

The practice of medicine on Thomsonian principles : adapted as well to the use of families as to that of the practitioner : containing a biographical sketch of Dr. Thomson ... with practical directions for administering the Thomsonian medicines ... and a materia medica, adapted to the work / by J.W. Comfort.

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ROBERT A. HANCE'S
(LATE COMFORT'S)
THOMSONIAN MEDICINE STORE,
WHOLESALE AND RETAIL,
No. 729 MARKET STREET
PHILADELPHIA.

An extensive supply of the medicine recommended in the following pages, a general assortment of Shaker Herbs, and articles connected with the Botanic Drug business, also a supply of Thomsonian and Botanic Books constantly on hand and for sale.

The following PREPARATIONS are neatly put up and accompanied with the necessary directions for use :—

Composition Powder.	Tooth Powder.	Third Preparation of Lobelia.
Spiced Bitters.	Headache Snuff.	Prepared Lobelia Emetic.
Ladies' Spiced Bitters.	Toothache Drops.	Tincture of Lobelia.
No. 4 Bitters.	Healing Salve.	Comp. Valerian Carminative.
No. 3 Powder.	Strengthening Plaster.	No. 6, or Rheumatic Drops.
Conserve of Hollyhock.	Stimulating Liniment.	No. 5 Syrup.
Anti-acid Powders.	Tetter Ointment.	Cholera Mixture.
Injection Powders.	Meadow Fern Ointment.	Cough Syrup.
Nerve Powder.	Nerve Ointment.	Croup Syrup.
Compound Lobelia Pills.	Adhesive Plaster.	Worm Syrup.
Anti Dyspeptic Pills.	Cure-all Salve.	Butternut Syrup.
No. 3, or Anti Canker Pills.	Hair Tonic.	Wine Bitters.

NOTICE.

It cannot but be evident to every one that medicine, to have its proper effect, must be genuine, pure, and uninjured by age or exposure. As well may we expect good results from the use of unwholesome articles of food as from spoiled articles of medicine. Hence it is all important that those who would be benefited by the use of Thomsonian Medicines should look well to their qualities.

These remarks are deemed necessary, as large quantities of Thomsonian Medicine, particularly Composition Powder, Capsicum, Bayberry, and No. 6, are manufactured by Druggists and others, and being composed of bad materials, are unfit for use as medicine.

Persons not particularly interested in advancing the prosperity of the Thomsonian Practice, take advantage of opportunities for working off cheap and damaged articles in the way of Thomsonian compounds, when the fraud is not easily detected except by good judges. In this way essential injury is done the Thomsonian System, and the benefit that would be received from the use of good medicine is not realized.

N. B. Medicine should be kept from the air, and in a dry place.

Concentrated Preparations

OR

ACTIVE PRINCIPLES OF MEDICINAL PLANTS.

Podophyllin,	from Mandrake.
Leptandrin,	" Culver's Root.
Cimicifugin, or }	" Black Cohosh.
Macrotin,	" Aconite Leaves.
Aconitin,	" Tag Alder.
Alnuine,	" American Ivy.
Ampelopsine?	" Dogsbane.
Apocynin,	" Pleurisy Root.
Asclepidin,	" Wild Indigo.
Baptisin,	" Buchu Leaves.
Barosmin,	" Blue Cohosh.
Caulophylline,	" Cerasus.
Cerasine,	" Pipsissewa.
Chimaphillin,	" Colocynth.
Colocynthin,	" Dogwood.
Cornine,	" Turkey Pea.
Corydalia,	" Ladies' Slipper.
Cypripedine,	" Foxglove.
Digitaline?	" Wild Yam.
Dioscorein,	" Corn Snakeroot.
Eryngine?	" Wahoo.
Euonymine,	" Eupator. Agerat.
Eupatoidin?	" Boneset.
Eupatorine?	" Queen of Meadow.
Eupurpurin,	" Am. Colomba.
Fraserine,	" Yellow Jessamine.
Gelseminine,	" Cranesbill.
Geranine,	" American Ipecac.
Gillennine?	" Cotton Root.
Gossypin,	" Frostwort.
Helianthemine,	" Unicorn Root.
Helonin?	" Hops.
Humulin,	" Golden Seal.
Hydrastia Sulp.,	" "
Hydrastine,	" "

Hydrastia mur.,	.	.	.	from Golden Seal.
Hyoscyamine,	.	.	.	" Henbane.
Irisin,	.	.	.	" Blue Flag.
Jalapin,	.	.	.	" Jalap.
Juglandin?	.	.	.	" Butternut.
Lobeline?	.	.	.	" Lobelia.
Menisperm.,	.	.	.	" Yellow Parilla.
Myricin,	.	.	.	" Bayberry.
Panduratin,	.	.	.	" Conv. Pandurat.
Phytolaccin,	.	.	.	" Garget or Poke.
Populin,	.	.	.	" Aspen Poplar.
Prunine,	.	.	.	" Wild Cherry.
Ptelein,	.	.	.	" Wafer Ash.
Rhusin,	.	.	.	" Sumach.
Rumicin?	.	.	.	" Yellow Dock.
Sanguinarina,	.	.	.	" Bloodroot (Alkal).
Sanguinarin,	.	.	.	" " (Resinoid.)
Sanguinarine,	.	.	.	" " (Com'b).
Sanguinarina Sulp.,	.	.	.	" "
Scutellarine,	.	.	.	" Skulleap.
Senecionine,	.	.	.	" Liferoot.
Stillingine,	.	.	.	" Stillingia.
Trilliin?	.	.	.	" Birthroot.
Veratrin?	.	.	.	" American Hellebore.
Verbenine?	.	.	.	" Blue Vervain.
Viburnine?	.	.	.	" High Cranberry.
Xanthoxylin,	.	.	.	" Prickly Ash.

OILS.

- Oil Capsicum (Cayenne, African).
 " Cubeba (Cubeb Berries).
 " Ergota (Ergot).
 " Filix Mas (Male Fern).
 " Lobelia Infl. (Lobelia Seed).
 " Piper Niger (Black Pepper).
 " Stillingia (Stillingia).
 " Xanthoxylum (Prickly Ash).
 " Liriodendron (Yellow Poplar).
 " Santonica (Levant Wormseed).
 " (Essential) Erigeron Can. (Fleabane).
 " " Erethites Hier (Fireweed).

THE
PRACTICE OF MEDICINE
ON
THOMSONIAN PRINCIPLES,

ADAPTED AS WELL TO THE

USE OF FAMILIES AS TO THAT OF THE PRACTITIONER.

CONTAINING

A BIOGRAPHICAL SKETCH OF DR. THOMSON,

PROPOSITIONS ILLUSTRATIVE OF THE PHILOSOPHY OF THOMSONIANISM; A BRIEF
HISTORY OF THE SYMPTOMS, PECULIARITIES, AND GENERAL COURSE OF
DISEASE IN ITS DIFFERENT FORMS AND VARIETIES;

WITH

PRACTICAL DIRECTIONS FOR
ADMINISTERING THE THOMSONIAN MEDICINES,

INCLUDING THE

VARIOUS METHODS OF ADMINISTERING VAPOUR BATHS, EMETICS, &c.

AND

A Materia Medica, adapted to the Work.

