

in the subjects discussed, and in the very practical character of the information. In the present state of our knowledge, it is impossible to make a classification free from defects, and I do not claim for mine that it is superior to others—only that its simplicity is a point in its favor. As respects the subjects treated of, it will be seen that the most elaborate section is that on aliment, and that remedies have been introduced not usually referred to by therapeutical writers. In the treatment of individual agents, I have, usually, adopted the description of the “United States Pharmacopœia,” and have omitted botanical and chemical details, unless they are necessary to elucidate physiological questions, or to facilitate intelligent prescription-writing. All pharmaceutical questions are most thoroughly handled in the “Dispensatory” of Wood and Bache, and this kind of knowledge is more the province of the druggist than of the physician.

In describing the physiological action of drugs, two methods may be pursued: to present in chronological order a summary of the opinions of various authorities on the subject in question; or, to condense in a connected description that view of the subject which seems to the author most consonant with all the facts. I have adopted the latter plan, from a conviction of its advantages for the student, and of its utility for the practitioner. The authorities which I have utilized in making up my opinions are placed at the end of each article, in order to avoid interruptions in the methodical descriptions.

As respects the therapeutical applications of remedies, I have, as far as practicable, based them on the physiological actions. Many empirical facts are, however, well founded in professional experience. Although convinced that the most certain acquisitions to therapeutical knowledge must come through the physiological method, I am equally clear that well-established empirical facts should not be omitted, even if they are not explicable by any of the known physiological properties of the remedies under discussion.

My best acknowledgments are due to John Chatto, Esq., the learned Librarian of the Royal College of Surgeons, London, for numerous courtesies extended to me during my visits to Lincoln's-Inn-Fields.

ROBERTS BARTHOLOW.

120 WEST SEVENTH STREET,
CINCINNATI, OHIO, June, 1876. }

TABLE OF CONTENTS.

	PAGE
Schema	1
PART I.	
Routes by which Medicines are introduced into the Organism	3
1. Through the External Integument	3
2. Through the Internal Integument	4
3. By the Subcutaneous Areolar Tissue	11
4. By the Veins	15
Transfusion of Blood	16
Arterial Transfusion	19
Transfusion of Milk	20
Peritoneal Transfusion	21
PART II.	
The Actions and Uses of Remedial Agents	23
Those used to promote Constructive Metamorphosis	23
Aliments	23
Animal	25
Vegetable	34
Special Plans of Diet	38
Denutrition	38
Dry Diet	41
Vegetable Diet	42
Milk Diet	44
Infant Feeding	47
Alimentation in Diseases	49
Aliment in Acute Inflammations and Fevers	49
Formulæ for Animal Broths	50
Formulæ for Diet Drinks	50
Aliment in Diseases of the Digestive Organs	51
Aliment in Cachectic States	52
Formulæ for Articles of Diet	54
Nutrient Enemata	55
Supplementary Rectal Alimentation	56
Beverages	57
Coffee	57
Tea	57
Cocoa	57
Milk	59

	PAGE
Water	60
Aqua	60
Fluvialis	60
Fontana	60
Modes of applying Water	62
Russian Bath	62
The Wet Pack	63
The Douche	64
The Hip or Sitz Bath	64
Hydrotherapy	64
Heat	73
Modes of applying Heat	74
Solar Heat	74
Artificial Heat	74
Moist Heat	74
Dry Heat	74
The Turkish Bath	75
Air	76
Pure Air	77
Impure Air	77
Compressed Air	79
Therapy of Compressed Air	81
Massage	83
Digestion Ferments	87
Pepsin	87
Ingluvin	87
Pancreatin	88
Papaiva or Papain	89
Acidum Lacticum	92
Acids, Mineral	99
Oils and Fats	103
Phosphorus and some of its Compounds	110
Phosphites and Phosphates	119
Iron and its Preparations	123
Manganese	136
Chalybeate Mineral Springs	139
Bismuth	141
Arsenic	144
The Simple Bitters	157
Aromatic Bitters	161
Eucalyptus	164
Hydrastis	165
Cinchona and its Preparations	167
Agents promoting Destructive Metamorphosis or increasing Waste	187
Alkalies	187
Potassium and its Preparations	187
Sodium and its Preparations	195
Calcium and its Preparations	197
Lithium and its Preparations	199
Alkaline Mineral Springs	203
Saline Mineral Springs	206
Ammonium and its Preparations	210

