Syllabus for the use of students attending the lectures on materia medica, in Marischal College and University, Aberdeen / by William Henderson.

SYLLABUS

FOR

THE USE OF STUDENTS

ATTENDING THE

LECTURES ON MATERIA MEDICA,

IN

MARISCHAL COLLEGE AND UNIVERSITY,

ABERDEEN:

BY

WILLIAM HENDERSON, M.D.

ABERDEEN:
PRINTED BY GEO. CORNWALL,
54, CASTLE STREET.

1850.

SYLLABUS

OF

LECTURES ON MATERIA MEDICA.

Introductory.

Mutual relations of the various branches of Medical Science.—The Subject defined;—Its importance;—Brief view of its history.—Division and Arrangement of the Course, as embracing

I. Diætetics; II. Pharmacology; III. Pharmacy.

I. DIÆTETICS.

Definition,—Arrangement under Six Heads.

I.—AIR.

A. Agents constantly present.
   - *a* Physiology of Respiration,—Actions of Atmospheric Air,—Effects of various Gases.
   - *b* Relation of the body to Heat and Cold,—Theory of Animal Heat.
   - *c* Effects of Electricity.
   - *d* Influence of Watery Vapour,—Absorbing power of the Lungs.

B. Substances present occasionally.
   - *a* Gases occasionally evolved.
   - *b* Products of Combustion.

c Products of Processes in the Arts.
d Products of Animal and Vegetable Decomposition.
e Odorous Effluvia.
f Miasmata.
1. Given out from the body in disease.
2. Existing in certain situations.
3. Prevailing at particular times.
—General character of Morbific Miasmata;
—Means of diminishing or destroying them.
a Free Circulation of Air.
b Coolness.
c Seclusion of the Sick.
d Cleanliness.
e Sprinkling; and Fumigation,
1. By Aromatics.
2. By Carbonaceous Smoke.
3. By Acid Vapours.
f Whitewashing.

C. Changes in the Density of the Air.

D. Effects of Air in Motion.

II.—NOURISHMENT.

A. Food;—Physiology of Digestion,—Necessity for a supply of Food,—Qualities requisite.
Account of Aliments, their nature, actions, and relative value.
Quantity of Food required,—Frequency of taking Nourishment,—Power of enduring Abstinence.
B. Drink;—Necessity for a Supply of it,—Effects of various Drinks,—Incapability of sustaining Deprivation of Liquid.

C. Gaseous Nourishment;—Cutaneous Absorption?—Absorption by the Lungs.

Supplementary;—Question as to the Natural Food of Man;—Effects of various kinds of Food and Drink on the Health and Moral Character.

III.—SLEEP.

Necessity for Intermission of the Active State,—Causes of Sleep —Phenomena of Sleep.

Relative degrees of Drowsiness in the Senses and Voluntary Muscles.

Dreaming—Modified by the state of the health and other circumstances.

Length of the period of Sleep,—Effects of Deprivation of Sleep, and of Excessive Sleep.

States allied to Sleep in some respects:—

a Delirium.
b Incubus.
c Somnambulism.
d Reverie.
e Entrancing.

Notice of the Phenomena attributed to Mesmerism.

IV.—EXERCISE.

A. Necessity for alternate action and inaction of the Voluntary Muscles;

Mechanical Action of Muscles attached to Bones,—Physiology of Muscular Action.

Salubrious effects of Exercise,—Various kinds of Exercise.

Strength of Muscular Action,—Power of continued exertion.

B. Rest, a relative term,—relief obtained by various postures. —Effects of excessive fatigue.

V.—EVACUATIONS.

A. Unnatural, produced by Disease;—sometimes by Association or Emotion;—occasionally constitutional;—seldom voluntary.

B. Natural, of various kinds:—

1. Gaseous;—Carbonic Acid in the Lungs,—and on the Skin?—Gas from the Intestines.
2. Vaporic,—from the Lungs and Skin.
3. Fluid;—produced by secretion;—this distinguished into Arterial and Venous;—These commonly though improperly divided into Glandular and Vascular;—Further distinguished by situation.
    1. Given out on the surface.
    2. Poured into cavities either open or close.

    Products of Arterial Secretion:—

    a Tears.
    b Saliva.
    c Milk.
    d Gastric Fluid.
    e Pancreatic Fluid.
    f Urine.
    g Seminal Fluid.
    h Liquor of the Prostate.
    i Sweat.
    k Mucus.
    l Serum.
    m Synovia.

    Products of Venous Secretion:—

    a Bile.
    b Carbonic Acid.

4. Solid:—

    a Cuticle.
    b Nails.
    c Hair.
    d Fœces.

VI.—EMOTIONS.

Difficulty of observation from their complication with other agents, and with each other.—Effects best illustrated by extreme cases—and why.

A. Exciting Emotions.

a Placidity.
b Hope.
c Joy—Surprise.
d Ardent Desire—Love.
e Anger.
f Terror.

B. Depressing Emotions.

a Commiseration.
b Shame.
c Sorrow—Disappointment—Nostalgia.
d Disgust.
e Hatred.
f Envy.
g Jealousy.
h Fear.

C. Supplementary observations on

a Confidence.
b Determination to resist Disease.
c Sympathy.

II. PHARMACOLOGY.

Definition and general observations;—Notice of Books on the subject.

—Particulars embraced in the History of the Articles—

1. Their Natural History.
2. Their Chemical Relations.
3. Their Medical Actions.

—Notice of the Principles of the Homœopathic Treatment.

Arrangement of the subject difficult—Attempts to apply Philosophical Principles—scarcely successful as yet.

Division into Vital and Chemical agents.

Classification.

- A. Vital Agents,
  - General.
    - Affecting the Solids.
      - 1. Roborants.
      - 2. Astringents.
    - Altering the Fluids.
      - 3. Diluents.
    - Modifying the Functions.
      - 4. Excitants.
      - 5. Refrigerants.
      - 6. Sedatives.
      - 7. Narcotics.
      - 8. Antispasmodics.
  - Local.
    - Affecting Secreting Organs.
      - 9. Demulcents.
      - 10. Errhines.
      - 11. Expectorants.
      - 12. Sialagogues.
      - 13. Emetics.
      - 14. Cathartics.
      - (15. Anthelmintics)
      - 16. Diuretics.
      - 17. Emmenagogues.
    - Acting on the Skin.
      - 18. Diaphoretics.
      - 19. Epispatics.
- B. Chemical Agents.
  - Corroding the Textures.
    - 20. Escharotics.
  - Altering the Nature of Products.
    - 21. Antacids.
    - 22. Antilithics.

The particular consideration of these Classes embraces an Account of the individual Articles, including, besides their Natural, Chemical, and Medical History—

a Their Effects in Disease; and Indications for and against their use.

b Formulæ for their Administration; and Doses.

c Consequences resulting from their Habitual Use.

d Effects of an Excessive Dose;—Tests,—Antidotes,—and Treatment.

e Adulterations, and the means of detecting them.

f Incompatible Substances.

CLASS I.—ROBORANTS.

Definition,—The name of Tonics objectionable because hypothetical,—The term Tone is generally used in a speculative sense.—Distinction required to be made between the Action, the Contraction, and the Shortening of a Muscle.—Examination of the Arguments in favour of Tone.

Ultimate effects of Roborants,—to increase the strength, and invigorate action without stimulating;—Variety among Roborants in this respect.

Their characteristic action is slow and imperceptible,—hence they are useless in acute disease.

They are Improper when Excitement, Irritation, Inflammation, or Congestion are present.

Necessity for a separation of the Organic from the Inorganic Roborants, from differences in their action, as well as in their origin;—They agree in their general effects, but differ in several important particulars.

A. *Organic.*

Generally possess a bitter taste, and are alkaline or neutral.—If given in large doses they oppress the stomach, and cause headache.

Bitter taste supposed connected with the Roborant power,—hence the inquiry after the Bitter or Tonic principle;—This inquiry vain, for—1 The Bitter taste is not always owing to the same

cause;—2 There is not, probably, any single Roborant principle;—3 Taste and action are not necessarily connected.

Roborant action is increased by an Aromatic,—supposed from the excitant power of a Volatile Oil,—doubtful;—Also increased by a bitter substance though neither Roborant nor Excitant;—Sometimes by an Astringent, a Refrigerant, or a Narcotic;—and by conjoining various Roborants.

The active matter of an Organic Roborant, when purified, generally is less powerful than a proportional quantity of the natural production;—perhaps owing to the removal of Astringent, Excitant, or other principles present.

*Table of Organic Roborants.**

1.	Cinchona Cordifolia,	Yellow Cinchona,	Bark,	Quinine.
	Cinchona Oblongifolia,	Red Cinchona.		
2.	Cinchona Oblongifolia,	Red Cinchona,	Bark,	Cinchonine.
	Cinchona Lancifolia,	Pale Cinchona,		
	Galipea Officinalis,	Angostura, —		
3.	Cocculus Palmatus,	Calumba, —	Root,	Calumbine?
4.	Picræna Excelsa,	Quassia, —	Wood,	Quassine.
	Simaruba Amara,	Simaruba,	Bark,	Quassine.
5.	Gentiana Lutea,	Gentian, —	Root,	Gentianite.
	Agathotes Chirayta,	Chiretta, —	Herb,	Gentianite.
6.	Nectandra Rodiei,	Bebeeru, — Greenheart,	Bark,	Bebeerine.
7.	Croton Eleuteria,	Cascarilla, —	Bark,	Cascarilline?
8.	Menyanthes Trifoliata,	Bog Bean, Marsh Trefoil,	Root,	Gentianite?
9.	Swietenia Febrifuga,	E. India Mahogany,	Bark,	Unascertained.
10.	Anthemis Nobilis,	Chamomile,	Flower,	Unascertained.
11.	Geum Urbanum,	Avens, — Bennet,	Root,	Unascertained.
12.	Archangelica Officinalis,	Garden Angelica,	Root, Fruit,	Unascertained.
13.	Salix Alba,	Willow, —	Bark,	Salicine.
14.	Erythræa Centaurium,	Common Centaury,	Flower-Top,	Centaurine.
15.	Cnicus Benedictus,	Blessed Thistle, —	Herb,	Cnicine.

