonly be found better adapted to the condition of the vital powers, and fully capable of carrying off the secretions which have been poured into the intestinal canal. I could depict to you the bad effects of a contrary practice, and have seen patients suffering under all the symptoms I have mentioned, the passages consisting of little else than thin serous discharges, with flakes of mucus floating in the fluid. The continuance of these medicines, under these circumstances, not only irritates the mucus surface to a considerable extent, but I will not go too far on in stating, that instead of subduing, will be found to increase the fever. You would hardly credit me were I to relate the extent to which I have known cathartic medicines pursued in febrile affections of an acute character. I have known from twenty to thirty evacuations excited from the bowells in twenty-four hours, not only from adults but children. This practice is entirely wrong, it is absolutely destructive. You might almost question how such a Number could be produced. The fact is undeniable, and it is adduced to show the pernicious extent to which these medicines are carried, and against which I wish to warn you. These successive discharges are procured, not by two or three doses of active medicines, which are proper enough in the commencement of diseases, but by a continuance of the same medicine every two or three hours, for twenty-four, thirty-six, or forty-eight hours, and sometimes the whole course of the fever. However excited, whether by calomel alone, or its combinations, whether Jalap and its combinations, or whether simply oleaginous, the practice is to be deprecated in the highest degree. I should be glad, if it were possible, to give you definite rules on this subject. I can only state to you what has usually been my course.

It is when called to a patient laboring under acute disease, to remove as much as possible all apparent sources of irritation. If necessary, venæ section is practised, if not, the condition of the alimentary canal as affording many sources of irritation, and having a more extensive influence upon the system than any other channel, is attended to. The stercoraceous and offensive contents of the bowells being removed,

which is commonly done with half a dozen evacuations, I, with the continuance of the disease, attempt the renewal of some other secretion---the skin, or urinary organs, and combat symptoms as they arise. When the condition of the bowells requires attention, which will be in twenty-four, or thirty-six, or forty-eight hours, to excite discharges by the same medicines, if it can be borne, and if not by a milder article, always keeping the same object in view, a renewal of secretion, or a change of secretion, and combatting symptoms as they arise. The resources of the M. M. are quite sufficient in by far the greater number of cases, if we only apply them properly, judiciously, cautiously. You will hear various and contradictory opinions as to the means by which this is to be accomplished---listen to them all, and judge for yourselves. Having found a mixture of error and truth to exist in systems and doctrines, I take advantage of the fact, judge for myself, and pursue an eclectic course.

II. Drastic or irritating Cathartics are injudiciously, nay, improperly employed, in diseases attended with an inflammatory condition of the mucous membrane of the alimentary canal. When speaking of the physiological operation of these articles upon this surface, the remarks then made will render it unnecessary to enter into details---it is evident that they will exasperate all the symptoms. While on the contrary, from the milder articles, the most beneficial consequences must result.

It seems to me that in a subject of such importance, it might be advisable to particularize some examples in Febrile diseases in which the precautions I have mentioned should be observed, as well as the symptoms which lead to a knowledge of this inflammatory state.

Without entering into the disputed question, whether Febrile diseases originate in an inflamed condition of the mucous membrane of the alimentary canal or not, I shall only observe to you, that Febrile diseases are often attended with a considerable determination to the abdominal viscera, and among the organs affected, the stomach and intestinal canal frequently participate largely in these determinations.

The symptoms which characterize this condition of these organs, are, nausea, irritable stomach, vomiting of fluids taken, pain upon pressure, costiveness. When to these are added redness of the tongue, either pervading the whole surface, or confined to the edges or tip, or when to this state, it is coated with a thick fur,---when thirst exists, and the pulse ranges from ninety to a hundred pulsations in the minute, we

Castor oil may be given in coffee, infusion of senna, or in peppermint water – Alcohol a test of the purity – frequently adulterated with olive oil and poppy oil

may be assured that abdominal inflammation exists, and under these circumstances, active medicines of an emetic or cathartic character, will be improper. Depletion by the lancet, should be preferred until these symptoms are abated, fomentations to the abdomen, warm cloths, and the mildest medicines employed---calomel, for instance, followed by castor oil---Evacuations from the bowells being effected by this course, the utmost relief will be afforded, and the patient will have reason to rejoice in the prudence, judgment, and discrimination of his physician. A contrary practice will but subject him to much and severe uneasiness and distress.

Utility of Cathartics in Inflammatory diseases--Examples of Inflammatory diseases in which they become necessary ---In affections of the Peritoneum and Intestines. In these last, they should be administered with much caution, and when properly and seasonably employed, will be found useful by a renewal of secretion in favoring a resolution of the Inflammation.

Utility of this class in Dysentery and Diarrhœa---In colic after the urgent symptoms have been allayed by venæ section and other means.

In like manner, by promoting secretions extensively from the intestines and neighboring organs, they are advantageously employed in derangements of the Chylopoietic viscera, and in the anomalous affections arising from this cause. The means used should be of a mild character, and continued some time.

In diseases of the Cerebral system.

In diseases of the absorbent system.

PARTICULAR CATHARTICS,

Divided into Vegetable and Mineral.

Family *Euphorbiaceæ*--Ricinus Communis or Palma Christi ---Natural History---Preparation of the oil from the seeds. (*a*) By expression. (*b*) By decoction. Very extensively employed in the diseases of adults and children. Useful in removing costiveness and to allay irritation of the system. In intestinal affections, hæmorrhoids, the diseases of parturient women. Exhibited in the form of oleaginous mixture or floating upon Tinct. of Senna, peppermint water, coffee, milk, &c. Formula---adulterations.

Dose adult, ℥i to ℥ii

Infant, ʒi to ʒii

Croton Oil, obtained from the seeds of the Croton Tiglium---Natural History---preparation of the oil. Effects of this article described—hypercatharsis frequently induced--Employed in obstinate constipation unattended with inflammatory symptoms. In Mania, Dropsies, for the expulsion of worms, particularly the Tænia. Rarely employed. External employment of the Oil—rubbed upon the skin produces an eruption resembling the chicken pox—appearance of the Inflammation described---Useful in chronic and painful diseases—manner of applying the oil.

Dose, oil, i to ij minims in pill, with the conserve of roses.
Substance, 1 seed.
Tincture of the seeds, ʒi.

Spurge Oil, obtained from the seeds of the Euphorbia Lathyris---Preparation. Employed to remove costiveness.
Dose viii to x minims.

Family *Jasmineæ*---Olea Europea---Natural History, Preparation of the oil from the fruit. Employed for the same general purposes as Castor Oil. Applied to the surface, useful in lessening the force and frequency of the pulse, and is thus employed in febrile diseases in foreign countries. Also in Dropsies.
Dose ʒi to ʒii

Fraxinus Ornus---Natural History---Inspissated juice of this tree furnishes the Manna of the shops. Seldom employed alone, but in combination with other articles. Formula.

Family *Leguminosæ*---Cassia Senna---Natural History---Varieties of the Cassia---Analysis---Cathartine. Seldom employed alone from the insolubility of its active principle, occasioning griping. Rendered soluble by combination with Salts. Employed to obviate costiveness, and as an evacuant. Officinal preparations. Tinct. Senna Comp. Useful prepartion.
Infusion ʒii to ℥ss to ℥viii boiling water.
Useful in the formation of enemata---Adulterations.

Cassa Marylandica---Indigenous---Natural History. Properties and application as the preceeding, only requiring a larger quantity to produce the same effects.

Family *Juglandeæ*---Juglans Cenerea---Butternut---Natural History---Indigenous. An extract of the inner bark of the root of the preparation used. Mild in its operation, and particularly useful to obviate costiveness. Increased in its activity by combination with other articles.
Dose x grs. to ʒss in pills

Croton oil

– Very effectual in removing tape-worm – best exhibited with some aromatic oil – ½-1 gt. of this oil combined with ℥ ss. of castor oil increases the activity of the latter

where used by Dr Frost the result was not satisfactory

→ applied externally reduces the force and frequency of the pulse – mixed with lime water a good application to burns but not as good as chlorate of lime and linseed oil

Infusion ℥ ss. of leaves to pint boiling water – dose tea cup full – repeated

Recommended in dropsy and intermittent fever

Grows in S. America - active prop. - resides in a gummy extract and resinous matter - in combination with Sulph. Potas. aa. 10 grs. - also with Cal. 10 grs of Cal. 15 of Jalap - anthelmintic - Cremor tartar & jalap - tincture ℥ ss.

Two species found in the shops - that from Russia best

Rhubarb 30 grs
Spear 10 "
Ofic 4 "

Family *Podophyllæ*---Podophyllum Peltatum or May Apple---Natural History. Indigenous. Useful as an active and safe cathartic. Employed in the same diseases as Jalap, and similarly combined.

Dose ℈i to ʒss

Family *Convolvulaceæ*----Ipomea Jalapa---Natural History--Analysis. Much employed for the promptness, certainty, and energy of its operation. Its action chiefly exerted upon the small intestines. Useful as an evacuant in febrile and inflammatory diseases, and to bring down the tone of the system. Contraindicated in acute affections of the mucus membrane of the alimentary canal. Combined advantageously with various articles. Adulterations. Formula.

Dose ℈i to ℈ii

Convolvulus Macrorhizus---Indigenous. Allied to the preceding in botanical characters and relations, but of little activity.

Convolvulus Scammonia---Scammony---Natural History. Obtained from the root of the plant by inspissating its juice ---Analysis---Found mixed with various impurities. As a cathartic powerful and drastic. Has been employed in cases of Dropsy, Hypocondriasis, Worms, and as a cathartic for ordinary purposes. In many instances, has been of decided utility, but it is sometimes unsafe from its violence.

Dose v to x grs.

Family *Polygoneæ*---Rheum---Rhubarb---Several species of this genus---Natural History of the Rheum Palmatum. Exported from the ports of St. Petersburg Russia, and Canton in China. Cultivated also in France, England, and this country. Soil in which the plant thrives best. Age and season for digging up the roots, and the manner of preparing them for market. Analysis. Varies with the soil and climate. Roots cultivated in Europe inferior in purgative and tonic properties, while the astringent is increased. Rhubarb a very useful and important article, from the singular combination of Medicinal powers of which it is possessed.—Employed as a mild and pretty active cathartic, and from its properties well adapted to diseases of the alimentary canal. Used to correct costiveness—in Dyspepsia, Diarrhœa, and Dysentery. In the diseases of children valuable. Its activity increased by combination. Officinal preparations numerous. Formula.

Dose ℈i to ʒss

Contrary to Dr Chapman

Family *Liliaceæ*—Aloe Perfoliata—Aloes—Natural History and preparation of the article from the leaves. Three varieties to be met with in the shops. Analysis—Action of this substance upon the intestinal canal in large doses. Its operation chiefly exerted upon the large intestines. Employed in cases where a derivative operation is required, and from its peculiar determination, to excite the vessels of the uterus. Enters into the formation of cathartic pills, and combined in a great variety of forms. Formula for its cathartic and emmenagogue operation. Officinal preparations.

Dose ii to x grs.

Family *Guttiferæ*—Stalagmitis Cambogioides—Gamboge—Natural History and preparation of the article. Analysis. As a cathartic very powerful in its operation; and exercises an impression strongly irritating upon the mucous membrane. Employed to give activity to other cathartics—in Tænia—and in the formation of cathartic pills.

Dose vi to ℈i

Family *Cucurbitaceæ*—Cucumis Colocynthis—Colocynth or Bitter Apple—Natural History. The spongy membranous part of the fruit employed in Medicine. Effects upon the system of a very drastic and irritating character. Has been employed in Mania, Melancholia, and in cases where a powerful impression on the system was required. It may be doubted whether it was ever necessary to resort to so active an article.

The compound extract of Colocynth, milder and more useful—Preparation—combined with calomel operates without griping or inconvenience.

Dose iv to vi grs.

Memordica Elaterium—Wild or Squirting Cucumber—Natural History—Article used in Medicine—Preparation from the fruit—Method of preparing it—Analysis—Elatin. Elaterium very powerful in its operation, and classed among the most active articles of the Materia Medica. Employed in Hydrothorax, and as an alterative remedy in obstinate diseases of long standing.

Dose 1-2 gr. to ii grs.

Carbo Ligni—Preparation—Mildly cathartic—Useful in Dyspepsia, habitual costiveness, and probably in hepatic derangements.

Dose—A teaspoonful to a tablespoonful, in water or milk.

Socoterine - Hepatic & Cape aloes
first is the best - Contraindicated
in uterine affections

- Native of the South of Europe -
- does not manifest its hydrogogue
properties until it has been taken
for several days -

Lime combined with magnesia
equal parts

MINERAL CATHARTICS.

Protochloride of Mercury, or Calomel—Preparation—Properties numerous, and diversified, rendering it one of the most important articles of the Materia Medica. Particularly useful as an evacuant in many cases. *(a)* "Imparts force to the mild, and moderates the severity of drastic Medicines." *(b)* It commences its action higher in the alimentary canal than any other, and is well calculated to relieve the stomach by determining downwards, as well as to deplete the liver and the other chylopoietic viscera. Useful therefore in the bilious and other fevers of our climate. *(c)* Corrects the hepatic secretions, "increasing them when deficient, and lessening them when in excess." *(d)* Its small bulk, its insipidity, render its exhibition easy, and allow of its being retained when other articles would be rejected. *(e)* Useful in the diseases of children.

Rules by which Ptyalism may be prevented.

Dose v to x grs. given in syrup.

Flores Sulphuris—Preparation—Mild in its operation, and chiefly exerted upon the large intestines. Useful in costiveness and in hæmorrhoidal affections.

Action upon the general system; employed in Intermittents, Chronic Rheumatism, Catarrhs, and Pulmonic Affections, unattended with much inflammatory action. In Cutaneous diseases, internally exhibited and externally employed. Used in the form of ointment, fumigations, baths. Officinal preparations.

Dose ʒi to ʒiii

Carbonate of Magnesia—Preparation—Of much utility in Medicine—Becomes active by meeting with an acid in the stomach—Calcined Magnesia preferred, especially in the diseases of children—Preparation. Employed as a laxative and an antacid. Used in combination with other articles—Antidote to the Mineral acids when taken in a large quantity. Formula.

Dose ʒss to ʒii

Neutral Salts.

Saline *Mineral Waters*—General remarks upon their composition—Sedlitz—Analysis—Cheltenham—Analysis—Congress Spring, Saratoga, and Ballston, New-York, &c.

Enemata—General remarks upon them—Composition—proper instrument described.