	PAGE
Barium and its Preparations	215
Vegetable Acids	218
Sulphurous Acid and the Sulphites	220
Sulphur and Sulphides (Sulphurets)	222
Sulphurous Mineral Waters	224
Iodine and its Preparations	227
Ether Hydriodicus	238
Iodoform	239
Mercury and its Preparations	244
Aurum (Gold) and its Preparations	258
Argentum (Silver) and its Preparations	260
Cuprum (Copper) and its Preparations	268
Plumbum (Lead) and its Preparations	272
Zincum (Zinc) and its Preparations	278
Antimonium (Antimony) and its Preparations	283
Cadmium, Sulphate	287
Cerium, Oxalate	288
Metallotherapy	289
Alumen (Alum) and its Preparations	292
Acidum Tannicum	296
Acidum Gallicum	296
Galla (Nutmeg)	296
Catechu	296
Kino	297
Krameria (Rhatany)	297
Hæmatoxylon (Logwood)	297
Geranium (Cranesbill)	297
Quercus Alba (White Oak)	297
Quercus Tinctoria (Black Oak)	297
Rosa Gallica (Red Rose)	298
Rubus (Blackberry)	298
Myrica Cerifera (Bayberry)	298
Alnus Serrulata (Alder)	298
Statice Limonium (Marsh Rosemary)	298
Heuchera (Alum-Root)	298
Hamamelis Virginica (Witch-Hazel)	298
Nymphæa Odorata	299
Castanea Vesca	299
Colchicum and its Preparations	304
Sarsaparilla and its Preparations	307
Guaiacum and its Preparations	309
Stillingia and its Preparations	310
Sanguinaria (Blood-Root)	312
Xanthoxylum	315
Fraxinus Americana	316
Agents having the Power to arrest Septic Processes, and to destroy the Ferments or the Minute Organisms (Disease-Germs) on the Presence of which their Activity depends	317
Antiseptics	317
Oxygen	318
Chlorine	320
Bromine	321

	PAGE
Carbolic Acid	322
Creosote	322
Sulphocarbolates	332
Salix	334
Salicin	334
Salicylic Acid	335
Resorcin	346
Boracic Acid	351
Benzoin	353
Benzoates	354
Antiseptic Oils	356
Gaultheria	356
Thyme	356
Cajeput	356
Thymol	357
Myrtol	357
Agents used to modify the Functions of the Nervous System	358
Agents whose most Important Quality consists in exciting Functional Activity	359
A. Of the Spinal Cord and Sympathetic	359
Electricity	359
Static Electricity	359
Magnetism	361
Galvanism	362
Faradism	369
Electro-Physiology	372
Electro-Diagnosis	376
Therapy	379
Electrolysis	388
Galvano-Cautery	389
Static Electricity	390
Trouvé's Polyscope	390
Nux Vomica and its Preparations	391
Strychnine	392
Hypodermatic Injection of Strychnine	401
Ignatia	404
Cocculus	404
Picrotoxin	405
Ergota (Ergot) and its Preparations	408
Hypodermatic Injection of Ergotin	417
Ustilago Maydis (Corn-Ergot)	420
Digitalis and its Preparations	421
Convallaria	429
Cimicifuga and its Preparations	432
Belladonna and its Preparations	434
Atropine	435
Atropine, Hypodermatic Injection of	443
Homotropine	445
Stramonium and its Preparations	446
Hyoscyamus and its Preparations	447
Hyoscine	451
Duboisia	452
B. Agents exciting the Functional Activity of the Cerebrum	454

	PAGE
Camphor and its Preparations	454
Asafetida and its Preparations	458
Ammoniacum and its Preparations	460
Valerian and its Preparations	461
Cannabis Indica	463
Cannabis Americana	463
Erythroxyton	466
Caffeine	467
Guarana	469
Remedies which diminish or suspend the Functions of the Cerebrum after a Preliminary Stage of Excitement	470
Alcohol	470
Vinum (Wine)	480
Beer, Ale, and Porter	485
Extract of Malt	486
Paraldehyde	486
Æther	487
Ether Hypodermatically	490
Chloroformum	491
Chlorodyne	494
Anæsthetics and Anæsthesia	495
Ether and Chloroform	495
Ethyl Bromide	504
Bichloride of Methylene	505
Local Anæsthesia	506
Nitrous Oxide	507
Chloral	509
Croton Chloral Hydrate	515
Opium and its Preparations	516
Morphine and its Salts	518
Humulus (Hops)	537
Lupuline	537
Lactucarium	538
Bromides	538
Agents which depress the Motor Functions of the Spinal Cord and Sympathetic	550
Conium and its Preparations	550
Conine and Morphine	554
Curara or Woorara	555
Curarine	555
Gelsemium and its Preparations	559
Arnica and its Preparations	564
Trimethylamine	565
Pilocarpus (Jaborandi)	567
Physostigma and its Preparations	573
Tabacum (Tobacco) and its Preparations	579
Lobelia and its Preparations	583
Acidum Hydrocyanicum (Prussic Acid)	585
Potassii Cyanidum	589
Amyl Nitrite	591
Nitro-glycerin	594
Aconite and its Preparations	597
Veratrum Viride and its Preparations	602