* In the following Tables of Organic Substances, the first column contains the scientific name; the second the common name; the third the part of the plant or animal which is used, or which yields the product that is used in medicine; and the fourth the principle on which its activity is supposed to depend.

B. *Inorganic.*

Generally possess a sour or harsh taste, and are either Binary Oxydes or Acids, or Ternary Saline Compounds.

If given in large doses they generally irritate;—Some produce characteristic poisonous effects if the dose be large, or the use of them be long continued.

Their actions are generally traceable to the Base; but in some cases to the Acid.

1. *Alkaline Bases and their Compounds.*

1. Oxydes of Iron,	Carbonate,	Sulphate,	Chalybeate Waters,
	Chloride,	Iodide,	Cyanide,
	Tartrate,	Citrate.	
2. Lime Water,	Chloride of Calcium.		
3. Oxyde of Zinc,	Acetate,	Sulphate.	
4. Nitrate of Silver.			
5. Bisulphate of Copper, —	Ammonio-Sulphate, —		Acetate, —
6. Hydrated Oxyde of Barium,	Chloride. —		

2. *Acid Bases and their Compounds.*

1. Sulphuric Acid.		
2. Phosphoric Acid.	—	
3. Nitric Acid.		
4. Chlorine,	Chloride of Sodium,	Chlorate of Potash, —
	Hydrochloric Acid.	
5. Arsenious Acid,	Arsenite of Potash,	Arsenic Acid,
	Iodide of Arsenic,	Sulphurets.

CLASS II.—ASTRINGENTS.

The Name is somewhat speculative;—Action on the living body inferred from their effect on dead matter;—but the one is the subject of vital action, the other of chemical or mechanical only.

Sometimes these and the Roborants are called Permanent Stimuli, —but this title is objectionable.

Their use in external hæmorrhage;—less certain benefit in internal bleeding;—their capability of controlling discharges, especially if directly applied;—they produce no effect on internal morbid effusions.

Necessity for a division into two orders.—Most of them appear to exert a Roborant action along with their proper effect;—but some are positively sedative.

Order I.—Roborant.

Points of resemblance between these, the Roborants, and the Excitants.

They are useful when the Capillary action is weakened,—and when the Animal constituents of the Blood are deficient;—also in Fevers, especially Periodic;—often usefully conjoined with Roborants.

A. *Organic.*

Mostly contain Gallic and Tannic Acids,—the latter frequently called the Astringent principle;—their action is not fully explained by the presence of these.

1.	Quercus Robur,	Oak,	Bark,		Tannic Acid.
2.	Quercus Infectoria,	Gall Oak,	Excrescence on leaf,		Tannic Acid.
3.	Eucalyptus Resinifera,	Iron Bark Tree,	Trunk,	(Juice,)	Tannic Acid.
	Pterocarpus Erinaceus,	African Kino,	Trunk,	(Juice,)	Tannic Acid.
	Pterocarpus Marsupium,	E. Indian Kino,	Trunk,	(Juice,)	Tannic Acid.
	Coccoloba Uvifera,	Jamaica Kino,	Bark,	(Extract,)	Tannic Acid.
4.	Acacia Catechu,	Catechu,	Trunk,	(Extract,)	Tannic Acid.
	Uncaria Gambir,	Gambier,	Leaf,	(Extract,)	Tannic Acid.
5.	Piper Angustifolium,	Matico,	Leaf,		Tannic Acid.
6.	Krameria Triandra,	Rhatany,	Root,		Tannic Acid.
7.	Arctostaphylos Uva Ursi,	Bearberry,	Leaf,		Tannic Acid.
8.	Polygonum Bistorta,	Snakeweed, Bistort,	Root,		Tannic Acid.
9.	Potentilla Tormentilla,	Septfoil, Tormentil,	Root,		Tannic Acid.
10.	Rumex Hydrolapathum,	Water Dock,	Root,		Tannic Acid?
11.	Solidago Virgaurea	Golden Rod,	Herb.		Tannic Acid?
12.	Punica Granatum,	Pomegranate,	Flower, Rhind,		Tannic Acid?

13.	Geum Urbanum,	Avens, Bennet,	Root,	Tannic Acid?
14.	Lythrum Salicaria,	Loosestrife,	Herb,	Tannic Acid.
15.	Rosa Gallica,	Red Rose,	Petal,	Gallic Acid.
	Rosa Centifolia,	Damask Rose,	Petal,	Gallic Acid.
	Rosa Canina,	Dog Rose,	Petal,	Tannic Acid.
16.	Ulmus Campestris,	Elm,	Bark,	Tannic Acid?
17.	Hæmatoxylon Campechianum,	Logwood,	Wood,	Hæmatine?

B. *Inorganic.*

Allied to the Inorganic Roborants in their nature and mode of action.—They are either Oxydes, Acids, or Salts;—contain no common active principle;—and are mostly irritating if used too freely.

1. Sulphuric Acid.
2. Sulphate of Iron, Chloride.
3. Bisulphate of Copper.
4. Sulphate of Zinc.
5. Lime Water, Carbonate of Lime.
6. Alumina, Sulphate of Alumina and Potash.

Order II.—Sedative.

Exerting a Sedative action on the Circulation and Nervous System.—their Astringent effect is sometimes ascribed to this;—but apparently without sufficient reason.

A. *Inorganic.*

1. Cold.
2. Carbonate of Lead? Acetate, Diacetate, Iodide.
3. Nitrate of Bismuth.

Appendix.—Notice of the external use of certain Astringents as Styptics;—Difference in the mode of action of Organic and Inorganic Styptics.

A. *Organic.*

1.	Quercus Robur,	Oak,	Bark,		Tannic Acid.
2.	Quercus Infectoria,	Gall Oak,	Excrescence,		Tannic Acid.
3.	Eucalyptus Resinifera,	Iron Bark Tree,	Trunk,	(Juice,)	Tannic Acid.
	Pterocarpus Erinaceus,	African Kino,	Trunk,	(Juice,)	Tannic Acid.
	Pterocarpus Marsupium,	E. Indian Kino,	Trunk,	(Juice,)	Tannic Acid.
	Coccoloba Uvifera,	Jamaica Kino,	Bark,	(Extract,)	Tannic Acid.
4.	Acacia Catechu,	Catechu,	Trunk,	(Extract,)	Tannic Acid.
	Uncaria Gambir,	Gambier,	Leaf,	(Extract,)	Tannic Acid.
5.	Krameria Triandra,	Rhatany,	Root,		Tannic Acid.
6.	Piper Angustifolia,	Matico,	Leaf,		Tannic Acid.
7.	Polyporus Igniarius,	Agaric,	Thallus,		Unascertained.
8.	Polyporus Fomentarius,	Amadou,	Thallus,		Unascertained.

B. *Inorganic.*

1. Sulphate of Iron, Chloride.
2. Bisulphate of Copper.
3. Alumina, Sulphate of Alumina and Potash.
4. Cold.
5. Acetate of Lead, Diacetate.

CLASS III.—DILUENTS.

Physiology of the Sensation of Thirst;—Necessity for a Supply of Liquid.

Common Definition of Diluents inaccurate;—Properly speaking, there is only one Diluent,—but variously modified.

These are not Active Remedies,—but frequently useful.

—Notice of the Principles of the Hydropathic Treatment.

A. *Inorganic.*

1. Water.

a. Natural Varieties.

1 Rain, Snow,
2 River, Lake, Ice,
3 Spring,
4 Well,

b. Artificial Modifications.

1 Boiled,
2 Distilled,
3 Tepid,

c. With Additions, mostly Demulcent.

1 Ptisane.
2 Barley Water.
3 Lintseed Tea.
4 Liquorice Tea.

CLASS IV.—EXCITANTS.

Definition;—Differences in their mode of action;—hence a necessity for division into Simple and Diffusive.

The Organic Excitants are Sapid,—frequently Pungent,—generally Odorous;—sometimes also contain Inodorous matter apparently Roborant.

The Inorganic Excitants have no common characteristic constitution.

Order I.—Simple.

1. Organic Simple Excitants stimulate the part acted on, but scarcely affect the system generally.—In large doses they oppress the Stomach and Head, as the Organic Roborants do.—They are not often efficacious alone in the cure of Disease;—but useful conjoined with Roborants and other remedies, to increase their effect or to enable the Stomach to bear them.