Suppositories.

a piece of soap

Pill of opium

Division 3.

Embraces those means by which we destroy or counteract morbid substances lodged in the alimentary canal.

ANTHELMINTICS.

Worms infesting the alimentary canal divided into the round and flat. 1. Ascaris Lumbricoides, or long round worm. *(b)* Ascaris Vermicularis, or Oxyuris Vermicularis, maw or thread worm—*(c)* Trichuris vulgaris—long thread worm.

Ascaris Lumbricordes—described—the portion of the intestines in which usually found—sexes distinct—and oviparous—the uterine system exhibited—the number of eggs produced very considerable, tho' several causes prevent their developement. (*b*) Ascaris Vermicularis—ascarides, &c. The portion of the Intestinal Canal in which usually found—Sexes distinct and oviparous. (*c*) Trichuris Vulgaris—described—of rare occurrence. 2. Of the flat worms. (*a*) Bothriocephalus latus, or broad tape worm. Its anatomical structure and habits—also oviparous. (*b*) Tænia solium—solitary or common tape worm, described—vermes cucurbitini.

Origin of Worms—circumstances disposing to their production—Excite diseases, when their numbers are increased to such a degree as to produce irritation–or from a misplaced state of the worm—Diseases produced—not as frequent as commonly supposed.

Symptoms of worms.

PARTICULAR ANTHELMINTICS,

Arranged according to the worm they are calculated to remove.

Articles for the expulsion of the Ascaris Lumbricoides.

Family *Gentianeæ*—Spigelia Marylandica or Pink Root —Natural History. Effects upon the system when in too large quantities, similar to those of the Narcotic poisons—system soon recovers from the effects. Administered in powder and infusion.

Dose powder, x to xv grs. repeated.

Infusion, ʒi to ʒii of the roots, in a pint and a half of water, simmered to 1 pint---a wine glassfull sweetened with syrup every two hours---followed by a cathartic.

Family *Meliaceæ*---Melia Azedarach---Pride of India---Poison berry tree. Natural History. Useful and even valuable article. Administered in the form of a strong decoction of the bark of the root.

Dose ℥ss to ℥i every 2 hours, or small tea cup full every night, for several nights, followed by a cathartic.

one for every year of age
proper dose 10 to 20 grs -

Family *Chenopodeæ*---Chenopodium Anthelminticum---Natural History---Nearly every part of the plant active.

Dose of the expressed juice---A table spoonful.
Seeds---a tea spoonful.
Oil of the seeds---v to x and xx m.

Family *Leguminosæ*---Groffrœa Inermis---Cabbage tree bark. Seldom employed.

Dolichos Pruriens---Cowhage---Natural History---Hairy spiculæ of the pods employed---Given in the form of an electuary with syrup---operation mechanical---seldom resorted to.

Dose, a tea spoonful to a child.
Table spoonful to an adult.

Family *Laurineæ*---Laurus Camphora---Valuable not only in expelling worms, but prevents the developement of the verminous ova.

ʒss to ʒi, rubbed up with gum arabic, to which add water ʒvii---dose ʒss.

The Ascaris L. not being very tenacious of life, are easily destroyed and evacuated by remedies which exert a cathartic operation. The most commonly resorted to are, the

Proto Chloride of Mercury, given in a large dose at bed time, and removed from the system the next morning by castor oil, and the practice if necessary repeated.

Family *Ranunculacæ*---Helleborus Fœtidus---very active upon the system, but not employed at present

Scammony.

Chloride of Sodium, or common salt—Dr. Rush's favorite Anthelmintic.

Cedar Apple—description of the article, with an account of its introduction into practice, and of its effects—possessed of much activity as a remedial agent, but not superior to many others employed with the same intention---manner of administering it---powder---tincture and decoction.

(*b*) Ascaris Vermicularis --- symptoms, seat and other circumstances connected with their existence. The general health not much impaired by their presence—but are productive of much uneasiness and distress—are difficult to cure, from their tenacity of life, and burying themselves in the mucus of the first passages—Remedies—Enemata and Cathartics—the most important noticed.

Circumstances rendering recourse to enemata proper.

Articles of which composed.

Remedies for Tænia.

Family *Felices*---Polypodium Filix Mas---Male Fern---Natural History. Constituted the basis of Madame Nouffeur's remedy. Character as an Anthelmintic.

Dose, ʒi to ʒiii of the powdered root, for several mornings in succession, followed by a cathartic, or given in the form of decoction.

Family *Coniferæ*---Oil or Spirits of Turpentine---To be effectual, it must be given in large doses, and its exhibition is usually followed by a considerable cathartic operation, and a discharge of Tænia.

Dose, ℥ss to ℥i in milk, or mixed with honey.

Family *Myrtaceæ*---Punica Granatum---Pomegranate---Decoction of the bark of the root. Spoken of in high terms by the Physicians of India, given in powder and decoction.

Dose of the Powder—x grs to ℈i.

Decoction prepared by boiling ℥ii of the bark of the root in Water 1 1-2 pint to 1 pint.

Dose ℥ii every half hour until the worm is expelled.

Drastic Cathartics---Jalap, Colocynth, Scammony, Gamboge, &c.

Division 4.

ANTACIDS.

Division 5.

Medicines which promote particular secretions.

(a) Of the skin.

DIAPHORETICS.

Nature and importance of Perspiration--Proportion which it bears to the other excretions---Experiments of Sanctorius. Lining.

Of the means by which it is excited---1. Agents which increase vascular action. 2. Agents which relax the cutaneous vessels. 3. Agents applied to the surface. Remarks upon these divisions, and the circumstances under which they become useful and proper. Efficacy of these articles

best, compnd tinc. of aloes — ℥ss

aloes dissolved in milk — camphor useful in great itching of the ~~arm~~

carbonate of iron in doses of ℥ss to ℥ss.

stimulating diaphoretics act by exciting vascular action — those which relax the cutaneous exhalents diminish vascular action

Indigenous Diaphoretics

Eupatorium Perfoliatum
Asclepias Decumbens
Serpentaria
Heart Snake root
Wild ginger
Aralia spinosa = prickly ash

improved by their union---Rules to be observed in their administration.

Application of Diaphoretics to diseases.

Particular Diaphoretics and such as increase arterial action.

Family *Papaveraceæ*—Papaver Somniferum--Poppy. Effects of Opium upon the nervous and vascular systems--Free use among the Turks and Persians. To obtain its diaphoretic operation it is seldom employed alone, but is combined with various articles—as the Antimonial preparations—Ipecacuanha—Calomel. These combinations useful in Inflammatory diseases after depleting measures have been freely pursued. Under these circumstances, symptoms of irritation often succeed, which symptoms are relieved by opium, and with peculiar good effects when united with the above—combined with calomel particularly, an anti-inflammatory operation is exerted: Dose 1 gr.

Family *Laurineæ*—Laurus Camphora—also the Dryobalanops Camphora, a tree which grows to a great height in the forests, on the coast of Sumatra—Natural History—Manner of separating camphor from the wood—Purification—Obtained from several aromatic plants—differs in its composition from that obtained from the above—Qualities—Effects upon the vascular system, and cutaneous vessels---Combined with tartarized antimony---calomel---and with opium. Formula.

Dose ij to viii grs.

Carbonate of Ammonia. Preparation. Seldom employed in this state as a diaphoretic; but united to vinegar, whereby an acetate of ammonia is formed and held in solution. It is of much utility, and may be beneficially employed when required.

Dose, ℥ss every hour.

Family *Synanthereæ*---Eupatorium Perfoliatum---Thoroughwort --- Indigenous --- Natural History---Properties--- Employed as a diaphoretic in fevers in the form of infusion. ʒii to ℥ss in a quart of boiling water. Dose ℥ss to ʒii

Family *Apocyneæ* --- Asclepias Decumbens---Pleurisy Root---Indigenous---Natural History—Employed in diseases of the pulmonary system---Promoting expectoration---relieving the breathing, &c. Given in the form of an infusion.

℥ss of the root to 1 qt. water. Dose, a tea cup full.

Family *Aristolochiæ*, Aristolochia Serpentaria—Virginia Snakeroot --- Indigenous — Natural History—Properties—

Employed in the advanced stages of fever, attended with Typhoid symptoms, alone, or in combination. Formula.

℥i to ℥ii in a pint of boiling water. Dose ℥i.

Asarum Virginicum—Heart Snake Root. Indigenous. Natural History. Employed as the preceding.

Asarum Canadense, or Wild Ginger. Indigenous. Natural History. Employed as the preceding.

Family *Araliaceæ*---Aralia Spinosa---Prickly Ash---Indigenous--Natural History. Employed in Rheumatism, and in the formation of Diet Drinks.

℥i of the bark of the root to 1 pint spirits. Dose ʒi to ℥ss repeated.

Family *Rutaceæ*—Guaiacum Officinale. Natural History ---Properties. Employed in the formation of decoctions combined with other alteratives in Syphilitic affections. Chronic Rheumatism, and Cutaneous Diseases.

℥i to ℥ii to ℔iii water reduced to ℔ii.

Resin of *Guaiac*---Manner in which it is obtained from the tree---Peculiar substance—Properties. Used in the chronic stage of Rheumatism combined with various articles—In the pains following Dengue fever—In Dysmenorrhæa in the form of Tincture. Formula.

Dose, powder, x to ʒss
Tincture ʒii to ʒvi.
Decoction, ℔i daily.

Family *Thymeleæ*---Daphne Mezereon. Natural History. Properties--but rarely employed alone.

Family *Asparagineæ*---Smilax Sarsaparilla--Natural History---Analysis---Parillina--Properties--Alterative and sub tonic.

In proceeding to speak of this article, I would observe that the remarks made, will not have reference to the Sarsaparilla alone, but they must be understood as applying to it in its various states of combination. By itself, it is highly useful, but the good effects derived from this and other similar articles as the guaicum—mezereon---sassafras, &c. are greatly increased by combination with each other. It is therefore of the combinations of this article, contributing as they do, to their increased activity, as well as to the greater convenience of administration, that the practical remarks I shall make, will apply.

Sarsaparilla and its combinations is admirably adapted to the secondary stages of Syphilis. The secondary forms

in combination with camphor and spts nitre –

Saturated tincture

also known by the name Lignum vitae –

G. guiac 1 ʒ
Tar. emet. ½ gr
opium 1 gr

grows in Jamaica and shaun – a shrub – bark of root employed.

grows in the west indies and S. America

the most painful, loathsome, and mortifying affections of the human body--Originating as these diseases do, not in single acts of folly, or the weakness to which human nature is subjected, but to a continuance of excesses, dissipation, and disease, the subject of secondary syphilis, exhibits most frequently in constitution and appearance, a body impaired in its energies, crippled in its faculties. Mercury, alone, in a constitution like the one I have described, cannot be endured. Its stimulating, or rather irritating operation, under these circumstances, aggravates all the symptoms---harasses the patient, and superinduces the most distressing consequences. Sarsaparilla, and the vegetable alteratives, combined with very minute quantities of the per Chloride of Mercury, in the manner I shall point out, forms a preparation freed from the objections just made, and a medicine well adapted to the disordered states of the constitution, now under consideration. It will be found excellent in restoring the appetite, strength, and flesh of the patient.

It will complete the cure of ulcerations of the palate, throat, and mucous membrane of the nose---skin, and other parts. It will relieve noctural pains of the limbs, painful enlargements of the joints---of the bones, membranous nodes, cutaneous ulcerations, &c.

It will efface the blotches, foul spots, stains, &c. which in a constitution of this character so frequently occur from slight irritations, or which remain after the ulcerations have healed.

It will remove that morbid condition of the solids and fluids, which disposes every injury, however slight, to degenerate into a festering, painful, scabby ulcer.

It will, in short, so improve the digestive and assimilating operations of the system, that a more healthy blood and more renewed fibre will be substituted for the defective conditions of the one and the other, and thus fully support the character bestowed on these medicines, of being essentially alterative. To accomplish these objects, this class of medicines must frequently be long and perseveringly employed. It cannot be supposed that these great and important designs can be effected with a few or lengthened repetitions of these substances. To their continued use, it will occasionally happen that other alteratives be added—as diet, change of climate, a long sea voyage, travelling.

Sarsaparilla, and its combinations will be found useful, not only in what is called syphilitic rheumatism, but the chronic forms of ordinary rheumatism.

It will be found useful in various affections of the skin pustular, papillary---herpetic. Under the last, I would consider not only the affections properly so called, but that very troublesome disease Tænia capitis, which, when long existing, refuses to yield to local remedies, and requires the aid of such as are constitutional.

The combinations of which I am speaking, will be found useful in the chronic ulcerations, of such frequent occurrence in the laboring and poorer classes of society. The tonic and alterative impressions excited, contribute to the rapid and successful operations of granulation and cicatrization. From the remarks I have made upon these articles, you will be convinced that I repose no small confidence in their virtues---and with the opportunities I have had of prescribing them, in constitutions impaired and debilitated from diseases and excesses of various kinds, in habits vitiated frnm a scrophulous or venereal taint, or from the injudicious use of Mercury; the relief which, in many instances, has been afforded, fully entitles them to these commendations. I might say more, but I shall probably be charged with extravagance. I trust I have said sufficient to direct your attention to their virtues and efficacy.

Preparations--Simple Decoction—Compound Decoction---Syrups and Extracts---Formula.

Decoction prepared by boiling.

℥ ij of the roots in 4 pints of water for 4 hours, in a vessel lightly covered and placed near the fire; then taking out the roots, bruising them, returning them against the liquor; macerate in a similar manner for 2 hours more, and boil to 2 pints and a half--strain. Dose, 1 pint daily.

SUBSTITUTES.

Smilax Herbacea--Indigenous.
Smilax Pseudo China--China Briar; Indigenous.

Family *Ulmaceæ*—Ulmus Fulva—Inner bark of the Elm, used in the form of decoction, alone, or combined with other articles.

(*b*) *Diaphoretics which produce perspiration by relaxing the cutaneous vessels.*

must be boiled a long time
4 ℥ to 4 lbs water 4 hours —

8 or 10 grns. nitre to ½ or ⅛ Tar. eme

by burning equal weights of hartshorn shavings and sulphuret of antimony — per on. less effica. than protonide — 16 grs. of this pow. contain 1 of tar. emet.

Antimonial Preparations—Tartarised Antimony. Promotes the excretions. This property supposed to be connected with the production of nausea—Nausea not essential, but perspiration is the result of a direct and specific action upon the vessels of the skin; to this must be added its sedative and febrifuge operation, properties which particularly adapt it to the excited stages of disease–Combinations. Formula.