BY J. W. COMFORT, M.D.

~~~~~  
SEVENTH EDITION.  
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PHILADELPHIA:
LINDSAY & BLAKISTON.

1867.

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Eastern District of Pennsylvania.

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TO
DR. SAMUEL THOMSON,
THE
PHILOSOPHER IN MEDICINE,
AND
FOUNDER OF THE THOMSONIAN SYSTEM OF MEDICAL PRACTICE,

This Work

IS WITH DUE RESPECT INSCRIBED

BY

THE AUTHOR.

DR. SAMUEL THOMSON

PHYSICIAN IN MEDICINE

OF THE UNIVERSITY OF MEDICAL PRACTICE

OF THE CITY OF NEW YORK

WITH THE HISTORY OF HIS PRACTICE

AND THE AUTHOR

TO THE READER.

THIS work is presented to the public as a *Practical Guide* in the treatment of disease, in accordance with the *principles* of medical science discovered and promulgated to the world by Samuel Thomson.

The author does not claim to have made improvements upon the fundamental principles of the Thomsonian system of practice. Daily observation affords confirmatory evidence that this system is based upon correct principles; and that the remedial means therein employed, are adapted to the cure of every variety of disease that is curable by means of medical treatment. What I have aimed at in the following pages, besides a description of the symptoms and peculiarities of the principal varieties of disease as detailed by medical authors, has been to point out that treatment best adapted to the different forms and stages of disease under various conditions of the system.

In the directions for conducting the treatment, repetitions in relation to preparing medicines have been introduced, which may appear superfluous or unnecessary; but, designed as a plain family guide, it was deemed right to pursue this plan, that the work might be better adapted to answer the purpose intended.

The Practice of Medicine, based upon *correct principles*, needs not the "garb of *mystery*, too often employed to conceal *imperfection*, and to give to *false knowledge* the appearance of *science*." Samuel Thomson, influenced by benevolent motives, made known his medical discoveries and system of practice, without a semblance of disguise. Taught in the school of Nature, he imparted

TO THE READER.

the knowledge thus acquired for the benefit of mankind—an example worthy of a great mind and a philanthropic spirit. The author of this work has endeavoured to follow the example of Thomson in simplifying the Practice of Medicine, and to give such practical information as he has found from experience and observation most essential for the successful treatment of disease in its various forms and phases.

Although some articles of medicine are recommended in this work not used by Dr. Thomson, still I am not an advocate for enlarging the list of medical agents beyond the limits embracing those articles and compounds best adapted to effect all the essential objects required for the eradication of disease, and the restoration of health. Indeed, the more the practice is simplified and restricted to the employment of general remedies, the more successful will it prove. The medicines introduced to the notice of the reader, not mentioned by Samuel Thomson, have been found beneficial for the purposes to which they are recommended to be applied, and others contained in *his* materia medica, regarded as being of a less useful character, have been excluded.

J. W. C.

PREFACE TO THE THIRD EDITION.

A BIOGRAPHICAL sketch of Samuel Thomson has been introduced into the present edition, with a view to give an elucidation of Thomson's Theory and General Principles, upon which his practice is based, in his own language. Adapted to the common-sense understanding of the general reader, his reasonings enforce conviction, to the unprejudiced mind, of the truth of his general doctrines.

The "Principles of Medicine," as presented in the former editions, have been modified, with a view to afford clearer and more extended explanations in relation to the laws of life—the agents and causes which most materially influence their operation, either as supporters or destroyers of vital action; inasmuch as it is from this source of knowledge alone that true medical principles can be conceived of, and correct general rules laid down, for the treatment of disease.

PHILADELPHIA, May 1, 1850.

CONTENTS.

BIOGRAPHY OF DR. SAMUEL THOMSON	Page. 13
PRINCIPLES OF MEDICINE	39

PRACTICE OF MEDICINE.

CHAPTER I.

SECT. I. Ague—Intermittent Fever	55
II. Remitting or Bilious Fever	61
III. Continued Fever—Typhoid, Typhus, Nervous, Conges- tive, &c.	68

CHAPTER II.

Eruptive Diseases.

SECT. I. Small-Pox	79
II. Vaccination—Cow-pox—Kine-pox	87
III. Varioloid—Modified Small-pox	91
IV. Varicella—Chicken-pox—Swine-pox	92
V. Measles	93
VI. Scarlet Fever	96
VII. Nettle-rash—Hives	104
VIII. Erysipelas—St. Anthony's Fire—Rose	105
IX. Shingles	109
X. Scald Head	110
XI. Tetter	112
XII. Itch	115
XIII. Ring-worm	116
XIV. Chafing in children	117
XV. Prickly heat	117

CHAPTER III.

Diseases affecting the Chest and Lungs.

SECT. I.	Acute Bronchitis (<i>Seated Cold</i>).....	118
II.	Chronic Bronchitis (<i>Deeply-seated Cold</i>)	122
III.	Pulmonary Consumption	125
IV.	Asthma, or Phthisic	133
V.	Summer Catarrh, or Cold—Hay Fever.....	136
VI.	Whooping-cough.....	137
VII.	Pleurisy	140
VIII.	Catarrh—Colds—Influenza—Gripp.....	143

CHAPTER IV.

Diseases affecting the Mouth and Throat.

SECT. I.	Croup—Hives	146
II.	Quinsy.....	150
III.	Mumps	152
IV.	Common sore Throat	153
V.	Acute Laryngitis	154
VI.	Aphthous sore Mouth—Infant's sore Mouth	156
VII.	Elongated Uvula—Falling of the Palate	157

CHAPTER V.

Diseases affecting the Stomach and Bowels.

SECT. I.	Colic	158
II.	Cholera Morbus	159
III.	Cholera Infantum—Cholera of Infants	162
IV.	Bilious Colic	169
V.	Colica Pictonum—Painter's Colic	172
VI.	Dysentery	174
VII.	Diarrhœa—Relax	178
VIII.	Peritonitis (<i>Inflammation of the Peritoneum</i>).....	180
IX.	Constipation	184
X.	Dyspepsia—Indigestion.....	187
XI.	Worms in the Stomach and Bowels.....	196
XII.	Piles	201

CHAPTER VI.

SECT. I.	Rheumatism	206
II.	Lumbago—Rheumatism in the Loins.....	214
III.	Gout	215

CHAPTER VII.

Diseases of the Kidneys and Bladder.

SECT. I.	Inflammation of the Kidneys	220
	Chronic Diseases of the Kidneys.....	223
II.	Inflammation of the Bladder.....	224
III.	Diabetes—Excessive flow of Urine	228
IV.	Retention of Urine (<i>Inability to discharge Urine</i>)	230
V.	Stranguary (<i>Difficulty and Pain in voiding Urine</i>).....	234
VI.	Incontinence of Urine (<i>Involuntary flow of Urine</i>).....	236
VII.	Suppression of Urine (<i>The Kidneys ceasing to form Urine</i>).....	238

CHAPTER VIII.

Disease of the Liver.

SECT. I.	Acute Inflammation of the Liver	240
	Chronic Disease of the Liver.....	242
II.	Jaundice	246

CHAPTER IX.

SECT. I.	Apoplexy	249
II.	Paralysis—Palsy	254
III.	Epilepsy (<i>Convulsion Fits—Falling Sickness</i>)	261
IV.	Infantile Convulsions	264
V.	Chlorosis—Green Sickness.....	267
VI.	Hysteria—Hysteric Fits	270
VII.	Fainting.	276
VIII.	Hypochondriasis (<i>Dejection of Mind—Low Spirits</i>)....	277
IX.	St. Vitus's Dance.....	282
X.	Tetanus—Locked Jaw	286
XI.	Hydrophobia (<i>Bite of a Mad Dog or other rabid Animal</i>)	290
XII.	Neuralgia—Tic Douloureux	294

CHAPTER X.

SECT. I. Dropsy	299
1. Ascitis (Dropsy of the Belly)	300
2. Hydrothorax (Dropsy of the Chest)	301
3. Anasarca (Cellular Dropsy)	302
4. Hydrocele (Dropsy of the Scrotum)	306
5. Hydrocephalus (Dropsy of the Brain)	307

CHAPTER XI.

SECT. I. Scrofula	309
II. Goitre	315

CHAPTER XII.

SECT. I. Suspension of Animation from Drowning	317
II. Suspension of Animation from Carbonic Acid Gas	318
III. Suspended Animation from Lightning	319

CHAPTER XIII.

Various Forms of Diseases of the Eyes.

SECT. I. Inflammation of the Eyes from taking Cold	320
II. Rheumatic Inflammation of the Eyes	322
III. Suppurative Inflammation of the Eyes	324
IV. Scrofulous sore Eyes	327
V. Blindness (<i>total or partial</i>)	331
VI. Iritis (Inflammation of the Iris)	333
VII. Styne	336
VIII. Fistula Lachrymalis (<i>Obstruction in the Duct which con-</i> <i>veys the Tears from the Eye into the Nostril</i>)	337

CHAPTER XIV.

SECT. I. Insanity—Mental Derangement	338
1. Mania—General Insanity	340
2. Partial Insanity	341
II. Delirium Tremens—Mania á potu (<i>Craziness from</i> <i>Drinking</i>)	344

CHAPTER XV.

SECT. I.	Ordinary Headach	351
II.	Sick Headach	352
III.	Toothach	356

CHAPTER XVI.

ECT. I.	Earach	358
II.	Running of the Ears	359
III.	Deafness and Dulness of Hearing	362

CHAPTER XVII.

SECT. I.	Palpitation of the Heart	363
II.	Organic, or Structural Diseases of the Heart	365

CHAPTER XVIII.

Discharges of Blood.

SECT. I.	Bleeding from the Lungs	370
II.	Epistaxis (<i>Bleeding from the Nose</i>)	373
III.	Bleeding from Wounds	376
IV.	Bleeding from the Stomach—Vomiting Blood	378
V.	Bloody Urine	381

CHAPTER XIX.

SECT. I.	Cancer	382
----------	--------------	-----

CHAPTER XX.

SECT. I.	Sprains	389
II.	Bruises	391
III.	Severe Shocks from violent Blows or Falls	391
IV.	Wounds of the Scalp	394
V.	Wounds produced by sharp Instruments	398
VI.	Lacerated Wounds	400
VII.	Punctured Wounds from sharp-pointed Instruments	401
VIII.	Wounds of Joints	402

IX.	Burns and Scalds	404
X.	Chilblains	407
XI.	Treatment of Frozen Limbs	407
XII.	Biles	409
XIII.	Carbuncle	410
XIV.	Abscess of the Female Breast	412
XV.	Whitlow or Felon	413
XVI.	Hip Disease	415
XVII.	White Swelling	418
XVIII.	Ulcers	421
1st.	Simple or healthy Ulcer	421
2d.	Unhealthy Ulcer	422

CHAPTER XXI.

Venereal Disease.

SECT. I.	Gonorrhœa	427
	Syphilitic Sore or Chancre	432
	Bubo—Swelling in the Groin	435
	Secondary Symptoms of Syphilis	436

CHAPTER XXII.

SECT. I.	Obstructed Menstruation	439
II.	Treatment of Fluor Albus, or Whites	441

CHAPTER XXIII.

Miscellaneous.

Bee-stings	442
Nervousness—Weak Nerves	442
Polypus of the Nose	444
Cramp in the Legs and Feet	445
Prolapsus Ani—Protrusion of the Bowel	446
Hernia, or Rupture	447
Strangulated Hernia	447

CHAPTER XXIV.

Epidemic Cholera—Asiatic Cholera	450
--	-----

THOMSONIAN COURSE OF MEDICINE.

General Directions for administering a Course of Medicine	461
---	-----

Blood-letting	471
Hot-air or Vapour Bath	474
Partial Steaming	481
Warm-water Foot Bath	482
Of the utility of Lobelia Emetics in the Cure of Disease in general	482
Of the use of Cathartics, or Purgative Medicines	489
Injections or Enemas	495

THOMSONIAN MATERIA MEDICA.

Lobelia Inflata	501
Preparations of Lobelia	505
Third Preparation of Lobelia	506
Compound Lobelia Pills	508

STIMULANTS

Which raise and sustain Vital Action, and assist the Efforts of Nature to remove Disease.

Capsicum—Cayenne Pepper	510
Thomson's Composition Powder	514
Black Pepper	515
Ginger	515

ASTRINGENTS.

Thomson's No. 3, or Medicine for Canker.

Bayberry (<i>Myrica Cirifera</i>)	517
Upland Sumac (<i>Rhus Glabrum</i>)	521
White Pond Lily (<i>Nymphia Odorata</i>)	522
Wild Red Raspberry (<i>Rubus Strigosus</i>)	522
Witch Hazel (<i>Hamamelis Virginiana</i>)	523
Gallæ (Galls)	523
Evan Root (<i>Guem Rivale</i>)	523

Marsh Rosemary (<i>Statia Limonium</i>)	523
Dewberry (<i>Rubus Procumbens</i>)	524
Crow-foot—Cranes Bill (<i>Geranium Maculatum</i>)	525
Beach-drop (<i>Orbanche Virginiana</i>)	525
Alum Root (<i>Heuchera Americana</i>)	525

TONICS—BITTERS

To Strengthen the System and Promote Digestion.

Peruvian Bark (<i>Cinchona Officinalis</i>)	526
Quinine	528
White Aspen and Black Aspen Poplar (<i>Populus Tremuloides</i> , and <i>Populus Grandidentata</i>)	529
Balmomy (<i>Chelone Glabra</i>)	529
Barberry (<i>Berberis Vulgaris</i>)	530
Golden Seal (<i>Hydrastis Canadensis</i>)	530
Virginia Snake-Root (<i>Serpentaria Virginiana</i>)	530
Centuary (<i>Chironia Angularis</i>)	531
Red Dog-wood—Red Willow (<i>Cornus Sericea</i>)	531
Gentian	531
Wild Cherry (<i>Prunus Virginiana</i>)	532
Quassia	532
Tulip Poplar (<i>Liriodendron Tulipifera</i>)	533
Columba	533
Thoroughwort—Boneset (<i>Eupatorium Perfoliatum</i>)	533
Yellow Root (<i>Xanthoriaza Apüfolia</i>)	533
Chamomile (<i>Anthemis Nobilis</i>)	533
Myrrh	534
Thomson's No. 6, or Rheumatic Drops	535
No. 5 Syrup, or Restorative Cordial	536
Unicorn (<i>Helonias Dioicia</i>)	537
Bitter Almonds, Peach-Meats, and Cherry-Stones	538
Wine Bitters	538
Spice Bitters	538
Ladies' Spice Bitters	539
Conserve of Hollyhock	539
Wormwood	540
Bitter Root—Indian Hemp—Wandering Milkweed (<i>Apacynium An- drosemifolium</i>)	540

NERVINES

To quiet Restlessness, calm Nervous Agitation, and promote Sleep.

American Valerian (<i>Cypripedium Humile, pubescens, parviflorum, condidum and spectabile</i>)	541
Scull-cap (<i>Scutellaria Lateriflora</i>)	541
Hops	542
Garlic	542

Carbonate of Ammonia	543
Camphor	544
Oil of Turpentine	545
White Turpentine	547
Oil of Amber	547
Oil of Horsemint	547
Oil of Juniper	548
Oil of Peppermint	548
Oil of Anise-seed	548
Oil of Caraway	548

VEGETABLE BALSAMS.

Balsam Copaiva	549
Balsam Tolu	549
Balsam Fir	550

MISCELLANEOUS MEDICINES.

Pennyroyal	550
Ditany	550
Catnip	551
Hoarhound	551
Scabious (<i>Erigeron Philadelphicum and E. Canadense</i>)	551
Honey	551
Pipsissewa (<i>Pyrola Umbellata</i>)	552
Cleavers	552
Burdock	552
Cubebs	552
Prickly Ash (<i>Zanthoxylum Fraxineum</i>)	553

Sarsaparilla	553
Purple Archangel (<i>Lycopus Virginicus</i>).....	555
Guaiacum Wood	555
Precipitated Carbonate of Iron	555
Tansy	556
Slippery Elm (<i>Ulmus Fulva</i>)	556
Yellow Dock	556
Strengthening Syrup	557

ACIDS.

Vinegar	557
Lemon-Juice	558
Elixir of Vitriol	558

ALKALIES—ANTI-ACIDS.

Super-carbonate of Soda	558
Bi-carbonate of Soda.....	558
Sal æratus	559
Hickory Ashes	559
Charcoal	559
Lime-water	561
Prepared Chalk.....	561

Stimulating Liniment	562
Ward's Paste	562

COUGH MIXTURES.

Cough Powder.....	564
Garlic Syrup	564
Oxymel of Garlic	564

VOLATILE LOTIONS AND LINIMENTS.

Granville's Lotion	565
Ammonia Liniment	565
Camphor Liniment	565
Soap Liniment	565

CONTENTS.

xi

Simple Cerate	565
Basilicon Ointment.....	566
Gum Elastic	566
Tar Ointment	566
Tar Water.....	566
Thomson's Salve	567
Astringent Ointment.....	567
Persimmon Ointment	567
Pitch Plaster.....	567
Turpentine Plaster	567
Gum Hemlock Plaster	567
Mustard Plaster	568

POULTICES.

Emollient and slightly Stimulating Poultices.....	568
Stimulating and Astringent Poultices.....	569
Mallows Poultice	569
Catnip Poultice.....	569
Charcoal Poultice.....	569
Yeast Poultice	569
Myrrh Poultice.....	570
Wild Indigo Poultice	570

Gum Arabic	570
Cider.....	571
Arrow-root.....	571
Barley Water.....	571
Milk Porridge	572
Oat Meal Gruel	572
Essence of Beef, or Beef Tea	573
Chicken Tea.....	573
Crust Coffee	573
Panada	573
Mutton Broth	574
Wine Whey	574
Egg Soup	574
Sugar	574
Drying Roots and Herbs	575

POISONS AND THEIR ANTIDOTES.

CONCENTRATED ACIDS.

Nitric and Oxalic Acids	576
Muriatic and Sulphuric Acids.....	576
Prussic Acid	576

CONCENTRATED ALKALIES.

Caustic Potash, Caustic Soda, pure Volatile Alkali, and Quicklime..	576
---	-----

Creosote	577
Corrosive Sublimate	577
Arsenic	577
Antimony	578
Copper	578
Lunar Caustic—Nitrate of Silver	579
Nitre—Saltpetre	579
Alcohol.....	579
Poisoning from the Fumes of Lead.....	580
Swamp Sumac (<i>Rhus Vernix</i>), Poison Vine, Poison Oak	580
Opium	580
Belladonna—Deadly Nightshade.....	580
Strychnia—Nux Vomica.....	581
Datura Stramonium—Gympson Weed	581

Purified Animal Charcoal an Antidote to all Vegetable Poisons....	582
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BIOGRAPHICAL SKETCH

OF

SAMUEL THOMSON.

HISTORY furnishes many striking evidences of the fact, that those who discover new and important truths in science, however beneficial to mankind, always meet with opposition and persecution; more especially when the new discoveries come in collision with theories and doctrines that have received the sanction of the reputedly *wise* and *learned*.

Why was the great Newton persecuted, but for the fact that his discoveries proved the astronomical theories of that age to be erroneous?

Galileo made the discovery that the earth revolved round the sun; but this new doctrine came in collision with the opinions of the holy fathers of the church; and to avoid persecution, if not martyrdom, he was compelled to denounce, as damnable heresy, what he knew to be truth.

Hervy, who discovered the circulation of the blood, was denounced, and otherwise basely treated, by the medical profession.

Jenner, after having practised vaccination thirty years, and having furnished abundant evidence in proof of the protective power of vaccination against small-pox, made an appeal to his medical brethren to aid him in introducing the practice into use, and was treated by them with contempt and ridicule.

And what was the course pursued by our American Congress, when Fulton made application to government for means to aid him in his endeavours to prove the practicability of propelling boats by steam-power? A resolution was passed by that body of wise men, casting the reflection upon Fulton of being affected with insanity.

With these historical facts before us — and hundreds of others there are of a like character — what, but calumny and persecution, could be anticipated from the medical profession towards the founder of the Thomsonian theory and system of practice, directly opposed, as it is, to their theoretical dogmas and general practice?

Endowed with a deep, searching intellect, a benevolent spirit, strong moral honesty, and unbounded firmness, Thomson was well suited for the task which Providence allotted to him. Labouring with the philanthropic desire of benefiting his fellow-man, by removing the veil of darkness and imposition, which had so long been thrown over the medical science of the world, he sacrificed every thing at the shrine of duty. Few are aware of the opposition he had to encounter; received at the very outset with taunts and persecutions, stigmatised with all the opprobrious names that human ingenuity could invent, borne down, oppressed, and at one time incarcerated in a loathsome dungeon, still he nobly persevered in the good work. Manfully he met the raging storm; singly and alone, except when now and then cheered by the enlivening influence of a few congenial friends, he toiled undauntedly on, with a determination to effect the grand object he had in view: that of making known to the world a safe and effectual system of medical practice.

The history of Thomson affords a striking example of the fact that education does not *always* make the man. It shows from what an humble source this great system of medicine originated, whose influence is not only being felt in the United States, but even in the Old World. Yes, the name of Samuel Thomson, the poor, unaccomplished, plebeian farmer-boy, like that of our great philosopher Franklin, will be, in time to come, as familiar in the mouth of the Frenchman, German, and Englishman, as it is in that of the American.

John Thomson, the father of Samuel Thomson, was born in Northbridge, Worcester county, Massachusetts. About the year 1768 he moved his family to the township of Alstead, Cheshire county, New Hampshire. This part of the county was in a wild state, and there were no roads, and the nearest house was a mile distant. They were very poor, with nothing to commence the world except a spirit of energy and industry.

In such a wilderness, and under such circumstances, on the 9th of February, 1769, Samuel Thomson was born. He was the fourth

child, and the youngest of three brothers, there being one sister still younger than himself.

Such were the pressing necessities of the family that they set him to work while yet a mere lad. His father took him into the fields and gave him employment, and even at this tender period, before the mental faculties, as it were, had yet become developed, he evinced striking symptoms of the peculiar bent of his mind. "I was," says he in his Narrative, "very curious to know the names of all the herbs which I saw growing, and what they were good for; and, to satisfy my curiosity, was constantly making inquiries of the persons I happened to be with for that purpose. All the information I thus obtained, or by my own observation, I carefully laid up in my memory, *and never forgot.*" Such precocity is by no means common. An old doctress, who practised entirely with plants, attended the family, and on account of the benefits they had received from her skill, they became very much attached to her. The lad took advantage of the opportunity thus offered, and used to accompany her in her rambles to collect roots and herbs; he would ask their names, and to what particular diseases they were applied; he would also ascertain their taste and appearance, and thus he acquired a knowledge of their different qualities and uses.

Thomson had but a very limited share of school-learning, deriving knowledge chiefly from his own observation. Possessed, however, of strong powers of reasoning and reflection, he became what may be termed an original thinker. To learn the medical properties and uses of plants and herbs, was the early natural bent of Thomson's mind. On chewing some of the leaves and pods of a certain herb, which proved to be the *Lobelia Inflata*, the sensations produced by it were so remarkable that it made a lasting impression upon the mind of young Thomson, and he frequently gave it to those he was in company with merely through diversion. "While in the field at work," says he, "I often found this herb, and used to give it to those who worked with me to see them spit, and sometimes vomit; but I never observed any bad effects produced by it, which simple experiments eventually led me to observe the value of it in disease."

It was upwards of twenty years from the time that Thomson first observed the singular effects produced upon the system by chewing the lobelia plant, before it occurred to him that it possessed any

valuable medical powers. "Mowing in the field," he observes, "with a number of men, I cut a sprig of it (*Lobelia*) and gave it to the man next me, who eat it; when we got to the end of the piece, which was about six rods, he said that he believed that what I had given him would kill him, for he never felt so in his life. He was in a profuse perspiration, trembled, and was pale as a corpse. He laid down and vomited freely several times. I then helped him into the house, and in about two hours he ate a very hearty dinner, and in the afternoon was able to do a good half day's labour. He afterwards told me that he never had any thing to do him so much good before; his appetite was remarkably good, and he felt better than he had done for a long time. This circumstance gave me the first idea of the medical virtues of this plant, which I have since found by twenty years experience, in which time I have made use of it in every disease I have met with to great advantage, and regard this discovery as one of great importance."

But for this apparently accidental discovery of the medical virtues of *lobelia*, Thomson could never have completed his *System of Medical Practice*. No other article, possessing qualities adapted to effect so many important purposes in the treatment of disease, is to be found either in the vegetable or mineral kingdom.

Thomson's practice, at the first, was purely empirical, not having any general principles to govern him in applying remedies. It was not to the writings of medical theorists that Thomson recurred for instruction. The book of Nature was his tutor;—he studied the laws which govern the elements, and, by his great power of tracing effects to causes, finally gained a knowledge of those general principles in relation to the laws of life, and the nature and cause of disease, which form the basis of the 'Thomsonian System of Medicine.

Previous to the discoveries of Samuel Thomson, there never had been a system of medicine established upon fixed general principles. The regular practice has ever been fluctuating, and at this day not less so than formerly. Not that the laws which govern the human constitution are changeable, for nature is governed by fixed general laws, but the continued changing of the theories of medicine; and the uncertainty of the regular practice arises from the want of a knowledge of established first principles, without which all experience in medicine is of little use. No one can demonstrate a proposition in geometry without being acquainted with the first prin

ciples of that science ; neither can disease be treated correctly and scientifically, unless the rules for conducting the treatment be based upon correct first principles. However learned a man may be, if he has imbibed erroneous views with regard to the nature of disease, his practice will be erroneous. Had Samuel Thomson received a regular medical education, he too, probably, like many in the profession, would have discovered the want of established medical principles, and deplored the imperfections of the practice without adding any useful knowledge to the science.

Shortly after the death of his mother, which occurred in 1790, Thomson was seized with an attack of the same disorder. He refused to employ any of the regular medicines, urging that he preferred to die a *natural death*. The doctor endeavoured to frighten him into a compliance with his advice ; but he obstinately refused, saying that he had observed the effect of the medicines on his mother, that she constantly grew worse under the operation of them, and he had no desire to hazard it himself. He prescribed his own remedies, and recovered.

Thomson was married, on the 7th of July, 1790, to a Miss Susan Allen, and in about a year his first child was born.

At the time he had obtained a family, we still find him engaged in enlarging his store of knowledge of the vegetable kingdom, and in close and arduous inquiry to discover the most effectual means of counteracting disease. Although Thomson was a sceptic as to the efficacy of the usual mode of practice, still, in case of illness in his family, he applied to a regular physician, not having sufficient confidence in his own ability, at this time, to induce him to assume so great a responsibility. Mrs. Thomson being subject to frequent violent attacks of sickness, he prevailed on the family physician to move into a house on his farm, in order that he might be near in case of emergency.

Thomson informs us, in his "Narrative," that at this time he had not the most distant idea of ever engaging in the practice of medicine, further than to administer in his own family ; but that during the doctor's residence on his farm, which was about seven years, there was sickness in his family almost all the time. "Since I have had more experience," says he, "and became better acquainted with the subject, I am satisfied, in my own mind, of the cause. Whenever any of the family took a cold, the doctor was sent for, who would always either bleed or give physic. Taking

away blood reduced the heat and gave power to the cold they had taken, which increased the disorder, and the coldness of the stomach caused canker (unhealthy secretions); purging draws the determining powers from the surface inwardly, weakens the power of inward heat, and tends to fasten disease in the system.

“Again, other consequences of such treatment are, that perspiration ceases, because internal heat is the sole cause of this important evacuation, and a settled fever may take place, which will continue as long as the cold keeps the upper hand. My experience has taught me that by giving hot medicine, the internal heat was increased; and by applying the steam externally, the natural perspiration was restored; and by giving medicine to clear the stomach and bowels of canker, till the cold is driven out, and the heat returns, which is the turn of the fever, they will recover the digestive powers, so that *food* alone will keep the heat where it naturally belongs, for food is the fuel that sustains the vital fire, or life of man.”

It was in a case of extreme illness in his second daughter, after the physician had declared he could do no more, that Thomson, in the last extremity, driven by necessity to the resources of his own powerful mind, conceived the idea of applying steam, or vapour, to the body, for the purpose of eradicating disease; and by his trial he was fully confirmed in the belief of its utility. In the case of the child, the first experiment afforded relief, and he continued to apply it at frequent intervals for the space of a week, using, at the same time, cold water upon the face and body, as the condition of the patient appeared to require, in order to suppress the outward heat. By these means, and giving some simple warming medicines internally, he succeeded in curing one of the most desperate cases, probably, ever restored by medical skill.

Mrs. Thomson being in a critical condition after confinement, and the family physician being away, and no other within six miles, Thomson, after obtaining the consent of his wife, determined on making a trial of the steam-bath in this case. “I gave her some warm medicine to raise the inward heat, and then applied the steam, which was very much opposed by the midwife; but I persisted in it, according to the best of my judgment, and relieved her in about an hour, after she had lain in a critical situation four hours without any thing being done.”

Subsequently Thomson's family were attacked with measles,

and two of the children had the disease very severely; in one the eruption struck in and a state of stupor ensued. In this case, steam was applied, which, together with the use of warming teas, succeeded in bringing the disease out, and the child recovered. In the other case, the lungs became severely affected, threatening consumption. The treatment, as used in the other case, was applied, but proved insufficient to effectually relieve the lungs, when the thought occurred to Thomson to make a trial of the emetic herb (*lobelia*), which relieved the symptoms, and the patient soon got well.