A. *Organic.*

1.	Lavandula Spica,	Lavender,	Flower,	Volatile Oil.
2.	Citrus Aurantium,	Orange,	Rhind, Leaf,	Volatile Oil.
	Citrus Medica,	Citron,		
	Citrus Bergamia,	Bergamott,		
	Citrus Limonum,	Lemon,		
	Citrus Vulgaris,	Seville Orange,		

	Melissa Officinalis,	Balm,	Herb,	Volatile Oil.
4.	Coriandrum Sativum,	Coriander,	Seed,	Volatile Oil.
5.	Carum Carui,	Carraway,	Seed,	Volatile Oil.
6.	Elettaria Cardamomum,	Cardamom,	Seed,	Volatile Oil.
7.	Curcuma Zedoaria,	Zedoary,	Rhizome,	Volatile Oil?
	Curcuma Longa,	Turmeric,	Rhizome,	Volatile Oil?
8.	Canella Alba,	Canella,	Bark,	Volatile Oil.
9.	Croton Eleuteria,	Cascarilla,	Bark,	Volatile Oil.
10.	Drimys Aromatica,	Winter's Bark,	Bark,	Volatile Oil.
11.	Acorus Calamus,	Calamus Aromaticus, Sweet Flag,	Rhizome,	Volatile Oil.
12.	Dorstenia Braziliensis,	Contrayerva,	Root,	Volatile Oil.
13.	Inula Helenium,	Elecampane,	Root,	Resin.
14.	Pimpinella Anisum,	Anise,	Seed,	Volatile Oil.
15.	Anethum Graveolens,	Dill,	Seed,	Volatile Oil.
16.	Fœniculum Vulgare,	Fennel,	Seed,	Volatile Oil.
	Fœniculum Dulce,	Sweet Fennel,	Seed,	Volatile Oil.
17.	Cuminum Cyminum,	Cumin,	Seed,	Volatile Oil.
18.	Mentha Sativa,	Spearmint,	Herb,	Volatile Oil.
	Mentha Piperita,	Peppermint,		
	Mentha Pulegium,	Pennyroyal,		
19.	Piper Cubeba,	Cubebs,	Fruit,	Volatile Oil.
20.	Zingiber Officinale,	Ginger,	Rhizome,	Resin.
21.	Alpinia Galanga,	Galangale,	Rhizome,	Resin.
22.	Amomum Melegueta,	Grana Paradisi,	Seed,	Resin.
	Amomum Angustifolium,	Madagascar Cardamom,	Seed,	Resin?
	Amomum Maximum,	Java Cardamom,	Seed,	Resin?
23.	Eugenia Pimento,	Allspice,	Fruit,	Resin?
24.	Piper Nigrum,	Black Pepper,	Fruit,	Resin.
	Piper Longum,	Long Pepper,		Piperine?
25.	Capsicum Annuum,	Cayenne Pepper,	Fruit,	Capsicine.

B. *Inorganic.*

These also stimulate the part acted on, and affect the system only indirectly and slightly;—if too freely used they injure the vitality of the part, and thus cause depression of the system.

1. Warmth.
2. Ammonia, Carbonate.

Order II.—Diffusive.

Besides the stimulant effect common to all Excitants, these produce disturbance of the Nervous System followed by Depression.

A. *Organic.*

1.	Cinnamomum Zeylanicum,	Cinnamon,	Bark,	Volatile Oil.
	Cinnamomum Cassia,	Cassia,	Bark,	Volatile Oil.
	Cinnamomum Aromaticum,		Bud,	Volatile Oil.
2.	Eugenia Caryophyllata,	Clove,	Bud,	Volatile Oil.
3.	Dianthus Caryophyllus,	Clove Pink,	Flower,	Volatile Oil.
4.	Myristica Moschata,	Nutmeg,	Fruit,	Volatile Oil.
5.	Melaleuca Cajuputi,	Kya Puti,	Leaf,	Volatile Oil.
6.	Andropogon Nardoides,	Spikenard,	Rhizome,	Volatile Oil.
	Andropogon Schænanthus,	Lemon Grass,	Rhizome,	Volatile Oil.
	Laurus Nobilis,	Sweet Bay,	Leaf,	Volatile Oil.
7.	Coffæa Arabica,	Coffee,	Kernel,	Caffeine.
8.	Camphora Officinalis,	Camphor Laurel,	Root, &c.	Camphor.
	Dryobalanops Aromatica.	Camphor Tree,	Trunk,	
9.		Sumbul,	Root,	Unascertained.
10.	Strychnos Nux Vomica,	Nux Vomica,	Fruit,	Strychnine.
	Strychnos Ignatia,	St. Ignatius's Bean,		
11.	Delphinium Staphisagria,	Stavesacre,	Seed,	Delphine.
12.	Colchicum Autumnale,	Meadow Saffron,	Cormus,	Colchicine.
13.	Veratrum Album,	White Hellebore,	Root,	Veratrine.
	Asagræa Officinalis,	Cevadilla,	Seed,	Veratrine.
		Sabadilla,		

B. *Products of Chemical Action on Organic Substances.*

1. Alchohol,	Wines and other Fermented Liquors.
2. Sulphuric Ether,	Acetic Ether.
3. Oil of Wine.	
4. Chloroform.	

C. *Inorganic.*

In most instances these have little Local Action.—They act chiefly either on the Sensorium or the General powers of the System,—sometimes durably.—This division is unsatisfactory, from the extreme differences of action observed.

1. Electricity.
2. Galvanism.
3. Protoxyde of Nitrogen.
4. Bromine.
5. Iodine, Iodide of Sulphur, Iodides of Mercury, Iodide of Potassium.
6. Phosphorus.

7. Oxydes of Mercury, Sulphurets,
Nitrate, Acetate,
Cyanide.

APPENDIX.—Substances not used as Medicines, but possessing an action apparently analogous to Diffusive Excitants in some degree, and important on account of their Poisonous effects.

1. Strychnos Tieute,	Tshettek,	Bark of Root,	Strychnine.
2. Anamirta Cocculus,	Cocculus Indicus,	Berry,	Picrotoxine.
3. Antiaris Toxicaria,	Poison Tree,	Trunk,	Antiarine.
4. Strychnos Toxicaria,	Woorali,	Stem,	Picrotoxine?
5. Tanghinia Venenata,	Tanghin,	Seed,	Tanghicine.
6. Ticunas,			Picrotoxine?
7. Curare,			Curarine?
8. Fungi Venenosi,	Poisonous Mushrooms,	Pileus,	Unascertained.

CLASS V.—REFRIGERANTS.

Defined;—their Mode of action described;—their Effects if too freely or improperly given.

The Theory of their Action is obscure;—the Relation between Animal heat and the consumpt of Oxygen supposed to afford an explanation,—by no means clear.

Effects of Alkalis and Vegetable Acids on the Circulation and Nervous system.

Sympathetic effects of Cold.

Their use is chiefly in Febrile and Inflammatory complaints.

A. *Organic.*

1.	Vitis Vinifera,	Vine,	Fruit,	Acid Pulp.
2.	Morus Nigra,	Mulberry,	Fruit,	Acid Pulp.
3.	Persica Vulgaris,	Peach,	Fruit,	Acid Pulp.
4.	Citrus Aurantium,	Orange,	Fruit,	Acid Pulp.
	Citrus Limonum,	Lemon,		
	Citrus Limetta,	Lime,		
	Citrus Decumana,	Shaddock,		

5. Punica Granatum,	Pomegranate,	Fruit,	Acid Pulp.
6. Rumex Acetosa,	Sorrel,	Leaf,	Acid Juice.
7. Oxalis Acetosella,	Wood Sorrel,	Leaf,	Acid Juice.

B. *Of Organic Origin.*

1. Tartaric Acid, Bitartrate of Potash.
2. Citric Acid, Citrate of Potash, Citrate of Soda,
3. Acetic Acid.
4. Binoxalate of Potash.

C. *Inorganic.*

1. Carbonate of Potash, Bicarbonate, Nitrate.
2. Carbonate of Soda, Bicarbonate, Biborate.

CLASS VI.—SEDATIVES.

Their characteristic action defined.—Often confounded with Narcotics;—Distinction between them.

Account of their Action,—Effects of their continued use.

A. *Organic.*

1.	Thea Bohea,	Black Tea,	Leaf,	Theine.
	Thea Viridis,	Green Tea,	Leaf,	Theine.
2.	Nicotiana Tabacum,	Tobacco,	Leaf,	Nicotine
3.	Lobelia Inflata,	Indian Tobacco,	Leaf,	Lobeline?
4.	Digitalis Purpurea,	Foxglove,	Leaf,	Digitaline.
5.	Prunus Lauro-cerasus,	Cherry Laurel,	Leaf,	Hydrocyanic Acid.
	Amygdala Amara,	Bitter Almond,	Kernel,	Hydrocyanic Acid.

B. *Inorganic*

1. Carbonic Acid.
2. Carburetted Hydrogen.
3. Hydrosulphuric Acid, Hydrosulphate of Ammonia.
4. Hydrochlorate of Ammonia.
5. Tartrate of Antimony and Potash.

CLASS VII.—NARCOTICS.

Difficulty of definition from the difference of their Primary and Secondary action,—the former resembling Excitants,—the latter Sedatives.—Their characteristic effect belongs to the latter.

Account of their actions,—Effects of repetition.—Their mode of action is obscure.—Their usefulness in cases of Nervous irritation.—Their Effects on the Secreting Organs.—Incompleteness of the List.

A. *Organic.*

1. Papaver Somniferum,	White Poppy,	Seed Vessel,	(Juice,)	Morphine.
2. Lactuca Virosa,	Strong-scented Lettuce,	Stem,	(Juice,)	Unascertained.
3. Conium Maculatum,	Hemlock,	Leaf,	(Extract,)	Coneine.
4. Hyoscyamus Niger,	Henbane,	Herb, Seed,	(Extract,)	Hyoscyamine.
5. Datura Stramonium,	Thorn Apple,	Stem, Seed,	(Extract,)	Daturine.
6. Humulus Lupulus,	Hop,	Strobulus,	(Extract,)	Lupuline.
7. Cannabis Indica,	Indian Hemp,	Stem,	(Extract,)	Unascertained.
8. Atropa Belladonna,	Dwale, DeadlyNightshade,	Leaf,	(Extract,)	Atropine.
9. Aconitum Napellus,	Wolfsbane,	Root, Leaf,	(Extract,)	Aconitine.
10. Rhododendron Chrysanthum,	Yellow Rhododendron,	Leaf,		Unascertained.
11. Œnanthe Phellandrum,	Water Dropwort,	Seed,		Unascertained.

APPENDIX 1.—Acro-Narcotics.—Scarcely, or not at all used in Medicine,—but important on account of their Poisonous qualities.