Dose, 1-6 gr.

Pulvis Antimonialis---or Oxyd of Antimony with Phosphate of Lime---Preparation: Often an inert substance---Employed in febrile and inflammatory affections---in determinations to the head, and when the article has been properly prepared is decidedly useful.

Dose, iij to v grs.

Kermes Mineral and Golden Sulphuret of Antimony---Preparation---Of more uniform strength and equal activity.

Dose, ii to v grs.

Ipecacuanha---Diaphoretic—In small doses useful in Catarrhal and Pulmonic Affections---diminishing the mucous secretion in some cases, and in others exciting it when deficient; useful in other increased discharges from the mucous membrane,as in diarrhœa and dysenteries---Given in small doses alone, or combined with opium and the sulphate of potash, as in the Dovers Powder.

Dose, fs to ij grs.
Dovers Powder, v to x grs.

Nitrate of Potash—Saltpetre---found native and prepared artificially---Properties: to increase its powers, usually combined---as with Tartarised Antimony, or Tartarised Ant: and Calomel, forming the Nitrous and Antimonial Powders—Formula. The *Crystals* of this Salt sometimes mistaken for GlauberSalts—Effects of a large dose—Symptoms—Treatment.

Crystals of other articles, wuich may be mistaken for each other; Sulphate of Zinc for Sulphate of Magnesia; and the last, for the crystals of Oxalic Acid; Antidotes Oxalic Acid...Lime...Magnesia...forming an insoluble Oxalate of Lime.

Carbonates of Soda and Potash—Given in the form of Neutral mixture and effervescing draught—Formula.

Soda Powders.

(c) *Agents applied to the Surface.*

Regulated by the condition of the skin--When excited, cool air, cold applications, sponging with spirits, vinegar, &c.

Cold Bath.

Effects of cold water when applied to the excited surface. The nervous system experiences a great and sudden impression—Vascular action is diminished—Morbid heat reduced—the cooling process of perspiration instituted. Employed in febrile diseases when there is no sense of chilliness present—when the heat of the surface is steadily above what is natural—and when there is no general or profuse sensible perspiration. Manner of employing the Bath—Improper in Febrile affections with determinations to the lungs or limbs—but employed with great advantage when the head is affected. In the latter case, when general affusion may not be deemed proper, the utmost benefit will be experienced by pouring water from a small height upon the head for five or ten minutes.

The skin being in an opposite condition, and the functions of the system feeble—*Tepid and Warm Bath*—Effects.

Vapour Baths.

Jenning's Instrument described.

Minor Means.

Division 6.

Medicines which promote the secretion af the Kidneys.

DIURETICS.

Office of the Kidneys—Their secretory action promoted—(*a*) By increasing the quantity of fluid in the mass of blood—Remarks upon the propriety of this practice, and under what circumstances admissible—(*b*) By introducing into the system such articles as stimulate the secretories of the kidneys—The saline Diuretics operate in this manner; Proofs of their introduction—(*c*) By increasing the action of the absorbents. The action of the absorbents excited by remedies of a varied and opposite character—These enumerated.

Diseases in which Diuretics are employed.

Utility of combining Medicinal forces in this class.

Rules for the administration of Diuretics.

(*b*) *And such as operate by stimulating the secretories of the Kidney.*

Preparations of Potash.—Sub-carbonate of Potash—Preparation—Best adopted to cases connected with acidity of the first passages—Combined with an infusion of Vegetable Tonics, its effects are best promoted.

Dose, ℈i to ʒss.

Acetate Potash—An article formerly much esteemed, but not much employed at the present time.

Bi Tartrate of Potash, or Cream of Tartar—Preparation—Very useful article, and employed in all the forms of Dropsy, but chiefly in ascites and anasarca—Experiments of Home, Ferriar, and Manghini. To obtain success its use must be persisted in for some time—either given alone or in an infusion of Quassia or other Tonics. It sometimes happens that it disorders the stomach and first passages; when its use must be intermitted.

ʒss to ℥i largely diluted with water.
Dose, a small cup full.

Nitrate of Potash—Properties—Employed in Tonic Dropsies. Given largely diluted.

ʒi to ʒiii dissolved in water or cider, and this taken in small doses in 24 hours.

Spiritus Œtheris Nitrosi—Dulcified Spirits of Nitre—Preparation—Properties—Adapted to Children—Usually combined with other articles.

Dose, infant, viii. to x m.
Adult, ʒi to ℥ss.

Diuretics, which to a local stimulating action, also act as stimulants to the system generally.

Tinctura Cantharidum or Tincture of Cantharides—Natural History of the Cantharides—Manner of collecting and preserving them—Analysis—Effects upon the organic structures of the body and particularly the urinary—Employed in the Atonic forms of Dropsy—In Dropsies succeeding Scarlitina; in local diseases of the Urinary and Genital organs; In incontinence of Urine; In Gleets and long protracted Gonorrheas; In Leucorrhea; Impotence.

Dose, xv to xx m. to ʒii and ʒii.

Urea—Preparation; Diuretic operation considerable.

Dose, xv grs. to ℈i.

Family *Coniferæ*; Pinus Palustris; Ol: Terebinthinæ; Preparation; Effects upon the system; Applied to the same disease as the Tinct. of Cantharides.

Dose, xv to xx m. increasing.

Family *Leguminosæ*--Copaifera Officinalis--Balsam Copaiva--Natural History--Analysis--Term balsam incorrect, being a compound of volatile oil and resin--Irritating operation upon the stomach and intestinal canal.

Effects upon the urinary organs--Diseases in which employed--In Dropsies--but in these cases not entitled to particular consideration. Employed in Chronic Catarrhs--Humid Coughs. and the Chronic affections of the pulmonary organs--In diseases of the Genital organs--Gonorrhæa, Gleet, Leucorrhæa--Its modus operandi in these cases.

Forms of Exhibition--In Drops--In Emulsion--Combined with the Tincture of Cubebs--In pills rubbed up with Calcined Magnesia--In Enemata.

Formula--Preparations--Volatile Oil--Resin--Consolidated Balsam. Adulterations.

Dose, xx m. to ʒi.

Family *Polygaleæ*---Polygala Seneka--Natural History--Properties much diversified—These enumerated--As a diuretic has been much extolled by several physicians, as Milman, Hartshorn, Percival. It is not very efficacious employed alone, but requires the co-operation of other articles, as the Nitrate of Potash---super Tartrate of Potash---The states of the system to which it is best adapted---Employed in diseases of the respiratory system---Given in the form of decoction,

Prepared by boiling,

℥ss of the root in a pint of water, dose ʒi

Powder, grs. x to ℈i.

(c) Diuretics which operate by increasing the action of the absorbents.

The several modes in which this may be effected, pointed out.

Family *Liliaceæ*—Scilla Maritima, or Squills—Used in all the forms of Dropsy—Given to the fullest extent the patient can bear without vomiting. To this degree it should be continued, when its beneficial effects will be experienced.

given in honey and cinnamon water

- Fir grows in S America - obtained by boring into the tree -

equal parts balsam and tinct. cubebs

if the balsam does not dissolve in 4 parts alcohol and one of ether it is adulterated according to the French chymists

Seneka - Fir, squills and tar, anti constitute the lyne syrup

Given in infusion 2 ʒ of the root and 2 ʒ of orange peel to 10 ℥ water - dose table spoonfull every two or three hours -

Native of great britain now naturalized in this country — will diminish the pulse from 75 to 30-40 infusion 1 ʒ to 8 ℥ water poisonous effects counteracted by stimulant —

6 closely allied in its effects to the former — Saturated tincture

1½ ʒ of the root to pint vinegar dose 30-40 m.

2 ʒ seeds to a pint spanish wine

Commencing with ʒiv of the syrup or tincture, it may be increased to ℥i or ℥iss in the 24 hours—In Hydrothorax combined with Calomel. Employed as an Expectorant in diseases of the respiratory system.

Preparations—Acetum Scillæ--Oxymel Scillæ—Tincture Scillæ.

Dose, powder, ii to viii grs.
Tincture ʒss to ʒii
Vinegar, same.

Family *Scrophulariæ*--Digitalis Purpurea--Foxglove--Natural History--The proper period for gathering the leaves and their preservation. Effects of Digitalis upon the system--upon the pulse--varies with the position of the body--often exerts but little sensible action, when its operation becomes suddenly developed. Medical History. Employed in Dropsical Affections---Conditions of the system most favorable to its use--Forms of Dropsy to which it is best adapted. Though its powers have been much overrated, there is also much inattention shewn to the states of the system in which its effects are best exhibited, and to the article being in a proper state, and properly administered. Given in the form of infusion—Preparation. Dose ʒi to ℥ss. Directions to be observed in its use–Utility in other diseases. In Hemoptysis of advantage in controling the circulation after depleting measures have been properly pursued—Employed in Hæmorrhages from other organs--In Phthisis Pulmonalis of little value--No power to contend with Tubercular formations. Useful in other forms of Pulmonary diseases—Morbid effects produced by this article--Symptoms of their approach. Treatment.

Dose, powder, g. i
Tincture, xx m. increased.

Family Solaneæ--Nicotiana Tabacum--Employed as a Diuretic--It cannot be considered a certain or convenient remedy. Dose of the Infusion 60 to 100 drops.

Family *Colchiceæ*--Colchicum Autumnale—Meadow Saffron. Natural History--Sensible Properties--Analysis--Introduced into practice by Baron Stork, and employed in Dropsies in the form Syrup. This preparation superceded, and in place of it the Colchycum Wine substituted. Effects upon the system. Employed in Dropsy, in Gout and Rheumatism. In the last disease, a tincture of the Seeds preferred. Employed in the treatment of Inflammatory diseases, acute as well as chronic.

Preparations.

Dose of the Oxymel, ʒi increased.

Of the Wine, xxx to xl m.

Of the Tincture of the seeds, xx to xxx

Diuretics varied in their action.

Family *Iridees*—Iris Versicolor, or Blue Flag. Indigenous. Natural History—Effects upon the system—Employed in Dropsies, combined with the Button Snake Root, and thus united, has been used with great advantage in obstinate cases. Given in Decoction.

Formula.

Dose, 1 pint daily.

Family *Umbelliferæ*—Eryngium Aquaticum vel Yuccifolium—Button Snake Root. Indigenous—Natural History—Properties. United with the preceding article in the treatment of Dropsies. In the form of Tincture, employed in Indigestion, &c.

Dose, Tincture, ʒi increased.

Apium Petroselinum—Parsley. Indigenous—Natural History. Useful in Strangury—In suppression of Urine occurring in children—Employed in the form of Decoction of the root—alone, or combined with the Nitrate of Potash.

Family *Ericineæ*—Chimaphila Umbellata—Pipsissewa. Indigenous—Natural History. Properties. Employed in Dropsical Affections, particularly in those cases accompanied with enfeebled digestion, and languid condition of the vital powers.

1 pint of a strong infusion, daily

Externally employed as a wash for foul ulcers.

Family *Aloideæ*—Aletris Farinosa—Star Grass—Indigenous. Natural History. Employed in similar cases.

Decoction of the root and leaves in liberal doses.

Other articles—Erygeron Heterophyllum. Sweet Scabious. Achyranthes Repens, Forty Knot, &c.

General principles determining the extent of operation of this class of Medicines.

Division 8.

LITHONTRIPTICS AND ANTILITHICS.

The urinary secretion considered—Composed in its healthy state of various salts and acids, and from the predomi-

[illegible] of a few, or they cured indirectly, the presence of impure calculous deposit—The tendency of calculous concretions quantified—The state of the urine as to being the production of these concretions—Lithic Diathesis—Means by which the formation of calculous deposits is prevented—or *Lithiasis*—When resulting on some other ground, the means by which their increase is prevented—or *Lithontriptics*—Their action considered, and the possibility of active substances being conveyed to the urinary passages through the medium of the circulation—The conclusions drawn—Manner of distinguishing the alkaline and acid deposits.

APPENDIX.

Of the Therapeutic the Medicines which impart the tone of the alimentary canal—Several articles from the class of Tonics enumerated.

Family *Ericeæ*—Arbutus Uva Ursi—Bear Berry. Natural History—Much difference of opinion respecting its virtues—Useful in urinary pain in calculous disease—Employed with advantage in Nephritic affections—In diseases of the bladder—In Catarrhus Vesicæ—In suppression of long continuance, in protracted gonorrhœa, &c.

Dose, powder, x gr. to xx.

Infusion, ℥ij to ℥xxx water, ℥viij.

Family *Tiliaceæ*—Hæmatus Lignum, or Hæmatoxylon—Natural History—Infusion—Is possessed of tonic and astringent properties—Medicinal virtues considerable equal to cinchona—In Nephritis employed with advantage given in the form of infusion.

Infusion, ℥ss to ℥viij water, ℥viij.

Family *Caryophylleæ*—Dianthus Caryophyllus, or Wild Carnation—Infusion—Natural History—Is possessed of considerable astringency and diuretics—Active Agent of the root and seeds is employed in some of the diseases of the urinary passages and generally with benefit.

Family *Liliaceæ*—Allium Sativum or Garlic—Its little [illegible]

Importance of Diet as an Auxiliary—Experiments of Dr. Wollaston.

APPENDIX II.

1. Solvents of the Alkaline deposits.

Copperson appears to possess antilithic properties

nance of a few, or their varied combination, the varieties of human calculi are derived—The variety of calculous concretions enumerated—The state of the constitution favoring the production of these principles—Lithic Diathesis —Means by which the formation of calculous deposits is prevented---or *Antilithics*---When forming, or soon after formed, the means by which their increase is prevented — or *Lithontriptics* — Their action considered, and the possibility of active substances being conveyed to the urinary passages through the medium of the circulation— The conclusions drawn--Manner of distinguishing the alkaline and acid deposits.

ANTILITHICS.

Of this character are the Medicines which improve the tone of the alimentary canal–Several articles from the class of Tonics enumerated.

Family *Ericineæ*—Arbutus Uva Ursi—Bear Berry. Natural History—Much difference of opinion respecting its virtues--Useful in allaying pain in calculous diseases—Employed with advantage in Nephritic affections. In diseases of the bladder--In Catarrhus Vesicæ--In suppurations of long continuance, in protracted gonorrhœas, &c.

Dose, powder, x grs to ʒss.
Infusion, ʒiij to ℥ss to water 1 pint.

Family *Urticeæ*—Humulus Lupulus, or Hop--Indigenous ---Natural History---Lupulin---Is possessed of tonic and narcotic properties---Medicinal virtues extolled beyond its merits--In Nephritis employed with advantage,given in the form of infusion.