The good success which attended Thomson's plan of treating disease, began to be noticed by his neighbours, and induced some to apply to him for relief in sickness, whilst others spoke of his practice with sarcasm and ridicule. His mind, however, was not constituted to be shaken in its purpose by the envious or malicious, or by the foolish stories of idle, prating gossips. When called, he attended, and often acted the part of both doctor and nurse. Finally the applications for his services became so frequent that his time was almost wholly occupied in attending upon the sick. "I began," says he, "to be sent for by the people of this part of the country so much that I found it impossible to attend to my farm and family as I ought; for the cases I had attended, I had received very little remuneration, not enough to compensate me for my time, and I found that my duty to my family required that I should either give up the practice of medicine altogether, or make it my regular business. I consulted with my wife, and asked the advice of my friends what was best for me to do. They all agreed that, as it seemed to be the natural turn of my mind, if I thought myself capable of such an important undertaking, it would be best to let my own judgment govern me, and do as I thought best. I maturely weighed the matter in my mind, regarding the practice of medicine as the most responsible calling any one could engage in; yet my inclination for the practice was so strong that it seemed impossible for me to divest my mind of it."

This was the critical period in Samuel Thomson's life; the turning point of his history. The decision to be made was of momentous consequences to mankind, for upon it devolved the fate of a system of medical practice, entirely new, based upon correct principles, and never before conceived of;—a system of treatment embracing the agents and means required to cure disease, not only

in the hands of the scientific, but, founded in truth, and consistent in itself, both in theory and practice, particularly well adapted to the common-sense understanding of intelligent people.

On the one hand were presented to his mind recollections of the difficulties and trials he had met with in the desperate cases that had come under his charge; the weight of responsibility that must rest upon him; his want of learning, and ignorance of the ways of the world—unknown and unacquainted with mankind. On the other hand, he was urged on by the almost irresistible promptings of his genius. Finally he determined “to make use of that gift which, I thought,” says he, “the God of nature had implanted in me.”

“I thought of what St. Paul says in his Epistle to the Corinthians, concerning the different gifts by the same Spirit: some had the gift of prophecy; another, the gift of healing; to another, the working of miracles. I am satisfied, in my own mind,” he observes, “that every man is made and capacitated for some particular pursuit in life, which, if he engages in, he will be more useful than he would be in following a calling or profession that was not allotted to him by his Maker. This is a very important consideration for parents, and they should not compel their sons to learn trades or professions contrary to their inclinations and the natural turn of their minds; for it is certain, if they do, they never can be useful or happy in following them.”

Possessed of extraordinary powers of originality of thought, free from the bias of education or preconceived opinions, the mind of Thomson was prepared to receive instruction from the teachings of Nature. Like the great Newton, he adopted a just method of reasoning, extending his inquiries to first principles. Already he had acquired a knowledge of the medical qualities and uses of many important medicinal agents; and had tested and proved the efficacy of the animating, life-giving power of *heat*, as made manifest to his understanding by observing its effects upon his own person and upon all animals and vegetables; and thus led him to regard this element as the main-spring of vital movement—the “principle of life.”

Embarked on a voyage of discovery, in which his mental powers were wholly and earnestly employed, Thomson suffered no fact to escape his observation, which could in any way assist him in obtaining knowledge in relation to the nature and causes of disease. The result of his inquiries, after years of observation and reflection,

was the conviction that cold, or loss of heat, was the general cause of disease; and that, however produced, there is, in all cases of disease, a lessening of the power of *internal* heat. The truth of these convictions was still further enforced upon his mind by the beneficial effects produced by his method of treatment.

Lobelia emetics he had found to prove effectual in relieving the stomach of foulness, and that they might be employed as a *general remedy* in disease, with great benefit to the patient.

We also find that Thomson, at this time, entertained some original ideas in relation to what he terms "*Canker*"—its cause and remedy.

His experience in the treatment of measles, scarlet fever, and small-pox, afforded convincing evidence, to his mind, that these different forms of disease all partake of the same nature, except that in the latter there is a stronger tendency to canker and putrefaction; and that they require the same general plan of treatment, regardless of the name of the disease.

In relation to medical education, Thomson remarks:—"Whether I should have been more useful had it been my lot to have had a medical education, and learned the profession in the fashionable way, is impossible for me to say; probably I should have been deemed more honourable in the world; but I am inclined to think that my mind would have been guided by the false theories and doctrines of the day, and led away from *Nature*, and, in this way, been prevented from making the discoveries which, I believe, will prove a great blessing to mankind. * * * I wish my readers to understand that I do not intend to convey the idea that learning is not necessary and essential in obtaining a knowledge of any profession; but a man may be college-bred, and yet possess very little useful knowledge; and I also contend that natural genius may enable a man to become useful, and even great in his profession, in any science, without the advantages of a classical education. Some of the greatest philosophers, statesmen, physicians, and divines, the world has ever known, have been self-taught."

After Thomson had come to the determination to give up all other business, and devote his time wholly to the practice of medicine, "I found it necessary," says he, "to fix upon some system or plan for my future government in the treatment of disease; as my practice had been the result of accident, as it were, and the

necessity arising out of the particular cases that came under my care, without any fixed plan. I deemed this necessary, not only as a guide to myself, but that whatever future discoveries I should make might be so arranged that my whole system could be easily taught to others, and preserved for the benefit of the world. I had no assistance other than my own observation and reflection, unaided by learning or the opinions of others. I took nature for my guide, and experience for my instructor; and, after considering every part of my subject, came to certain conclusions concerning disease and the whole animal economy, which the experience of more than forty years has perfectly satisfied me is correct. My practice has invariably been conformable to the general principles upon which my system is founded; and in no instance have I had reason to doubt its correctness or applicability to every variety of disease incident to the country.

“That all diseases are the effect of one proximate cause, and should be treated upon the same general principles, is the foundation upon which I have erected my fabric, and which I shall endeavour to explain in as concise a manner as possible, that my readers may be convinced of its correctness.”

Thomson, in his Theory, assumes the following grounds or positions:—

1. That heat is life, and cold, death; or, in other words, that heat is the cause of life and motion, and the absence of heat is death.

2. That the constitutions of all mankind are governed by certain fixed laws.

3. That cold, or loss of heat, is a universal cause of disease; and that in all cases of disease, however produced, there is a lessening of the power of *internal* heat.

If the stomach become cloyed with too much food, or disordered by food of an unsuitable kind, and digestion thereby suspended, the natural temperature of the body will be lowered, and the patient will become chilly, even in a warm temperature.

4. That when the power of inward heat is lessened, perspiration ceases, and the system becomes thereby diseased.

5. That, as heat or warmth is a friend, and cold an enemy, the means employed for curing disease should be such as will strengthen the friend, in order that the enemy may be overcome.

6. That all diseases to which the human body is liable are alike

in principle ; that is, in all cases, and under all circumstances of disease, there is, to a greater or less degree, a weakened condition of the living power, or principle of life.

7. That fever is not disease, but the manifestation of nature's efforts to clear the system of disease. In the language of Thomson, "What is commonly called fever is the effect, and not the cause, of disease. It is the struggle of nature to throw off disease."

8. That coldness, or loss of inward heat, produces *canker*, or unhealthy secretions, on the mucous membrane or lining of the stomach and bowels, which prevents the digestion of food, and keeps the stomach and bowels cold.

9. That whatever will increase the internal heat, remove obstructions from the system, restore the digestive powers of the stomach, and produce a natural perspiration, is universally applicable in all cases of disease, and therefore may be considered as a general remedy.

Convinced, by a long course of observation, of the truth of the above positions, "my next business," says Thomson, "was to ascertain what kinds of medicine and treatment would best answer the purpose, in conformity to these general principles;" in other words, to discover the best way to aid and assist nature to remove disease, and restore health.

"The first and most important consideration was to find a medicine that would establish a natural internal heat, so as to give nature its command over the body. The emetic herb (No. 1), *Lobelia inflata*, I found would effectually cleanse the stomach, and aid in raising the heat and promoting perspiration ; but the system would not hold it (*the heat*) a sufficient length of time to effect the desired object. It was like a fire made of shavings—a heat for a short time, then it would go out.

"After much trouble and experience, and trying every thing within my knowledge, I at length fixed upon the medicine which I have called No. 2, Cayenne pepper (or capsicum), for that purpose ; and, after many years' experience in its use, I am perfectly convinced that it is the best thing that can be used to hold the heat in the system until the stomach and various avenues of the body are cleared of their obstructions, so as to produce a natural digestion of the food, which will nourish the body, establish perspiration, and restore the health of the patient. I found it to be perfectly safe

in all cases, and have never known any bad effects to arise from its use.

“My next grand object was to get something that would clear the stomach and bowels from canker, or the white, feverish coat that was attached to the mucous membrane, which is more or less affected by it in all cases of disease to which the human family are subject. Canker and putrefaction are caused by cold, or want of heat; for whenever any part of the body is so affected with the cold as to overpower the natural heat, the tendency to putrefaction commences; and if not checked by medicine, or if the natural constitution is not strong enough to overcome its progress, it will communicate with the blood, when death will end the contest between the heat and cold, or the powers of life and death, by deciding in favour of the latter. In this case, too, as in the others, I have used a great variety of articles which are useful in removing this feverish coat or canker; but my preparation called No. 3, is the best for that purpose of any remedy that has come within my knowledge, though many other things may be used to good effect, which will be described in their appropriate place, under the head of compounded medicines.

“My general plan of treatment,” he observes, “has been, in all severe, or seated cases of disease, to cleanse the stomach, by giving an emetic, or No. 1, and produce as great an internal heat as I could, by the use of Cayenne pepper, or other stimulants under the head of No. 2; and, when necessary, made use of the steam bath, in which I always found a great benefit, especially in fevers. After this I have given medicine to clear the stomach and bowels of canker (morbid secretions); and in all cases where the patient had not previously become so far reduced as to have nothing to build upon, I have, by persevering in my general plan of treatment, been successful in restoring the patient to health.”

In Dr. Thomson's Theory and System of Practice, we find simplicity, consistency, and a kind of philosophical reasoning well suited to the common-sense understanding of the general reader. Thomson's medical doctrines, however, are too simple for those educated physicians who, as Thomson expresses it, “have had all the common sense forced out of their heads by the false knowledge they get at college.” Neither have his doctrines been regarded as scarcely worth a passing notice by those medical theorists who, “ambitious for fame, have abandoned the book of Nature, and,

scorning to receive the truth from her unerring teachings, have soared away into the airy regions of speculation; and there, far removed from the fountain of true science, theory after theory has been ushered before the world, most of which, however, have barely survived their inventors."

The following extracts are taken from "Robinson's Lectures."

"After bewailing the defects and disasters of medical science, Dr. Rush consoled himself with the animating prospects of that hope, which he often proclaimed from his desk, that the day would arrive when medical knowledge should have attained to that apex of perfection that it would be able to remove all the disease of man; and leave not for life a single outlet, a single door of retreat, but old age; for such is my confidence, said he, in the benevolence of the Deity, that he has placed on earth remedies for all the maladies of man. I remember still, with a thrill of love and gratitude to that admired and venerable professor, with what enthusiasm and transport, and prophetic vehemence, he used to pronounce that sentiment at the close of his lectures. His confidence in the benevolence of that Deity was boundless; and his own soul largely partook of that divine character of the Almighty. We shall not, shortly, look upon his like again. *Quam de invenient parem?*

"The influence of this hope, so feelingly expressed, and deeply felt by every noble mind, that all diseases shall yet yield to the power of medicine, in its perfect state, ought to be abundantly sufficient to determine us to examine with candour every new discovery that is presented by the care and experience of man, whatever may be his state or condition in life. Great men are not always wise; and the very meanest is not beneath the care of a kind Providence, nor the influence of his holy Spirit.

"'For thy kind heavenly Father bends his eye,
On the least wing that flits across the sky.'

"Dr. Thomson was not brought up in the schools and colleges of the learned. But he was trained in one far superior for eliciting the powers of an original mind, the severe school of adversity, that perilous ordeal where the feeble-minded perish; but the great of heart come out of the fires, purified and resplendent in ten-fold brightness. They rebound by the very impulse and pressure of the blow that was designed to crush them, and reach their elevation in the sky; to refute an objection made against the goodness of

Divine Providence, that the virtuous were often not only destitute of the blessings of fortune, but of nature, and even the necessities of life."

Again, the same writer observes:—

"Those who devote themselves to a new theory; who have to stand alone in defence of new truths, and to combat alone the doctrines and practice of the self-reputed leaders in medical science, require a large portion of the self-denying spirit of the Grecian sage. And Dr. Thomson seems to have been admirably endued with that supreme devotion to his object which has brought the martyr to the stake, and the patriot to pour out his blood on the field of battle. I cannot help uniting with Dr. Thomson in his own sentiment, that Providence must have presided over his labours, with an especial care, for the good of mankind."

Thomson pursued, with assiduity and firmness, his system of practice, and his fame began to spread. The greater part of the cases he was called to were of a deeply-seated character, and often such as had been abandoned by the regular doctors; but when he undertook a case, he persevered in the treatment, even to the sacrifice of not only his rest, but his health; and his practice was successful to that degree, that, in many instances, patients were cured in so short a time, that they came to the conclusion, afterwards, that very little had ailed them.

In relation to the treatment Thomson received, he says:—

"While I was attending those who were sick, and relieving their distress, they were ready to flatter, and give me great credit for my practice; but after I had nearly worn myself out in their service, they began to think it was not done in a fashionable way; and the doctors made use of every means to ridicule my mode of treatment, for the purpose of more successfully maintaining their credit and ascendancy with the people. This kind of treatment I did not then understand so well as I do now; as I have since learned, from hard experience, how to appreciate reports of doctors, when excited on account of the restoration of their old, abandoned patients to health, by one who does not believe or practise in their peculiar way.

"The words 'quack' and 'quackery,' when used by the doctors against me, effected the object intended, which was to prejudice the people against my practice; but I would ask the candid and reflecting part of the community, which is the greatest quack, the

one who relieves their infirmities by simple and safe means, or he who administers poisons and breaks down the constitution of the patient, and leaves *death* to relieve them from pain?"

The following incident, related by Dr. Thomson, occurred on his meeting with a doctor at the funeral of a young man who had died very suddenly. On entering the room, the physician, who had attended the young man, addressing Dr. Thomson, said, "I understand you have a patent to cure such disorders as that," pointing to the corpse. I said no; and then intimated what I thought of him. He put on an air of great importance, and said to me, "What can you know about medicine? You have no learning; you cannot parse one sentence of grammar." I replied that I did not know that grammar was made use of as medicine; and if the treatment this young man had received was according to grammar, I had no inclination to become acquainted with it." The doctor became enraged, and threatened to horsewhip Thomson, who replied that "he might do what he pleased, provided he did not poison him with his grammar."

Desirous of introducing his system of practice in other parts, and to give himself and family some respite from the toils of a laborious practice, he left home and went to New York, to ascertain the character of the yellow fever, as it was prevailing there at this time. "I had been," he observes, "in constant employment among the people in my neighbourhood and the adjoining towns and country for four or five years, and had been very successful, not having lost one patient during the whole time. My house had been constantly filled with patients from all parts of the country, for which I had received little or no compensation for my services. Myself and family were broken down and worn out with nursing and attending to them night and day, so that I was obliged to leave home to free myself and family from so heavy a burthen."

In the course of a few days after his arrival at New York, Thomson applied to the mayor of the city, and also to the board of health, to ascertain whether or not an opportunity would be afforded him to try the effects of his medicine and system of practice on the prevailing fever. They informed him that he could practise, but that he could obtain no compensation for it by law.

During his stay in New York, several cases of the disease came under his immediate care, and the practice proved successful, effecting speedy cures. The first case he attended was a Mr.

McGowan, the teacher of a Catholic school, and an acquaintance of the man with whom he boarded. He pursued his usual course of treatment, for increasing the power of internal heat, cleansing the stomach and bowels, and producing perspiration. The medicine given caused severe pain and distress, so much so that the friends of the patient became alarmed; but Thomson told them that this was a favourable symptom, as it was the consequence of returning sensibility; or, in other words, the heat contending with the cold; the patient having been in a cold and insensible condition previously. After the patient had remained in this condition about an hour, perspiration ensued, and he became easy; and on the following day was able to be about, and soon recovered his health under the treatment.

After three months' absence from home, during which period Thomson had many convincing proofs of the truth of his theory and of the efficacy of his system of practice, he returned to his family, and was often called on to practise in the neighbourhood; but he declined most part of these applications, in consequence of the ill treatment he had formerly received.

He continued to visit different parts of the country for the purpose of collecting medicine and introducing his plan of treatment. The success he met with was altogether unprecedented; curing case after case regarded as incurable.

The outset of Thomson in the medical world was, when we take his success as a criterion, exceedingly flattering; but when we regard the treatment he received from the hands of others, it was far from encouraging.

During a visit to Newburyport, he came in contact with a Doctor French, a vicious, unprincipled man, who, in consequence of Thomson's professional prosperity, became his bitterest enemy. He had restored patients that Dr. French had pronounced incurable; and each new achievement of Thomson's engendered increased hatred. He opposed him, insulted him, denounced him as a murderer, in fact did every thing in his power to injure his reputation; but all was unavailing; and it was not until he had threatened to shoot him, that Thomson considered himself forced to take legal action upon the matter. He deemed it necessary for his own preservation to compel him to suffer the punishment of the law. Still his malice continued unabated.

But he was not alone and friendless in his difficulties; a few

noble spirits upheld and aided him in his time of trouble, and, by their praiseworthy actions, have made themselves entitled to the everlasting gratitude of every true Thomsonian; among the rest, pre-eminent for his exertions in behalf of Thomson, we must not pass over in silence the name of Judge Alexander Rice, whom he thus mentions:—"For all his time and trouble, through the whole of my persecutions and trials, and for his kindness and friendship on all occasions, I shall ever consider myself under the greatest obligations." A man who would thus bravely stand by a fellow-being in such a dark hour, when the whole world, as it were, was arrayed against him, deserves, at least, this simple notice, as a tribute to his memory.

Thomson's practice employed every moment of his time, his scene of action being the principal towns in Eastern Massachusetts and Southern New Hampshire, and many in the surrounding states.

Now came the darkest spot of the whole history; a transaction that casts a stigma upon the perpetrator and his minions, which will brand them so long as the name of Samuel Thomson exists in the memory of man, as consummate, inveterate, malicious villains! I speak it plainly, and am fully prepared to prove the assertion; to afford evidence that the behaviour toward Thomson is an example equalled in atrocity only by the cruelties of the barbaric ages. The facts are plain and undeniable, and best told in Thomson's own language.

"On my arrival at Salisbury, my friends informed me that Dr French had been very busily employed in my absence; and that he and a Deacon Pecker, who was one of the grand jury, had been to Salem, to the court, and on their return had said that there had been a bill of indictment found against me for *wilful murder*! They advised me to leave, and keep out of the way; but I told them I should never do that; for if they had found a bill against me, the government must prove the charges, or I must be honourably acquitted. About 10 o'clock at night, Dr. French came to the place where I stopped, with a constable, and made me a prisoner in behalf of the commonwealth. I asked the constable to read the warrant, which he did; by this I found that Dr. French was the only complainant, and the justice who granted the warrant ordered me before him to be examined the next morning. I was then taken by the constable to Dr. French's house; while there, a *prisoner*, Dr. French abused me and insulted me in the most

shameful manner that can be conceived of, without any provocation on my part. He continued his abuse to me till between two and three o'clock, when he set out for Salem for the indictment. After he was gone, I found, on inquiry of the constable, that after he had caused me to be indicted, he came home before the bill was made out; and finding that I was at Salisbury, fearing I might be gone, and he should miss the chance of gratifying his malicious revenge against me, he went to a brother doctor, who was a justice of the peace, before whom he made an oath that he had probable ground to suspect, and did suspect, that I had, with malice aforethought, murdered sundry persons in the course of the year past, whose names were unknown to the complainant; upon which a warrant was issued against me, and I was arrested as before stated, in order to detain and keep me in custody till the indictment could be obtained. The examination was deferred until near night. The constable took me to his house, in the mean time, and put me in the back room and left me alone, all of them leaving the house. When they came back, some of them asked me why I did not make my escape, which I might very easily have done, out of a back window; but I told them that I stood in no fear of the consequence, having done nothing whereby I ought to be punished. Just before night, Dr. French arrived with a sheriff, and ordered me to be delivered up by the constable to the sheriff; after Dr. French had again vented his spleen upon me by the most savage abuse that language could express, saying that I was a murderer, that I should either be hung or sent to state-prison for life, and he would do all in his power to have me convicted. I was then ironed by the sheriff, and conveyed to the jail in Newburyport, and confined with a man who had been convicted for a criminal offence, and sentenced to solitary confinement for one year. I was not allowed a chair or a table, and nothing but a miserable straw bunk on the floor, with one poor blanket, which had never been washed. I was incarcerated in this prison on the 10th day of November, 1809; the weather was very cold, and no fire, not even the light of the sun, or a candle; and, to complete the whole, the filth ran from the upper rooms into our cell, and was so offensive that I was almost stifled with the smell. I got no sleep that night, for I felt something crawling over me, which caused an itching, and not knowing what it was, inquired of my fellow-sufferer; he said that

it was lice, and that there were enough of them to shingle a meeting-house.'

"In the morning, just light enough came through the iron grates to show the horror of my situation. At breakfast time I was called on through the grates to take our miserable fare; it consisted of an old tin pot of musty coffee, without sweetening or milk, and was so bad as to be unwholesome; with a tin pan, containing a hard piece of Indian bread, and the nape of a fish, which was so hard I could not eat it. Mr. Osgood came to see me; my situation affected him very much; he asked liberty of the jailor to furnish me with a bed, which was granted;—I put it on the old one, and allowed my fellow-sufferer a part of it, for which he was very thankful. I had provisions enough brought me by my friends for us both, and I gave him what I did not want; the crusts and scraps that were left, his poor wife would come and beg, to carry to her starving children, who were dependent on her. Her situation and that of her husband were so much worse than mine, that it made me feel more reconciled to my fate; and I gave her all I could spare, besides making his condition much more comfortable, for which they expressed a great deal of gratitude.