A. *Organic.*

1. Lolium Temulentum,	Bearded Darnel,	Seed,	Unascertained.
2. Rhus Toxicodendron,	Poison Oak,	Leaf,	Unascertained.
3. Æthusa Cynapium,	Fool's Parsley,	Leaf,	Cynapine.
4. Cytisus Laburnum,	Laburnum,	Seed,	Cytisine.
5. Œnanthe Crocata,	Hemlock Dropwort,	Root,	Unascertained.
6. Mercurialis Perennis,	Dog's Mercury,	Herb,	Unascertained.
7. Cicuta Virosa,	Water Hemlock,	Root,	Unascertained.
8. Chelidonium Majus,	Great Celandine,	Root,	Unascertained.

APPENDIX 2.—Anæsthetics and Anodynes.—Consist of most of the Narcotics and a few Excitants;—they are used either by swallowing them or by inhalation of their Vapour;—sometimes applied externally.

A. *Organic.*

1. Papaver Somniferum,	White Poppy,	Seed Vessel,	(Juice,)	Morphine.
2. Lactuca Virosa.	Strong-scented Lettuce,	Stem,	(Juice,)	Unascertained.
3. Conium Maculatum,	Hemlock,	Leaf,	(Extract,)	Coneine.
4. Hyoscyamus Niger,	Henbane,	Herb, Seed,	(Extract,)	Hyoscyamine.
5. Datura Stramonium,	Thorn Apple,	Stem, Seed,	(Extract,)	Daturine.
6. Humulus Lupulus,	Hop,	Strobulus,	(Extract,)	Lupuline.
7. Atropa Belladonna,	Dwale, Deadly Nightshade,	Leaf,	(Extract,)	Atropine.
8, Aconitum Napellus,	Wolfsbane,	Root, Leaf,	(Extract,)	Aconitine.

B. *Products of Chemical Action on Vegetable Matter.*

1. Alcohol.
2. Sulphuric Æther.
3. Chloroform.

C. *Inorganic.*

1. Protoxide of Nitrogen.
2. Bisulphuret of Carbon.

CLASS VIII.—ANTISPASMODICS.

Statement of the Nature of Spasm and its varieties.
—The Action of Antispasmodics,—their Relation to Narcotics.
—The Causes of Spasm are various;—hence it may be removed by remedies of various classes.—Frequently it is sympathetic, and can only be removed by curing the disease that has induced it.

A. *Organic.*

1. *Animal.*

1. Moschus Moschiferus,	Musk Deer,	Præputial Sac,	Musk,	Unascertained.
2. Castor Fiber,	Beaver,	Præputial Sac,	Castor,	Unascertained.

2. *Of Animal Origin.*

1. Dippel's Animal Oil.

3. *Vegetable.*

1. Valeriana Sylvestris,	Valerian,	Root,	Valerianic Acid?
2. Ferula Asafœtida,	Asafœtida,	Root,	Gum Resin.
3. Opoidia Galbanifera?	Galbanum,	Trunk,	Gum Resin.
4. Ferula? Sagapenum,	Sagapenum,	Trunk,	Gum Resin.
5. Opoponax Chironium,	Opoponax,	Root,	Gum Resin.
6. Indigofera Tinctoria,	Indigo,	Herb,	Indigotine?

4. *Of Vegetable Origin.*

1. Oil of Amber.
2. Coal Naphtha.

B. *Inorganic.*

1. Mineral Naphtha.
2. Petroleum.
3. Oil of Tar.

CLASS IX.—DEMULCENTS.

Their Name and common Definition are speculative,—founded on an assumption of acrimony of the Fluids;—this assumption is erroneous.

They may act partly by excluding the Air,—but they are often useful when not directly applied.

—They are Neutral and do not readily become Acid,—hence they may prevent or diminish irritation.

—The Effect of the Diluent administered with them must be taken into account.

—They produce no violent effects, and act slowly.—Their Internal use is limited by the state of the stomach.

Necessity for a division into two orders, as some are only used externally;—These are by some thought to act mechanically by lubricating the surface;—but they materially influence the Vital actions of the part.—Their Mode of action is not well explained.

Order I.—Used Internally.

A. *Organic.*

1. *Animal.*

1.	Bos Taurus,	Ox,	Tendon, Skin,	Gelatine.
2	Cervus Dama, Cervus Elaphus,	Deer, Stag,	Antler,	Gelatine.
3	Acipenser Huso, Acipenser Stellatus, Acipenser Ruthenus, Acipenser Guldenstädtii,	Beluga, Sewruga, Sterlet, Osseter,	Air Vessel,	Gelatine.
4.	Physeter Macrocephalus,	Sperm Whale, Cachalot,	Head,	Cetine.
5.	Morrhua Vulgaris,	Cod,	Liver,	Fixed Oil.
6.	Apis Mellifica,	Hive Bee,		Wax.

2. *Of Animal Origin.*

1. Glycerine.

3. *Vegetable.*

May be conveniently divided into three Sub-orders.

a. Amylaceous.

1.	Maranta Arundinacea,	West Indian Arrow-root,	Tuber,	Fecula.
	Curcuma Angustifolia,	East Indian Arrow-root,	Tuber,	Fecula.
	Canna Coccinea,	South Sea Arrow-root,	Rhizome,	Fecula.
	Arum Maculatum,	Wake-Robin,	Tuber,	Fecula.
2.	Janipha Manihot,	Bitter Cassava,	Tuber,	Fecula.

3.	Solanum Tuberosum,	Potato,	Tuber,	Fecula.
4.	Triticum Vulgare,	Common Wheat,	Seed,	Fecula.
	Triticum Polonicum,	Polish Wheat,		
	Triticum Monococcum,	Brent Barley,		
	Triticum Spelta,	Spelt Wheat,		
5.	Sagus Farinifera,	Sago Palm,	Trunk,	Fecula.
	Cycas Circinalis,	Japan Sago Tree,	Trunk,	Fecula.
6.	Avena Sativa,	Common Oat,	Seed,	Fecula.
	Avena Sibirica,	Siberian Oat,		
	Avena Nuda,	Naked Oat,		
7.	Oryza Sativa,	Rice,	Seed,	Fecula.
8.	Hordeum Distichon,	Common Barley,	Seed,	Fecula.
	Hordeum Tetrastichon,	Spring Barley,		
	Hordeum Hexastichon,	Winter Barley,		
9.	Secale Cereale,	Rye,	Seed,	Fecula.
10.	Zea Mays,	Maize,	Seed,	Fecula.
11.	Panicum Miliaceum,	Millet,	Seed,	Fecula.
	Panicum Glaucum,	Panic,		
12.	Sorghum Vulgare,	Durra,	Seed,	Fecula.
	Sorghum Bicolor,	Guinea Corn,		
13.	Fagopyrum Esculentum,	Buck-wheat,	Seed,	Fecula.
14.	Pisum Sativum,	Pea,	Seed,	Legumine.
15.	Faba Vulgaris,	Bean,	Seed,	Legumine.
16.	Ervum Lens,	Lentil,	Seed,	Legumine.
17.	Orchis Mascula,	Purple Orchis,	Root,	Fecula?
18.	Cetraria Islandica,	Iceland Moss,	Thallus,	Lichenine.
19.	Cladonia Rangiferina,	Reindeer Moss,	Thallus,	Lichenine.

b. Mucilaginous.

1.	Acacia Vera,	Egyptian Thorn,	Trunk,	Arabine.
	Acacia Senegalensis,		Trunk,	Arabine.
2.	Malva Sylvestris,	Common Mallow,	Herb,	Gum?
3.	Althæa Officinalis,	Marsh Mallow,	Root,	Gum.
4.	Lythrum Salicaria,	Loosestrife,	Herb,	Gum?
5.	Linum Usitatissimum,	Flax,	Seed,	Gum?
6	Sphærococcus Crispus,	Carrageen Moss,	Frond,	Jelly.
7.	Ficus Carica,	Fig,	Fruit,	Sugar?
8	Cydonia Vulgaris,	Quince,	Seed,	Cydonine.
9.	Verbascum Thapsus,	Great Mullein,	Leaf,	Gum.
10	Penæa Mucronata,		Calyx,	Sarcocoll.
11.	Glycyrrhiza Glabra,	Liquorice,	Root,	Glycyrrhizine.
12.	Astragalus Creticus,	Tragacanth,	Stem,	Bassorine.
13.	Cerasus Avium,	Cherry Tree,	Trunk,	Cerasine.

c. Oleaginous.

1.	Myrica Cerifera,	Wax Berry,	Fruit,	Wax.
2.	Amygdalus Communis,	Almond,	Seed,	Fixed Oil.
3.	Olea Europæa,	Olive,	Fruit,	Fixed Oil.

Order II.—Used Externally.

(Emollients.)

A. *Organic.*

1. *Animal.*

1.	Ovis Aries,	Sheep,	Fat,	Suet,
2.	Bos Taurus,	Ox,	Fat,	Tallow.
3.	Sus Scrofa,	Swine,	Fat,	Lard.

2. *Vegetable.*

1.	Elais Guineensis,	Palm,	Fruit,	Fixed Oil.
	Cocos Butyracea,	Macaw Tree,		
	Cocos Nucifera,	Cocoa Nut Tree,		
2.	Amygdalus Communis,	Almond,	Seed,	Fixed Oil.
3.	Olea Europæa,	Olive,	Fruit,	Fixed Oil.
4.	Brassica Napus,	Rape,	Seed,	Fixed Oil.
5.	Linum Usitatissimum,	Flax,	Seed,	Fixed Oil. Gum?
6.	Lilium Candidum,	White Lily,	Bulb,	Gum?
7.	Malva Sylvestris,	Common Mallow,	Herb,	Gum?
8.	Althæa Officinalis,	Marsh Mallow,	Root,	Gum?
9.	Ficus Carica,	Fig,	Fruit,	Saccharine Pulp.
10.	Daucus Carota,	Carrot,	Root,	Pectine?

B. *Inorganic.*

1. Heat as applied in Cataplasms and Fomentations.

CLASS X.—ERRHINES.