Infusion ℥ss to water 1 pint.

Family *Umbelliferæ*---Daucus Carota, or Wild Carrot--- Indigenous. Natural History--Is possessed of considerable acrimony and bitterness---An infusion of the roots and seeds is employed in some of the diseases of the urinary organs, and occasionally with benefit.

Family *Liliaceæ*—Allium Sativum or Garlic---of little value.

Importance of Diet as an Antilithic. Experiments of Dr. Wollaston.

LITHONTRIPTICS.

1. Solvents of the Alkaline deposits.

Carbonic Acid—Useful to the patient, and grateful to the system. Prepared by the dealers in Mineral Waters—or impregnating water by a Nooth's apparatus.

Mineral Acids—General and Relative Importance---The Muriatic preferred.

Dose, v to xx m.

Vegetable Acids—Under certain circumstances preferred to the Mineral.

Tartaric Acid in doses of from v to xx grains may be employed.

2. *Solvents of the acid deposits.*

Carbonates of Potash and of Soda—Latter preferred--cases of their utility cited---Administered in solution with the mucilage of gum arabic or in weak broth; or saturated with carbonic acid gas.

Dose ℈i to ʒss repeated.

Soap—Has no advantage separate from the alkali it contains, and as in this state, it is apt to impair the digestive powers of the stomach, and lay the foundation of dyspepsia, s seldom employed.

ʒss to ʒss daily in pills.

Lime Water—was much commended by Dr. Whytt, and benefit was supposed to have been derived from its use in Lord Walpole's case—but it is an inconvenient and ineffective form of alkaline medicine, and not entitled to much consideration.

1 quart to 3 pints daily.

Magnesia—Has peculiar advantages in the cases under consideration–corrects the conditions of the first passages which favors the formation of uric acid---Particularly useful when the alkalies have been employed a long time without much benefit, or when they excite flatulence, or indigestion.

Dose; xv to xx grs. several times a day.

Injections into the bladder have been proposed, consisting of acid or alkaline solutions—The Gastric juice of animals, particularly the Hog, proposed by the late Dr. Dorsey.

Division 8.

Medicines which promote the Catamenial Secretion.

EMMENAGOGUES.

General Remarks upon the Catamenia---Its nature and importance. Its suppression connected with several forms of chronic disease—Objections to the efficacy of this class considered–Means by which the secretion is excited.

(*a*) *Such as increase arterial action.*

Under this division is comprehended those articles which stimulate the arterial system: and those which give tone to the system generally.

Family *Polygaleæ*---Polygala Seneka--Properties--Cases of its utility cited--Best adapted to habits that are weak and feeble--and of a temperament apparently cold and leuco-phlegmatic--Manner of preparing it for use, and the best period for its administration--Exhibited in the form of

Decoction, ʒii to ℥ss of the root to water 1 pint, simmer a short time
vii to x oz. daily.

Family *Coniferæ*—Juniperus Sabina or Savin—Natural History—Properties—Experiments of Home and others, with this article as an emmenagogue.

The constitutions to which it is best adapted are the weak and relaxed--Employed also in Chronic Rheumatism.

Externally employed in powder as an escharotic--In infusion as a wash for ulcers--In tænia capitis, and in the form of ointment to keep up the discharge from blistered surfaces.

Dose, powder, ℈i to ℈ii

Decoction ℥i of the leaves to water 1 pint, boiled to half a pint, to which add syrup ℥ii—dose, a wine glassful every 2 or 3 hours.

Juniperus Virginia--Natural History--Properties and uses as the preceding.

Tinctura *Cantharidum*--Tincture of Cantharides--Effects upon the abdominal and more especially the pelvic viscera --Its utility connected with its operation on the latter--particularly when given to the extent of producing strangury--Cases of its efficacy cited--Connection of several chronic forms of disease with the suppression of the Catamenia exhibited, viz. Mania, Nymphomania, Epilepsy, Phthisis.

Dose, xv to xxm. increased.

Family *Rubiaceæ*---Rubia Tinctorum--Madder--Natural History--Properties--Experiments of Home and others. Article of little value.

Dose, ʒss to ʒi

Secale Cornutum--Spurred Rye--Ergot--Natural History --Sensible Properties--Its prominent effects, are, to accelerate parturition and its emmenagogue operation--The former operation is not more remarkable, than the almost instantaneous manner in which uterine contractions are produced--Rules to be observed in its administration--Cases in which it may be resorted to with great advantge--Objections to its employment answered. Its emmenagogue operation considered, with cases of its efficacy.

Dose, powder, xv to xx grs.
Decoction, ℈ii in ℥iv of water.
Dose, 1-3 every 20 minutes.

Tinct. of Guaiac--a valuable article in Amenorrhæa and Dysmenorrhea.

Dose, a tea spoonful in half an ounce of water or milk.

Stimulating injections into the vagina.

Electricity--An agent of considerable importance in removing uterine obstructions--This effected by its increasing the circulation, and promoting the glandular secretions--Authorities in support of its efficacy--Cases of its utility cited.

Others of minor efficacy.

Rosmarinus Officinalis--Rosemary.

Mentha Puligium--Pennyroyal.

Monarda Punctata--Mountain Mint.

(*b*) *Remedies which increase arterial action by giving tone to the system.*

Amenorrhæa being often connected with a debilitated state of the system requiring tonics.

The preparations of Iron most important--General remarks upon the effects and operation of these medicines.

Proto Carbonate of Iron--Preparation--a useful article and is employed alone, but more advantageously combined with other articles--Formula--Chalybeate Wine.

Dose, powder, x to xv grs.
Chalybeate Wine, ʒii to ℥ss.

Cases in which ergot may be used —

1. When abortion becomes inevitable in the early part of pregnancy, and the contractions are feeble with considerable haemorrhage —

2. In cases of alarming haemorrhage near the close of utero-gestation, not occasioned by attachment of the placenta over the osuteri, and not accompanied by efficient contractions —

3. In puerperal convulsions in which a speedy delivery becomes necessary —

4. In lingering labour, the osuteri being sufficiently dilated, and the parts properly relaxed —

5. In retention of the placenta from a want of contraction of the uterus —

6. In subjects liable to haemorrhage after delivery from laxity and deficiency of contraction —

7. To restrain haemorrhagy after delivery

Proto Sulphate of Iron--Preparation--a useful and more active article--also combined with other articles. Formula.

Dose, i to ij grs.

Tinctura Muriatis Ferri--Preparation--an agreeable and efficacous article.

Dose, viii to xii m. in a infusion of Colombo or Quassia.

Any of the above preparations may be employed advantageously when these articles are required--and they will be found to contribute greatly to improve the digestive powers --to promote a more perfect assimilation of the food--to restore the impeded secretions--and the languid action of the uterine as well as other parts of the system--By their tonic, united to an astringent operation, they will be found useful in immoderate discharges, particularly in Menorrhagia, Leucorrhæa, Gleets, &c.

Other means--as exercise, cordial diet, &c.

(*c*) *Remedies which reduce action.*

Bloodletting--Cathartics—and of these any of the mild preparations already mentioned may be employed—a few have been particularly recommended, as

Family *Ranunculaceæ*--Helleborus Niger. Natural History--Character--Dangerous and drastic remedy--rarely employed.

Aloe Perfoliata...Natural History and operation already considered...Given united with other substances...Hooper's Pills, Comp. Tinct. Aloes, &c.

Preparations of Mercury--They are employed, not only as evacuants, but to renew secretions--For this purpose their use is continued in moderate doses until slight ptyalism is accomplished, and in very obstinate cases, this course aided by blisters to the inner parts of the thighs, will in all probability be attended with beneficial effects.

Division 9.

Medicines which promote the secretions from the Bronchial passages.

EXPECTORANTS.

State of the bronchial secretion in health--in disease... The action of this class considered, and the circumstances under which their operation is promoted.

PARTICULAR EXPECTORANTS.

(*a*) *Depleting Remedies.*

(*b*) *Medicines which have their action upon the stomach and operate by increasing the pulmonary with the insensible secretions of the surface.*

Ipecacuanha and tartarized Antimony of this character--Given combined with other articles and in small doses.

Scilla Maritima--Useful article, particularly in the diseases of children--Compound Syrup of Squills.

(*c*) *Expectorants which operate as stimulants.*

Family *Umbelliferæ*--Gum Ammoniac. Natural History... Preparation...Properties...Employed in Pulmonary affections, where the lungs are oppressed by viscid phlegm...In Chronic Catarrhs--In Asthmas, particularly the pituitary, or humid...In pneumonia after action has been reduced--and in peripneumonia Notha--In any of these cases, it is often of essential service in promoting expectoration, and relieving respiration.

Exhibition--Vide Formula.

Gum Assafœtida--Natural History described hereafter. Useful in Pertussis--Tussis Senilis--Chronic coughs, &c. given in the form of a watery solution.

Dose, ʒii to ℥ss.

Polygala Seneka—Expectorant properties considerable —Employed in Pulmonic affections after inflammatory action has been reduced—when the patient is oppressed with a dry cough or difficult expectoration—In Cynanche Trachealis as a secondary remedy, and when employed the decoction should be stronger than is usually given. Formula

The decoction when of ordinary strength is prepared by boiling ℥ss ℥i of the root in water ℔iss to 1 pint, other articles being added to make it more agreeable.

Dose, ℥ss to ℥i.

Family *Campanulaceæ*--Lobelia Inflata--Indian Tobacco. Natural History—Properties—Action upon the fauces and the salivary and mucous secretions—Upon the stomach produces Nausea, and when in large doses, vomiting frequently succeeds—Employed in Asthma—In the pectoral affections of children—In threatened Croup, for its emetic and expectorant properties.

Dose—Saturated tincture ʒi to ʒii.
Children xx to xl. m.
Infusion—℥ss to water 1 pint.
Dose, ℥ss to ℥i.
Syrup for children similar in its effects to squills—ʒi to ʒii.

Family *Liliaceæ*—Allium Sativum—Garlic—Natural History—Properties---Employed in catarrhal affections of long continuance---Given in the form of

Expressed juice, ʒi to ℥ss
Syrup of Garlic, a tablespoonful.

Family *Leguminosæ*—Myroxylon Toluiferum—Balsam of Tolu—Natural History—Obtained by making incisions into the bark of the tree, from which it exudes in considerable abundance—Analysis—Useful as an expectorant when vascular action has been reduced, or when little excitement exists—Employed alone or more commonly united with other articles. Formula.

Hill's Balsam of Honey—a preparation of this article, useful in the chronic coughs, and pectoral affections of old people.

Dose, Tincture Bals. tolut. ʒi to ʒii
Balsam, ʒss suspended in water by mucilage or honey.

Myroxylon Peruiferum — or Peruvian Balsam — Natural History—Obtained by incisions made into the bark of the tree—Analysis—Employed as the preceding.

Doses the same.

Copaifera Officinalis—Balsam Copaiva—To its other properties must be added its very valuable operation in the chronic stages of Pulmonary affections—As Chronic Catarrh—In increased discharges from the mucous membrane lining the bronchiæ, &c.

Dose, xx to xxx m.

(*d*) *Articles which allay irritation of the mucous membrane, lining the larynx and trachea---the existence of which excites coughing.*

Family *Leguminosæ*---Glycirrhiza Glabra—Liquorice—Natural History—Preparation of the Extract—Employed in Catarrhal and Pulmonic affections—In coughs, hoarseness, &c. combined with other articles. Formula.

Mimosa Nilotica--Gum Arabic. Natural History--Manner in which obtained from the tree—varieties to be met with in commerce...Most valuable of all the gums and mucilagi-

nous substances...Useful adjuvant to other substances in the formation of Pectoral mixtures...and for allaying irritation in various parts of the body.

Family *Lineaceæ*--Semen Lini...Flax Seed. Natural History--Much employed as the preceding.

Decoction of the seeds sweetened with honey, and acidulated.

Inhalations.

General Remarks—*Mildest* vapour of warm water--of Vinegar and water--*More stimulating*--Spirits, impregnated with other substances--Fumes of Tar-Rosin, &c.

Pneumatic Medicine.

Division 10.

EPISPASTICS.

History of the employment of blisters--Phenomena arising from their application--The modus operandi of blisters, in the cure of diseases--To give to this subject all the importance it deserves, the structure and relations of the skin briefly considered. The beneficial effects of this class arranged under the three following divisions:

(*a*) *Where the actions of the system threaten to become too weak.*

Their utility exhibited in the several forms of febrile diseases—In Typhus and other continued Fevers---In remittents--In the advanced stages of inflammatory fevers.

(*b*) *Where they are irregular.*

As in convulsive affections—In apoplexy—Mania—In affections of the alimentary canal—Cholera—Cholic--Diarrhœa.

(*c*) *Where they are partially too strong.*

As in all local inflammatory affections--The proper period for the application of blisters considered--The connections of the skin with the general system concluding these remarks.

ARTICLES COMPOSING THE CLASS EPISPASTICS.

Cantharis Vesicatoria--or Spanish Fly. Natural History --Manner of collecting and preserving the Flies--Analysis--Cantharidin--Preparation of the ointment, size and shape of the plasters when applied to particular parts--Their proper application--Parts of the body selected when their general operation is to be obtained--when the local--Dressing of blisters.

Their effects upon the Constitution, particularly the urinary bladder...producing strangury...Treatment.

Lytta Vitata or Potato Fly...Natural History. Effects as the preceding.

Nitric Acid...Employed in diseases which are violent and rapid in their course, for the production of speedy vesication –Thus used in the Cholera Morbus of India...In the low states of fever...In comatose affections, and in cases where the ordinary process of blistering is resisted.

Manner of applying the acid.

Rubifacients...Their general effects, and cases in which they are usefully employed.

Family *Cruciferæ*...Sinapis or Mustard...The very beneficial effects derived from it in disease, in the form of Cataplasm, as a stimulating and revulsive remedy. The seeds administered in several diseases with results not very decisive.

Ol: Terebinthinæ—Very useful article, commonly employed combined. Formula.

Issues.

Setons and Caustic Issues—Useful auxiliary in several chronic diseases--In Pulmonic affections, Chronic Hepatitis ---Dysentery--Hypochondriasis--In obstinate Leucorrhea, Menorrhagia, &c. applied near to the seat of the disease.

Division 11.

Medicines which promote the secretions generally, and particularly the salivary.

SIALOGOGUES.

External or Masticatories.