"In a few days after my confinement, Judge Rice came to see me, and brought with him a lawyer. On consulting upon the case, they advised me to petition to the judges of the Supreme Court to hold a special court to try my cause, as there would be no court held by law, at which it could be tried, till the next fall; and as there could be no bail for an indictment for murder, I should have to remain in prison nearly a year, whether there was anything against me or not. *This was the policy of my enemies, thinking that they could keep me in prison a year, and, in all probability, I would not live that time, and their ends would be fully answered.*"

On the 20th of December, 1809, the Supreme Court convened for the trial of Thomson, at which Judge Parsons presided, with judges Sewall and Parker assistant judges.

The history of the trial would occupy too much space to be given here. The testimony against Thomson amounted to nothing, and even Dr. French's evidence was more in favour of Thomson's practice than against it.

After the testimony of some eight or ten witnesses had been given, and among them that of three physicians, Judge Parsons

asked the solicitor-general what they had in evidence for a grand jury to find a bill of indictment upon.

The judge was about to charge the jury, when the solicitor-general arose and said that if it was not proved to be murder, it might be found manslaughter. The judge said, You have proved nothing against the man, and repeated, that he wondered what they had for a grand jury.

In his charge to the jury, the judge stated that the prisoner had broken no law, common or statute, and quoted Hale, who says, "Any person may administer medicine, with an intention to do good; and if it has the contrary effect from his expectation, and kills the patient, it is not murder, nor even manslaughter. If doctors must risk their lives for their patients, who would practise?" He quoted also from Blackstone, who says, "Where no malice is, no action lies."

The charge being given to the jury, they retired about five minutes, and returned into court, and gave in their verdict of *not guilty*.

"I was thus honourably acquitted, without having had an opportunity to have my witnesses examined, by whom I expected to have proved the usefulness and importance of my discovery before a large assembly of people, by the testimony of about twenty-five creditable men, who were present at the trial, besides contradicting all the evidence produced against me. After the trial was over, was invited to the Sun Tavern to supper, where we enjoyed ourselves for the evening. When we sat down to the table, several doctors were present, who were so offended at my acquittal, that they left the table; which made me think of what the Scripture says, that the 'wicked flee when no man pursueth; but the righteous are bold as a lion.' "

After recovering his health and strength, he recommenced practice, and employed much of his time in giving information to others, in different parts where he visited.

In 1813, Thomson repaired to Washington, and obtained a patent to secure him in his just rights to his medical discoveries, and, as he thought, afford a protection against laws made to support the fashionable practice of physic.

On his return, he remained several days in Philadelphia, for the purpose of conferring with Drs. Rush and Barton upon the subject of his medical discoveries. He was treated with courtesy by these

two physicians; and Dr. Barton agreed to make a trial of Thomson's remedies, and Dr. Rush also said he would agree to any thing that Dr. Barton consented to in relation to the subject. Soon after this, Dr. Barton died, and not long after, Dr. Rush also died. "Thus I was," remarks Thomson, "deprived of the influence of these two men, which, I am confident, would have been exerted in my favour."

Thomson now devised the plan of forming societies for the purpose of mutual instruction, and to afford strength and encouragement to the members against the strong current of opposition setting so heavily against the practice.

In the spring of 1815, Thomson visited Philadelphia, by request. About twenty families purchased his Family Guide, and the right to practise. So far as the writer's knowledge extends, these families and their children, without an exception, still employ the Thomsonian medicine and plan of treatment.

Societies were formed in many places—the system was gaining rapidly in the confidence of the people. Agencies were formed, and medical stores established; persons possessed of the right turn of mind, and more especially those who had been under treatment a considerable length of time for some deeply-seated complaint, and thereby becoming acquainted with the practice, engaged in it; and, as long as they pursued Thomson's general plan of treatment, were very successful, giving general satisfaction to those upon whom they practised.

Honest, almost to a fault; unsuspecting and confiding, the confidence of Thomson was easily won. Applicants for agencies were accommodated, and full confidence placed in their honesty; but this agency business soon became a source of much trouble and annoyance to Dr. Thomson; for, when once he detected dishonesty in an agent, he viewed him in the light of a bitter enemy; and this cause alone—I mean the difficulties occurring between Dr. Thomson and his agents—operated as a stumbling-block to the progress of Thomsonianism, which, previous to these occurrences, was fast advancing in public favour. Whether Dr. Thomson was justifiable in the course he pursued with some of his agents, is a matter of doubt with many of his friends.

But still greater obstacles to the advancement of Thomsonianism were presented. The practice, up to the time that Thomson obtained his patent, was under his own direction, or in the hands

of nurses who had been with him, and adopted his course of practice.

But, as the system became more popular, there was an increased demand for practitioners, and the practice fell into other hands ;— into the hands of those who, in many instances, were not only entirely deficient in medical knowledge, but who did not comprehend the general principles of Thomson's system. Such practitioners rarely, if ever, carry out the Thomsonian principles in their treatment of disease, but are very apt to give in to the prejudices of others, and do just what they apprehend will best suit the fancy of patients or their friends.

The steam-bath was, by the regular faculty and their adherents, represented in such a way as to convert it, in popular estimation, into a "monster of hideous mien ;" and some professedly Thomsonian practitioners, to avoid the odium of the term "steam-doctor," omitted its application, even where its use was essentially necessary for the restoration of the health of their patients.

Then, again, there were others who, influenced more by selfish motives than by a regard to the welfare of society, assumed to be *leaders* in the revolutionary movements brought about through the genius and indefatigable exertions of Dr. Thomson ; and with a view, it would seem, of placing upon their own brows the laurels so deservedly won by Thomson, instituted a practice differing as widely from Thomson's as they could, not to render their practice altogether inefficient. Works were published and announced to the world as containing an improved system of botanic practice, but in reality the reverse of an improvement on Thomson's system, containing very little, if any thing, that was really valuable, that was not obtained through Thomson's discoveries. These and other projects put into execution, all tending to mar the prosperity of his system of practice, and to lead the enquiring public into error, proved a source of deep regret and aggravation to Dr. Thomson ; who had, up to the present period of his life, devoted all the powers of his genius in maturing his system of practice, and had succeeded in raising a medical superstructure, based upon true principles, and built up, as it were, inch by inch, by new acquisitions of knowledge, gained by a long and laborious course of observation and experience, at the bed-side of the sick.

Suits were instituted against certain parties, for infringements

upon his rights ; but the general result of such movements was a pecuniary loss to Dr. Thomson.

We do not regard Thomson's as a perfected system of medicine. It needs extension beyond the limits its founder gave it. But no material part of it can be dispensed with, in general practice, without impairing its efficacy. The medicines may be prepared and compounded in various ways, without impairing their qualities. The hot-air bath will effect the same object for which Thomson employed the steam-bath ; but it will not do to depend upon the warm-water bath in place of the steam or hot-air bath. The astringents are among the most essential of Thomson's medicines, and yet, in some of the botanic works, this class of medicines is scarcely noticed. And, again, a peculiar feature in Thomson's system, is the entire exclusion of cathartics ; whereas, in the botanic practice, purgative medicines are used extensively, even those which have the most prostrating tendency, as croton oil and mandrake.

Taking a firm stand against the innovations of pretended improvers upon his practice, Thomson soon arrayed against him an army of opposers from among the professed friends of medical reform. He was charged with illiberality, obstinacy, and disregard for any thing beyond his own private interests. The intelligent, unprejudiced mind, however, will discover, in the faithful history of Thomson's life, a just refutation of any such charges.

The unprecedented success that had attended Thomson's mode of treatment, in all the various forms of disease that had come under his care, fully warranted him in pursuing the course which he did pursue in relation to the subject of improvement upon his system. He had avoided the use of any article possessing poisonous or deleterious qualities, inasmuch as his great object was to assist nature.

The field of his labours had now become enlarged to such an extent that a great part of his time was passed in visiting different parts of the Union, giving information to the people, by calling meetings, for the purpose of explaining his system of practice, by lecturing to them in his plain, domestic, unostentatious manner ; appointing agents, and exerting his influence in protecting his system from the threatened innovations of pretended improvement.

The friends of Dr. Thomson were generally intelligent and well-informed. Among the few members of the medical profession who regarded Thomson as a true medical reformer was Doctor Benjamin

Waterhouse, who was, for forty years, professor of Materia Medica in Cambridge University.

The following is part of a letter from Dr. Waterhouse to James Parker, of Sharon :

“Your general idea, that I think favourably of the labours of Samuel Thomson is founded in truth. Without ever reading the writings of Hippocrates and other Greek physicians, Thomson is imbued with their spirit of closely following nature.

* * * * * * *

Thomson has done great service to the science and practice of medicine ; and I wish his science had been commensurate to his experience and natural sagacity. But he sowed the seed, and left the harvest to be gathered by those following him, as is commonly the case.”

In a letter in reply to one from Dr. Thomson, Dr. Waterhouse writes as follows :—

“CAMBRIDGE, December 8, 1835.

TO SAMUEL THOMSON,

Botanic Practitioner of Medicine.

DEAR SIR :—To the questions put to me yesterday, I answer that I remain firm in the opinion that you were the discoverer of the remarkable medicinal virtues of the *Lobelia Inflata*, as a safe emetic, and other rare qualities, in effectually detarging the stomach and intestines of foul and morbid matter, a prime object in the removal of all disorders consequent on imperfect digestion, the fruitful source of almost all our chronic disorders. The efficacy and safety of this vegetable I have had ample and repeated proofs of in a number of cases and in my own person, and have reason to value it equal to any article in our materia medica.

Your joining to the emetic effects of *Lobelia* the *vapor-bath*, is, in my opinion, a happy practice, if conducted with requisite care and caution, but not to be intrusted to any that are not duly instructed in the danger attendant upon a careless and harsh use of a warm bath, without every convenience and accommodation in such seasons as the present.

That you yourself were the originator of this compound process, very extensively known under the title of the *Thomsonian Practice*, or *System*, I have no doubt whatever. I mean the uniting the warm bath with the thorough elimination of the whole alimentary

canal. I value it, and recommend it on this account.—It effects in three or four days, what we regular physicians use to occupy as many weeks. As a public teacher of the practice of physic, I have told my pupils, for nearly half a century past, that when they have learned how to restore the long-impaired organs of digestion to their pristine or natural state, they have acquired two-thirds of their profession; and on that simple principle is based the whole doctrine of my printed Lecture on the pernicious effects of *smoking cigars*, and the inordinate use of ardent spirits.

BENJAMIN WATERHOUSE."

In 1832, the season that Cholera prevailed epidemically in this country, Thomson published a circular, extending an invitation to his agents, and the friends of his system, to meet in convention, at Columbus, Ohio. He also devoted three months to travelling, for the purpose of soliciting the co-operation of his friends in the movement. The convention assembled in December, 1832, and organized under the name of the "United States' Botanic Convention." The subjects presented by Dr. Thomson to the notice of the convention were:—the nature of Cholera, and the proper plan of treating it; the devising of means for extending the knowledge of his system among the people, and for perpetuating it, in its simplicity and efficiency, for the benefit of mankind.

After having been in session several days, the convention adjourned to meet the ensuing year, at Baltimore; and in this way continued to meet annually, at different points, for several years.

The addresses from Dr. Thomson to the different conventions are interesting documents. His address to the first convention closes with the following language:—

"The privilege and consolation of such an interview, I shall not, probably, ever again enjoy. I wish to inspire the most perfect harmony and unanimity in all your deliberations. When my hoary head lies down in dust, may the cause survive the ruins of the grave. The hope of leaving you in harmony and peace, pressing forward, as one man, in the great pursuit, shall cheer my mortal hour. These benevolent desires animate my mind, and support me in my trials; and to transfuse such views and feelings to posterity, is the best legacy I can bequeath the world, when I shall retire behind the curtain that veils all futurity from mortal eyes."

The limits of this sketch will not admit of a further relation of

the events and incidents attending the checkered life of Samuel Thomson. Enfeebled by age, he retired to Boston, and employed the remainder of his life chiefly in preparing medicines, giving advice to the sick, &c. He died on the fourth of October, 1843, in his seventy-fifth year.

Phrenological Character.—The following description of the phrenological constitution of Samuel Thomson, is given by a writer in the Boston Thomsonian Manual:—"Dr. Thomson had Firmness, full; Combateness, active, not imperious; Self-Esteem, medium; Reverence, small; Conscientiousness, full; Benevolence, in the *extreme*, but expansive; the reflective faculties, Causality and Comparison, very large; sustained by a full development of the perceptive. They gave him the cast of intellect adapted to effect a great work, if thrown into the right sphere of action. All his animal, or purely physical organs, were active, comparatively full, but well balanced. As a whole, we find the high, expansive, intellectual forehead, the correspondent lineaments of countenance, which, in person, presence, portraiture, made him an uncommon man;—his likeness being as distinct from all others as that of Washington, and as marked in its outlines as was the history of his life. * * * He was so constituted as to adjust him to the great work to which he was called. Like Cyrus, he was 'girded, in the omnipotence of nature, for it.'

"Posterity—the millions yet unborn—will appreciate the value of Samuel Thomson's system of practice, and enroll his name among the greatest of the benefactors of the human race."

PRINCIPLES OF MEDICINE.

I. MATTER, in all its diversity of character, quality, form and combination, may be classed in two great divisions, namely *Organic* and *Inorganic Matter*.

II. *Organic Matter* includes the two vast kingdoms of nature; the animal and the vegetable kingdom.

III. *Inorganic Matter* includes all bodies not possessed of *life*, and which are not endowed with a *capacity* for life.

V. Without organization, there cannot be life; and again, organized bodies, though possessed of a capacity for life, require the impression of "stimulants, to call it into activity."

V. "Life is the consequence of the operation of stimuli or excitants, on organized matter."—*Brown*.

"Life is the organism in motion."—*Richrand*.

"A proper organization, and suitable temperature, produce life and motion. Caloric, or heat, is the cause of life and motion."—*Thomson*.

"Caloric, whatever be its nature, is the first and most important of all stimulants; and if it ceases to animate the economy, others lose their influence over it."—*Broussais*.

There is, in an egg, a point of organized matter—a germ endowed with a capacity for life. Place the egg in a temperature of 98 degrees of heat, and vital movements will commence in the elements composing the germ. Under the stimulating power of heat, the germ is nourished, organs developed, and a perfect animal formed. If the egg becomes chilled, vital movement ceases, disorganization and decomposition ensue.

In the early period of human animal life, heat is derived from the mother; and, after birth, heat is generated within the body. The generation of heat within the body is as necessary to vital action in man, as external heat is necessary to sustain vitality in the chick, before it bursts from the shell.

VI. It is by the animating power of heat, that the system becomes susceptible to the impression of other life-supporting agents as air, light, electricity, galvanism, food, drinks, and medicine.

Animals that remain torpid and insensible during winter, are reawakened into life and activity, on the return of warm weather. Upon the same principle, the steam or vapour bath proves a powerful auxiliary remedy in the cure of disease, by imparting caloric and electricity to the blood; and, in many instances of slight ailments, is sufficient of itself to restore to the system the power necessary to establish health.

VII. "If the system be deprived of caloric for a certain length of time, all the preservative, recuperative, and sanative phenomena cease. It is the same, also, as respects oxygen."—*Broussais*.

VIII. Caloric (heat) brings into play the nerve power, (assumed to be an electro-galvanic influence,) which, operating through the medium of the nervous apparatus, carries on and governs all the vital functions—respiration, circulation, digestion, nutrition, assimilation, &c.; selects and expels effete or worn-out matter, by the pores of the skin, the kidneys, and other depuratory organs; carries on all the various secretions; endows the organs with sensation; and enables the organization to resist the influence of causes that tend to its destruction.

If the premises advanced in the above paragraph be true, they prove (theoretically) the correctness of the practice introduced by Dr. S. Thomson; which has for its object to promote and sustain the function of calorification, or as Dr. Thomson terms it, "the power of inward heat," as a means of aiding the vital functions, under the control of the nervous influence, to overcome disease, and re-establish health. It is through the agency of vital energy, inseparably connected with the function of calorification, that the causes of disease are resisted, and health restored, when the system is invaded with disease. This is universally true, under all circumstances, in relation to general disease.

IX. "While the assimilation of food, in vegetables, and the whole process of their formation, are dependent on certain external influences which produce motion, the development of the animal organism is, to a certain extent, independent of these external influences; just because the animal body can produce within itself that source of motion which is indispensable to the vital powers.

* * * * * The mutual action between the elements of the food and the oxygen conveyed by the circulation of the blood to every part of the body, is THE SOURCE OF ANIMAL HEAT."—*Liebig*.

A good digestion, and a proper supply of food and air, are requisite, not only to supply the wastes of the system, but also to

produce the amount of heat and nervous energy necessary to maintain healthy action in the system. "The stomach is the fire-place of the system, and food, the fuel that furnishes the heat, upon which life and motion depend."

X. "The law of organic life is fixed; it cannot be changed; but the forces that bring this law into activity, heat, electricity, and magnetism, are never fixed, but are constantly subject to disturbances from perturbing influences."

XI. The laws of life always operate in the fullest degree of perfection, under the attending circumstances. To operate in their greatest degree of perfection; or, in other words, to maintain a state of perfect health, it is requisite that all the forces that influence the operation of the laws of life, shall be in the most favourable condition.

XII. A deficiency in the supply of either aliment, atmospheric air, or heat, and its associated elements, light, electricity, and magnetism, renders the operation of the laws of life imperfect, and necessarily occasions disease.

XIII. Nutrition, the process by which nutritive material is converted into living organic structure, is the first vital action, and constitutes, during life, the basis of every other vital movement, or function. Derangement of the nutritive action of an organ, necessarily impairs its functions.

The various functions, digestion, respiration, and circulation, subserve the purpose of furnishing the necessary supply of nutritive materials; and calorification and enervation are the sources of motion.

XIV. Simultaneously with the nutritive, or assimilative action, there is a constant decomposing process being carried on, by which worn-out material is taken up and expelled, mainly by the kidneys, and through the pores of the skin. The latter constitutes the great outlet of morbid humours from the system; and this fact makes manifest the importance of promoting perspiration as a means of clearing the system of disease.

XV. "In the inferior animals, and vegetables, the vital actions are capable of suspension, without their destruction; the organic force diminishes, but is not entirely extinguished. On the renewal of stimuli, the vital phenomena again reappear, and the organic force is renewed. These facts are seen in hybernating animals, and in vegetables in the temperate latitudes, having alternate seasons of opposite temperature. The abstraction of the stimulus of

heat diminishes the vital actions; the functions of the various organs essential to life are gradually suspended, and almost every trace and sign of animation are lost. With the renewal of the stimulus of caloric, whether artificial or solar, reanimation commences; the vital actions are reawakened; they are manifested in their fullest energy; and the organic force, which had been nearly extinguished, acquires its former intensity."

In the higher order of animals, and in man, "vital action, once commenced, cannot be again suspended for any length of time; they have different degrees of energy; but, if once terminated, or reduced to a certain point, they are not again renewed; their cessation is permanent, and with them ceases the organic forces. This constitutes death." The human system is endowed with power to react against causes that tend to its destruction. The impressions produced by the causes of disease being communicated to the brain by the nerves of sensibility, a recuperative action is instituted, with the design of expelling the cause of disease.

XVI. Nature is the real physician: in other words, diseases are cured, wounds healed, and injuries repaired, by processes of actions or movements under the control of the vital principle, or laws of life. These curative processes are manifested by fever, inflammation, vomiting, diarrhœa, and convulsions.

XVII. The nervous, or electro-magnetic, fluid, which, under the vivifying influence of caloric, and acting in conformity to the organic laws, is the immediate or proximate agent of every vital movement, is generated from red globules of blood, as they circulate through the nerve centres. All recuperative, life-sustaining actions are carried on through the agency of the nervous fluid. The nerves of the internal mucous membranes, especially those of the stomach, exercise a controlling influence over the digestive nutritive, and all other vital functions. The amount of nerve-force generated will be in the same ratio to the quantity of red globules of blood circulating through the nerve-centres; and, consequently, to abstract blood, by the lancet, or to prevent its formation by poisonous drugs, taken into the stomach, that impair digestion, retards the curative operations of nature.

XVIII. In disease, the digestive functions are either impaired or suspended, and, consequently, the system is partially or wholly deprived of a supply of the means of subsistence, from the natural source. This important fact, it would seem, has never been taken into consideration by medical theorists, inasmuch as their general course of treatment directly tends to lessen the amount of blood, or to produce greater prostration of the digestive functions. The supply of nutritive material from food being cut off, in conse-

quence of a suspension of the digestive functions, vital action soon would cease, were it not that nature, but more properly, the Author of nature, has provided a means for sustaining life, by a process of *reaction*, constituting fever. The pores of the skin are "locked up," retaining the heat; the action of the heart is quickened, giving increased impetus to the circulation of the blood through the nerve-centres, to sustain the various functions; and, being impelled through the lungs more rapidly, with a corresponding increase of respiration, the blood thereby becomes more highly vitalized, and better adapted to sustain the recuperative actions, necessary to overcome the influence of the cause of disease. In malignant forms of disease; for instance, in that class termed "continued fevers," the life of the patient depends upon the continuance of the recuperative action—the fever—until a favourable crisis is effected.

XIX. It is by action—by vital movement—that disease is overcome. The direct tendency of cold, poison, and other causes of disease, is to suspend vital motion, weakening the power that sustains nutrition, or vital chemistry. The lower order of animals, those not endowed with the power to react, never have fever; neither can inflammation be established in them; whereas, in the higher order, and in man, the brain is made to know of the existence of disease; and establishes a recuperative process, constituting fever and inflammation. Hence, most of the symptoms of disease are the result of the protective power of the economy in operation;—the efforts of the system to sustain itself, and to throw off disease.

The most fatal cases of disease are those unattended by fever; for instance, in small-pox and scarlet fever, the specific poison, producing the disease, operates, in some cases, with such deadly power, that the vital forces are at once prostrate below the point to admit of reaction;—the patient remaining cold, and partly insensible, from the commencement of the disease, until the spark of life is extinguished. The cold plague, as it was termed, which proved so alarmingly fatal in some parts of the old world, was characterized by coldness and absence of fever. This was, also, a peculiar feature of the Asiatic, or epidemic, cholera;—the functions of nutrition, and, consequently, that of calorification and enervation, being, in many cases, suspended, in the very outset of the disease.

XX. The amount of vital power in the system is always less in disease than it is in health. In fever, of even the highest grade, there is always a diminution of the life-power;—nature fans the fire of life by forcing the blood through the lungs at an increased ratio, and quickening the respiratory movements. These are the

means furnished by the Creator to supply the necessary wants of the system, when the stomach cannot digest food.