Defined;—Their action ascribed to an increase of discharge,—sometimes to Sympathy,—or to Counter Irritation.

Sternutation not necessarily an accompaniment,—but sometimes reckoned useful.

Divided into Two Orders;—Those which chiefly stimulate the Discharge—and seldom cause Sneezing;—and those which, being more irritating, increase the discharge,—cause Sneezing,—and may give rise to inflammation of the membrane.

Order I.—Deobstruent.

A. *Organic.*

1.	Iris Florentina,	Orris,	Root,	Resin.
2.	Æsculus Hippocastanum,	Horse Chesnut,	Fruit,	Unascertained.
3.	Origanum Vulgare,	Marjoram,	Leaf,	Volatile Oil.
4.	Lavandula Spica,	Lavender,	Flower,	Volatile Oil.
5	Thymus Vulgaris,	Thyme,	Leaf,	Volatile Oil.
	Thymus Citriodorus,	Lemon Thyme,		
6.	Rosmarinus Officinalis,	Rosemary,	Leaf,	Volatile Oil.
7.	Hyssopus Officinalis,	Hyssop,	Herb,	Volatile Oil.
8.	Salvia Officinalis,	Sage,	Herb,	Volatile Oil.
9.	Teucrium Marum,	Cat Thyme,	Herb,	Volatile Oil.

Order II.—Irritant.

A. *Organic.*

1.	Nicotiana Tabacum,	Tobacco,	Leaf,	Volatile Oil.
2.	Veratrum Album,	White Hellebore,	Rhizome,	Veratrine?
3.	Asarum Europæum,	Asarabacca,	Leaf,	Volatile Oil.
4.	Piper Nigrum,	Black Pepper,	Fruit,	Piperine?
5.	Euphorbia Canariensis,	Euphorbium,	Stem,	Resin.

Inorganic.

1. Subsulphate of Mercury.

CLASS XI.—EXPECTORANTS.

The common Definition is vague and inapplicable.

Discharge from the Trachea may be promoted in various ways;—hence Roborants, Diluents, Excitants, Refrigerants, Antispasmodics, Emetics, and Diaphoretics may all produce Expectoration.

The direct actions of an Expectorant are difficult of explanation.

The necessity for their use apparently arises from opposite causes, in different states of the system; hence they are of two kinds, Stimulant and Relaxant.—(A third variety, tending directly to produce Absorption of watery secretion and to diminish determination, is sometimes admitted, but without much propriety.)—This arrangement is hypothetical, and not satisfactory, but the obscurity of their mode of action prevents the adoption of a less objectionable one.

Order I.—Stimulant.

A. *Organic.*

1. *Vegetable.*

1.	Scilla Maritima,	Squill,	Bulb,	Scillitine.
2.	Dorema Ammoniacum,	Ammoniacum,	Trunk,	Gum Resin.
3.	Ferula Asafœtida,	Asafœtida,	Root,	Gum Resin.
4.	Opoidia Galbanifera?	Galbanum,		Gum Resin.
5.	Balsamodendron Myrrha,	Myrrh,	Trunk,	Gum Resin.
6.	Styrax Benzoin,	Benzoin Tree,	Trunk,	Balsam.
	Styrax Officinale,	Storax,		
	Liquidambar Styraciflua,	Sweet Gum Tree.		
7.	Myrospermum Toluiferum,	Tolu Balsam Tree,	Trunk,	Balsam.
	Myrospermum Peruiferum,	Quinquino,		
8.	Balsamodrendon Gileadense,	Balm of Gilead, Balsam of Mecca,	Trunk,	Balsam.
9.	Pistacia Lentiscus,	Mastic Tree,	Trunk,	Resin.
10.	Copaifera Bijuga,	Copaiva,	Trunk,	Volatile Oil.
11.	Pinus Sylvestris,	Scotch Fir,	Wood,	Turpentine. Tar.
	Pinus Pinaster,	Cluster Pine,		
	Pinus Palustris,	Pitch Pine, Swamp Pine,		
	Pinus Tæda,	Frankincense Pine,		
12.	Tussilago Farfara,	Coltsfoot,	Leaf,	Unascertained.
13.	Marrubium Vulgare,	Horehound,	Herb,	Unascertained.

B. *Inorganic.*

1. Chlorine.

Order II.—Relaxant.

A. *Organic.*

1.	Datura Stramonium,	Thorn Apple,	Stem,	Daturine.
2.	Nicotiana Tabacum,	Tobacco,	Leaf,	Nicotine.
3.	Cephaelis Ipecacuanha, / Richardsonia Scabra, / Psychotria Emetica,	Brazilian Ipecacuanha, / White Ipecacuanha, / Striated Ipecacuanha,	Root,	Emetine

B. *Inorganic.*

1. Tartrate of Antimony and Potash.
2. Sulphuret of Potassium.

Class XII.—Sialagogues.

Definition;—A double action observed, on the Salivary Glands and on the Mucous Membrane.

Their Mode of Action is apparently threefold;—Some stimulate directly by topical application,—others stimulate indirectly,—others act constitutionally.

The Rationale of their Action is not well understood;—Their application in Disease is limited, and their efficiency frequently dependent entirely on local stimulus.

A. *Organic.*

1.	Acorus Calamus,	Calamus Aromaticus, / Sweet Flag,	Rhizome,	Volatile Oil.
2.	Cochlearia Armoracia,	Horse Radish,	Root,	Volatile Oil.
3.	Zingiber Officinale,	Ginger,	Rhizome,	Resin.
4.	Anacyclus Pyrethrum,	Pellitory of Spain,	Root,	Resin.
5.	Nicotiana Tabacum,	Tobacco,	Leaf,	Nicotine.
6.	Daphne Mezereum,	Mezereon,	Bark,	Resin. / Daphnine.

B. *Inorganic.*

1.	Mercury,	Oxydes,	Chlorides.

CLASS XIII.—EMETICS.

Definition;—Phenomena of Vomiting,—the Theory of these Phenomena is difficult.

Action of Emetics;—State of the Functions during Nausea,—Alterations when Vomiting comes on,—State of the System after Vomiting.

Differences in the facility of exciting Vomiting,—these often arise from the nature of the Disease present.

Effects resulting from Emetics.—Cautions regarding their use.

A. *Organic.*

1.	Anthemis Nobilis,	Chamomile,	Flower,	Volatile Oil?
2.	Sinapis Nigra,	Common Mustard,	Seed,	Volatile Oil.
	Sinapis Alba,	White Mustard,	Seed,	Fixed Oil?
3.	Cephaelis Ipecacuanha,	Brazilian Ipecacuanha,	Root,	Emetine.
	Richardsonia Scabra,	White Ipecacuanha,		
	Psychotria Emetica,	Striated Ipecacuanha,		
4.	Viola Odorata,	Violet,	Root,	Violine.
5.	Scilla Maritima,	Squill,	Bulb,	Scillitine.

B. *Inorganic.*

1. Tepid Water.
2. Ammonia, Carbonate, Hydrosulphate.
3. Chloride of Sodium.
4. Tartrate of Antimony and Potash.
5. Sulphate of Zinc.
6. Bisulphate of Copper.

CLASS XIV.—CATHARTICS.

Definition;—They act in various modes, and these are generally combined;—Different portions of the Intestine chiefly acted on;—Action extended to other Viscera;—Differences in the time required for their Action,—in the continuance of their Action,—and in the Seat or Degree of the Irritation accompanying it.

Division into orders; 1, Laxative, simply causing Evacuation, and 2, Purgative, inducing other actions.—The latter divided into Cholagogue and Hydragogue.—This arrangement is imperfect. —A preferable division of Purgatives is into Stimulant, increasing the Secretion from the Intestines, Drastic, inducing Collateral Actions, and Hydragogue, causing Watery Evacuations;—Necessity for another Division, of Substances used as Enemata.

The use of Cathartics is very important,—sometimes regarded as the chief means of treating most diseases;—this is incorrect and often unsafe.

General indications for their use,—1. Retention of Fœcal matter—2. Irritation of the system—3. Defect or Alteration of the Intestinal Secretions—4. Deranged action of the Absorbents and Exhalants.

Cautions requisite to be attended to,—1. Irritation of the Intestines.—2. Local Congestion—3. Peculiar states of neighbouring Organs.

Times, modes, and forms of administration.

Order I.—Laxative.

A. *Organic.*

1. *Animal.*

1.	Apis Mellifica,	Hive Bee,	Honey,	Sugar.

2. *Vegetable.*

1.	Saccharum Officinarum,	Sugar Cane,	Stem,	Sugar.
	Beta Vulgaris,	Beet,	Root,	Sugar.
	Acer Saccharinum,	Maple,	Trunk,	Sugar.
2.	Fraxinus Ornus,	Flowering Ash,	Trunk,	Mannite.
3.	Cassia Fistula,	Purging Cassia,	Pod,	Sugar?
4.	Tamarindus Indica,	Tamarind,	Pod,	Bitartrate of Potash?
5.	Prunus Domestica,	Plum,	Fruit,	Unascertained.
6.	Cochlearia Officinalis,	Scurvy Grass,	Herb,	Unascertained.
7.	Taraxacum Dens Leonis,	Dandelion,	Juice,	Unascertained.
8.	Ricinus Communis,	Oil Bush, Palma Christi,	Seed,	Fixed Oil.

B. *Inorganic.*

1. Sulphur.
2. Magnesia, Carbonate, Bicarbonate.

Order II.—Purgative.

1. Stimulant.

A. *Organic.*

1.	Rheum Compactum, Rheum Palmatum, Rheum Undulatum?	Rhubarb,	Root,	Rheine?
2.	Cassia Senna, Cassia Lanceolata.	Senna,	Leaf,	Cathartine.
3.	Convolvulus Sepium,	Great Bindweed,	Root,	Unascertained.
4.	Exogonium Purga,	Jalap,	Root,	Resin?
5.	Aloe Spicata, Aloe Vulgaris, Aloe Socotrina,	Cape Aloes, Barbadoes Aloes, Socotrine Aloes,	Leaf, (Extract)	Aloesine.