Internal--Hydrargyrum or Mercury--Natural, Medical and Chemical History--The preparations of Mercury considered under the three following heads:

(*a*) *As they are formed by Trituration.*

Pilulæ Hydrargyri or Blue Pill--Preparation--one of the mildest of the Mercurial preparations--Much employed to produce a Mercurial impression on the system, and as a

laxative. Can be administered to patients of an irritable constitution, with whom the more active articles disagree. Employed in the treatment of various affections of the stomach and chylopoietic viscera.

Dose, iv to vi grs.

1 gr. of Mercury is contained in 4 grs. of the mass according to the Edinburgh formula,

Do. in iii of the London

Do. in ij ss of the Dublin

The first is preferred.

Mistura Hydrargyri Mucilaginosa--Preparation--but rarely employed.

Unguentum Hydrargyri—or Mercurial Ointment---Preparation—Mercury exists in the ointment partly oxydated, and partly in the state of minute mechanical division—Employed in the form of friction when the other preparations disagree with the bowells, producing griping, purging, &c. and where it is desirable to produce a prompt operation upon the system. Used for the discussion of tumors, buboes--In Erysipelas.

Preparation of the patient before commencing the frictions. ʒi, the ordinary quantity to be rubbed into the inner part of the thigh, groins, and genitals, or inner part of the arm and axilla.

Hydrargyrum cum Creta—Preparation—Employed with advantage in the disordered condition of the first passages occurring in children, exhibiting as they often do an altered and morbid condition of the secretions--being either (*a*) of a greenish color, or clay colored, or white, or (*b*) as regards consistence thin and watery, or curdled, or slimy—or (*c*) as relates to odour, either highly offensive, or of an earthy smell—Under the above circumstances, small doses of this preparation will be found very beneficial.

Three grs. of the Hydrargyrum cum creta contain 1 gr. of Mercury.

Dose, ij to iv grs.

(*b*) *In combination with Sulphur.*

Black Sulphuret of Mercury—Æthiops Mineral—Preparation—rarely employed.

Red Sulphuret of Mercury, or Factitious Cinnabar. Preparation--Rarely employed internally, but chiefly used in fumigations to sores of a syphilitic character, or chronic ulcerations. Remarks upon Mercurial fumigations.

Triturate equal parts of mer. and sulphur

Triturate 5 parts of mer. with 1 of sulphur and sublime —

Eg. 7.2 Cor. Sub. 272 - 202 mer

Protochloride of mercury - treat mer. with corrosive sub. triturate and sub lime - again sublime - powder and wash also treat a solution of nitrate of mercury with hydrochloric acid or common salt Distinguish from the bichloride by its weight when treated with an alkali throw down a black precipitate - insol.

bichloride of mer. by treating red precipitate with muriatic acid - also treat common salt with bisulphate of the peroxid of mercury - test. ~~Also~~ treat a solution with an alkali it throws down a yellow precipitate albumen a remedy - the chlorine combines with the hyd. of the albumen

(*c*) *Preparations of Mercury by Acids.*

Protonitrate of Mercury or Red Precipitate--Preparation. Externally employed as an escarotic.

Sub deuto Sulphate of Mercury or Turpeth Mineral---Preparation. Properties.

Perchloride of Mercury or Corrosive Sublimate--Preparation --Antivenereal properties considered--Employed with most advantage in the concluding stages of syphilis--Given in small doses, and in combination with the vegetable alteratives--In cutaneous diseases, obstinate ulcerations--Chronic inflammations generally---Form of administration---Formula.

Poisonous operation of the Perchloride--Effects upon the system in large doses. Treatment to be pursued. Antidotes —The best is albumen, or the white of eggs beat up with water, and taken in large quantity—It decomposes the corrosive sublimate, and forms a triple compound, consisting of albumen, muriatic acid and calomel—An ounce of the white of eggs is required to neutralize 4 grs. of the corrosive sublimate.

Externally employed in the formation of washes in cutaneous diseases, and gargles in venereal sore throat.

Dose, 1-8 to 1-4 gr.

Protochloride of Mercury--Calomel--Preparation--Its properties very numerous and diversified--These enumerated --Its local operation upon the alimentary canal and neighboring viscera--Its operation upon the general system when given in sufficient and continued doses--Its power to excite an action different from the existing diseased one. It is these properties which give to Calomel its peculiar importance,and render it subservient to many valuable purposes.

Illustrated by its application to Diseases--The subject considered in detail--Morbid effects produced from the use of Mercury--Hydrargyrium--Ptyalism.

Precautions by attention to which the very severe effects of Mercury on the mouth may in general be prevented--(*a*) By attending to the nature of the evacuations--as soon as they are changed either from a dark, ash or grey color, to the color of bile—or their consistence from being thin and watery, to a more natural appearance,which will always take place when the liver pours forth a more healthy secretion, the medicine should be discontinued, or given at longer

intervals. (*b*) By omitting the use of the Medicine as soon as it exhibits the first indications of action upon the gums--These are, redness, a peculiar fætor upon being rubbed, and a slight ulceration about the teeth. (*c*) By attending to the constitution of the patient--The sialogogue operation of Mercury is very badly borne by persons of delicate habits, in whom the nervous temperament chiefly prevails--It is badly borne by persons advanced in life, whose constitutions have been impaired by previous attacks of sickness, and who are therefore weak and enfeebled. (*d*) The sialogogue operation of Mercury should not be attempted in persons under 12 years of age. By attending to these rules, severe instances of salivation will be prevented from occurring, I will not say invariably, but in a great majority of cases. Only observe the same precautions with this medicine, which are used with other active articles. We discontinue the use of opium when sleep is induced, Digitalis when it affects the brain and the organ of vision, Arsenic when it produces intumescence of the cellular membrane, and Calomel when it changes the secretions. This is sometimes difficult to be discovered, but attention is, on that account, the more necessary, particularly as its effects are more lasting, and distressing.

Treatment of Ptyalism.

Division 12.

Medicines, the effects of which are exhibited on the system generally.

Under this division are comprised Stimulants or Incitants properly so called—Narcotics—Antispasmodics—Tonics—and Astringents.

STIMULANTS.

Definition—Their impression is made upon the nervous energies of the stomach, which being communicated to the sensorium, is thence diffused over the system. They are usefully employed in those cases of debility succeeding fevers, or other violent diseases, when the morbid action ceases, and no organic disorder remains—Under these circumstances, the powers of the constitution languish, the circulation is feeble, and the digestive function is weak—The

functions here are materially assisted by a supply of gentle stimulation, and it is then that they are useful and safe.

PARTICULAR STIMULANTS.

Sub Carbonas Ammoniæ—Concrete volatile Alkali. Preparation—Properties. Employed in low and malignant forms of fever, and in such as are called putrid. Formula In Typhus Pneumonia, but with caution; In Cardialgia depending upon acidity; In gastric affections succeeding habits of irregularity and debauch; In Rheumatism combined with the Tinct. of Guaiac, &c; In the bites of venemous reptiles. Used also as an external application.

Dose, grs. v to x. in Julep or pill.

Camphor--Substance peculiar to its operation---Much employed in low and malignant forms of disease, alternated with the vol: alkali. Formula--In Gangrene--In eruptive fevers to promote the filling of the pustules, and to bring them back after they have receded--In Inflammatory fevers after action has been reduced, combined with relaxing diaphoretics...In several chronic disorders combined with other articles...In Mania-a-Potu...External employment.

Dose, grs v to ℈i.

Family *Coniferæ*...Ol: Terebinthinæ Rect...Natural History--Preparation...Very important article...Employed in Puerperal Fever...Produces its good effects in these cases, by exciting a copious secretion from the whole internal membrane of the intestines, by which irritation is determined from the peritoneum...To this may be added what has been termed a specific property in itself, by virtue of which it operates as an antidote to the morbid action which exists. Epilepsy ... Chronic Rheumatism ... In obstructions of the bowels combined with Castor Oil..As an Anthelmintic --In Chronic Pulmonary affections, in Gonorrhæa, Leucorrhæa,

Dose, from ʒi to ℥ii

ʒi or less in chronic pains of limbs, chest or elsewhere

ʒii to ʒiij in Epilepsy, Puerperal fever, Obstructions of the bowels, against Lumbrici

℥i to ℥ii...Tænia.

Alcohol and its combinations--In the former state seldom if ever used internally, but is employed externally for several purposes--Diluted as it exists in wine, it is of essential im-

portance in Medicine; being more agreeably exciting--more refreshing to the patient, and more readily retained than any other article. Its stimulant operation is more permanent; it does not exhaust excitability in any great degree, and may be considered in comparison with ardent spirits as exerting a tonic operation–The circumstances which forbid its employment,and such as are favorable to its use—Wines to be preferred. Substitutes for Wine.

Poisonous operation of ardent spirits. Treatment. The practice in many respects similar to that recommended where an overdose of Laudanum has been taken--substituting the aqua ammonia largely diluted or the acetate of Ammonia in the form of mixture, in place of coffee--lime juice &c. recommended to counteract the effects of Laudanum.

Family *Solanaceæ*—Capsicum Annuum...Red Pepper... Natural History. Analysis...Capsicin...Employed as a condiment. Used also in certain stages of Dyspepsia...In Cynanche Maligna in the form of gargle. Also in that deranged condition of the mucous membrane of the stomach which accompanies the black vomit,but with little effect..Proposed also in febrile diseases for its stimulant and diaphoretic properties.

Given in the form of infusion
In Powder.

Family *Piperineæ*—Piper Nigrum or Black Pepper. Natural History. Analysis—Oil—Piperin---Employed as a stimulant and carminative for several purposes; In Intermittent Fevers. Useful as a gargle in relaxed states of the Uvula and in certain ulcerations of the throat.

Dose, v to viii of the seeds twice a day
Powder, gr. iv to ℈i
Oil, i drop
Piperine, 1-2 to i gr.

Piper Cubeba—Cubebs. Natural History—Properties--Analysis—Employed in Gonorrhæa and Leucorrhæa, alone or combined with Copaiva. Formula.

Dose, ʒss to ʒii of the powder.
ʒi to ℥ss of the tincture
Oil Cubebs m viii
Enema, ʒvi to ʒviii of the powder, combined with mucilage and administered to the patient. The practice repeated for several days.

native of east indies

rules for admint. narcotics

1) begin with small doses

2) it is wrong to combine many of these articles —

3) it is proper to change the parts to which they are applied —

4) it is proper to graduate the strength of article to the degree of excitability of the system —

four kinds of opium - Turkey - East India - Egyptian - and European —

volatile oil - gum - resin - coutch narcotin - narcine - morphine and several salts -

I am fully convinced of the inefficacy of opium in tetanus -

NARCOTICS.

Definition of the class; The operation of Narcotics upon the system considered–Sensorial Stimuli–Manner in which death takes place from an overdose--Narcotics having been considered sedative in their operation, the reasons commonly assigned considered, and the contrary maintained.

Rules to be observed in their administration.

PARTICULAR NARCOTICS.

Family *Papaveraceæ*—Papaver Somniferum—Poppy. Natural History–Manner of preparing the extract or opium from the plant--Making incisions into the Capsules, or by boiling—First preferred—The varieties to be met with in commerce–Cultivated with much advantage in Carolina and Georgia—Analysis of Opium—The period when opium was employed in Medicine—The inestimable benefits it confers—Action upon the different functions of the body.

Its application to diseases considered in detail.

Its external employment often productive of beneficial effects.

Opiate enema.

Opium suppository.

Its poisonous operation considered--Symptoms--Treatment. The first object to be accomplished is to evacuate the stomach--Emetics of the Sulphate of Zinc, and should this fail,of the Sulphate of Copper, are usually resorted to. With the evacuation of the stomach, the apprehensions of danger will be much relieved. After vomiting, the patient should be moved about--irritating applications be applied to the skin if necessary--and strong coffee, lime juice, or vinegar be given diluted, to correct the effects of opium upon the nervous system.

Should Deglutition be interrupted, and it is impossible to introduce an emetic into the stomach, other means must be resorted to. Bloodletting may be employed with caution--but the affusion of cold water over the head and shoulders has been found productive of the happiest effects in rousing the patient from this state of insensibility. The emetic should then be administered as soon as it can be taken, and whenever the torpor returns, the cold affusion is to be repeated.

Should the insensibility of the patient continue, the stomach pump must be resorted to.

Various articles have been proposed as Antidotes to Opium--Vinegar, Vegetable Acids--the infusion of Coffee, Chlorine, &c. They have no such operation--on the contrary, by being given before the narcotic is expelled, by diluting the substance they promote its absorption, and thus aggravate the symptoms. They are useful, however, after it has been removed, in counteracting its effects upon the nervous system.

Should the means fail, which have been proposed, artificial respiration should be attempted, and persevered in some time, since very hopeless cases have been restored by this means.

Consequences of its habitual use.

Officinal preparations—Tinctures.

Tinctura Opii—Dose, xxv m. for an adult.
vi m. for a child 6 years old
i m. for an infant within the month.

Denarcotised Laudanum—Dose the same.

Denarcotised Acidulated Tincture—Dose the same.

Salts.

Morphia---rarely employed in its pure state.

Acetate Morphia—Dose, 1-4 to 1-2 gr. rubbed up with sugar.

Sulphate Morphia—Dose same.

Citrate Morphia.

Opium in substance 1 gr.

The doses of this article will vary with the indications.

Family *Synantherea*—Lactuca Virosa—Lactucarium seu Thridax—Natural History—Preparation—Powers inferior to the preceding article, but freed from its stupifying operation—applied to the same purposes in large doses.

Family *Solanea*—Hyosciamus Niger—Henbane—Natural History—Effects upon the system—Employed in several diseases as a substitute for opium, the good effects of which, it often exhibits, without its constipating the bowels --Useful as a topical application in scirrhus and cancerous affections, and in scrofulous ulcerations, applied in the form of cataplasm of the bruised leaves, or as a wash.

Dose, gr. ij to ℈i.

Done for a child three days old 1/2 gt
never more than a drop within the month
one ʒ of paragoric contains about 6
drop of laudanum — Denarcotized
acidulated tincture of opium

Denar-opi	1 ʒ
Spts vinum	8 ʒ
acetic acid	2 ʒ
aqua —	6 ʒ

Datura Stramonium—Thornapple—Indigenous—Natural History—Properties—Employed in mania—Epilepsy-particularly that form which is regular in its attacks–In Asthma when uncomplicated–In lessening the pain of chronic diseases--as Rheumatism–Tic Doloureaux—Sciatica—In scrofulous—Venereal—and ill conditioned Ulcers with thickened edges and a sanious discharge.—Administered in the form of powder—Extract from the seeds and plant Tincture.