XXI. The stomach is the great repository from which the body receives its support; and its condition exerts a widely-extended influence over the system. Being the recipient organ for all food, drinks, and medicines; and, from its "central and exposed position, and extraordinary sympathies," this organ is especially liable to become disordered, and its functions impaired, from many sources; and seems to be the organ which is first affected, in nearly every variety of disease. While the functions of the stomach remain unimpaired, the causes of disease are repelled; but when suspended, or impaired, from any cause whatever, the secretions become vitiated, the circulation flags, the nutritive action diminished, and the animal temperature lowered. These conditions are the immediate consequences of disorder, or suspension of the functions of the stomach. Under favourable circumstances and conditions, nature will rally, and bring into operation a counteracting influence, for the preservation of the system, constituting the recuperative processes, previously described.

The influence of cold, in engendering disease, may be traced to its prostrating effects upon the digestive and nutritive functions. Food, taken into the stomach unsuited to the state of the digestive functions, is a common source of disease. Food, remaining undigested in the stomach, becomes an enemy to health; and, at particular seasons, and under certain conditions, actively poisonous agents are formed, by chemical changes taking place between the elements of food and the acrid secretion of the stomach, producing cholera morbus, epidemic cholera, malignant dysentery, &c. At seasons when an epidemic disease is prevailing, inaccuracies in diet, form a very common exciting cause of the disease, in those predisposed to it.

XII. Vomiting, and all other disease-expelling and curative actions, are instituted and carried on by a power generated at the base of the brain,—the medulla oblongata. This is the seat or throne of power, whence proceeds the commands for all movements designed to protect the system from disease. The nerve-centres, throughout the system, apprise the *great centre* of the condition and wants of the system, through the medium of the nervous cords, which may be compared to telegraphic wires. The great centre, taking cognizance of the intelligence thus conveyed, commands the movements, within its control, best adapted to overcome enemies and supply existing wants. Thus, the infant stomach, oppressed with too much food, or disturbed by the presence of foul or acrid substances, is relieved by vomiting. The knowledge of the condition of the stomach being telegraphed

to the base of the brain, through the medium of sensitive nerves, vomiting is induced; and this is a provision of nature to relieve the stomach. A badly-organized stomach, or one in which the nerves, or sensibilities, are not in a condition to convey to the brain the knowledge of the presence of acrid substances, will be subjected to pain and distress, in consequence of the transmission of the acrid materials from the stomach to the bowels, there producing an effect which calls for reaction, to expel the acrid substances.

XXIII. In medicine, error in theory leads to error in practice. The physician, educated to regard fever as constituting disease, and the increased action of the heart and arteries, necessary to sustain the curative actions, as evidence of excess of vital power, is led to practice blood-letting and purging, and to prescribe antimony, nitre, calomel, digitalis, and various other poisonous agents, with a view to moderate, or suppress those actions; and, notwithstanding the evil consequences of such practice, the same course of treatment is pursued, as long as the theory, by which the practice is governed, is believed to be true.

XXIV. Nature always conducts her operations, for eradicating disease, in the best way possible, with the resources furnished by internal and external conditions and circumstances.

Every movement, whether voluntary or involuntary, is attended with an expenditure of nervous fluid, derived from arterial, red blood. Active exercise demands an active circulation of the blood through the nerve-centres, which generate the nerve-force requisite to produce muscular action. One, in whose system there is a deficiency of red blood, will, in ascending a flight of stairs, experience an increase, in the action of the heart, to probably 160 or 180 beats per minute; this increased action being absolutely and essentially necessary, in order to generate power to perform the required exertion. The exercise of running is accompanied by a more violent action of the heart; otherwise the muscular action required could not be performed.

XXV. In disease, whenever the action of the heart is augmented, there exists a necessity for it. Thus, in fever, inflammation, extreme debility, &c., its energy is invoked for the accomplishment of an object or design, ultimately for the preservation of the system. Physicians should study the designs of nature, and endeavour to assist her efforts.

XXVI. Medical treatment, to prove beneficial, must harmonize with the principle of life. Pain may be relieved by stupifying the brain with narcotics; fever may be subdued by prostrating the

vital powers; the heart's action may be lessened by the administration of digitalis and other sedatives; and inflammatory action may be reduced by cathartics, and general depletion; but such treatment operates always against nature; directly and invariably tending to deprive the system of the means of support, and to weaken its power of resisting the causes of disease. "Physicians," observes a celebrated teacher of medicine, "have always looked at the outside of disease, and have been doctoring symptoms, without understanding the nature of disease."

XXVII. Perfect health may be defined to be that state in which external and internal conditions and influences are favourable to the free and undisturbed operation of the laws of life.

XXVIII. Disease consists, essentially, in diminished vital power.

XXIX. *Symptoms* do not constitute disease. They are the immediate consequences of diminished vital power; or they may arise from the restoring efforts of the constitution. Thus, the first symptoms in disease, as languor and debility, coldness of the surface, and chilliness, are the immediate effects of a loss of vital power; whereas, when reaction takes place, many of the accompanying symptoms, as fever, pain, inflammation, vomiting, diarrhœa, and convulsions, are the consequences of the vital force resisting the cause of disease.

XXX. Disease is produced by agents or causes which exert an influence upon the system, not *congenial to the vital principle, or which are not in relation with, or adapted to, the laws of life.*

Exposure to cold and dampness; sudden vicissitudes of temperature, more especially when the system is in an exhausted condition; exclusion from the open air, and close confinement to business; unwholesome food taken into the stomach; excesses in eating and drinking, and in the indulgence of the animal passions; and specific poisonous agents, such as produce small-pox, measles, and scarlet fever, are the general sources of disease.

Cold and dampness are fruitful sources of disease. Their direct effect upon the system is to weaken the vital power, and consequently diminish and subvert the healthy order of action in the system; and whatever organ or part of the body is weakest, proportionably to its natural degree of vitality, that will be the part most likely to become diseased. Hence, of any number of persons exposed to cold and dampness, each may have a different form of disease. Thus, one may have a pleurisy; another, rheumatism; a third, a simple catarrh; a fourth, bronchitis; a fifth, quinsy; a sixth, neuralgia; a seventh, sick headach; whilst another may be taken with bilious fever, and another with erysipelas. In this

way, almost every variety of disease may be brought on by the same cause.

Marsh Miasmata.—The poisonous effluvia, or vapour, arising from decomposition of vegetable matter, together with cold and dampness, are believed to be the principal causes of the fevers that prevail during the latter part of summer, and in autumn, more particularly in low, marshy districts of country. It is certainly true that fevers prevail most in marshy places, and near ponds of stagnant water. Newly-cleared land evidently gives rise, also, to noxious vapours, from the decomposition that ensues on the exposure of the fresh earth to the sun. This will account for the prevalence of disease in newly-settled places.

The first effect of this miasmata upon the system is to weaken the vital powers; the strength becomes enfeebled; the appetite fails; there are languor, chilliness, and aching pains; precisely such symptoms as might be produced by exposure to cold and dampness. These symptoms are the direct consequences of the poisonous effluvia weakening vitality; and, as the constitution rallies to expel the poison, fever is produced.

The greater part of medicines employed in the regular practice, have no relation to the laws of life, but are repugnant to nature, and injurious to the constitution. Such agents will modify symptoms, or change the form of disease; but often, where a cure is effected, it is the result of the sanative efforts of the constitution, in spite of medicine.

XXXI. When fever prevails, it furnishes evidence of the existence of an offending cause in the system, and the treatment instituted should have for its object the removal of that cause. Thus, a Thomsonian emetic will, in many instances, dispel fever, by evacuating the stomach of acrid secretions and undigested food, from which cause so frequently proceed febrile symptoms, more especially during infancy and childhood.

XXXII. Dr. Samuel Thomson, in his "Remarks on Fevers," says:—"What is commonly called fever, is the effect, and not the cause of disease. It is the struggle of nature to throw off disease. The cold causes an obstruction, and fever arises to remove it. This is universally the case. *Remove the cause, and the effect will cease.*"

This theory of fever, advanced by Dr. Thomson, and doubtless original with him, was maintained by Hypocrates, Sylvius, and others of the early writers on medicine. But the failure of their practice arose from the employment of remedies which tended to *aggravate*, rather than *assist*, the efforts of nature. The medical faculty have never made the proper distinction between *pure* stimulants, which raise and support vital action, and those which

provoke an unnatural action, and ultimately exhaust the strength. It is to Samuel Thomson we are indebted for the discovery and selection of medicines which harmonize with the laws of life, and, if judiciously applied, are adapted to the cure of every variety of disease.

"When a patient is bled," says Dr. Thomson, "it lessens the heat, and gives power to the cold; like taking out of one side of the scale and putting it into the other, which doubles the weight, and turns the scale in favour of the disease. By giving opium, the feelings are deadened; the use of antimony, calomel and nitre, tends to destroy what heat remains; or, more properly, destroys the power in the system of producing heat."

"I remember, with pain," says Dr. Eberle, "the unfortunate lot of an amiable and intelligent friend. He was a man of healthy constitution, and fond of indulging in the pleasures of the table. He was seized with simple synochial fever from cold. His physician bled moderately; the fever went on unchecked; he bled again and again, daily; after the seventh bleeding, there was still too much quickness and tension in the pulse; the lancet was inserted the eighth time, and the patient sunk almost immediately into a state of collapse. Stimulants, both externally and internally, the most diffusive and potent, were now diligently applied; but all in vain; he lived but a few hours longer." Tens of thousands of lives are annually destroyed by blood-letting.

"The fashionable practice, when fever rises, is to destroy the heat-producing power; and the same means which they often employ to cure the sick, would destroy the health of a well person. How much more reasonable it is, when fever rises, to help it to overcome the effects of the cold, that caused the disease!" — Thomson.

The means recommended by Dr. Thomson, for "raising the heat of the system," and for "keeping the inward above the outward heat," are the same that are required to sustain the generation of the nervous power necessary to maintain a proper balance in the circulation of the blood, and to sustain the curative, life-preserving actions in resisting the various causes of disease.

XXXIII. In tracing the progress of fever to a favourable crisis, we find it terminating in a restoration of the secretions, and by establishing some critical evacuation, more particularly by sweat and urine. This fact points out the design of nature in establishing fever, or reaction. The plan of treatment established by Dr. Thomson will assist the constitutional efforts in bringing on a crisis in disease; and, without in the least degree aggravating the fever, but, on the contrary, at the same time that it aids its efforts, will generally moderate the violence of its symptoms. But, take a case of remittant fever, where the symptoms are all favourable,

bleed this patient every day, purge with active cathartics, give him freely of ice-water to drink, and pursue this course for a week, and in nine cases out of ten, the fever will, at the end of this time, assume a malignant type; and the patient, very probably, die, in consequence of the system being deprived, by the treatment, of the power to resist disease.

It is by *reaction*, or the *power of vital resistance*, that the organization is sustained against *all* debilitating causes. Dr. Parrish, in lecturing before his class, related the case of a man who had been, for a length of time, subject to frequent losses of blood from piles, and subsequently underwent an operation, by which he lost a large quantity of blood. This, a few days after the operation, threw the system into a state of tumultuous excitement; the face red, eyes sparkling, with a full, bounding pulse, and the carotid arteries throbbing very strongly; and, as the doctor stated, the patient exhibited symptoms which every surgeon would have said demanded bleeding, when, at the same time, the patient was drained of almost all his blood.

Not many months since, one of the physicians to the Blockley Hospital, a man of extensive experience, having been fourteen years in practice, on examining a patient in one of the wards, inquired of one of the house physicians why that patient had not been bled, and immediately directed a pint of blood to be drawn. The doctor was informed, however, that this patient had a surgical operation performed a few days previous, and that secondary hemorrhage had taken place, and the patient had been already nearly bled to death.

The frequent abstraction of blood has repeatedly produced symptoms of inflammation of the brain, and the arterial system. been thrown into a state of great excitement, presenting the same symptoms, which, according to the doctrines of the schools of medicine, require the use of the lancet; the loss of blood being, at the same time, the sole cause of the excitement: the constitution reacting against the threatening danger arising from the loss of blood. Often has inflammation of the brain ensued in remittent fever, and the disease assumed a malignant character, by bleeding or purging, or by both; reducing vitality so low, that nature has been driven to rally all her powers to "*save a wreck*:" "the clashing forces struggle for the ascendancy, which, too often, is decided in favour of the foe to life, aided by the *college skill* of the doctor." Excessive loss of blood is not always followed, however, by reaction; in some instances, the system remains in a state of debility, accompanied by some chronic disorder; as dyspepsia, liver complaint, consumption, dropsy, &c.

XXXIV. "In disease of the constitution, *fever* is nature's hand-maid. In local disease, her chief reliance is upon inflammation."

Inflammation is required in the healing of wounds. Blood furnishes the material for repairing injuries, and its presence is also necessary for sustaining vitality in parts surrounding an injury.

A splinter, lodged in the flesh, and allowed to remain, creates a necessity for inflammation, in order to effect suppuration; the means by which bodies become detached and separated from living tissues. The poison from a bee sting, occasions severe pain; blood is sent quickly to the part, and there deposits coagulated lymph, blocking up the cells of the cellular tissue, for the purpose of preventing the poison being absorbed and carried into the circulation. If the poison be neutralized, by the application of ammonia, then there will be no occasion for inflammation.

XXXV. If, from exposure to cold and dampness, or from any other cause, an obstruction takes place in the capillary vessels of the pleura, the knowledge of this condition is communicated to the brain; the energies of the heart and arteries are invoked; the blood rushes to the part, to overcome the tendency to disorganization; and, if the circulation be restored, there will be no necessity for inflammation. If, however, the reaction fail of removing the obstruction, inflammation is the next step taken, in the curative process; which, under the most favourable circumstances, will terminate in resolution; or, if this cannot be effected, there will be an effusion of serum, or an exhalation of lymph; or the inflammation may terminate in the formation of pus, in consequence of the loss of vitality in the pleura.

XXXVI. Inflammation of the brain, as it frequently occurs, as a consequence of exhaustion of vitality in the complaints of children, is the protective power of the economy, in operation, to sustain the vitality of the brain; and if the designs of nature, in establishing inflammation, be accomplished, the crisis will be favourable.

In hip disease, the condition of the parts make it necessary that inflammation shall be established. The vitality of the diseased parts cannot be preserved without inflammation; and, under favourable circumstances, and correct treatment, the inflammation may terminate in resolution, and the parts be restored to a healthy condition. Under circumstances less favourable, there will be false anchilosis of the joint,—the joint becoming stiff. This is, next to resolution, the most favourable termination of the recuperative action. If the vitality of the tissues cannot be preserved by the restorative effort, suppuration becomes necessary;—the dead parts become separated from the living parts by the suppurative inflammation. Sometimes the head of the bone loses its vitality, requiring to be removed by a slow process of suppuration, or caries, effected by an inflammatory action.

XXXVII. Inflammation of the bowels, as it occurs, for instance, in dysentery, is established for the purpose of preserving the vitality of the mucous membrane. The most fatal cases of dysentery are those unattended by any marked symptoms of inflammation;—the violence of the cause of the disease producing disorganization of the mucous membrane, in the outset of the disease. The death of the parts, in fatal cases of dysentery, is not the consequence of the inflammation.

XXXVIII. The condition of the lungs, at the time tubercles are deposited, is the opposite to inflammation. When tubercles become enlarged, nature establishes an inflammatory action around the tubercles, for the purpose of bringing about suppuration, the only way by which tuberculous matter can be removed from the lungs.

XXXIX. If a dose of violent poison, such as arsenic, prussic acid, opium, or varatria, be taken in sufficient quantity to cause death, in the course of a few hours, there will be no marks of inflammation in the stomach, after death. The vital principle will be destroyed before any curative effort can be established. If a portion of bone loses its vitality, either by the use of mercury, or from syphilitic poison, or from scrofula, inflammation is absolutely necessary, in order to remove the diseased bone, and to repair the injury, by the deposition of new bone. When the vitality of a bone is not too far reduced, it may be restored to a healthy condition, by means of inflammation.

XL. A broken bone cannot unite without inflammation. Cases have occurred where broken bones have been prevented from uniting, by bony union, in consequence of the parts having been frequently subjected to motion, breaking up the knitting of the bone, until, finally, the inflammation has subsided; and the parts not being supplied with sufficient blood to furnish material, and sustain the *action* necessary to unite the broken bone, a false joint has been formed.

Dr. Physic devised a plan for effecting a reunion of the bone, in such cases, by forcing a threaded needle through the limb, between the surfaces of broken bones, and leaving the thread in the part, for the purpose of exciting inflammation, and thus furnishing the means necessary for a reunion of the bone.

Although inflammation be a restorative action, it is liable to become perverted into an unhealthy one, and the accomplishment of the object for which it is instituted, prevented. Thus, if a person of scrofulous constitution, or whose system is in an otherwise unhealthy condition, should receive a bruise which destroys the vitality of a portion of flesh, the inflammation that ensues will be extremely liable to assume an unhealthy character, the efforts of

nature being too feeble to establish healthy inflammation; and, instead of being circumscribed, as in case of a bile, it may spread over a considerable extent of surface, forming what is called *erysipelas*; and when matter is formed in the injured part, instead of being confined to the spot where it is secreted, as it is when the inflammation is of a healthy character, it spreads to a greater or less extent through the surrounding parts, which become swollen, doughy, and without extra heat attending, and may require a long time for the parts to become restored to a healthy condition, in consequence of the want of power, in the system, to establish an efficient inflammatory action. A simple incision in the flesh, from a sharp instrument, that heals rapidly in a healthy constitution, may become converted into an indolent ulcer in one of an unhealthy constitution. An injury upon the shin, that would be followed by healthy inflammation, and the part restored to a healthy condition in a short time, in a young man, would be apt to become converted into an indolent ulcer, and probably continue for years, in an old man in feeble health. The *healing power* is sometimes almost destroyed in constitutions poisoned by the use of mercury: the simple scratch from a pin, causing a long-continued running sore. Blisters have occasionally been observed to become gangrenous, in consequence of extreme prostration of the healing powers of the system; the constitutional energies becoming too far exhausted to establish healthy inflammation, and to sustain the action necessary to heal the parts. Inflammation may assume an unhealthy character, in consequence of the severity of an injury. This fact is frequently noticed in gun-shot wounds, the surrounding tissues being deadened by the force of the concussion, the vessels of the parts have not sufficient power to carry on a healthy inflammatory or restorative action.

"Let us suppose," observes Astley Cooper, "that two women each receive a blow on the breast, one with a vigorous and healthy constitution, and the other with a system worn down with care, anxiety and disappointment, and in a constant state of chronic, feverish excitement, in which the secretions are imperfectly performed, and is thus predisposed to the formation of cancer: in the first individual, the inflammation will be strictly healthy, going through its several stages until the cure is accomplished; but in the other, owing to constitutional peculiarity, the same extent of injury will produce cancerous disease; an affection over which all remedies hitherto tried have little control, and extirpation is but an uncertain mode of relief."

Inflammation in internal organs is no less curative in design, than when it is confined to external parts of the body. Poison, taken into the stomach, is followed by inflammation of its mucous membrane, unless the dose be so large as to destroy the vitality of this organ. The direct tendency of poison is to destroy the

principle of life; and inflammation is the means which nature employs to counteract the effects of the poison, and preserve the life of the parts. The inflammatory action, existing in the mucous membrane of the stomach, in those forms of disease called fevers, is the restorative power of nature in action. No person ever recovered from a low form of fever, without some degree of inflammation having existed in the stomach. In inflammation of the stomach, medicine should be given that will excite the secretions. Inflammation of the throat is relieved, and its efforts aided, by gargling with pepper tea, which excites the secretions, and relieves the congested vessels. It is ascertained that the mucous membrane of the stomach seldom exhibits marks of inflammation when patients die soon after an attack of some highly malignant form of disease; for instance, yellow fever: the force of the cause of disease having suddenly prostrated the living principle so low that the constitution is unable to establish an inflammatory action.

XLII. In pleurisy, inflammation of the lungs, rheumatism, erysipelas, and all other forms of disease attended with inflammation, conditions obtain which call for inflammation—the disease always existing before inflammation ensues. Thus, in pleurisy, the nutritive action being arrested, in a portion of the pleura, by debilitating influences, and its disorganization threatened, are conditions which call for a supply of arterial blood, and an inflammatory action, as the only means of effecting a restoration of the nutritive or assimilative action, and sustaining the organization. Not less salutary are the effects of inflammation in rheumatism and erysipelas.

XLII. Curative in design, the *results* of fever and inflammation are always beneficial, under favourable conditions.

XLIII. Finally, whenever nature is called upon to repair an injury, or to protect an organ or tissue from disorganization, she performs the work by means of inflammation, aided, sometimes, by fever.

XLIV. It must be borne in mind, however, that the *efforts of nature* often require the aid of medicines, and other means, for regulating and sustaining her restorative actions. In the case of a common bile, for instance, or in any other case of acute inflammation, there may be an undue accumulation of blood in the diseased parts, causing unnecessary pain and swelling, and retarding the cure.

More especially are the resources of art demanded in diseases attended with inflammation of internal organs, such as pleurisy,

inflammation of the lungs, dysentery, peritonitis, inflammation of the brain, &c.

XLV. The general course of treatment introduced by Dr. Samuel Thomson, and described, with some modifications, in the following pages, will prove beneficial in the way of affording assistance to nature,—the great physician, in all the varieties of fever and inflammation.

Thomsonian Theory of "Canker."

XLVI. Dr. Thomson introduced into general use, in his system of practice, a class of remedies for removing the "canker, or vitiated secretions," that forms on the stomach and bowels, to a greater or less extent, in all cases of disease, and interrupts the process of digestion, and tends to prostrate all the functions of the stomach, and constitutes a general cause of the continuance of disease.

The correctness of Thomson's views, in relation to the collection of vitiated secretions upon the mucous membrane of the stomach and bowels, in disease, have long since been realized and established by the most positive evidence; and so important is it to effect its removal, that the treatment best adapted to effect this object, constitutes a leading object in the practice of medicine.

PRACTICE OF MEDICINE.

CHAPTER I.

SECTION I.

AGUE—INTERMITTENT FEVER.

Causes of Ague.—It is the general belief that ague is caused by noxious or poisonous vapors in the air, called *Malaria* or *Marsh Miasma*, arising from the decay and decomposition of vegetable matter in marshes, and from grounds inundated and then drained. Newly cleared land is supposed to give rise to deleterious exhalations from the decomposition produced by the exposure of the fresh earth to the sun and air. Cold and dampness are frequently the *exciting* cause of the disease.

The same cause or combination of causes that produce ague in one, may cause dysentery in another, jaundice in another, and in another neuralgia. And then again, one possessed of a good constitution, and who is in vigorous health, may be exposed to the same causes of disease without being affected. The more perfect and active the digestive functions, the less will be the liability to disease.

Symptoms and general course of Ague.—Before a fit of ague comes on, the patient usually experiences loss of appetite, general debility, more or less distress at the pit of the stomach, dejection of spirits, aching in the head and limbs, and increased sensibility to cold.

The cold stage or chill.—The chill comes on with creeps along the back, and an irresistible desire to yawn and stretch. There is a general coldness and contracted state of the skin, presenting that rough appearance called goose-flesh, and a sensation down the back as from trickling of cold water; the mind is confused and dejected, the pulse is small, contracted, frequent and firm. The jaws begin to quiver or chatter, and a general shivering takes place over the whole body; sometimes these rigors are so violent as to shake not only the bed, but even the floor and partition. The