B. *Inorganic*

1. Oxyde of Mercury, Chloride.
2. Chloride of Sodium.

2. Drastic.

A. *Organic.*

1.	Cucumis Colocynthis,	Colocynth,	Pepo,	Colcynthine.
2.	Convolvulus Scammonia,	Scammony,	Root,	Resin.
3.	Hebradendron Gambogioides, Garcinia Gambogia,	Gamboge Tree,	Trunk,	Resin?
4.	Pinus Sylvestris,	Scotch Fir,	Wood,	Volatile Oil.
	Pinus Palustris,	Pitch Pine, Swamp Pine,		
	Pinus Tæda,	Frankincense Pine,		
	Pinus Pinaster,	Cluster Pine,		
5.	Linum Catharticum,	Purging Flax,	Herb,	Unascertained.
6.	Euphorbia Lathyris,	Caper Spurge,	Seed,	Fixed Oil.
7.	Croton Tiglium,	Purging Nut,	Seed,	Crotonic Acid?
	Iatropha Curcas,	Physic Nut,	Seed,	Fixed Oil.

8.	Helleborus Niger,	Black Hellebore, Christmas Rose,	Root,	Resin?
	Helleborus Viridis,	Bear's Foot,	Root,	Resin?
	Helleborus Orientalis,	East Indian Hellebore,	Root,	Resin?
9.	Bryonia Dioica,	White Bryony,	Root,	Unascertained.
10.	Gratiola Officinalis,	Hedge Hyssop,	Herb,	Gratioline
11.	Momordica Elaterium,	Squirting Cucumber,	Pepo,	Elaterine.

B. *Inorganic.*

1. Subsulphate of Mercury,

3. Hydragogue.

A. *Organic.*

1.	Sambucus Nigra,	Elder,	Bark,	Unascertained.
2.	Rhamnus Catharticus,	Buckthorn,	Fruit,	Unascertained.

B. *Inorganic.*

1. Sulphate of Soda.
2. Sulphate of Magnesia.
3. Phosphate of Soda.
4. Tartrate of Potash.
5. Tartrate of Soda.
6. Tartrate of Potash and Soda.
7. Bitartrate of Potash.
8. Saline Waters.

Order III.—Enemata.

A. *Organic.*

1.	Olea Europæa,	Olive,	Fruit,	Fixed Oil.
2.	Saccharum Officinarum,	Sugar Cane,	Stem,	Sugar.
3.	Fraxinus Ornus,	Flowering Ash,	Trunk,	Mannite.
4.	Ricinus Communis,	Oil Bush, Palma Christi,	Seed,	Fixed Oil.
5.	Cassia Senna,	Senna,	Leaf,	Cathartine.
6.	Abies Picea,	Silver Fir,	Trunk,	Turpentine.
	Larix Europæa,	Larch,	Trunk,	Turpentine.

7.	Pistacia Terebinthus,	Turpentine Tree,	Trunk,	Resin.
8.	Abies Balsamea,	Balm of Gilead Fir,	Trunk,	Resin.
	Abies Canadensis,	Hemlock Spruce,		
sp 9.	Pinus Sylvestris,	Scotch Fir,	Wood,	Volatile Oil.
	Pinus Tæda,	Frankincense Pine,		
	Pinus Pinaster,	Cluster Pine,		
	Piuus Palustris,	Pitch Pine, Swamp Pine,		

B. *Inorganic.*

1. Tepid Water.
2. Chloride of Sodium.
3. Sulphate of Soda.
4. Sulphate of Magnesia.

CLASS XV.—ANTHELMINTICS.

Objects to be attained by their use.—Notice of the various kinds of Intestinal Worms;—2 Orders, Nematoidea and Parenchymata.

1. Ord. Nematoidea, { Gen. Trichocephalus, T. Dispar, / Gen. Ascaris, A. Vermicularis. A. Lumbricoides.

2. Ord. Parenchymata, Fam. Tænioidea, Gen. Tænia { T. Lata / T. Solium.

The expulsion or destruction of these may be attempted in various ways.—Some remedies simply remove them;—others destroy, but do not remove them;—others expel them dead;—and many enable the system to throw them off, but do not act on them. —The following arrangement is founded on these differences —but not strictly, as the mode of action of some of the articles is complex and doubtful.—5 Orders.

Order I.—Mechanical.

Of doubtful efficacy and seldom used.

A. *Inorganic.*

1. Mercury.
2. Water.

Order II.—Cathartic.

Sometimes effectual by the mere violence of their operation;—in some instances other actions are supposed to take place.

A. *Organic.*

1.	Aloe Spicata, Aloe Vulgaris, Aloe Socotrina,	Cape Aloes, Barbadoes Aloes, Socotrine Aloes,	Leaf, (Extract)	Aloesine.
2.	Cucumis Colocynthis,	Colocynth,	Pepo,	Colocynthine.
3.	Convolvulus Scammonia,	Scammony,	Root,	Resin.
4.	Exogonium Purga,	Jalap,	Root,	Resin?
5.	Hebradendron Gambogioides, Garcinia Gambogia,	Gamboge Tree,	Trunk,	Resin?
6.	Gratiola Officinalis,	Hedge Hyssop,	Herb,	Gratioline.
7.	Helleborus Fœtidus,	Great Bear's Foot,	Root,	Resin?
8.	Euphorbia Canariensis,	Euphorbium,	Stem,	Resin.
9.	Helleborus Niger,	Black Hellebore, Christmas Rose,	Root,	Resin?
	Helleborus Viridis,	Bear's Foot,	Root,	Resin?
	Helleborus Orientalis,	East Indian Hellebore,	Root,	Unascertained.
10.	Iatropha Curcas,	Physic Nut,	Seed,	Fixed Oil.
	Croton Tiglium,	Purging Nut,	Seed,	Crotonic Acid?

B. *Inorganic.*

1. Chloride of Mercury, Subsulphate.

Order III.—Irritant.

Supposed to wound the worms.—This is not satisfactory.—The mode of their action is very doubtful, and probably not the same in all of them.

A. *Organic.*

1	Mucuna Pruriens,	Cowhage,	Seed Vessel,	Setæ.

B. *Inorganic.*

1. Iron Filings.
2. Tin Powder.

Order IV.—Roborant.

Most of the Organic Roborants are useful,—but not in proportion to their Roborant action.—The Volatile Oil which they contain is supposed to be noxious to the worms.

The Inorganic Roborants probably depend entirely on their Roborant action for their efficacy;—this, however, is uncertain.

A. *Organic.*

1.	Galipea Officinalis,	Angostura,	Bark,	Cinchonine?
2.	Gentiana Lutea,	Gentian,	Root,	Gentianite.
3.	Croton Eleuteria,	Cascarilla,	Bark,	Cascarilline?
4.	Anthemis Nobilis,	Chamomile,	Flower,	Piperine?

B. *Inorganic.*

1. Chloride of Iron, Sulphate.
2. Lime Water.
3. Arsenite of Potash.

Order V.—Directly Anthelmintic.

Various actions are probably exerted by them.—Fixed Oil supposed to act by stopping the spiracula of the Worms,—doubtful.—Volatile Oils and some other principles supposed to be poisonous to the Worms.

A. *Organic.*

1.	Amygdalus Communis,	Almond,	Seed,	Fixed Oil.
2.	Olea Europæa,	Olive,	Fruit,	Fixed Oil.
3.	Ricinus Communis,	Oil Bush, Palma Christi,	Seed,	Fixed Oil.

4.	Pinus Sylvestris,	Scotch Fir,	Trunk,	Volatile Oil.
	Pinus Palustris,	Pitch Pine, Swamp Pine,		
	Pinus Tæda,	Frankincense Pine,		
	Pinus Palustris,	Cluster Pine,		
5.	Melaleuca Cajuputi,	Kya Puti,	Leaf,	Volatile Oil.
6.	Artemisia Santonica?	Wormseed,	Leaf Stalk,	Volatile Oil?
	Artemisia Absinthium,	Wormwood,	Herb,	Volatile Oil.
7	Tanacetum Vulgare,	Tansy,	Herb,	Volatile Oil?
8.	Spigelia Marylandica,	Carolina Pink,	Root,	Extractive?
	Spigelia Anthelmia,	Guiana Pink,	Root,	Unascertained.
9.	Andira Inermis,	Cabbage Bark,	Bark,	Jamaicine?
10.	Nicotiana Tabacum,	Tobacco,	Leaf,	Nicotine.
11.	Punica Granatum,	Pomegranate,	Bark of Root,	Unascertained.
12.	Brayera Anthelmintica,	Kousso,	Flower,	Unascertained.
13.	Lastrea Filix Mas,	Shield Fern,	Rhizome,	Fixed Oil?
14.	Persica Vulgaris,	Peach,	Bark,	Unascertained.
15.	Gigartina Helminthocorton,	Corsican Moss,	Frond,	Unascertained.
16.	Asagræa Officinalis,	Cevadilla, Sabadilla,	Seed,	Veratrine?

B. *Inorganic.*

1. Oxyde of Silver.

CLASS XVI.—DIURETICS.

Definition.—Distinction between the secretion and the evacuation of Urine;—the former is increased by various means; 1, Increase in the quantity of fluid taken; 2, Diminution of the action of the Exhalants; 3, Stimulated action of the Absorbents; 4, Stimulus to the action of the Kidneys.—The last of these only is properly Diuretic.

Their mode of action is doubtful;—Sympathetic stimulus,—not proved;—Direct action on the Renal Nerves,—probable;—rapidity of action objected to this,—but explained by the circumstances under which they act.