	PAGE
Pulsatilla and its Preparations	607
Grindelia and its Preparations	608
Phytolacca and its Preparations	610
Ailanthus	611
Muscarine	612
Quebracho	616
Remedies used to cause some Evacuation from the Body	619
Emetics	619
Emetics by Local Action	619
Systemic Emetics	621
Apomorphine	621
Ipecacuanha and its Preparations	623
Cathartics	629
Laxatives	629
Manna	629
Sulphur	630
Pulvis Glycyrrhizæ Compositus	630
Magnesia	630
Oleum Ricini	631
Saline Purgatives	633
Sulphate of Magnesia	633
Citrate of Magnesia	633
Mercurial Purgatives	636
Calomel	636
Massa Hydrargyri	636
Tonic-Astringent and Resin-bearing Purgatives	637
Senna and its Preparations	637
Rheum and its Preparations	638
Aloes and its Preparations	640
Jalap and its Preparations	643
Scammony and its Resin	644
Colocynth and its Preparations	644
Podophyllum and its Preparations	645
Leptandra	646
Iris	647
Euonymus	647
Baptisia	648
Hydragogue Cathartics	648
Gamboge	648
Croton-Oil	649
Elaterium	651
Elaterin	651
Enemata	652
Anthelmintics	654
Mucuna	655
Santonica	655
Santonin	656
Spigelia and its Preparations	657
Chenopodium (Worm-Seed)	657
Oleum Chenopodii	657
Filix Mas (Male Fern)	658
Oleo-resina Filicis	658

	PAGE
Granati Fructus Cortex	658
Brayera	659
Kamala	659
Pepo (Pumpkin-Seeds)	659
Urino-Genital Remedies	660
Oleum Terebinthinæ	660
Copaiba and its Preparations	666
Cubeb and its Preparations	668
Piper	669
Oleo-resina Piperis	669
Capsicum and its Preparations	670
Juniper and its Preparations	671
Erigeron	672
Oleum Erigerontis	672
Buchu and its Preparations	673
Uva Ursi and its Preparations	673
Pareira and its Preparations	673
Chimaphila and its Preparations	673
Scoparius	673
Carota	674
Taraxacum and its Preparations	674
Scilla and its Preparations	675
Petroselinum	677
Polygonum Hydropiperoides	678
Ruta	678
Sabina	679
Cantharis	680
Tinctura Cantharidis	680

PART III.

Topical Remedies	683
Counter-Irritants	683
Rubefacients	683
Sinapis Alba	683
Sinapis Nigra	683
Charta Sinapis	683
Emplastra	684
Linimenta	684
Epispastics	685
Ceratum Cantharidis	685
Ceratum Extracti Cantharidis	685
Charta Cantharidis	685
Collodium cum Cantharide	685
Linimentum Cantharidis	685
Acupuncture	689
Baunscheidtismus	689
Aquapuncture	690
Bloodletting	691
Escharotics	694
Acidum Chromicum	695
Emollients, Protectives, and Demulcents	695
Glycerin and its Preparations	695

	PAGE
Collodium	697
Liquor Gutta-Perchæ	697
Chondrus (Irish Moss)	698
Cetraria (Iceland Moss)	698
Acacia and its Preparations	699
Tragacanth	699
Mucilago Tragacanthæ	699
Sassafras Medullæ	699
Mucilago Sassafras Medullæ	699
Linum (Flaxseed) and its Preparations	700
Ulmus (Slippery Elm)	700
Mucilago Ulmi	700
Glycyrrhiza and its Preparations	700
Poultices	700

A TREATISE
ON
MATERIA MEDICA AND THERAPEUTICS.

SCHEMA.

PART I.—*Modes in which Medicines are introduced into the Organism.*

PART II.—*The Actions and Uses of Remedial Agents:*

Those used to promote constructive metamorphosis.

Those used to promote destructive metamorphosis.

Those used to prevent septic decomposition.

Those used to modify the functions of the nervous system.

Those used to cause some evacuation from the body.

PART III.—*Topical Remedies.*

In this scheme the action of the medicine is followed from its introduction into the stomach, to its exit through the organs of excretion. Some remedies are used solely or chiefly for their influence on the primary assimilation; as, for example, pepsin, the simple bitters. Other remedies, with or without affecting the function of digestion, modify the process of assimilation, either promoting the construction of tissue, or the retrograde or destructive metamorphosis. Iron may be taken as a typical example of the one, and mercury of the other mode of action on the function of assimilation. The therapeutical application of these remedies is based in this conception of their physiological action.

In the group of remedies used to prevent septic decomposition are included those having a destructive action on the minute organisms, or germs of disease. These agents have, also, distinct anti-pyretic effects, and a relation probably exists between the anti-ferment action and the power to reduce febrile heat. As substances having the reactions and toxic activity of alkaloids, and known as *ptomaines*,