Preparation of the extract.

Dose, powder, gr. i
Seeds gr. 1-2
Extract, gr. 1
do. from the seeds, gr. ss.
Tincture, xx to xxx m.

Ointment—Preparation—applied to hæmorrhoids–to the eyelids to dilate the pupil–as a dressing in scalds and burns, &c.

Poisonous operation of the stramonium—The capsule, or apples as they are commonly called being eat by children symptoms of a distressing character are produced—These enumerated—Treatment.

Atropa Belladonna--Natural History—Analysis--Atropia—Properties–Rarely employed internally — Recommended as a preventive of Scarlitina--Applied to the eyelids to produce dilatation of the pupils in cataract.

Dose of the Extract, gr. i, increased.

Solanum Dulcamara---Bitter sweet---Natural History---Properties---Chiefly employed in cutaneous diseases in the form of decoction of the stipites of younger branches.

Decoction, 1 pint daily.

Family *Umbellatæ*---Conium Maculatum---Hemlock---Natural History---Recommended in Scirrhus and Cancer, but without advantage except as a palliative--In scrofulous ulcerations, and in Opthalmia---In ulcerations of the secondary stages of syphilis---In the Neuroses---Glandular Obstructions.

Preparation of the extract.

Administration, beginning with small doses, the quantity to be increased until the system becomes sensibly affected

by its use--Often an inert article from age--Care should be taken in its selection, and a return to the original small dose with a fresh parcel.

Dose, ij grs, to ʒss and ℈ii

Cicuta Maculata--American Hemlock---Indigenous--Natural History–Effects similar to the preceding, only more powerful.

Dose, ij grs. increased.

Hydrocyanic Acid--Preparation. Exists abundantly in the vegetable kingdom—Effects upon the system—Action decidedly sedative. Employed in diseases of increased sensibility and irritability–In Nervous and Chronic Coughs —In catarrhal affections and Whooping Cough. Also in Phthisis Pulmonalis, Asthma, Dyspeptic affections, Tetanus, &c. Evidence of its utility in these cases.

Exhibition—Medicinal Prussic Acid employed--To be administered in distilled water–to be recently prepared since it is easily discomposed.

Dose, i m. increased. Formula.

Poisonous operation--its prompt and fatal effects--Antidotes. It is difficult to point out an antidote to an article which operates with such great activity--several have been proposed, but until lately with little effect. Those most approved, are diluted aqua ammonia, taken internally and applied externally--Chlorine---inhaling the vapour, and injecting a solution of Chloride of Lime, or soda into the stomach, when insensibility exists.

The best of all remedies is the affusion of cold water, and it should be employed in connection with the last mentioned.

Family *Rosaceæ*--Prunus Lauro Cerasus--Cherry Laurel --Naturalized--Natural History--Effects upon the system similar to the preceding--Active principle separated by distillation--Employed in the same diseases as the preceding.

Dose, xxx to xl m. of the distilled water
Tincture of the leaves, x to xx.

Amygdalis Communis--Bitter Almond--Prussic Acid obtained by distillation from the cake which remains after the separation of the fixed oil--The acid rising in union with volatile oil, from which it can be separated by the red oxyd of Mercury.

It is indispensible to make use of distilled water with prussic acid, as any other decomposes it

grows in the east indies

Family *Papaveraceæ*--Sanguinaria Canadensis--Blood Root--Indigenous--Analysis--Natural History--Sanguinarin --Effects upon the system diversified, according to the dose --Employed in Rheumatism, Hepatic derangements, Pulmonic affections attended with difficult respiration, cough, and occasional hæmorrhage--Pertussis--In some of the forms of Dropsy. Externally employed in ill conditioned ulcers--In Polypi of the Nose, combined with calomel as a stirnutatory.

Dose, Tincture, xxv to xxx m.
Powder, v grs.
Infusion, ʒi of the powder, to ℥v of water
Dose, ℥ss.

Family *Apocyneæ*—Strychnos Nux Vomica. Natural History--Analysis--Strychnine--Effects upon the system--Narcotic in its operation, but differs in many respects from most of the articles of this class--But little employed until the experiments of Delile and Majendie upon the action of the Upas Teuté and its kindred species on animals.

Employed in paralytic affections, particularly such as arise from an impaired state of the nervous energy--In muscular relaxation of particular parts. Symptoms produced by its use--Such as are favorable--and such requiring its discontinuance. Poisonous operation--Symptoms--Treatment--The first object is to remove by an emetic the article from the Stomach--and in the next to neutralise any which remains--For this purpose a tincture of Iodine has been employed, which combining with the Strychnia, forms a compound deprived of much activity.

Dose, substance, iv grs.
Alcoholic extract, i to ij grs.
Strychnine, 1-12 gr.

Family *Urticeæ*—Humulus Lupulus--Hop--Natural History--Lupulin--Its effects evidently narcotic--and used as a substitute for opium when that article disagrees, by producing nervous or other distressing symptoms.

Family *undetermined*–Gelseminum Sempervirens--Yellow Jesamine. Natural History--Indigenous--Effects upon the system of an active and powerful character--Employed in Rheumatism--and from its operation upon the nervous system may be used as a substitute for Prussic Acid, and in the diseases in which that article has been recommended. Bark of the root employed in the proportion of

ʒi to ℔i of spirits. Dose, xxx m.

General remarks upon the operation of this class, and the substances of which it is composed. * * *

Family *Umbelliferæ*--Ferula Assafætida--Natural History — Analysis—Used as a condiment in Arabia and Persia—Employed in diseases of the nervous and spasmodic character. Peculiarities in these diseases rendering this article admissible.

Exhibited in watery solution, dose ℥ss
Tincture, xxx to xl m.
Enema, ʒi to ʒii dissolved
in decoction of barley, ℥x

Bubon Galbanum—of little value.

Family *Valerianæ*—Valeriana Officinalis--Natural History--Sensible properties--Analysis--Effects upon the system--Employed in the same diseases as Assafætida—In Hermicrania combined with Peruvian Bark--In the typhus states of fever combined with ammonia and bark.

Exhibited in Infusion, dose, ℥i to ℥iss
Powder, ʒi to ʒiss
Tincture, ʒii to ℥ss
Extract, ʒi to ʒiij daily.

Family *Liliaceæ*--Allium Sativum--Garlic--Natural History--Properties--Of little value as an antispasmodic.

Musk--obtained from the Moschus Moschiferus--History of the animal and of this substance--Effects upon the system--Employed at one time to much extent in several forms of spasmodic diseases, but rarely resorted to at present. Frequently adulterated.

Dose, grs. v to ℥ss.

Tincture of Artificial Musk--Preparation--Employed in Pertussis.

Dose, xv m.

Castor--Obtained from the Castor Fiber--A deposition in both sexes, in two sacs or bags, containing a brownish oily matter--Employed in Hysteria, Hypocondriasis. &c. Its extremely nauseous taste and smell, together with the absence of any very positive properties has caused it to be rejected.

Dose, Tincture, ʒi to ʒij.

Artificial musk - pour nitric acid on the oil of amber

*** In proceeding to speak of the articles of this class of medicines, I ought not to disguise that they are very rarely employed, at least by myself. So great a revolution has of late taken place in the Pathology, and Treatment of Nervous and Convulsive Diseases, that the remedies which were once in vogue, are now rarely administered.

These diseases have for a long time been considered as originating in great mobilty of the system. By this term was meant, much excitability, connected with a debilitated, or more properly, a delicate habit of body. Such doubtless, is the state of constitution, giving rise to these diseases—But it should also be observed that the phenomena of nervous excitement, or the symptoms these diseases present, originate often in excited states of the cerebral and spinal systems, and in many instances, stimulants particularly of the diffusible kind, comprised under this class, are injudicious and improper. Such at least has been my views in the management of these cases, particularly during the states of excitement, or while the paroxysm is on.

In many instances, particularly in Hysteria occurring with delicate females, I have afforded almost instantaneous relief by depletion, by drawing a few ounces of blood, by keeping the apartment cool, by cold application to the head, cold drinks —and by these simple means more prompt and effectual relief has been afforded, than by the whole catalogue of anti-spasmodics successively employed.

There are periods, however, when these Medicines can be resorted to—In the intervals of the paroxysms, they are of use to fortify the nervous system, and to calm the irregular and disorderly movements. They seem adapted to lessen that irritability which is too readily excited into action, upon any, even the most trifling occurrence, which have reference to the feelings and sensibilities. Antispasmodics, though useful, are not even here the most approved means. This very excitable state, or unequally balanced condition of the system is often effectually, and I believe, most effectually removed, by bringing into action the corporeal energies—by giving vigor to the muscular system—by exercise—by tonics—by change of air—of climate—by

soothing mental anxieties, or removing them if practicable — and very often by renewing secretions or discharges, which have been interrupted—Of these secretions, the most important is the catamenial.

Subacute forms of these diseases will occur, in which a depletory course cannot be pursued, and where the chronic remedies which are to be resorted to in the Intermissions, cannot be practised. Under these circumstances, the Antispasmodics, strictly so called, must be resorted to.

It should be observed that all the substances which we are to consider under this class, are, vegetable gummy resinous, or aromatic substances, or animal substances of much odour, or chemical substances which are very diffusible. It is nevertheless in this vegetable or animal aroma, that the diffusible property of these substances resides, and their anti-spasmodic effects.

PARTICULAR ANTISPASMODICS.

Sulphuric Æther—Preparation--Properties--Effects upon the system--Employed in many cases when the organs of respiration are affected--When a state of congestion exists in the lungs, with an inability to expectorate--In Hysteria--Hiccough--In sea sickness--In the advanced stages of Typhus fever combined with an infusion of green mint--External employment--Formula.

Dose, ʒss.

Hoffman's Anodyne Liquor—Similar to the foregoing—Only weaker.

Oleum Succini—Natural History—Properties—Employed with advantage occasionally, in palpitations of the heart, &c. External Employment.

Dose, x to xxx m.

Other and opposite remedies frequently Antispasmodic. ...These enumerated.

TONICS.

General observations upon the operation of this class--Divided into the vegetable and mineral--The tonic power of the former is intimately connected with certain sensible properties--All possess these qualities, though in the different articles one may be more predominant than another--The purest Bitters, astringents, und aromatics, possess more or less tonic power--But the most powerful tonics are natural combinations of these principles.

PARTICULAR TONICS.

Family *Rubiaceæ*—Cinchona. Natural History--Soil in which the plants of this genus thrive best--Season for stripping the bark--Medical History.

Varieties of Cinchona—1, Cinchona Officinalis, Grey, Loxa, or crown bark, commonly known by the name of Pale Bark.

Obtained from the mountains of Santa Fe and Quito—Appearance and properties--from chemical analysis contains from 27 to 30 per cent. less Cinchonine and Quinine than the next species.

2. Yellow Bark or Calisaya Arrolenda--Rolled Calisaya --So called from the Province of Calisaya in Peru, from whence obtained--Derived from the Cinchona Cordifolia--

History--Appearance and Properties--Analysis--Yields a much larger proportion of Quinine than any other.

(*a*) Orange yellow Bark--Cinchona Lancifolia--rarely met with in commerce.

3. Red Bark--Cinchona Oblongifolia—Grows in Peru and New Grenada–In larger and thicker pieces than the pale, and more convoluted than the yellow--Analysis—Contains both Cinchonine and Quinine.

The distinctions derived from the sensible properties of the above very difficult.

Many other varieties may be mentioned, but our knowledge of this genus is still very imperfect.

Application of Cinchona to the cure of diseases—The subject considered in detail.

Form of Exhibition—In powder combined with various other articles...Menstrua in which it may be taken. Formula.

Dose ʒii to ℥ss
In decoction...Preparation...Formula.
In Infusion...Tincture...Extract...Essential Salt of Bark.
Alkaline Salts.
Sulphate of Quinine. Preparation.
Cinchonine...Remarks upon these Salts.
Adulterations.
Bark of Enemata and Bark jacket.

Pinckneya Pubens...Georgia Bark...Natural History... Indigenous...Properties...Application as the preceding.

Family *Aristolochiæ*...Aristolochia Serpentaria...Natural History...Indigenous...Sensible and Medicinal Properties... Employed in Typhoid states of fever, alone or in combination with Camphor and other diaphoretics, to support the strength, and relieve the distressing symptoms...In Remittents combined with Cinchona...To allay irritability of the stomach, &c.

Exhibited in Infusion...ʒii to water ℔i
Tincture.

Family *Hederaceæ*...Cornus Florida or Dogwood...Natural History...Indigenous...Analysis...Employed as the Cinchona...Liable to affect the bowels with pains. This experienced only in its recent state.

Exhibited in the form of Powder, decoction:

Tincture and extract.

Cornus Sericea.

Cornus Circinata.

Quassia Amara...Natural History...Properties...Tonic... Stomachic...Febrifuge...Useful when the more active tonics as Cinchona, &c. produce head ache, uneasiness of stomach, and febrile symptoms...In impaired conditions of the stomach, brought on by excesses...from constitutional causes or a relaxed state of the nervous system. In other disorders of the constitution connected with debility.

Exhibited in Infusion.

ʒi of the rasped wood to water ℔i

Dose, ℥ss.

The Salts of Iron can be conveniently added to infusions of this article and Colombo, their colour not being changed.

Family *Rosaceæ*—Prunus Virginiana—Wild Cherry Tree—Natural History— indigenous— To its tonic properties must be added those who are derived from the Prussic acid it contains. Useful in Intermittents combined with other articles of this class. In Pulmonary affections, Asthma -In chronic Diarrhœa—In some of the cases of Dyspepsia.

Exhibited in Infusion...taken freely.

Powder, ʒss to ʒii

Decoction useful as a wash for ill conditioned Ulcers.

Family *Synanthereæ*—Eupatorium Perfoliatum—Thoroughwort. Natural History—Indigenous—Useful tonic during convalescence from acute or other diseases.

Exhibited...Infusion used cold, and freely taken.

Tincture.

Eupatorium Pilosum—Wild Horehound.

Used as the preceding.

Anthemis Nobilis— Natural History— Properties.

Family *Gentianeæ*— Gentiana Lutæa. Natural History. Analysis—Gentianin— Tonic and Stomachic—Employed in Dyspeptic affections, in the convalescence from fevers, and other cases of debility—The basis of most stomachic preparations.

Exhibited in Infusion, ʒii to water ℔i

Powder often combined with other articles, gr. x to xv.