Diaphoretics act as Diuretics if the skin be kept cool;—and when Diaphoresis is produced the Urine is scanty.

Diluents assist the action of Diuretics, and the effect is nearly checked if Diluents be withheld;—In this case irritation of the Kidneys is often produced.

Diuretics chiefly increase the aqueous part of the Urine;—generally seem to have little effect on the Animal constituents;—and scarcely if at all affect the Saline ingredients.

Indications for their use;—1. To diminish morbid collections of fluid. 2. To render the Urine less irritating. 3. To prevent or remove a calculous deposit. 4. To diminish plethora.

Difficulties attending their use;—1. Uncertainty of their action. 2. Length of time required to effect the object.

A. *Organic.*

1. *Animal.*

1.	Cantharis Vittata,	Potato Fly,	Body,	Cantharidine.
	Cantharis Vesicatoria,	Spanish Fly,		
	Mylabris Cichorii,	Banded Mylabris,		
	Meloe Proscarabæus,	Oil Beetle,		

2. *Vegetable.*

1.	Lappa Minor,	Burdock,	Root,	Unascertained.
2.	Daucus Carota,	Carrot,	Seed,	Volatile Oil.
3.	Juniperus Communis,	Juniper,	Berry,	Volatile Oil.
4.	Arctostaphylos Uva Ursi,	Bearberry,	Leaf,	Unascertained.
5.	Cytisus Scoparius,	Broom,	Twigs,	Unascertained
6.	Chimaphila Umbellata,	Winter-Green,	Leaf, Stem,	Unascertained.
7.	Scilla Maritima,	Squill,	Bulb,	Scillitine.
8.	Digitalis Purpurea,	Foxglove,	Leaf,	Digitaline.
9.	Piper Cubeba,	Cubebs,	Berry,	Volatile Oil.
10.	Copaifera Bijuga,	Copaiva,	Fruit,	Volatile Oil.
11.	Colchicum Autumnale,	Meadow Saffron,	Cormus,	Veratrine?
12.	Pinus Sylvestris,	Scotch Fir,	Trunk,	Volatile Oil.
	Pinus Pinaster,	Cluster Pine,		
	Pinus Tæda,	Frankincense Pine,		
	Pinus Palustris,	Swamp Pine, Pitch Pine,		

3. *Product of Chemical Action on Vegetable Matter.*

1. Spirit of Nitric Ether.

B. *Inorganic.*

1. Potash, Carbonate, Bicarbonate, Nitrate.
   Acetate, Bitartrate?
2. Bromide of Potassium.
3. Chloride of Barium.

CLASS XVII.—EMMENAGOGUES.

Definition ;—Nature of the Menstrual Discharge ;—Probability, *a priori*, of Medicines influencing it.

Apparently none act as appropriate stimuli,—hence the class is made up of substances acting indirectly, as,—1. Roborants—2. Excitants—3. Anti-spasmodics—4. Cathartics—5. Diuretics—6. Diaphoretics.

—Some substances act more directly on the Uterus, exciting Vascular Irritation or Muscular Action,—but do not stimulate the Secretion.

Amenorrhœa results from a variety of causes ;—hence various remedies required, from differences in the cause of the disorder.

This is the least satisfactory of the classes of Pharmacology.—The following list embraces those chiefly used.

A. *Organic.*

1. *Animal.*

1.	Moschus Moschiferus,	Musk Deer,	Præputial Sac,	Unascertained.	(Antispasmodic)
2.	Castor Fiber,	Beaver,	Præputial Sac,	Unascertained.	(Antispasmodic.)
3.	Cantharis Vittata,	Potato Fly,	Body,	Cantharidine.	(Irritant.)
	Cantharis Vesicatoria,	Spanish Fly,			
	Mylabris Cichorii,	Banded Mylabris,			
	Meloe Proscarabæus,	Oil Beetle,			

2. *Vegetable.*

1.	Crocus Sativus,	Saffron Crocus,	Stigma,	Unascertained.	(Narcotic?)
2.	Ruta Graveolens,	Rue,	Leaf,	Volatile Oil.	(Acro-Narcotic.)

3.	Chenopodium Olidum,	Goosefoot,	Herb,	Unascertained.	(Antispasmodic?)
4.	Valeriana Sylvestris,	Valerian,	Root,	Valerianic Acid?	(Antispasmodic.)
5.	Ferula Asafœtida,	Asafœtida,	Root,	Gum Resin.	(Antispasmodic.)
6	Opoidia Galbanifera?	Galbanum,	Trunk,	Gum Resin.	(Antispasmodic.)
7.	Aloe Spicata, Aloe Vulgaris, Aloe Socotrina,	Cape Aloes, Barbadoes Aloes, Socotrine Aloes,	Leaf, (Extract.)	Aloesine.	(Cathartic.)
8.	Hebradendron Gambogioides, Garcinia Gambogia,	Gamboge Tree,		Gum Resin.	(Cathartic.)
9.	Helleborus Niger,	Christmas Rose, Black Hellebore,	Root,	Volatile Acid?	(Cathartic.)
10.	Copaifera Bijuga,	Copaiva,	Fruit,	Volatile Oil.	(Diuretic?)
11.	Polygala Senega,	Rattlesnake Root,	Root,	Polygalic Acid.	(Diaphoretic.)
12.	Juniperus Sabina,	Savine,	Leaf,	Volatile Oil.	(Irritant.)
13.	Spermoedia Clavus,	Ergot,		Ergotine.	(Irritant?)

3. *Product of Chemical Action on Vegetable Matter.*

1. Spirit of Nitric Ether. (Diuretic.)

B. *Inorganic.*

1. Oxyde of Iron, Carbonate, Sulphate, Tartrate, Citrate, Chalybeate Waters. (Roborant.)
2. Electricity. Galvanism. (Excitant.)
3. Oxyde of Mercury, Chloride. (Excitant.)

CLASS XVIII.—DIAPHORETICS.

Defined;—Distinction between them and Sudorifics unnecessary. —Nature of the secretion, and modifications to which it is liable.—Action of Diaphoretics on the pulse.—Supposed change effected by them on the blood.

Use of Diaphoretics in Febrile and Inflammatory complaints, in Dropsies, &c.—Rules and cautions to be observed in their selection and administration.

Division into two Orders—Deobstruent, and Stimulant,—the former having little effect on the Pulse, or the general system,—the latter affecting both.

Order I.—Deobstruent.

A. *Organic.*

1. *Animal.*

1.	Moschus Moschiferus,	Musk Deer,	Præputial Sac,	Unascertained.

2. *Vegetable.*

1.	Solanum Dulcamara,	Woody Nightshade,	Stem,	Solanine.
2.	Aristolochia Serpentaria,	Virginian Snake Root,	Root,	Unascertained.
3.	Calotropis Gigantea,	Mudar,	Bark of Root,	Unascertained.
4.	Sassafras Officinale,	Sassafras,	Wood, Root,	Volatile Oil.
5.	Smilax Officinalis, Smilax Medica, Smilax Papyracea,	Jamaica Sarsaparilla, Vera Cruz Sarsaparilla, Brazil Sarsaparilla,	Root,	Smilacine
6.	Camphora Officinalis, Dryobalanops Aromatica,	Camphor Laurel, Camphor Tree,	Root, Wood,	Camphor.
7.	Cardamine Pratensis,	Cuckooflower,	Flower,	Unascertained.

B. *Inorganic.*

1. Sulphur.
2. Warmth, Warm Water.
3. Acetate of Ammonia.

Order II.—Stimulant.

A. *Organic.*

1.	Guaiacum Officinale,	Lignum Vitæ,	Resin, Wood,	Guaiacine.
2.	Arnica Montana,	Leopard's Bane,	Root,	Arnicine.
3.	Cephaelis Ipecacuanha, Psychotria Emetica, Richardsonia Scabra,	Brazilian Ipecacuanha, Striated Ipecacuanha, White Ipecacuanha,	Root,	Emetine.
4.	Polygala Senega,	Rattlesnake Root,	Root,	Polygalic Acid.
5.	Mikania Guaco,	Guaco, Huaco,	Root,	Unascertained.
6.	Eupatorium Ayapana,		Herb,	Unascertained.
7.	Papaver Somniferum,	White Poppy,	Seed Vessel,	Morphine.
8.	Daphne Mezereum,	Mezereon,	Bark,	Resin. Daphnine.
9.	Aconitum Napellus,	Wolfsbane,	Root,	Aconitine.

B. *Inorganic.*

1. Heat, Hot Air, Hot Water, Vapour.
2. Sulphuret of Antimony, Sulphuretted Oxyde, Antimonial Powder, Tartrate of Antimony and Potash.

CLASS XIX.—EPISPASTICS.

Difficulty of definition from the complexity of their action.

The Division usually made into Rubefacients and Vesicants is not satisfactory;—Distinction between Vesicants and Suppuratives;—not very precise.

Primary action, producing inflammation of the skin;—followed by an effusion of Lymph or Pus.—Characters and varieties of the Lymph effused;—theory of its production.

—The effect may depend on various actions excited.

Rubefacients may be applied—1, to a part connected with the affected organ;—2, to an unconnected but contiguous part;—3, to a distant part.

Vesicants also may be applied to a connected, contiguous, or distant part.

—Both act as Stimulants in the first case;—as counter-irritants in the last;—the second is difficult of explanation.—Sympathy, Depletion, Metastasis, Derivation, all resorted to for explanation;—all unsatisfactory.

Their primary action is accompanied by excitement,—frequently followed by a disposition to sleep.

When the system is exhausted they are often useful,—but caution is required from the risk of gangrene.

Rubefacients act speedily,—Vesicants require more time, and produce much inflammation.

Suppuratives act more slowly,—hence they are scarcely used in acute diseases;—their effects are analogous to those of Vesicants, and the same difficulty of explanation is felt.

Effects of the continued use of Suppuratives;—Application of Epispastics in diseases General and Local.