breathing is hurried, and sometimes accompanied with a hacking cough, and a feeling of stricture across the breast. Vomiting is not an unusual occurrence, more particularly about the termination of the chill. The secretions of the mouth are suspended, occasioning urgent thirst. The urine in this stage "is clear, colorless, without sediment, and often copious." The chill in some instances continues but a few minutes, and in others for several hours. Sooner or later reaction commences, and the patient experiences flashes of heat through the body, which increase until the chill is entirely gone and the fever becomes fully developed; distressing vomiting often occurs at this period.

The reaction or hot stage.—The blood, which during the chill was confined to the internal organs and vessels, when reaction takes place is attracted to the surface: the countenance becomes flushed and the skin dry and hot; the pulse rises and becomes full and strong; the mind becomes more active, with a rapid flow of ideas; there is pain in the head, back and extremities, and not unfrequently more or less delirium, or, as it is commonly expressed, the patient is "light-headed." The urine is scanty, and high-colored, but without sediment. The duration of the fever varies in different cases, but finally effects a crisis by a restoration of the secretions from the skin and kidneys, and thus terminates in

The sweating stage or crisis.—As perspiration takes place the breathing becomes less difficult; the pulse softens, and a general abatement of all the distressing symptoms takes place as the perspiration becomes general and free. The urine is high-colored and deposits a reddish sediment on standing. As the sweating continues the symptoms of disease continue to lessen until finally the patient is apparently free of disease. "In this way (observes Dr. J. B. Williams, F. R. S., &c. &c.) we see that a paroxysm of intermittent fever is a sort of struggle between the protective power of the system and the poison (malaria;) and hence we can easily perceive why, when the paroxysm of ague is imperfect, the effects of the disease on the system are more severe, and why the body actually suffers more under these circumstances, than it does when the fit is complete and vigorous."

These stages, viz: the cold, the hot, and the sweating stage, form what is termed a *paroxysm* of intermittent fever. These paroxysms occur periodically, either every day, every other day, or once in three days, and generally about the same hour of the day. When the paroxysm occurs at the same hour *every day*, the patient is said to have *quotidian* ague. When it comes on at the same hour *every other day*, it is termed *tertian*, and when there is an intermission of two whole days between each paroxysm, it is called *quartan* ague. As a general rule, when the paroxysm

occurs every day, it comes on in the morning; in the tertian ague at noon; and in the quotidian, the ague fit occurs in the afternoon.

During the *intermission* or interval between the paroxysms, the patient will in some instances be entirely free from all unpleasant symptoms, except debility: more frequently, however, the patient experiences a considerable degree of indisposition, with loss of appetite, costive bowels, furred tongue, and much weakness.

Intermittent fever, like every other form of disease, is subject to various modifications, depending upon the circumstances under which the disease occurs, in relation to the condition of the patient, and various other causes which may tend to modify the disease. Thus, if the disease be connected with a diseased condition of the liver, the skin and whites of the eyes will be yellow, and it will be said the patient is *bilious*, or that he has a *bilious intermittent*; and when the intermissions are imperfect, the patient remaining ill and feverish, and uncomfortable in a less degree than during the paroxysm, then the complaint is said to be a *remittent* fever.

When the disease attacks persons of shattered and exhausted constitution, the efforts of nature or the vital powers may be too feeble to establish an efficient reaction, forming what is called *congestive intermittent*. The cold stage will be unusually long, with stupor and deep-seated pain in the head; vertigo, faintness and great oppression across the chest. The fever will be very slow in coming on, the skin being scarcely warm, and the patient will continue greatly oppressed, with a pale countenance and great oppression and anxiety of breathing.

Signs which distinguish ague and fever from hectic fever.

I. In hectic fever there is an absence of the distress in the back and limbs, which attends a paroxysm of intermittent fever.

II. Hectic fever occurs at irregular periods; whereas in intermittent fever the paroxysms come on at regular periods, seldom varying more than an hour in the time of their occurrence.

III. In hectic fever the hot stage is attended with a circumscribed flush on one or both cheeks; without pain in the head, which is a most distressing symptom in ague.

IV. The pulse, in hectic fever, instead of being moderated by the subsidence of the paroxysm, remains quick.

V. The tongue, which is furred in *ague*, is clean and smooth in *hectic*.

VI. In hectic fever the urine is muddy during the paroxysm, and clear after. In ague it is muddy or turbid after a paroxysm.

VII. The mind is full of hope and confidence in hectic, and desponding in intermittent fever.

Not dangerous.—Intermittent fever very seldom proves fatal except where it occurs in broken-down constitutions, or when complicated with extensive derangement of some important organ.

In low marshy districts of country the disease is apt to become chronic, from the continued exposure to the cause; the countenance is sallow, the abdomen distended, and the spirits sunken and dejected.

Favorable signs.—Each succeeding paroxysm occurring at a later period; scabby eruptions about the mouth and nostrils; cleaning of the tongue and restoration of the natural secretions of the skin and mucous membranes, and an improvement in the appetite, indicate a favorable termination of the disease.

It frequently happens that an unusually severe paroxysm, without there being any assignable cause, terminates the disease, the patient becoming convalescent.

Treatment.—*Thomson's course of medicine*, by its prompt action upon the stomach, bowels and skin, and by the fresh impulse given to the circulation and the secretions, will prove the most effectual method of curing intermittent and all other varieties of fever; at least it is the most certain and speedy way of cleansing the stomach, and preparing the system for the application of tonics. A very effectual plan is to commence with a course of medicine an hour or two before the time at which the chill comes on. In ordinary cases, where the paroxysms occur every other day, the course of medicine will seldom require to be repeated more than two or three times to effect a cure, provided a proper intermediate course of treatment be pursued.

Treatment during the paroxysm.—1st. Of the *cold stage*. During the chill the patient should drink hot teas, as composition, cayenne, or pennyroyal, and be placed in a vapor bath, or be covered warm in bed, and hot bricks or jugs of hot water placed at the feet and back. This will assist to bring on reaction and overcome the chill.

Where the vital powers are in an exhausted condition, and insufficient to establish reaction, constituting what is termed *congestive intermittent*, an emetic of the third preparation of lobelia should be given to relieve the stomach of its foul contents and to arouse its sunken energies; and external warmth be applied around the patient. After free vomiting the system will generally react, but if it should not, the medicine must be continued, and the same administered by injection to the bowels, together with mustard plasters to the stomach, wrists and ankles. In some rare cases fatal congestion has taken place during the cold stage, for want of power in the system to produce reaction. The most effectual means for

bringing on reaction, and relieving internal congestion, are the application of the vapor bath and the free use of the third preparation of lobelia.

Treatment during the hot stage.—When the fever comes on, all dry heat may be removed from around the patient, but the hot medicine will be proper with a view to aid the reaction to bring on a crisis by perspiration. Where the fever is of a violent character, and the patient greatly distressed, an emetic should be given, and the patient kept relaxed by broken doses of lobelia, given either alone or in the stimulating teas, and the surface bathed with whiskey, vinegar, sal eratus water, or simple water. Where the thirst is urgent, the patient craving cold drinks, they may be allowed him in small quantities. A draught of cold water will in some instances cause perspiration, in the latter period of the hot stage. Acidulated drinks, as lemonade, are very grateful to patients, and may be taken in moderate quantities. The thirst, however, arising from suspended secretion of the mucous membrane of the mouth and throat, will be more effectually relieved by capicum tea than by cold drinks. Simple herb teas, as mint, dittany, pennyroyal and balm, are proper in any stage of the disease. Bathing the surface with spirits or vinegar when the fever is violent affords relief to the patient. Hot bricks wrapped in cloths wet with vinegar, will in some instances afford relief even during the fever.

When the sweating stage comes on, all cold drinks are inadmissible. The patient should keep in bed and take warm drinks to favor and continue the perspiration. When the perspiration ceases, dry warm clothing should be put on. There is an advantage in bathing the surface with No. 6, or salt and brandy, after the sweating, and still much more benefit will be derived by the vapor bath at this period.

Treatment during the intermission.—The treatment during the interval between the paroxysms is to be regulated according to the circumstances of the case, and the condition of the patient. Thus in the first stage of the disease pure stimulants, as cayenne and composition, should be used. The compound lobelia pills answer the place of the teas, two or three of which may be taken every few hours.

Indications for the use of tonics.—When there is no fever between the paroxysms, and the tongue begins to clean, and assume a more natural appearance, tonics will come in play.

Peruvian bark.—This is probably the most effectual tonic in intermittent fever, and given at a proper time, or under certain

conditions of the system, no bad consequences probably would ever arise from its use, even in large doses.

The advocates of Homeopathy in proof of their theory, assert that Peruvian bark continued to be taken by a person in health will produce a disease resembling intermittent fever. In certain conditions of the stomach, for instance where there is a redundancy of acid, or the secretions otherwise deranged, Peruvian bark or other astringents, as hemlock and marsh rosemary, may produce a sense of oppression and constriction at the stomach, and even occasion intermittent fever. Peruvian bark, however, will not disorder a healthy stomach, nor will it produce intermittent fever, except under peculiar circumstances.

In preparing Peruvian bark I usually combine it with a portion of Virginia snakeroot and orange peel, or with spice bitters, and give in the form of a decoction. It may also be prepared in tincture, or taken in good wine, as Madeira, or Sherry. Barks are also frequently taken in substance mixed with some kind of liquid, such as milk, coffee, cinnamon water, clove tea, cider, brandy and water, or simple water. The bark may be taken in teaspoonful doses, and these repeated several times a day when there is an absence of fever; or take from half to an ounce of the bark an hour or two previous to the time at which the chill is expected. When there is much acidity of the stomach a portion of sal eratus, or sup. carb. soda should be combined with the bark. This, as well as other tonics, may be administered by injection with the same benefit as when swallowed, provided the injection be retained.

Quinine pills.—Pills composed of equal parts of quinine and capsicum, form a substitute for barks and all other tonics; and on account of the facility with which the pills are taken, they are generally preferred to any other preparation. Quinine contains the active principle of the Peruvian bark. I cannot discover any objection to its use in a proper state of the stomach. A few hours before the period at which the chill comes on, the quinine or whatever tonic is used, should be given freely; when the patient is taking quinine, it will be proper to omit the use of bayberry and all other vegetable astringents.

A great variety of tonics have been employed for ague or intermittent fever, which, in many cases, probably answer equally as well as the *Peruvian bark* and its *preparations*, such as Thomson's No. 4 bitters, various species of the poplar and willow, the broad-leaved dogwood bark, columbo, gentian, quassia, Virginia snake-root, and thoroughwort or boneset.

Relapses are very liable to occur if the patient be exposed to the night air or dampness, or becomes over fatigued.

Precautions.—Avoid cold and dampness; dress warmly, and never go out in the morning or evening with an empty stomach. If the patient resides in a marshy district he should continue the use of tonics in order to invigorate the system.

The cold shower bath may also be used as a preventive, where there is no particular organic disease, as an enlargement of the spleen or liver.

The plan adopted by some practitioners, and which generally proves successful in preventing a relapse, is to give the patient, say—half an ounce of Peruvian bark, or eight to ten grains of quinine, about the seventh day after the last chill, and then at the end of the next seven days give a less quantity, and in this way continue giving the tonic, every seventh day, lessening the quantity each time.

If there are symptoms indicating a return of the disease, the patient should go to bed, cover warm and take freely of composition or of capsicum tea, or, what is better, go through a course of medicine; and then take quinine.

SECTION II.

REMITTENT FEVER.

A continuance of the fever to a greater or less degree during the interval between the paroxysms, constitutes the principal distinction between *remittent* and *intermittent* fever: in the latter, the reaction effecting a crisis at each paroxysm, terminates the fever, and it disappears until the succeeding paroxysm; but where the efforts of the constitution are insufficient to effect a crisis, the contest continues and the fever is prolonged, constituting *remittent* fever.

Causes.—Remittent fever is produced by the same cause or combination of causes as intermittent fever. Persons who attend upon the sick, especially in cases of malignant disease, by being exposed to the deleterious exhalations from the patient, together with the loss of their natural rest, and the confined air in the sick-room, are liable to be taken ill, and frequently it happens that they will have the same form of disease as the patient on whom they had attended. Hence it often occurs that where one member of a family is taken sick with a “bad fever,” as it is called, other members of the family are subsequently taken down with much the same form of disease.

Symptoms.—The first symptoms resemble those that usually

occur in the first stage of intermittent fever, namely: languor and heaviness, yawning and heavy sighing, loss of appetite and distress at the pit of the stomach, pain in the head, back and limbs, alternate sensations of heat and cold, followed by a chill.

As reaction takes place and the fever rises, the pains in the head, back and limbs are increased. There is much distress at the pit of the stomach, with a total disgust for food; with nausea, retching and vomiting, sometimes of bilious matter, at others of a glairy mucus without bile; the tongue is thickly furred; the whites of the eyes in most instances become yellow, and the skin of a yellowish or sickly mixture of red and yellow; digestion is lost, and the bowels are torpid or very seldom moved; the stools are unnatural, generally either clay colored, or much darker than natural; the breathing is more or less oppressed, and a sense of tightness or stricture across the chest; the urine is scanty and high colored; the pulse full, frequent, but seldom very hard or tense, and the skin generally dry and hot.

These symptoms continue until the succeeding morning, when a gentle perspiration appears on the superior portions of the body and sometimes over the whole surface. The fever now abates, but a crisis is not effected, and the fever consequently does not entirely disappear, at least only for a limited period; the pulse continues quick and irritated, and the skin is above its natural temperature. Usually in the course of an hour or two, the fever again rises, and continues as during the preceding day and night, and then abates for a short time in the morning, and in this way the struggle between the vital powers and the cause of disease continues until a crisis takes place, and the patient becomes convalescent; or the disease assumes a more malignant character, by the vital energies becoming exhausted in the struggle. There is, however, great diversity in the symptoms and character of what is termed *remittent fever*, scarcely ever two cases presenting precisely the same aspects or regular train of symptoms. Thus in one the liver may be more disordered, and this will modify the symptoms; in another the liver may be less and the stomach more deranged, and the symptoms will be modified accordingly. The degree of loss of vital force tends to modify the symptoms to a great extent.

In most instances of remittent fever the symptoms are worse on every alternate day.

In some cases the remissions or declining of the fever occur soon after daylight, in others after the sun is up, and in others not until noon or after. Great variations also occur in relation to the degree and duration of the remissions. In some the fever will almost or entirely disappear for an hour or two, or even for three or four hours, whilst in other cases the fever is so slightly moderated as scarcely to be noticed by the patient or attendants. In some rare cases the remissions are observed to occur in the even-

ing or during some part of the night. These irregularities are observed particularly in the fevers that prevail in the spring and during the hot summer months.

If the disease continues over the ninth day or second week without a favorable crisis being brought about, the symptoms are very liable to assume a more aggravated and sometimes dangerous character.

In some instances the liver is prominently affected, losing entirely the power of secreting bile, and in a state of congestion, causing a sense of great fulness and pain in the right side; violent retching and vomiting occurs, "*without the ejection of bile, the matter thrown up consisting of glairy mucus,*" together with what may have been taken into the stomach; the bowels are extremely torpid; the tongue is *clean*, or seldom remains furred but for a short time, beginning to clean along the *middle*; and *towards the termination* of the disease, a *copious* discharge from the bowels of a dark pitch-like matter. "The liver frequently recovers its action and relieves itself by pouring a large quantity of black bile, or perhaps blood, into the bowels, as is manifested by the copious, dark colored or tar-like alvine discharges, which usually occur in such cases. These large and very peculiar discharges, may indeed be regarded as the favorable *crisis* of such fevers as prevail during hot weather, for convalescence generally soon follows their appearance, and except the disease be arrested by remedial treatment in the early period of its course, there are but few recoveries in which such discharges do not occur." The symptoms accompanying remittent fever present an almost infinite variety of modifications, but which it would be useless to attempt to describe, as the disease in all its diversity of character requires to be treated upon general principles, adapting the remedies to the character of the symptoms, and not to the name of the complaint.

Favorable symptoms.—A general perspiration with a warm skin; a soft pulse; the appearance of scabby eruptions about the mouth; the urine depositing a copious sediment; the nervous system maintaining its integrity; and the tongue moist and beginning to clean along its edges. Thirst is more favorable than its absence.

Unfavorable symptoms.—Low muttering delirium; a tympanitic state of the abdomen; involuntary offensive discharges from the bowels; a very diminished secretion of urine; the tongue soft and relaxed, possessing no elasticity; hiccough; the skin relaxed and inelastic; by pinching it up, it returns to its natural position very slowly; cold wrists and hot hands, and the breath and perspiration having a peculiar death-like odor. Where there is a chain of these bad symptoms existing, the case may be considered as al-

most hopeless. Still recoveries do occasionally take place where many of these symptoms have existed. I have known patients recover in whom there were at the same time continued low muttering delirium, involuntary discharges from the bowels, tympanitic state of the abdomen, hiccough, twitchings of the tendons, picking of the bed clothes, deep heavy sighing, and cold sweats over the face and breast. It frequently happens that a patient has a symptom which is considered as indicating great danger—hiccough for instance—but when unconnected with other bad symptoms, neither this nor any other single symptom is to be considered as a necessary cause of alarm.

Treatment of remittent fever.—A prompt and persevering course of treatment should be instituted in the early stage of the disease, with a view to cut short its course, and thus prevent the disease extending to other organs than those primarily affected.

Thomson's course of medicine constitutes the most effectual means, not only for hastening the *crisis*, but for relieving the symptoms. The *course of medicine* should be repeated daily in the first stage of the complaint, or at longer or shorter intervals as the case appears to require. Where there is violent pain in the head with a high fever, it will be proper to commence the *course* by an enema, containing a portion of lobelia. One or two teaspoonsful of lobelia powder administered in this way in lukewarm water, and retained, will not only relax the system, but in most instances will answer the place of an emetic given in the usual way. This method of producing relaxation is very effectual, and is of the first importance in the treatment of acute disease in its early stage, when the arterial system is struggling hard to overcome obstructions to the circulation of the blood, and it also tends to equalize the nervous influence, and aids in restoring the secretions. Whenever the system is relaxed by lobelia, and the patient becomes restless, or complains of the external heat, and the breathing oppressed, the face, breast, and hands, should be bathed with vinegar and water, spirits, or camphor and water; this affords great relief to the patient.

Patients laboring under a severe form of disease, often experience a good deal of distress under the operation of lobelia. The lobelia arouses the sensibilities, and thus, causing the patient to feel his diseased condition, occasions distress and pain. It has been observed by most persons who have practised on the Thomsonian plan, that lobelia emetics, which cause the most distress to the patient, generally prove the most beneficial in the treatment of seated fevers.

During the intervals between the courses of medicine, pure stimulants, as composition or capsicum tea, should be given occa-

sionally, and frequent broken doses of lobelia, either in powder infusion, tincture, or in pills.

When patients prefer taking medicine in the form of pills, the compound lobelia pills may be employed as a general medicine, more especially in the early stage of disease, or until a crisis takes place and tonics are demanded.

When the fever is very high, the face and breast, and even the whole surface may be bathed with cold water, vinegar and water, alcohol, brandy, camphor and water, or sal eratus water. This is more especially adapted to the early period of the disease, or when the vital powers are sufficiently strong to bear these cold applications to the surface. Bathing the surface with whiskey is perfectly safe, however, in any stage of the disease, and where the patient is greatly exhausted this will generally afford relief and apparently give strength to the system.

A great variety of teas and preparations for drink may be used in fevers, as pennyroyal, balm, mint, lemonade, apple tea, crust coffee, &c. A tablespoonful of cold water may be frequently taken where the thirst is urgent and the patient desires cold drinks.

Where the brain is much affected the feet should be kept warm and occasionally placed in warm water, containing mustard and salt, or hickory ashes. Injections are of especial benefit under these circumstances in diverting the nervous influence, and consequently the blood from the head to the bowels. Not only in this are the enemata beneficial, but they relieve the bowels and aid in restoring their lost function. I have occasionally observed discharges of black vitiated bile, evidently from the liver, by relaxation produced from an injection of lobelia; the obstruction in the liver is in this way overcome, and the organ enabled to relieve itself from a state of congestion and oppression.

Further remarks in relation to the course of medicine.

1st. *Of steaming.*—When the patient is unable to sit up, or the system relaxed by the lobelia, the vapor may be applied according to the directions given for steaming in bed, or hot bricks wrapped in damp cloths may be placed at the feet and each side of the patient. I have had patients in a vapor bath on a couch or mattress from an hour to an hour and a half at a time, and without proving in the least degree debilitating, but in many instances, by proper attention, grateful and refreshing. In a case of recovery from one of the worst forms of fever, where the patient had symptoms which are generally considered as denoting a fatal termination, he was steamed in this way every day, for eight or nine days in succession, and with the most marked benefit.

When the heat of the surface is high, it will be difficult to excite

perspiration even by the vapor, without reducing the heat of the skin by bathing with whiskey or vinegar. The shower bath is proper after steaming, provided the patient be able to sit up during the steaming. A sudden dash of cold water over a patient after a thorough vapor bath, is always safe and frequently very beneficial.

2d. *Of the emetic.*—It is always proper to prepare the emetic in bayberry tea, and the stronger the decoction the more effectually will it cleanse the stomach. In the early period of the disease, when the fever is violent, and the tongue dry and parched, the lobelia powder should be steeped in bayberry tea, adding half a teaspoonful of nerve powder, and from half to a teaspoonful of capsicum to each dose; or the patient may take the pepper separately in tea. In a later period of the disease, when the strength is greatly exhausted, the third preparation of lobelia may be used, adding a portion of lobelia powder. The following is a good form:

Two teaspoonsful of the liquid of the third preparation.

One teaspoonful of green or brown lobelia.

And a teacup half or two-thirds full of bayberry tea.

To be sweetened and taken at once, and the same repeated two or three times, or as often as is found necessary.

Stimulants.—There is no better stimulant in cases of fever than African pepper. Mixed with Virginia snakeroot or ginger, it is less disagreeable to take, and not so apt to produce distress in the stomach. The tea sweetened, to be taken in half teacupful doses every few hours, or a less quantity more frequently.

Injections.—These cannot be administered too often; it is advisable to give one both before and after the emetic. In very bad cases, attended with delirium, and a tympanitic state of the abdomen, I have found it necessary to use a tablespoonful, and even more, of the third preparation of lobelia in each injection, in order to produce a sensible impression upon the bowels.

Steaming after the operation of the emetic.—It is not in all cases necessary to administer the bath after the emetic; nor should the patient be disturbed so long as he is comfortable and in a perspiration; when this ceases, and the patient becomes uneasy, then it will be proper to give the bath. When the patient can sit up he should be showered with cold water, or washed with vinegar or spirits; if in bed, change the bed-clothes and also the clothes of the patient.

After the course, a hot brick or bottle of hot water should be placed at the feet, wrapped in a damp cloth, and, if the patient can

bear it, have one kept to the stomach. Care is necessary, however, not to oppress and distress the patient with dry external heat, more especially when there is fever. When there are cold sweats, dry heat should be applied.