Compound Tincture, ʒii to ℥ss, a very pleasant preparation

Extract.

Gentiana Catesbœi—Blue Gentian—Sampson Snake Root—Natural History—Indigenous—Employed in cases of impaired digestion—In dyspepsia—In Pneumonia of a Typhus character, given in the form of decoction, not only improving the general powers, but determining to the surface.

Dose, Tincture, ʒii to ℥ss

Frasera Walteri—American Colombo—Natural History—Indigenous. Properties and uses as the next article.

Family *Menispermæ*—Menispermum Palmatum–Colombo Root—Natural History—Useful tonic–communicating vigour to the stomach, without nausea or oppression. Has been much recommended in bilious vomitings and discharges from the bowels, without any particular advantage.

Exhibited in powder variously combined, x to xv grs.

Infusion, ℥s to ℥iss
Tincture, ʒii ℥ss.

Enters into composition of stomachic preparations.

Family *Rutaceæ*—Cusparia Febrifuga—Augustura Bark—Natural History—Properties—But rarely employed.

Many other Tonics foreign and Indigenous enumerated.

MINERAL TONICS.

The most important are the preparations of Iron. Their general effects, are, to increase the vigour of the circulation, to cause the blood to assume a more florid hue, to promote digestion, and excite the secretions, or restrain them when they have been morbidly increased—Employed in diseases of debility and chiefly in Chronic affections. The diseases in which they are particularly employed enumerated.

Particular Preparations—Limatura Ferri—Filings of Iron—Objectionable preparation and rarely employed.

Dose, grs. v to ʒss,

Sub Carbonas Ferri—Rubigo Ferri—Carbonate or Rust of Iron—Preparation—one of the most valuable articles of this class, and much employed to obtain the general effects of Tonics. Given alone or combined with various articles.

Formula. Dose, grs. v to ℈i.

Proto Sulphates of Iron—Green Vitrol—Preparation—A more active article, and to its tonic astringent properties

are added—Its use requires more caution—Combined with vegetable infusions—or given in union with vegetable extracts in the form of pills.

Dose i to iv grs.

Prussiate of Iron--Preparation--To the general purposes, for which these articles have been applied, has been recommended in Intermittent Fevers.

Dose, grs. iv to vi.

Tinct. Ferri Muriati--Preparation--Valuable article and much resorted to, when the full operation of Iron is desired Exhibited combined with bitter infusions or in drops.

Formula. Dose, viii to xii m.

Mineral Chalybeate waters--most important.

Preparations of Copper...Deuto Sulphate of Copper or Blue Vitriol--Has been employed in the treatment of Intermittent and Remittent Fevers, either alone or as an auxiliary to Bark. In Epilepsy — In hæmorrhages --- Given in such doses as the stomach will bear without vomiting.

Employed externally as a wash in obstinate ulcers— In Leucorrhœa, Gonorrhœa, &c.

Dose, 1-4 to 1-2 gr. combined with the extract of Bark or Gentian.

Cuprum Ammoniatum--Rarely employed.

Zinc—In its metallic state exerts but little action on the system—*Protoxide of Zinc*—Flowers of Zinc, &c.--Preparation—Employed in Epilepsy, Hysteria, Chorea—Degree of consideration to which entitled.

Applied externally as an absorbent—and with simple ointment as an application in Chronic opthalmia ; and to Herpetic and other cutaneous diseases.

Dose, grs. v increased.

Sulphate of Zinc--Also tonic in small doses, and for this and its astringent properties has been used in Chronic Dysentery ; In Dyspepsia, combined with bitter infusions. Also in Intermittent and Remittent Fevers, combined with Hyosciamus—used externally for various purposes.

Dose, i to iij grs.

Nitrate of Silver—Preparation--Employed in Epilepsy, and other nervous and convulsive affections—To irritable

conditions of the system--Effects of its long continued use.

Employed externally for various purposes, particularly in Opthalmia--Applied in the form of ointment or solution.

Formula. Dose 1-8 gr. increased.

Bismuth--Physical properties.

Oxyd Bismuth---Preparation--Employed in debilitated conditions of the stomach, particularly in those cases where pain follows the introduction of food--In Gastrodynia, Pyrosis, Cardialgia, &c.

Dose, v grs. increased.

Aurum Gold—Preparations--Employed as substistutes for Mercury in Syphilitic diseases. Rarely or never administered.

Arsenicum Album—Properly arsenious Acid—Physical properties—Medical History--Employed in Intermittent Fevers —Cases in which it is inadmissable— Administration —Useful to alternate its use with Cinchona —In Remittent Fevers--Typhus Periodical Head aches--Rheumatism—Cutaneous affections, &c.—Comparative operation of Bark and Arsenic—Poisonous operation—Follows the external as well as internal employment--Symptoms.

The Treatment to be pursued when a large dose of arsenic has been taken—The first object will be to evacuate the stomach —The emetics used should be of the mildest character—after vomiting, various substances, have been proposed with a view of neutralizing the noxious substance,or protecting the surface of the alimentary canal from its influence—With the former view, sulphurets of Potash and Soda have been employed, but very little dependance can be placed upon them—Others have been proposed,as Magnesia and Charcoal—From the experiments of Hume and Bertrand, large doses of arsenic combined with these substances have been taken with impunity–hence their utility has been inferred after the poison has been swallowed.

With the second intention, various mucilaginous matters have been employed—Milk particularly, should be given—large quantities before and after vomiting, since in coagulating it envelopes the poison and thereby promotes its discharge.

Should these means be insufficient, our efforts should then be directed to obviate Inflammation,and its consequences.

Tests for the presence of Arsenic.

Dose, Fowler's mineral solution.
vi to xii m.
Arsenious Acid, 1-16 gr.

Mineral Acids—Sulphuric Acid--Preparation--Useful in restoring tone to the digestive organs--Strengthening the appetite and checking the acetous fermentation in the stomach—In Hæmorrhages—Colliquative sweats in hectic Fever—Externally employed in cutaneous diseases diluted with water as a substitute for sulphur.

Dose of the acid, vi to viii m. in sugar and water.
Elixir of Vitrol, x to xv m.

Nitric Acid–Preparation–Employed in Hepatic derangements–Alterative action upon the hepatic secretions--In the secondary forms of Syphilis–External employment–Diluted for checking gangrene and promoting granulation.

United with the Muriatic acid forming the Nitromuriatic usefully employed in the formation of baths in various states of disease. Preparation of the bath.

Dose, viii to xm. in sweetened water.

Muriatic Acid—Preparation--Employed for the same general purposes as the preceding—and for checking the acetous fermentation in the stomach–Diluted very freely with water, as a gargle in ulcerated sore throats, and in ulceration of the gums—Employed in the state of gas for purifying foul wards, and chambers.

Chlorides of Lime and Soda.–Preparation—Much employed as disinfecting agents--In medicine to correct the odour from diseased surfaces—Applied to scurvy, Tænia capitis, or Porrigo–Psora–and other affections of the skin–As a wash in ulcers of the uterus and cancers.

ʒi to ℥i of the powder to water 1 pint.

Chloride of Soda—Preparation–Used as the preceding and as a gargle in ptyalism.

Other means of restoring tone to the system.

Change of climate.
Exercise.
Sailing.
Riding.
Remarks upon each.

ASTRINGENTS.

General remarks upon the operation of this class--Astringent principle extensively diffused, and connected with the presence of Tannin.

VEGETABLE ASTRINGENTS.

Different species of Oaks—Family *Cupuliferæ*--Quercus Robur. Employed in Intermittent Fevers, but with little advantage; in Chronic discharges, Diarrhæa, Leucorrhæa, and in the formation of gargles.

Gallæ or Galls--Their formation--employed as above. Used in the form of decoction, or pulverized and united with simple cerate as an application to hæmorrhoids.

Family *Rubiaceæ* Kino--Obtained from several plants, chiefly the Nauclea Gambir. Natural History--Analysis. Employed in Intermittent Fevers; in excessive discharges from the Uterus and Intestinal Canal; in Incontinence of Urine, Gleets, Leucorrhæa, &c.

Formula. Dose Tincture, ʒi to ʒii
Powder, gr. x to ʒss.

Family *Leguminosæ*--Lignum Campechianum--Logwood --Natural History--Employed in chronic discharges from the bowels and in Cholera Infantum.

Dose, decoction, ℥ss to ℥iii
Extract, ʒss to ʒi.

Family *Geraniaceæ*--Geranium Maculatum--Cranes bill--Natural History--Employed as the preceding, and as an injection in Gonorrhæa In the formation of gargles, and as a wash for chronic and obstinate ulcerations of the mouth.

Dose, powder, ℈i
Decoction, ℥i.

Family *Rosaceæ*--Rubus Villonus et R. Procumbens--Dewberry and Blackberry--Properties. Employed as the proceeding.

Dose, decoction of the root, ℥i to ℥ii.

Other articles enumerated.

MINERAL ASTRINGENTS.

Super Sulphate Alumina with Potash--Physical properties --Employed as the preceeding articles, and in Hæmorrha-

ges connected with relaxation of the system--In Menorrhagia--Externally employed for various purposes--In the formation of Injections combined with any of the preceding articles, in Leucorrhæa--gleets--In the formation of gargles for cleansing ulcers of the mouth and fauces--or relaxation of the uvula.

In Opthalmia a pleasant application is formed by coagulling the albuminous portion of an egg.

As an escharotic in the state of burnt alum.

Administered in the form of powder. Dose grs. v to ℈i.

Alum Whey--Preparation--Dose, ℥i.

Acetate Lead--Preparation--Objections to its use answered. Employed in Hæmorrhages from the lungs--Uterus bladder--bowels--In Diarrhæa and Dysentery--Formula. In Hydrophobia—Tetanus--Externally employed in the formation of collyria--Injections--To inflammatory Tumors, &c. Poisonous operation of the Salts of lead--Symptoms--Treatment.

The Salts of Lead when swallowed in large quantities may be so neutralized as to become inert--They are readily decomposed by the Sulphate of Soda or Magnesia--forming thereby an insoluble Sulphate of Lead, which is not possessed of poisonous properties—The first object of the Physician, when called to a person who has taken a large dose of the Acetate of Lead, is to administer copious draughts, containing a solution of the Sulphate of Soda or Magnesia—It decomposes the Lead in the manner mentioned.

Dose i to ii grs. increased, combined with opium or Laudanum.

Goulard's Extract--Preparation--Employed in the same diseases as the preceding.

MISCELLANEOUS CLASS.

Iodine...Natural and Medical History...Properties...Employed in Bronchocele or Goitre ..Symptoms forbidding its use...In enlargements of other glands...In the discussion of tubercles in the lungs...As an Emmenagogue...Administered in the form of pills...Tincture...Solution of Hydriodate of Potash...Precautions to be observed in its use.

Dose, Iodine, gr. 1-2
Tincture, x to xx m
Solution, same.

Externally employed in the form of ointment...Preparation—

Spongia Usta—Properties as the preceding.

Family *Euphorbiæ* Styllingia Sylvatica...Indigenous--Natural History...Properties...Employed in Syphilis, particularly in what is called Syphilitic Rheumatism...In Rheumatism, Obstinate ulcerations, Scrofula, &c. Used in the form of Decoction–Tincture–Powder.

Dose, decoction, ℥i
Tincture, ʒi to ʒii
Powder, i to v grs.

Family *Ranunculaceæ*...Hepatica Triloba...Indigenous...Natural History...Properties...Employed in Pulmonary affections, and as a subtonic in cases of debility.

Acupuncturation.

History of this operation and of its mode of action...Description of the Needle, and manner of using it. Employed in Rheumatic affections; In Neuralgia, Opthalmia, and for evacuating fluids in anasarca.

Electricity.

Its operation of a stimulating character. Its importance increased by the late pathological researches of the French physicians. Effects upon the system. Promotes the secretions. Restores muscular energy. Employed in Rheumatism. Paralysis. Amenorrhœa and other diseases. *Galvanism.* Action similar to the preceding, but as a stimulant less intense and more steady. Applied to the same diseases as the preceding. Recommended in Asthma, Dyspnœa, Dyspepsia. Galvanic machine.

Plates applied to the surface of the body.

ALIMENTS.

A knowledge of dietetics all important and particularly required of the physician. The human subject capable of subsisting upon a variety of articles...illustrated by the habits of different nations...Holds an immediate station be-

tween carnivorous and graminivorous animals...illustrated by a comparison of his digestive apparatus with theirs... Distinction between alimentary and medicinal substances.

Aliments derived from the vegetable kingdom.

Nutritive principles in vegetables depend upon Gluten.. Sugar Farina...Oils...Mucilage...Remarks upon each...The nutritive qualities of vegetables will further depend upon the greater or less difficulty with which the digestive organs separate the nutritious particles. This will be affected by the texture of the article...also by the state of strength or weakness of the particular habit of body, or peculiarity of constitution...Duty of the Lecturer.

Remarks upon the digestibility of different substances not to be considered *absolute*, but to correspond with the *general experience* upon the subject.

1. *Of Alimentary substances in which Mucilage chiefly prevails.*

1. Of Leaves of Plants.

Spinach.
Cabbage.
Lettuce.

Stems.

Asparagus.

Roots.

Turnip.
Carrot.
Parsnip.
Beet.

Receptacle of Flower.

Artichoke.

Fruits.

Cucumber.
Of the effects of a Mucilaginous Diet.
Of the diseases in which its use is contra-indicated.

Of alimentary substances in which Farina chiefly prevails.

Solanum Tuberosum...Potatoe.
Marunta Arundinacea...Arrow Root.
Jatrophia Manihot or Cassava Tree...The root furnishes the substance called Tapioca.
Cycas Circinalis...Species of Palm...the pith of the leaves and of the upright shoot furnishing the substance called Sago.

Hordei Semina...Barley
Secalis Semina...Rye.
Oryzæ Semina...Rice.
Avenæ Semina...Oats.
Zeæ Mayæ Semina...Indian Corn.
Tritici Semina. Wheat The article most commonly employed in the preparation of Bread.
Of Unleavened Bread.
Of Leavened Bread.
Of Fresh Bread.
Stale Bread.
Toasted Bread.

Of Pastry and its properties.

Family *Leguminosæ*-Comprehending the varieties of Peas, Beans &c.

Of the effects of a Farinaceous Diet.

The diseases in which a Farinaceous diet may properly be employed.

Of Alimentary substances in which oil chiefly prevails.

Nuts.
Almonds.
Their effects upon the system.
Diseases in which they are improper.