Order I.—Vesicant.

A. *Organic.*

1. *Animal.*

1.	Cantharis Vittata,	Potato Fly,	Body,	Cantharidine.
	Cantharis Vesicatoria,	Spanish Fly.		
	Mylabris Cichorii,	Banded Mylabris,		
	Meloe Proscarabæus,	Oil Beetle,		

2. *Vegetable.*

1.	Allium Sativum,	Garlick,	Bulb,	Volatile Oil.
2.	Sinapis Alba,	White Mustard,	Seed,	Fixed Oil?
3.	Capsicum Annuum,	Cayenne Pepper,	Fruit,	Capsicine.
4.	Ranunculus Acris,	Meadow Crowfoot,	Herb,	Unascertained.
	Ranunculus Flammula,	Spearwort Crowfoot,	Herb,	Unascertained.
	Ranunculus Sceleratus,	Marsh Crowfoot,		Unascertained.
5.	Euphorbia Canariensis,	Euphorbium,	Stem,	Resin.

B. *Inorganic.*

1. Heat, Hot Water, Steam, Heated Metal.
2. Ammonia.
3. Bichloride of Mercury.

Order II.—Suppurative.

A. *Organic.*

1.	Daphne Mezereum,	Mezereon,	Bark,	Daphnine. Resin?
2.	Juniperus Sabina,	Savine,	Leaf,	Volatile Oil.
3.	Pinus Sylvestris,	Scotch Fir,	Trunk,	Turpentine.
	Pinus Tæda,	Frankincense Pine,		
	Pinus Pinaster,	Cluster Pine,		
	Pinus Palustris,	Swamp Pine, Pitch Pine,		
4.	Betula Alba,	Birch,	Wood,	Kreasote.
5.	Opoidia Galbanifera?	Galbanum,	Trunk,	Gum Resin.
6.	Dorema Ammoniacum,	Ammoniacum,	Trunk,	Gum Resin.

B. *Inorganic.*

1. Heat, Hot Metal.
2. Sulphuric Acid.
3. Tartrate of Antimony and Potash.

CLASS XX.—ESCHAROTICS.

Definition;—Statement of their various Modes of action—

1. Combining with the Elements of the textures, and forming a slough.—This action is purely chemical;—it is accompanied by irritation of the adjacent textures;—Escharotics acting in this way are often useful as counter-irritants.
2. Apparently destroying the vitality by a direct influence on the Nerves.—The Sloughing thus produced is often extensive and continued;—frequently accompanied by constitutional symptoms produced by the substance applied.
3. Seemingly stimulating the absorbents,—producing no slough, but leaving an ulcerated suppurating surface.

The first are most generally used;—difficulties arising from their deliquescence or fluidity,—objection to their use from the slow separation of the Slough.

Division into two Orders, commonly named Stimulant and Cauterant;—The latter embracing the proper Escharotics.

Order I.—Stimulant.

A. *Organic.*

1. Juniperus Sabina,	Savine,	Leaf,	Volatile Oil.

B. *Inorganic.*

1. Sulphate of Alumina and Potash.
2. Bisulphate of Copper.
3. Subnitrate of Mercury.
4. Chloride of Antimony.
5. Chloride of Zinc.
6. Arsenious Acid,

Order II.—Cauterant.

A. *Inorganic.*

1. Flame, Heated Metal.
2. Sulphuric Acid.
3. Nitric Acid.
4. Nitrate of Silver.
5. Potash.
6. Lime.

CLASS XXI.—ANTACIDS.

Definition.
—Their action is altogether Chemical.
—Nature of the Acid present;—Action of the Salt produced;—and of the Alkali if given in excess.
—The use of Roborants and mild Excitants is often preferable.

A. *Inorganic.*

1. Lime Water,	Carbonate of Lime.	
2. Potash,	Carbonate,	Bicarbonate.
3. Soda,	Carbonate,	Bicarbonate.
4. Magnesia,	Carbonate,	Bicarbonate.

CLASS XXII.—ANTILITHICS.

Definition;
—View of the nature and varieties of Calculi.—Dr. Marcet's classification:

1. Lithic Acid.
2. Phosphate of Lime.
3. Ammoniaco-Magnesian Phosphate.
4. Fusible Calculus,—composed of 2 and 3 mixed.
5. Oxalate (or Oxalurate) of Lime.
6. Cystic Oxyde.
7. Laminated Calculus,—generally 1 and 3, 1 and 5, or 3 and 5, alternating;—sometimes more varied ingredients.

8. Mixed Calculus—consisting of various ingredients indiscriminately blended.
9. Xanthic Oxyde.
10. Fibrinous Calculus.

—Other varieties occurring sometimes, but very rarely.

—Action of remedies employed as direct Solvents;—only some kinds of Calculi are capable of being thus acted on, and only some Solvents can be introduced with safety;—this mode therefore is of little use.

Substances given by the Mouth act vitally;—They apparently modify the constitutional Diathesis.—Usefulness of various remedies acting in this way.—Direct Chemical effect of Antilithics given by the Mouth doubtful.

Division of the Class into three Orders;—The two first supposed to alter the Secretion, and to act partly by furnishing elements yielding a soluble compound,—partly by their Chemical effect on the Deposit already formed;—The third act on the System apparently as Roborants, but with a peculiar action on the Secreting organs.

Order I.—Acid.

A. *Of Organic Origin.*

1. Citric Acid.
2. Acetic Acid.

B. *Inorganic.*

1. Sulphuric Acid.
2. Carbonic Acid.
3. Nitric Acid.

Order II.—Alkaline.

A. *Inorganic.*

1. Potash,	Carbonate,	Bicarbonate.
2. Soda,	Carbonate,	Bicarbonate.
	Phosphate,	Biborate.

3. Lime Water,
4. Magnesia, Carbonate, Bicarbonate.
5. Carbonate of Lithia.
6. Nitro-Saccharate of Lead.

Order III.—Roborant.

A. *Organic.*

1.	Barosma Crenata,	Bucku,	Leaf.	Volatile Oil?
2.	Cissampelos Pareira,	Pareira Brava,	Root.	Unascertained.
3.	Arctostaphylos Uva Ursi,	Bearberry,	Leaf,	Tannic Acid?

III. PHARMACY.

Definition and statement of the objects of this Branch;—General observations;— Many Formulæ are not Pharmaceutical, but merely mixtures,—serving to save the time and trouble of extemporaneous Prescription.

Division into two kinds, according to the nature of the processes employed.

I. Mechanical Pharmacy,

Comprehending Processes for altering the Mechanical State of Bodies, or separating them from others Mechanically mixed.

1. Pulverising.
   - By Mechanical Means.
     - Simply,
       - Contusing.
       - Rasping.
       - Triturating.
       - Grinding.
     - Levigation.
     - Elutriation.
     - Aided
       - By Heat.
       - By Gum.
       - By Sugar.
       - By Spirit.
   - By Chemical Action.
     - By Water.
     - By Precipitation.
     - By Sublimation.

2. Expression. .....
   - Simply.
   - After Pulverising.
   - With the aid of Water.
   - Aided by Heat.
   - Aided by Maceration.
   - After Fermentation.

3. Diffusion.....
   - In Water.
   - In Mucilage.
   - In Syrup.
   - In Albumen.

4. Defœcation.
   - By Decantation.
   - By Filtration. ...
     - Through a Porous Vessel.
     - Through Sand.
     - Through Pounded Glass.
     - Through Charcoal.
     - Through Cloth.
     - Through Paper.
   - By Heat.
   - By Alcohol.
   - By Albumen.
   - By Gelatine.

II. Chemical Pharmacy.

Embracing processes for altering the Chemical composition or relations of substances.

—A considerable variety of processes is used ;—They may be classed as follows, according to the nature of the result.

1. Solution .....
   - In Water.
   - In Wine.
   - In Spirit.
   - In Ether.
   - In Oil.
   - In Acid.
   - In Alkali.

2. Evaporation.
3. Fermentation.
4. Distillation ..... Of Water. Of Spirit. Of Ether. Of an Acid. Of an Oil. Of a Solid.
5. Analysis, yielding..... An Elementary Substance. An Oxyde. A Sulphuret. An Acid. An Alkali.

Tables of the Pharmaceutical results of Analysis,—Remarks.

6. Synthesis, producing ..... An Oxyde. A Sulphuret. An Iodide. A Bromide. A Chloride. A Cyanide. An Acid. A Salt. An Ether. A Volatile Oil. A Soap. Imitative Mineral Water.

Tables of the Pharmaceutical results of Synthesis,—Remarks.

APPENDIX.—Connecting the course with the Practice of Medicine.

Necessarily requires attention to various points,—as

1. The Medicinal Actions of Drugs, or the proper subject of Pharmacology.
2. The varieties of Medicinal Action, depending on differences in the Dose, or Mode of Administration.
3. The Weights and Measures employed in Dispensing.
4. The Physical Qualities and Relations of Medicines.
5. Their Chemical Actions and Relations—involving the peculiar province of Pharmacy.
6. The distinctive Names of Medicines.
7. The Forms of Administration.
8. The proper times, forms, and intervals of Administration.
9. The Mixture of Medicines; and additional Substances used in Prescribing.
10. The Language and Form of the Prescription.
11. The Age, Sex, Temperament, and Habits of the Patient.
12. Idiosyncrasies occasionally occurring.
13. The Effects of the continued use of particular Articles.
14. Modifications of the Action of Medicines in certain Diseases.

Other Points belong more properly to the Practice of Medicine—as,

1. Attention to the Symptoms and their variations.
2. Inquiry into the History of the Case, and the Causes of the Symptoms observed.
3. Readiness in laying hold of the Indications presented by them.
4. Accuracy in Forming a Diagnosis, &c.

CONCLUSION.

GEO. CORNWALL, PRINTER, ABERDEEN.