When there is great tenderness of the abdomen, flannels wet with No. 6, or pepper sauce should be applied, and also a hot brick to favor perspiration and a proper action in the skin. Hops stewed in vinegar and thickened with ginger, or a poultice composed of two parts of elm powder and one of composition, adding lard to prevent its drying, applied to the abdomen, will prove more beneficial than bathing.

As the tongue becomes moist and manifests a tendency to clean at the edges, the "canker medicine" should be used, in combination with stimulants and tonics. A teacup two-thirds full of bayberry tea made very strong, adding a teaspoonful of composition in powder, is one of the most effectual of remedies for scouring the morbid secretions from the coats of the stomach. This or some other form of the bayberry or No. 3, should be given two or three times a day.

In all malignant forms of disease termed fevers, where there is a strong tendency to putrefaction, No. 3 or bayberry in strong decoction, adding the No. 6 or third preparation of lobelia, is probably the most effectual of all other remedies. Charcoal or prepared chalk may be given mixed with the teas taken.

The pepper sauce has also obtained high repute as a medicine in malignant fevers, in consequence probably of its powerfully antiseptic qualities.

Tonics.—As the secretions become restored and the tongue cleared, or begins to clean along the edges, together with complete cessations of fever, the tonics recommended in the treatment of intermittent fever should be employed. Quinine is probably the best tonic when the disease occurs in the autumn and spring; whereas, during the hot summer months, quinine does not suit so well as decoctions of the usual Thomsonian bitters.

A tea of the Virginia snakeroot is proper as a drink in any stage of the fever, and at the same time it tends to support the strength. A tea of the scull cap or of the valerian may be used as a nervine, or the powder added to the other medicines.

Diet.—During the early stage of the disease, and until it assumes a favorable aspect, great attention to diet is necessary. When the stomach is unable to digest food, as is the case in the early period of remittent fever, nothing should be allowed the patient but crust coffee, barley water, elm gruel, &c. Many patients are injured by taking improper articles of food which the stomach cannot digest.

In a more advanced period of the disease, essence of beef, chicken tea, and egg soup, will be required in order to sustain the strength of the patient. When there is extreme prostration of strength, wine-whey, and bran and water are to be resorted to, in connection with the kinds of nourishment above mentioned.

SECTION III.

CONTINUED FEVER.

Under this head may be classed all those malignant forms of disease denominated *Typhoid*, *Typhus*, *Nervous*, *Putrid*, *Congestive*, *Yellow Fever*, &c.

"We hear continually," observes Dr. Watson, of London, "both in and out of the profession, different species of fever spoken of. By the public, typhus, brain fever, bilious, low, putrid, nervous. And systematic writers are to the full as particular: mucous fever, ataxic, adynamic, gastro-enteric, and so forth. Now admitting that fever shows itself under various forms, I am persuaded that the effect upon the mind, of all this subdivision, is bad and hurtful. It encourages a disposition already too prevalent, to prescribe for a disease according to its *name*. There is *no* line of genuine distinction between continued fevers, that can be relied on. They run insensibly into each other, even the most dissimilar of them; and are traceable often to the same contagion."

All of these different modifications of what are usually termed malignant fevers, are produced by poisonous agents conveyed into the system, or by a combination of influences which operate powerfully in prostrating vital energy; and in some instances the energies of life are so far destroyed in the outset of the disease that the patient dies without any fever having been developed.

A case of continued fever that would be termed *Typhoid* by one physician, by another would be called *Congestive*; and by another, probably, low *Bilious*; whilst another would affix some name different from either of the others. Continued fever occurs in every grade of malignancy, from the mildest form of remittents to the most fatal kind of yellow fever, where the principle of life is destroyed in the onset of the disease, and terminating in the death of the patient without the system being able to establish reaction or fever. In these cases the patient remains in a deep stupor as if stunned by a blow upon the head, or poisoned by a large dose of arsenic. Even in such cases, the disease is called *fever*; but we might with as much propriety say that a person killed by taking arsenic or prussic acid, died of fever.

The following case shows the insidious and disguised manner in which disease of the most malignant character sometimes takes hold of the system. A young man of this city, whose health had become impaired by a succession of colds, became subject to bleeding at the nose, which occurred at frequent intervals, during the term of some weeks. In this exhausted state he bailed some offensive water from a cellar that was very damp, and remained in the cellar for some hours. Soon after this he grew worse, and I was desired to attend him. He was able to walk about the room, though extremely feeble and dull: he would converse, though with considerable hesitation; his skin was of the natural temperature or nearly so, but pale, relaxed, and without elasticity; his tongue was but very slightly coated, scarcely sufficient to change its natural appearance, and the pulse was apparently natural, manifesting no indications of irritation or unnatural excitement. This patient gradually grew worse and died in about two weeks, though the most powerful stimulants were used with a view to arouse the energies of the stomach and bring on reaction. There was no sign of fever, except an occasional flush on the cheeks towards the termination of the disease, neither did he complain of pain; and the stomach appeared altogether insensible to the most active stimulants from the commencement. There was a moisture on the skin during nearly the whole period of his illness. There was a peculiar expression of the countenance—a vacant stare, as though the chain of sympathies was broken up, the brain not perceiving what was going on in the system. This peculiar expression of countenance, which might not be noticed by a common observer, together with what is termed the “sardonic laugh,” are always alarming.

When the system is much diseased, it is more favorable to find the patient complaining of distress, than to hear no complaint, as though he did not feel his diseased condition. This rule applies more particularly to the forms of disease under consideration.

Dr. William Rush, of this city, stated in a lecture, that of two hundred cases of yellow fever, as it was called, that came under his care in the hospital, during the prevalence of the disease in Philadelphia, no two cases presented precisely the same modifications of symptoms.

When one member of a family is taken ill of a malignant form of disease, such as physicians term Typhus or Congestive fever, it is a very common occurrence that several others of the family are subsequently taken down with disease of the same character. And so common is it for other persons in the neighborhood, who have been with the sick patients, to be also attacked with the disease, that some late writers, and among them Dr. Watson, of London, consider continued fever capable of being communicated from one to another, and that the disease is caused by an *animal poison*.

Whether these low forms of fever be contagious or not, it will be a good rule to view them as contagious, and use such precautions as will be most likely to prevent their being communicated to the attendants upon the sick.

"Where choice can be made, a large apartment should be selected for the sick person. Unless the weather be very hot, there should be a fire in the room, for it acts as a ventilator. The air of the chamber should be kept fresh by having a window and door always open, or (according to the weather) both window and door. Bed-curtains, carpets, and all superfluous articles of furniture, should be removed. Great diligence should be used in keeping the patient clean by ablutions, and by frequently changing his sheets and his body-linen; and these should be immersed at once in water; and all discharges from the sick person's body should be instantly carried out of the room."

No persons but those necessary to attend upon the patient should remain in the room; and even the attendants should avoid being over the patient any more than is absolutely necessary. When friends visit the patient, it should be soon after a meal, as then they will be much less liable to contract the disease than when the stomach is empty. Chloride of lime should always be kept in the room; and a portion of it put into the vessels used to receive the evacuations from the stomach and bowels.

The *Symptoms* attending continued fever in its different stages and modifications are extremely diversified: scarcely any two cases present the same group of symptoms.

"It often happens that for several days before the disease assumes its distinct and proper aspect, and before the patient is rendered unable to pursue his usual occupations, he is affected with certain morbid symptoms, which may be considered premonitory of the fever; so that it is sometimes difficult to mark the precise beginning of the disease. These preliminary symptoms result apparently from an altered condition of the *nervous system*," (loss of nervous energy.) "The poison in the blood disturbs the functions of animal life before it causes any palpable derangement in the mechanism of the circulation. The expression of the patient's countenance alters; he becomes pale, languid, and abstracted. Those about him observe that he looks very ill. He is feeble, and easily tired; reluctant to make any exertion of mind or body; listless, and often apprehensive of some impending evil. He loses his appetite; his tongue becomes white and inclined to tremble; his bowels irregular, often confined, sometimes affected with diarrhœa; his senses lose their natural delicacy. He has uneasiness or wandering pains in various parts of his body; and occasionally there is some giddiness: drowsiness, perhaps, during the day, and unsound and unre-

freshing sleep at night. To collect all this into one expressive word, the patient evidently *droops*."

In many cases, however, the patient is seized suddenly with extreme illness, without having experienced the usual premonitory symptoms of continued fever.

Before fever is developed, the patient usually has a chill or shivering fit, attended with violent pain in the forehead, much oppression, and general distress. The expression of the face is dull, heavy, absent, and puzzled. The patient presents very much the appearance of a person made stupid by drink; and he staggers a little if he attempt to walk. The muscular power is sensibly enfeebled; sometimes the patient will struggle against this; but in a few hours, or in a day or two at farthest, he takes to his bed.

Such are the general appearances and symptoms presented in the early stage of continued fever, designated by different authors by the various titles of Typhus, Typhoid, Congestive, Nervous, Yellow and Malignant fevers. Symptoms of the same character prevail in other forms of disease, where there is extreme prostration of vital energy; for instance, in the most aggravated cases of small-pox, scarlet fever, pleurisy, and inflammation of the lungs.

The stage of chilliness is usually followed by some degree of reaction: the pulse becomes quicker than natural, the skin hot and dry; violent pain in the head, thirst, and throbbing of the temples. The mind continues dull and confused, and sometimes there is delirium, though not so frequently in the early as in a later period of the disease. The patient sighs frequently, and, if his sensibilities are not too much blunted, he appears much distressed and is very restless. If febrile symptoms be pretty strongly developed, the tongue will be furred and dry; in some instances white, and in others it will be brown or black. The patient experiences a disgust for food of every description. The respiration is quicker than natural, and frequently accompanied with slight rattling in the air-passages. The aspect of the patient is peculiar: the features are fixed and inexpressive, or expressive merely of apathy and indifference. Sometimes, even during the first stage of the disorder, when the bowels are relaxed, the prostration of strength is so great, or the tendency to stupor and indifference is so marked, that the stools are passed under him as he lies in bed, without any apparent endeavor on the part of the patient to prevent it; and without any notice of his wants being made to the nurse. The urine, during the same stage, is scanty and high-colored, and often ill-smelling.

In *mild cases*, and under judicious treatment, the patient will begin to *improve* soon after the first week.

In general, no change for the better takes place at the end of seven or eight days, but what are called the typhoid symptoms develop themselves more distinctly; the pulse becomes more frequent, weaker, and more compressible. The tongue grows

drier and browner; muscular debility increases; the patient lies on his back, and inclines to slide down towards the foot of the bed. If he retain the power to turn himself on his side, or to draw his knees up, it is a favorable omen. His voice becomes weak, and often, in bad cases, there are little convulsive startings of the tendons, and irregular, involuntary, and tremulous movements of the limbs. From the commencement of the disease, the abdomen is usually distended more than is natural, and feels harder than it does in health; and frequently uneasiness is manifested when pressure is made upon the belly. Dr. Chomel remarks, that another symptom, not commonly met with in other diseases, is a little gurgling movement in the bowels, which may be felt by applying the hand to the belly.

During the second week of the disease, the patient is very commonly affected with delirium. His mind wanders at first in the night only; and the delirium commonly appears on his awaking from disturbed sleep. Sometimes he is desirous of getting up, and talks incessantly and earnestly in a loud voice, and can only be kept in bed by the imposition of some restraint. Usually, however, his rambling is of a tranquil kind, and without agitation. His mind seems elsewhere; he is inattentive to all that passes around him; but he lies still, muttering disjointed words or sentences, like a man talking in his dreams. Deafness is a common symptom in this stage of the disease, and this is considered more favorable than the opposite condition, where the sensibility to sounds is morbidly acute. Loss of vision is much rarer; yet the eye is dull—unlike the brilliant eye of acute phrenitis, (inflammation of the brain;) it corresponds with the expression of the countenance, which is rather perplexed than wild. The patient in this stage of the disease rarely complains of pain; his tongue is dry, but he feels no thirst. The taste, the smell, the sense of touch, are all impaired; even external inflammation may take place, especially about the hips and sacrum, and go on to gangrene, without any complaint of pain from the patient. He imagines he sees motes in the air, and grasps to catch them; he picks the bed-clothes, and appears altogether careless about the issue of his disorder. If asked how he does, he will probably declare that he is quite well. The *fœces* and urine are passed involuntarily; sometimes there is retention of urine, requiring the use of the catheter to relieve the bladder.

Another symptom very apt to appear in this stage of the disease is a species of eruption, consisting of small red blotches, over the abdomen, and sometimes on the limbs. The eruption does not come out all at once; nor is its duration always the same. Sometimes it disappears entirely after two or three days. Sometimes, on the other hand, it lasts a fortnight or more. In the latter case it is probable that successive crops of the spots continue to arise.

This eruption is not a constant attendant of continued fever, though in some epidemics it is seldom absent. Professor Mitchell says, that in regular typhus fever, the eruptions, instead of being red, are dark. Another form of eruption is occasionally observed in low fevers, consisting of very small transparent vesicles, looking like very fine drops of sweat.

Continued fever usually terminates in convalescence or the death of the patient by the end of the third week from its commencement. This, however, is only a general occurrence; there are many recoveries during the first week; and some cases terminate in death during this period. That variety of malignant disease inappropriately termed *yellow fever* is almost exclusively confined to mercantile towns in warm climates, where there is no regular winter. It is not only confined to cities in warm climates, but principally to places near the wharves. Prof. J. K. Mitchell, of Philadelphia, advances the theory that *yellow fever* is caused by a species of poisonous vegetable, propagated in certain localities, and under certain influences, as the *mould* on bread, decayed wood, &c. That this poisonous agent, invisible to the naked eye, floats in the air near the place of propagation, and being inhaled, finds its way into the blood, and produces the malignant disease called yellow fever. This, however, is mere speculation. The symptoms in yellow fever are sometimes of a violent character in the commencement of the reaction; there is an intensely hot skin, flushed face, the eyes red, extreme headach, tormenting thirst, intolerance of light, pain in the loins and lower extremities, a sense of weight and tension at the pit of the stomach, and a white, and sometimes clean tongue. Distressing retching and vomiting occurs, the ejections sometimes so acrid as to excoriate the throat. There is a burning heat and tenderness at the pit of the stomach, as though the patient had swallowed some corroding acid. There is extreme restlessness and deep sighing; a hopeless expression of countenance, and frequently delirium.

The fever, in many instances, does not continue more than two or three days, when it subsides without any critical evacuation occurring, either by sweat, urine, or stool, leaving the patient extremely exhausted, with a weak and easily compressible pulse, and soon followed with yellowness of the skin and whites of the eyes. "The patient now remains in a state of tranquil indifference, amounting to a sort of stupor, without any apparent concern as to present or future situation. This is an ominous calm; for after a few hours the pain and burning sensation in the stomach return with increased violence; the vomiting becomes frequent and distressing—the fluid brought up containing minute flakes or flocculi, resembling the crust washed from a port-wine bottle, but little or no bilious matter," and every thing that is swallowed is forcibly ejected. "This second paroxysm continues commonly from twelve

to thirty-six hours, when the energies of the system are worn out in the struggle. The pulse sinks, the extremities become cold and clammy, the tongue is black, and the matter thrown up consists of a black ropy fluid, resembling coffee grounds suspended in a glairy fluid." The burning in the stomach and bowels is distressing in the extreme. "Diarrhœa usually occurs at this period—the discharges being green, or black. Hiccough, violent delirium, hemorrhages, stupor and convulsions are apt to occur in fatal cases."

Although the above describes the general characteristics of yellow fever, still a great diversity of modifications is presented in different cases. Thus in some instances the principle of life is destroyed in the onset of the attack, and the patient expires without any symptoms of reaction occurring. "In other instances violent and furious delirium, or mania, ushers in the disease, terminating in a few hours in insensibility and convulsions. Sometimes it commences and proceeds to a fatal termination in so insidious a manner, that the patient himself and those about him are scarcely aware that he is much indisposed. In such cases there is, however, always a remarkable change in the expression of the patient's countenance, as well as in his usual temper and habits. In almost all instances of this disease, the countenance is expressive of intense anxiety and despair during its early period, and of gloom or sullen abandonment in the last stage."

Treatment of Continued Fever in its various modifications.—In all cases of disease of a malignant character, an energetic course of treatment should be instituted in the early stage of it, before the energies of the system become exhausted by the disease. If it be true that continued fever is caused by a poisonous agent in the blood, nature will require time to work the poison out of the system, and the disease, therefore, cannot be cut short at once by any course of treatment, however thorough. Still, by lending a helping hand, the duration of the disease may be more or less shortened, the crisis rendered more complete, and, in fine, the disease brought to a favorable termination, that otherwise might have proved fatal.

The disease commencing with a state of extreme prostration and stupor, active stimulants, particularly the *third preparation of lobelia*, should be given freely, also *stimulating injections* administered, and stimulants and friction applied to the surface, together with external warmth, with a view of aiding the feeble efforts of the constitution to bring about *reaction*.

The *third preparation of lobelia*, besides constituting an efficient emetic, is a powerful diffusive stimulant, and also possesses antiseptic properties. Combined with a strong tea of bayberry, this mixture may be ranked as the best preparation of medicine, for the treatment of low or malignant fevers. The necessity for the

continuance of its use, and for the frequency of the repetition of the doses, must be determined by the character of the symptoms, as well as by the effect produced. It can do no harm. In observing the effects of this as well as other preparations of medicine, it must be borne in mind, that medicine often accomplishes most benefit, when it causes most distress.

Emetics should be given in all cases. In some instances the patient will be benefited by being vomited with lobelia every day, until the disease forms a crisis; and then, again, others will not require it oftener than once in two or three days.

Capsicum—Cayenne pepper.—In all cases of disease where the stomach has lost the power to digest food, an important part in the treatment, is to administer such medicines as are best adapted to sustain the function of calorification and enervation, or, as Dr. Thomson terms it, "*the power of inward heat.*" Cayenne is a pure and permanent stimulant, and well adapted to fulfil the important indication above mentioned. It may be administered in full doses every few hours, or in smaller doses more frequently repeated.

When the tongue is thickly coated, the cayenne should be mixed in a strong tea of bayberry; at least, occasionally it should be given in this way.

When the stomach continues to reject the medicine, it should be given in small doses. A teaspoonful of purified charcoal, or of prepared chalk, mixed with a dose of cayenne, or composition tea, will remain on the stomach, in many instances, when simple cayenne tea would be rejected. When there is evidence of a great accumulation of acid in the stomach, either the charcoal or prepared chalk will prove beneficial, given freely with other medicines, such as cayenne and bayberry composition, or with simple herb teas; for instance, pennyroyal, dittany, or mint.

The Steam or Vapor Bath.—Properly applied, the vapor bath is not only safe, but more or less beneficial in all cases of disease. When the patient is too feeble to bear the exertion of sitting up, the bath should be applied on a bed or mattress, the patient remaining in a horizontal posture. In this way the application of steam may be continued from three-quarters of an hour to an hour at a time, provided a proper attention be observed in bathing the face and breast of the patient with vinegar, spirits, or cold water, allowing a free circulation of air in the room, and administering cayenne or composition tea.

"In all cases," observes Dr. Thomson, "where the heat of the body is so far exhausted as not to be rekindled by using the medicine, and chills or stupor attend the patient, then applied heat by steam becomes indispensably necessary."

CONTINUED FEVER.

The most remarkable recoveries from diseases of dangerous character that I have witnessed, have been where the vapor bath has been administered frequently; at least daily.

When the patient is able to sit up to have the bath administered, it is a good rule to use the shower bath, at the close of the steaming.

Warm poultices kept applied to the abdomen, are highly beneficial, in many instances.

It matters not whether the disease comes on with great excitement and delirium, or with a state of congestion and oppression, as regards the general course of treatment. The emetic and injections proper in a state of congestion and extreme torpor, are equally applicable where there is great excitement in the system. I have, in repeated instances, observed a dose of the third preparation of lobelia, given in bayberry tea, to have great influence in moderating, and, in some instances, in overcoming delirium; and on the return of the delirium, by repeating the dose, these symptoms again disappear; in this way, patients have in some instances been kept comparatively calm and quiet, and able occasionally to sleep, who would have been in a state of extreme restlessness and delirium without the medicine.

Much distress will sometimes be produced by the medicine arousing the sensibilities, and exciting the recuperative powers of the system into action. It is more favorable when the medicine causes the patient to feel sensibly his diseased condition, than when he appears unconscious of it.

External warmth.—If warmth applied by means of warm bricks or bottles of hot water be agreeable to the patient, it should not be neglected. A moist heat will, in many instances, render a patient comfortable, when a dry heat will prove oppressive. When there is high fever, bathing the surface with vinegar and water, or alcohol and water, will be soothing to the feelings of the patient, and may be done without any risk of doing injury.

When the head is morbidly hot, cloths wet with cold water, or vinegar and water, should be kept steadily applied, provided it be agreeable to the feelings of the patient. If symptoms of inflammation of the brain prevail, the hair should be cut off, and a warm poultice applied over the scalp. The poultice may be made of slippery-elm powder, or Indian mush. Cloths, wrung out of warm water, may be substituted for poultices. Injurious consequences are liable to follow the application of ice or blisters to the head, in continued fever.

Injections.—The importance of employing stimulating injections in all cases of malignant disease cannot be too strongly impressed

upon the minds of those who have the management of such cases. Indeed they constitute the most effectual means of preventing putrefaction of the contents of the bowels, and of preventing stagnation of blood in the bowels. When there is a strong tendency to putrefaction, or the abdomen becomes distended from accumulations of gas in the bowels, from one to three teaspoonfuls of the liquid of the third preparation of lobelia, in half a pint of bayberry tea, should be administered by injection, and repeated every hour or two, as the urgency of the symptoms may demand. In some instances, even these powerfully stimulating injections will be returned until four or five are administered. In a milder form of disease, and in its early stage, injections of a less stimulating character will be sufficient to accomplish the desired object.

Tonics.—When the tongue manifests a tendency to clean along the edges, with an occasional absence of fever, tonics will be proper, such as are recommended in the treatment of remittent and intermittent fever, as quinine, Peruvian bark, Virginia snake-root, &c. The Virginia snakeroot may be used, however, in any stage of the disease. It answers very well given in decoction with capsicum or composition tea. Recoveries from these low forms of fevers are usually very slow, and the tonics and other remedies require occasionally to be changed.

Nourishment.—Barley-water, gum arabic, mucilage, elm-gruel, toast-water or crust coffee, essence of beef, or egg-soup may be given as nourishment. In the latter stages of the disease, and when extreme debility prevails, essence of beef should be given freely in combination with pepper-tea; and this is probably the best kind of nourishment after the operation of an emetic, in any stage of the disease. Egg-soup may be given in place of the beef-tea, when the latter cannot be obtained. "If plenty of beef-tea (essence of beef) does not suffice," give also wine-whey, clear wine, or brandy and water. If the wine should flush the face, it must be given in small quantities or omitted altogether. "If the patient relishes the beef-tea, or the wine, that is no small warrant of the propriety and usefulness of its administration."