Of Alimentary substances in which Sugar chiefly prevails.

Comprises Fruits, ripe, or preserved.
Their effects upon the system.
Diseases in which they are improper.

Of Milk.

Its value and importance---the changes it undergoes when taken into the stomach--Utility as an article of diet in convalescence and in particular diseases. Milk when congulated by acids or wine, forms a pleasant drink, grateful and refreshing to the sick.

ANIMAL FOOD.

Proximate principles of which animal substances are composed.

Gelatine---Albumen---Febrine---Remarks upon each.---Circumstances affecting the digestibility of animal sub-

stances. Differences will arise from the texture of the fibre —from age—sex—size—from the quantity of oily, fat, and glutinous matter they contain—from the manner in which the animal has been fed.

Other circumstances affecting the digestibility of animal substances—The food of the animal—The state of motion or of rest—its being fat or lean—the flesh being kept a short time.

Particular food, with remarks upon the digestibility of each.

Beef.
Veal.
Mutton.
Lamb.
Pork.
Wild Meats.
Domestic Fowls.
Wild Fowls.
Eggs.

Aliments derived from

Fishes.
Salt and fresh water.
Oysters.

Salted Meats.

Comparative effects of a diet exclusively animal or vegetable–Advantages of a Vegetable diet--Disadvantages--In favor of an animal diet—Objections—A mixture of both, the proper course to pursue.

Condiments.

Consist of Salt, Vinegar, and Aromatics. Remarks upon each.

Cooking of Food.

Drinks—Water—Varieties—Hard and soft—Spring—River—Rain.

Fermented Liquors.

Porter.
Beer.
Cider.
Wines.

Distilled Liquors.

The proportion of Alcohol contained, is shewn in the following: Brandy, 53, 39; Rum, 53, 63; Gin, 51 60; Scotch

Whiskey, 54 32--Irish do. 53, 90--Hollands genuine, 59 00. As Medicines have advantages over fermented liquors--Less liable to become acid--and therefore preferred in those cases when acidity prevails. Employed as stimulants in great prostration, and after much exposure. Diseases produced by the immoderate use of spirits.

Of other Drinks.

Coffee—Stimulating and Refreshing— Becomes injurious when excessively indulged in, or drank too strong —When to this free use, is added sedentary habits, delicate and weak constitutions, the organs of digestion become impaired, the appetite destroyed, and general debility with nervous symptoms produced. Medicinally employed in Asthma, and to counteract the operation of Narcotics.

Tea—Properties similar to the preceding--becoming injurious under similar circumstances.

FORMULÆ.

Formulæ referred to in the preceding observations, which are introduced to assist those Gentlemen who are unaccustomed to take Notes, and to furnish others more advanced, with a collection, which from experience, will, I think, be found useful.

Emetics.

℞. Powdered Ipecacuanha, ℈i to ʒss
Tartarised Antimony, gr. ii
m— for a powder.

℞. Tartarised Antimony, gr. iv.
Prepared Chalk, gr. iv m.

Divide into 4 powders —a powder to be taken every 15 minutes until they operate.

Cathartics.

℞. Infusion of Senna, ℥ xii.
Sulphate of Soda or Magnesia, ℥i
Manna, ℥ss or ℥i m.

Dose— a small cup full every hour or two hours, until it operates.

℞. Sulphate of Potash, or super Tartrate Pot:
Pulv. Jalap: a ℈ii, mix and divide into 4 powders.

To increase its activity, Calomel may be added, or Tartarized Antimony, or Ipecacuanha. One every two hours until it operates.

Or,

℞. Super Tartrate of Potash, ʒii
Pulv. Jalapii, ʒi—mix and divide into 4 powders. Administered as above.

Or,

℞. Proto Chloride of Mercury, g. viii
Pulv. Jalapii, gr. xvi—m. for a dose.

Powdered Rhubarb may be exhibited combined as the preceding article—or with Magnesia or the Carbonate of Soda for children.

℞. Carbonate of Potash or Soda, gr. xii to ℈i
Pulv. Rhei, ℈i to ℥ss
Water, ℥ii m
Dose, ʒii to ʒiii every 2 hours pro re nata.

Rhubarb Tea.

℞. Pulv. Rhei, ʒii
Fennel Seed, ʒii. Water ℥xii.
Boil until 1-3 is dissipated—Dose, ʒss to ℥ss, two or three times a day for several days.

℞ Powdered Rhubarb
Powdered Aloes
Blue pill mass—Each equal parts
Syrup, gr. s.
Mix and divide into pills of a convenient size.
A pill to be taken at bed time, or night and morning, as a gentle aperient,

More active.

℞. Powdered Aloes.
Powdered Gamboge.
Calomel, a ʒi
Syrup, as much as is necessary—mix and divide into Lx pills. ij to iv. a dose.

℞. Powdered Aloes, ʒi
Powdered Gamboge, ℈ii
Tartarised Antimony, gr. iv.
Syr. q. s. mix and divided into xxiv pills—iij at a dose, and followed by ij others, in 6 hours if necessary.

For Children.

℞. Calcined Magnesia,
Powdered Rhubarb—a ℈i—m. divide into 4 powders, one every two hours pro re nata.

Dr. Dewees's Formula in the Colicy complaints of Children.

℞. Calcined Magnesia, ℈i
Water, ℥i
Tinct. Assafæd. lx. m.
Tinct. Opii, xx m. a dose.
Repeated in an hour or two if not relieved.

Diaphoretics.

℞. Camphor, gr. viii.
Opium, gr. i.
Calomel, gr. ii m. fiat Puly. Repeated according to circumstances.

Or,

℞, Camphor, ʒss
Nitrate of Potash, ʒi
Antimon. Tart. g. l. m. fiat Pulv. vi.

To the above Calomel may be added, or substituted for either of the last articles.

℞. Infusion of Serpentaria, ℥xii
Camphor, ʒss to ℈ii
Spts. Nitr ; Dulc ; ℥ss
White Sugar, ʒiii—m

Rub the Camphor with the sugar until it is reduced to a fine powder—Add the spirits of Nitre, and then the infusion—Strain.

Dose, ℥ss.

℞. Gum Guaiac, ℈i
Antim. Tart, gr. I-8.
Gum Op; gr, 1-2—m ft. Pulv.

To be repeated as often as the case requires, and recommended in Chronic Rheumatism.

℞. Rad: Sarsaparilla.
China Briar Root.
Salphuret of Antimony a ℥ viii
Gum Guaiac, ℥iiss
Water xxiv ℔s.

These ingredients are to be simmered in a close vesse for 12 hours, the steam being prevented from escaping. After simmering the time prescribed, to be strained, bottled and kept in a cool place. The Antimony is to be coarsely powdered, enclosed in a piece of linen rag, and suspended from the cover of the vessel.

Dose as much as the stomach will bear and its use continued for weeks or months.

Or,

Sarsaparilla ℔ss
Stylingia, Sylv: ℥iv
Shavings of Guaiac, ℔ss.
Sassafras Root, ℥iv
Water, 1 gallon.

Boil for a sufficient length of time, to extract the virtues of the articles—Water must therefore be added as it evaporates, and it may finally be reduced to two quarts. To this, sugar or molasses is added. and the whole reduced to the consistence of a syrup. To each pint of this syrup, add, of the Perchloride of Mercury, previously dissolved in spirits, grs ij. The dose for an adult will be ℥ss to ℥i, three or four times a day. For children less.

℞. Tartarised Antimony, gr. viii
Powdered Gum Arabic.
Powdered Liquorice Root a ʒi.
Dose ii to iv grs.

Antimonial Powders.

℞. Nitrate of Potash. ʒi.

Tartarised Antimony, gr. i—m. and divide into six powders. A powder to be taken every two hours

Nitrous Powders,

℞. Nitrate of Potash, ʒiss
Tartarised Antimony, gr. i.
Calomel, gr. viii—m. and divide into ix powders.

Neutral Mixture.

Take of Lime Juice or Vinegar, ℥ii
Carbonate of Soda, as much as is sufficient to saturate it—first dissolving the Soda in a little water.
Sugar, ʒii
Water, ℥ii—℥ss every hour or two.

Diuretics.

℞. Balsam Copaiva, ʒii to ℥ss—to be well rubbed with powdered gum arabic
Yolk of an egg, or
Sweet Almonds blanched, a dozen— add
Water slowly, ℥vi
Sweet Spirits of Nitre, ℥ss
Tincture Opii, ʒi–Dose, ℥ss to ℥i, repeated frequently.

Or,

℞. Oil of Copaiva, ʒii
Powdered Gum Arab : ℥ss
Cinnamon Water, ℥ii
Simple Syrup. ℥iss
Tinct. Op. ʒss —Dose ℥ss.

℞. Root of the Iris Versicolor, ℥i
Eryngium Yuccifol : ʒii
Water, ℔iss. boil to one pint.
This quantity taken daily.

Emmenagogues—Tonic Formulæ.

℞. Powdered Cinchona, ℥ss
Powdered Ginger
Proto Carbonate of Iron a ʒii—m. and divide into eight or ten powders.
A powder to be taken two or three times.

℞. Sulphate of Iron, ℈i
Gum Myrrh, ʒi
Sub carbonate of Pot: ℈i
Sugar ʒii.

The articles to be well rubbed together, and during the trituration add,

Rose Water, ℥viiss
Spirit of Nutmeg, or other
Aromatic, ℥ss
Dose, ℥ss to ℥i

Sulphate of Iron, ℈ii
Ext. of Gentian or Bark. ʒi—m. ft.
Pil: xx.

Expectorants.

Lac Ammoniac ℥ii, prepared by dissolving the gum in the proportion of ʒi to ℥viii of water.
Cinnamon Water, ℥ii
Syrup of Squills, ℥ss
Elixir Paregoric, ʒii
Dose, a table spoonful as often as is necessary.

℞. Rad: Poly. Senéka ℥ss
Water, ℥viii—boil to one half.

Dose—a tea spoonful every half hour or hour, as the urgency of the symptoms require.

Dr. Archer's Formula in Croup.

Pectoral Formula.

℞. Syrup of Squills, ℥ss
Honey, ℥i
Elixir Paregoric, ʒii
Antimonial Wine, ʒiii
Laudanum, ʒi
Water, ℥vi—m.

A table spoonful at night, or as often as circumstances require.

℞. Extract of Liquorice
Gum Arabic, a ℥ss

Hot water, ℥viii— simmer until dissolved.
Antimonial Wine, ʒiii
Laudanum l to lx m.
A table spoonful to be taken every two or three hours.

Rubifacients.

℞. Spirits Turpentine
Olive Oil
Hartshorn—a ℥i—m—for a liniment. The friction to be repeated several times a day.

To the above, spirits of Camphor, or Laudanum, Oil of Amber, or Tinct. of Cantharides may be added.

Sialogogues.

℞. Perchloride of Mercury
Muriate of Ammonia, a gr. xv.
Distilled Water, ʒiss
Crumb of Bread—as much as is necessary to make a mass.
Divide into 120 pills, each containing 1-8 of a gr.

Or,

Perchloride of Mercury, gr. iv.
Alcohol, ℥i
xxv m. equal to a 1-4 of a gr.

Stimulants.

℞. Sub. Carbonate of Ammonia, ʒi
Mucilage of Gum Arabic, ℥vi
Sugar, ʒii
Spirits Lavender, C. ʒii
A table spoonful every hour or two.

℞. Camphor, ʒss
Powdered Gum Arabic
White Sugar, a ʒii
Or, Sweet Almonds blanched, No. vi
White sugar, ʒii
To be rubbed together until reduced to a fine powder—add Water—or
Mint Water, ℥vi
Laudanum xxx m.
Dose, a table spoonful every hour or two.

℞. Piper Cubebs
Balsam Copaiva, a ℥ss
Powdered Gum Arabic ℥iii
Cinnamon Water, ℥viii
Dose--two table spoonfuls three or four times a day.
Sir A. Cooper's Formula.

℞. Balsam Copaiva
Tinct. Cubebs, a 1 oz.---m.
i dr. to iii dr.---frequently.

Narcotics.

Medicinal Prussic Acid, viii m.
Distilled Water, ℥viii
Simple Syrup, q. s.

Dose—a table spoonful every two hours. The quantity of acid to be increased gradually.

Antispasmodics.

℞. Sulphuric Æther, ii dr.
Infusion of green Mint, ℥xvi
White Sugar, ii dr.
Dose, ℥i, every hour or two.

Tonics.

℞. Powdered Cinchona, ℥ss to ℥i
Powdered Nutmeg, Cloves or Cinnamon, dr. ss to ℈ii
Carbonate of Soda, ʒss m.
And divide into four papers.

Powdered Serpentaria may be added in place of the aromatics, and the dose taken in a cup of coffee with sugar and milk, or red wine, or water with a small quantity of brandy or warm tincture.

℞. Bark of Cinchona, bruised, 1 oz.
Water, ℥xvi— boil for ten minutes, and at the close add Serpentaria, ii dr.—let it stand for an hour and strain—add
Tincture of Cinchona, ℥iss
Dose, ℥i, as often as necessary.

℞. Sub Carbonate of Iron
Powdered Ginger, a gr. v.

Mix for a powder to be repeated three or four times a day. To the above, powered Colombo may be added.

℞. Tinct. Ferri Mur. vi m.
Infusion of Quassia
Cinnamon Water, vi dr.
Tinct. Colomb. i dr—m. for a draught. To be repeated several times a day.

Ointment of the Nitrate of Silver, in Opthalmia.

℞. Nitrate of Silver, gr. ii to x.
Solution of Subacetate of Lead; xv m.
Simple ointment, idr.

The Nitrate of Silver is first powdered finely, and mixed with the ointment on a slab–the solution being added afterwards.

Or,

The Solution substituted.

℞. Nitrate of Silver, ii to viii grs.
Water, ℥i. Applied to the eye with a camel's hair pencil, or dropped upon the eye.

Astringents.

℞. Tinct. Kino, ℥ss,
Solut, Gum Arab. ℥iv
Vin Antimon : ℥ss
Tinct. Opii, i dr—m.

A table spoonful every three hours after the bowels are evacuated.

In Gleets.

℞. Kino, i dr.
Alum, i dr.
Mucilage of Gum Arabic ℥i
Water, ℔i. to be well united together and filtered for use,

Mr. Bell's Formula.

In Dysentery and Diarrhœa.

℞. Sac Saturn, gr xii
Pulv. Ipecac, gr. vi
Gum Opii, gr. iv
Syrup, gr. s m. and divide in viii pills, one every two hours until relief is afforded.