Some patients crave acids, such as sound cider, salt and vinegar, or lemon juice and sugar, and where a desire for such articles is expressed, they should be allowed to be taken, commencing with small quantities, and, if found to agree with the stomach, their use should be continued. In certain conditions of the stomach, a mixture of lemon juice and sugar will prove the most suitable kind of nourishment.

Favorable Symptoms.—An improvement in the condition of the mind; a natural expression of countenance; a general

spiration; an ability to sleep; cleaning of the edges of the tongue, with a relish for some kind of food, are favorable omens.

"In some instances the amendment is so gradual, that we can scarcely say when it begins. In other cases, the favorable crisis is preceded by an aggravation of most of the former symptoms, and a marked increase of the general distress. This," observes Dr. Watson, "is a very curious circumstance; and it did not escape the notice of our great dramatist:

"Before the curing of a strong disease,
Even in the instant of repair and health,
The fit is strongest. Evils that take leave.
In their departure most of all show evil."

Under Thomsonian treatment, signal benefit is often observed to arise from the operation of medicine that occasions much distress. When the system is made to feel its diseased condition, it causes a reaction of the vital energy, the recuperative powers are aroused into action, and favorable results effected.

Unfavorable Symptoms.—Muttering, half-conscious, dreaming stupor; twitching of the tendons at the wrist; coldness of the extremities, or hot hands and cold wrists; a knitting of the brows, and constant working of the muscles of the face; involuntary discharge of the fæces and urine; and a purplish or bruised-like appearance of the skin, are symptoms indicative of approaching dissolution.

During recovery, especial care must be observed to avoid improper articles of food, and also to abstain from over-eating. Relapses are often brought on by over-taxing the stomach with too much food.

CHAPTER II.

ERUPTIVE DISEASES.

SECTION I.

SMALL-POX.

Small-pox may be distinguished from other species of eruptive disease, by peculiarities in the appearance and progress of the eruption. It is highly contagious, and, like measles and scarlet-fever, very rarely occurs more than once in the same person.

Previous to the introduction of vaccination by Dr. Jenner, the mortality from small-pox was very great; hence it has been dreaded more than any other contagious disease.

Cause.—Small-pox is produced by a specific poison, introduced into the system either by inoculation, or by inhaling the effluvia emanating from the body of one affected with the disease.

Small-pox is divided by writers into two varieties—the *distinct* and *confluent*. There is no essential difference between these, other than that the latter is a more severe grade of the disease. When the pustules, instead of remaining separate and distinct, run together and form irregular masses or patches, it is termed *confluent*; when the pustules do not thus run together, it constitutes the *distinct* variety.

Symptoms and general cause of small-pox.—The first symptoms in small-pox are such as attend the early stage of many varieties of acute disease; more especially do they resemble the premonitory symptoms of ague, remittent and continued fever.

Chilliness and languor, loss of appetite, aching pains in the back and lower extremities, thirst, nausea and vomiting, with pain and distress at the pit of the stomach, are the usual symptoms accompanying the forming stage of small-pox.

As the constitution reacts, fever becomes developed, and generally, in the course of three or four days, the eruption appears. The fever, in small-pox, presents the same character as ordinary bilious fever, such as a hot and dry skin, furred tongue, costive bowels, pain in the head, and scanty, high-colored urine. Bleeding from the nose is apt to occur during the first and second day of the fever. "The mind is dejected and confused, and towards the end of the third day the tongue usually acquires a bright red color."

Shortly before the appearance of the eruption, an unusual tendency to perspiration generally occurs in adults, and frequently much drowsiness and sometimes coma" (or stupor) "supervenes at this period." "In children the eruption is sometimes preceded by convulsions; but tendency to free perspiration very rarely occurs in them." In many cases the hands and feet are cold throughout the whole course of the disease, more especially in very young children.

The *eruption* first appears on the face, and generally in the course of twenty-four hours is spread over the body and limbs, "consisting at first of red points, which by the middle of the second day present small elevations, with inflamed bases, which as yet discharge no serous fluid if punctured, but the cuticle appears distended by a sort of semi-transparent plastic lymph. Towards the end of the second day, some of these pustules present small depressions in the centre; and on the following day these characteristic depressions become conspicuous in nearly all of them. "The number of the pustules indicates the quantity of the variolous poison which has been reproduced in the blood." Where there are but few pustules, they often remain elevated and pointed, with but very slight central depression; but where they are numerous they become flattened, with distinct depressions in the centre. As the pustules increase in size, their flattened form becomes more conspicuous. About the fourth day they assume a whitish color, and become surrounded by a pale red areola. When the pustules are very numerous, these areola run into each other, and give a uniform appearance of redness between the pustules.

The fever always remits or entirely disappears, and pain and other distressing feelings abate, when the eruption is fully out. By the fifth or seventh day of the eruption, the serous fluid contained in the pustules begins to change its color, "marking the stage of suppuration." As suppuration goes on, these pustules become distended with pus, and, losing their flattened form, acquire a spherical shape.

The face begins to swell, generally, by the eighth day, and occasionally the eyes become entirely closed. The fever usually returns during this stage of the disease, constituting the *secondary fever*. In *confluent* small-pox, the natural aspect of the face is completely changed at this period of the disease.

"Towards the end of the tenth day, the swelling of the face begins to subside," and the hands and feet, and other parts of the body, become swollen and tender.

Soreness of the throat, and a copious discharge of saliva, almost invariably accompany the suppurative stage.

"As the disease advances, the pustules become gradually yellower and more opaque, and arrive at their full state of maturity about the twelfth day. After the pustules have acquired their per-

fect state of development, they sometimes remain stationary for several days; but more commonly a brownish spot makes its appearance on the centre of each pustule as soon as the process of suppuration is completed, acquiring at the same time a rougher aspect, and deeper yellow. Soon after this change the pustules begin to shrink, becoming gradually drier, darker, and harder, until the matter is converted into a brown crust." These scabs are frequently formed on the face, when the "pustules on the extremities have scarcely arrived at maturity." When the scabs fall off, they leave red or purplish spots, which are slow to acquire the natural color of the skin. The mild form of small-pox rarely leaves the skin permanently marked or pitted.

Such is the process by which the constitution works out of the blood the poison of small-pox,—first, by the reaction or fever, by which it is thrown to the skin, and then, by certain mysterious actions, there is formed on the surface the *specific* poison which caused the disease.

These sanative operations of the constitution, however, are liable to be perverted by various causes, and the disease to assume a malignant and dangerous character. In some cases the pustules, instead of becoming yellow, are red, purple or blue, constituting *bloody* small-pox; a fatal form of the disease.

Confluent small-pox assumes various modifications. In some instances the disease is highly inflammatory, commencing "with strong chills, succeeded by intense febrile heat; a frequent, full, and hard pulse; high-colored and scanty urine; flushed countenance; sometimes delirium, and in children often with convulsions." The tongue is dry and harsh, and frequently coated with a dark or black fur, accompanied with excessive thirst. In some instances the brain becomes greatly affected, giving rise to violent delirium or stupor, and convulsions.

"The tendency to profuse perspiration, so conspicuous in the distinct small-pox, is rarely observed in the confluent variety; but profuse diarrhœa sometimes occurs shortly before the appearance of the eruption, and still more commonly during the suppuration." The pustules are generally "irregular in shape, and much less elevated than in the distinct small-pox, and the parts not covered with the eruption are apt to be pale and flaccid."

"In the more aggravated cases of small-pox, it often assumes a typhous character." "The chilly stage is unusually protracted; the pulse remains small, weak and frequent, and the patient complains of much muscular prostration. Various symptoms of nervous disturbance are apt to occur—such as vertigo, faintness, twitching of the tendons, and even convulsions. The urine is colorless, and the face pale and sunken. The pustules come out slowly and irregularly, appearing simultaneously on every part of

the body, yet sometimes first on the extremities." "The eruption sometimes disappears on some parts without passing into the pustular state; and slight causes, such as cold, or mental agitation, may cause the whole eruption to recede; in which case convulsions or apoplexy, or fatal congestion and effusion into the lungs, are apt to supervene. Suppuration goes on slowly and imperfectly, the pustules becoming filled with a thin watery pus. The intermediate skin is seldom much tumified, and remains pale."

In these severe cases of confluent small-pox, the patients are liable to swelling of the glands of the groin and arm-pit, and sometimes troublesome abscesses form. In some cases, the air-passages become clogged by the profuse secretion of a viscid mucus, rendering respiration extremely difficult; in other instances, the breathing is interrupted by swelling of the glottis.

"During the period of maturation, a peculiar greasy, disagreeable odor proceeds from the body of the patient. If taken into the sick-chamber blindfolded, one might name the disease at once by this smell. About the same time also, many patients are tormented by itching of the surface, so that they are provoked to scratch off the heads of the pustules; and by so doing they often insure the formation of pits. In many cases of confluent small-pox, this itching appears to constitute the chief part of the patient's suffering."

Treatment.—Small-pox should be treated on general principles, the same as other forms of disease accompanied with fever. To cleanse the stomach by emetics, to promote the action of the bowels by injections, and to sustain the vital powers by suitable nourishment and pure stimulants, constitute the most important points in the treatment.

A course of medicine administered in the early stage of small-pox tends to relieve the distress, and where the eruption is slow to come out, or the patient greatly distressed, it should not be omitted. It will, however, be proper at any period of the disease when the condition of the patient seems to require it.

During the cold or forming stage, the patient should be kept warm; but after the fever is established, the covering should not be too great, nor the room kept uncomfortably warm. It is also important that the room should be well ventilated.

When the eruption is fully out, and the pustules are distinct and not very numerous, and the symptoms wear a favorable aspect, it will not be requisite to give much medicine. An occasional dose of the composition or pepper-tea, or, if the patient be a child, simple herb teas, as pennyroyal, sweet marjoram, or balm, will be sufficient. The bowels to be relieved, when necessary, by injections.

When the symptoms are very distressing at any period of the disease, a course of medicine will prove the surest means of relief,

and if the patient be unable to bear the fatigue of sitting up, emetics may be given without previously administering the vapor bath. Much benefit may be derived from broken doses of lobelia and a free use of cayenne, when the fever is violent.

The Vapor Bath.—During the chilly or forming stage of small-pox, more especially when the efforts at reaction are feeble, and the cold stage consequently becomes more protracted, the vapor bath is of essential benefit, and, when followed by an emetic, will seldom fail to bring on reaction. The bath also prepares the skin for the reception of the eruption.

During the continuance of the disease, an occasional vapor bath will prove beneficial, by promoting the secretions and exhalations from the skin. It constitutes the most effectual means for allaying the itching of the surface, so troublesome and harassing in many cases of the disease. In the latter stage of the eruption, when the scabs are coming off, the vapor bath will be of especial advantage in restoring the skin to a healthy condition, and thereby prove a preventive to the various affections which sometimes follow the disease as a consequence of an unhealthy condition of the skin. While steaming, the patient may be washed or sponged over with soap and water, or with a weak solution of sal eratus in water. The temperature of the water should be regulated to suit the feelings of the patient.

A strong decoction of sumac berries and leaves, or of bayberry powder, adding a portion of cayenne, may be given once or twice a day, in ordinary cases, or substituted for the composition and cayenne, and given several times a day. This also forms a useful gargle for the throat, in the latter stages of the disease.

If costiveness prevail, or the patient be affected with diarrhoea, injections must be resorted to. They will prove beneficial in all cases.

Cold drinks.—Where the thirst is urgent, moderate quantities of cold water, or lemonade, may be allowed the patient, more especially after taking a dose of stimulating medicine.

The Diet.—During the early stage of the disease but little nourishment will be desired. Crust-coffee, barley-water, elm-gruel, &c., are suitable in ordinary cases, until the pustules begin to assume a yellow appearance, when a more generous diet may be allowed, as chicken-tea, milk porridge, toast and milk, soft-boiled eggs, custards, &c. In the confluent form of small-pox, where the symptoms indicate great prostration of the vital powers, wine whey and the essence of beef should be given as nourishment. Five or ten grains of the carbonate of ammonia may be added to a wine-glassful of the whey, as it tends to prevent acidity of the stomach,

and also affords a grateful stimulus. Constipation of the bowels may be in a great measure overcome by a diet consisting principally of unbolted wheat-flour gruel, calves' foot jelly, stewed prunes, Indian gruel, well boiled, or bread cut in thin slices, well toasted, and softened with sweet cream or boiled milk.

To allay itching of the surface.—The vapor bath efficiently applied, followed by sponging the surface with sal eratus water, or tincture of bayberry, constitutes the most effectual means of allaying the itching of the surface. Salt and water is also useful in allaying itching. When the skin becomes cracked, and the parts swollen and tender, an ointment made of lime-water and sweet oil, or a poultice composed of slippery elm, white pond lily and ginger, should be applied.

When the disease is of a typhous, or otherwise malignant character, the treatment should consist of such means, both external and internal, as are best adapted to support the prostrate and sunken energies of the constitution, and to assist the stomach to cast off offensive matters, which tend to weaken and oppress its powers. There is, probably, no better form of emetic, in such cases, than the liquid of the third preparation of lobelia, in a strong tea of the sumac or bayberry. A teaspoonful of the third preparation of lobelia to a teacup half full of the above tea, and the dose repeated every hour or two, should be continued until the symptoms become more favorable. I have found it necessary in some instances, to continue the use of the third preparation for several days and nights in succession, together with wine-whey, and essence of beef, as nourishment.

For children, a milder form of emetic may be employed; for instance, lobelia powder mixed with composition, or bayberry tea.

During the progress of suppuration, but more particularly when the scabs begin to form, patients are very liable to be restless and greatly distressed. There is, probably, no remedy for this equal to the vapor bath. I have seen patients in great suffering and distress, rendered comparatively comfortable and quiet, in a few minutes after applying the vapor bath. Applied in bed, the patient will bear it from half an hour to an hour, and even longer.

I knew an instance in which, a patient being steamed at a time when the scabs were fully formed, and almost dry, they came off in a body, and left the surface almost raw, the disease being of the confluent form, and the eruption covering almost the entire surface. An ointment made of sweet oil and lime-water was spread on soft cloths, and applied over the body, and in two or three days the soreness was nearly removed.

Various methods have been recommended to prevent pitting; none of these, however, have proved to any great extent effectual. Some propose the application of gold-leaf over the face, in the

early period of the eruption; but as the face swells, the gold-leaf is broken, and will require constant patching, in order to exclude the air and light. Others recommend opening each pustule, and applying lunar caustic. A liniment made by dissolving *half an ounce* of gum camphor in *two fluid ounces of olive oil*, has been used as a means of lessening pitting. It is applied to the face in the early stage of the pustules. The quantity of pustules on the face will be less numerous, if means be used to equalize the circulation in the early stage of the eruptive fever.

The eleventh and thirteenth days are said to be the most dangerous periods of the disease.

During *suppuration*, or in the latter period of the disease, the system should be nourished by the most nutritious diet that the stomach can take, such as wine-whey, milk-porridge, essence of beef, mulled egg, &c. It is not in every case, however, that nourishing food can be taken, except in small quantities; and under these circumstances, pepper and other stimulants must be given to sustain vital energy. If the throat be very sore, substances such as jellies and rye mush can be swallowed with less difficulty than thin liquids. Essence of beef, and chicken-tea, will be swallowed more readily by mixing finely powdered elm-bark with them. The elm may also be added to the medicines for the same purpose.

When the eyes are very sore, they should be kept covered with soft cloths, wet frequently with rose-water or raspberry-leaf tea, adding a portion of powdered elm.

When females are in a state of pregnancy, an attack of the small-pox is considered by the medical profession as always dangerous.

A Case.—I was called to attend on Mrs. P——, who had strong symptoms of approaching abortion. She was in her third month of pregnancy,—a period at which abortions are very liable to occur. A full course of medicine was given, which eased the pains for a time. On the following day, however, they returned, and I thought abortion must take place. The third preparation of lobelia was now given freely, until very copious vomiting ensued, when the pains ceased and did not again return. On the following day an eruption appeared, which proved to be genuine small-pox. The eruption came out so thick that it ran together, and formed what is termed the *confluent* small-pox. The case proved to be of a severe character, but the patient recovered perfectly, and without having any return of bearing-down pain, or other symptoms threatening abortion.

The above case illustrates the safety and advantage of treating all violent forms of disease upon general principles, not regarding the name by which the disease may be designated. Thus, the

same means that prevented the abortion, were precisely such as were adapted to throw the small-pox to the surface. And if the symptoms of abortion had been occasioned by other causes than that of small-pox poison, still the same general plan of treatment would be indicated. Thomsonians do not require to wait for a disease to become developed, so that they can give it a name before they administer medicine. Hot medicine, and, in violent attacks, a course of medicine, cannot be given amiss. The same means that will assist nature in bilious fever, will do the same in small-pox, or in any other disease. It is at least probable that the thorough treatment pursued in the above case, prevented abortion by cleansing the stomach, and throwing the small-pox poison to the surface.

The *distinct* variety of small-pox seldom proves fatal under judicious treatment; and even in the confluent form, unless under unfavorable circumstances, the system, by proper assistance, will "work out its own salvation." When the vital powers are greatly prostrated, and the disease assumes a typhoid or malignant character, it almost always proves fatal.

Favorable Symptoms.—A well-developed eruptive fever; the pustules remaining distinct, round, and filling with thick yellow pus, and a blush or areola encircling their base.

Unfavorable Signs.—When the reaction or fever that brings out the eruption is imperfectly developed, indicating want of vital power, accompanied by a sudden subsiding of the swelling of the hands and face, with pallid countenance, or a striking in of the eruption, the case may be considered as of a highly alarming character. Whenever the symptoms assume an unfavorable aspect, a thorough course of treatment is required to arouse the sinking energies of the system.

The question is frequently asked, whether the stimulating medicines, given freely, will not make the eruption greater than it would have been without it? To this, it may be replied: If the disease be not thrown fully to the surface, the eruption may be less, but the constitutional symptoms will be more violent and dangerous than where the eruption is greater, and the disease effectually thrown to the surface by pure stimulating medicines. To cast the disease off by the surface is the method established by nature, and these curative efforts should be aided.

SECTION II.

VACCINATION—COW-POX.

The practice of vaccination originated in England, about the year 1796. It was introduced by Dr. Jenner.

In the year 1775, Jenner, who was then a student of medicine, one day heard a dairy-maid in the office, in conversation with his preceptor, declare that she was not afraid of the small-pox, (which was at the time prevailing in the neighborhood,) for she had taken the kine-pox, and that dairy-maids that had taken the disease from the cows never took the small-pox. This declaration of the milk-girl, first gave Jenner the idea of introducing the cow-pox by vaccination, as a means of protecting the system from small-pox. Although it had been known in some of the dairy counties in England many years previous to the time of Jenner, that cows were subject to an eruptive disease, which, being communicated to the hands of the milkers, produced pustules, which protected them from small-pox, yet no one before Jenner ever thought of introducing a preventive to the small-pox, by inoculation with the cow-pox matter.

The opposition that Jenner met with from the medical profession, in introducing this new practice, was of the most hostile character. Two physicians in London went so far as to declare through the public journals, that introducing the disease from an animal into the human system would convert mankind into a sort of mongrel, partaking of the nature both of man and beast. It was even denounced from the *pulpit*, as an invention of *Satan*, and that the devil first introduced the practice by vaccinating Job.

After many years of devoted attention to this subject, Jenner presented an essay to the Board of Physicians, of London, containing an account of his experiments in vaccination, and furnished proof of the protection it afforded against small-pox. They, however, *returned* the essay, with the advice to suppress its publication, or otherwise he would be considered as either a "*fool or a knave*."

The frightful and ridiculous accounts related concerning vaccination, during its early struggles against popular prejudice, were probably not even surpassed in inconsistency, by the multitude of gross and palpable misrepresentations extensively circulated, concerning the Thomsonian system of medicine.

The practice of vaccination, however, finally gained the confidence of many medical men, and it soon became generally adopted. Jenner, on his first visit to the United States for the purpose of

introducing vaccination, met with strenuous opposition from the medical profession of Boston, where he first landed. Dr. Benjamin Waterhouse, then a professor at Yale College, was the first of the medical faculty who adopted vaccination. He then introduced it into his own family, and about the same time Thomas Jefferson's family were vaccinated; and in a few years after, the practice of vaccination became generally adopted, not only in England and the United States, but throughout all civilized countries.

There is too much evidence to admit of a doubt that vaccination affords a protection, in general against small-pox: that it occasionally fails of affording protection to the system, is equally certain; but it should be borne in mind, that there are many assignable causes for these failures, such as, when the matter used is of spurious character, or its virtue destroyed by long keeping; or where erysipelatous inflammation takes place, and destroys the genuine character of the disease; or where the patient is affected with an eruptive disorder, and thus the vaccine disease perverted or changed.

I attended a female, not long since, who had the small-pox in a most violent form, and who had been vaccinated. On examining the mark on her arm, I discovered a large smooth scar, nearly the size of a quarter of a dollar, showing that the scab must have been three or four times as large as a genuine vaccine scab, and that the inflammation had probably so modified the disease as to afford no protection against small-pox. The family of this female had been vaccinated, and they all escaped the small-pox. It is at least probable, that in the greater part of those cases of small-pox that occur after vaccination, the failure of vaccination in affording protection, has been in consequence of imperfection in the vaccine virus; its nature being changed by erysipelatous inflammation; the vesicle having broken, and the fluid escaped; or from the scab being injured or rubbed off soon after it had formed.

Concerning Vaccination causing New Diseases.—That eruptive diseases are sometimes occasioned by vaccination, is admitted: but many, and probably the great majority of instances of disease occurring after, and attributed to vaccination, arise from other causes, independent altogether of the vaccine virus. How often do consumption, scrofula, and chronic inflammation of the eyes occur as a consequence of small-pox; great numbers also die of the disease. Although small-pox may tend to purify the system, as Dr. Thomson asserts, yet there are few, probably, who have witnessed bad cases of it, that would willingly take it, rather than run all the risks attendant upon vaccination.

Characteristics of a genuine Vaccine Scab.—Not larger in cir-

cumference than a five-cent piece, nearly round, with an indentation, or eye, in the centre; smooth on the upper surface, with a bold and regular rounded edge; of a mahogany color, horny appearance, and brittle.

How to preserve the Scab.—Kept from the light, and in a cool place, in a sealed glass vial, a scab will continue good for years. The usual way of preserving the virus is to wrap it in a small piece of clean paper, and inclose it in bees-wax.

To prepare the matter for Vaccination.—Take a portion of the brittle part, near the middle of the scab—place it on a piece of glass or china, and put a drop of cold water on it, and when sufficiently soft, mash it with a knife-blade; or, shave off a small portion of the scab, and then add sufficient water to the part shaven off to make it of about the consistency of honey.

Season most favorable.—In very cold or very hot weather, vaccination is very liable to fail, requiring in some instances to be repeated several times before it will take.

Age—A child should not be vaccinated until after it is at least two months old. The usual time is about the fourth or fifth month.

Precautions.—Be sure that the matter to be used is genuine. Do not vaccinate a child affected with any eruptive disease. Persons predisposed to erysipelas should not be vaccinated at a time when that disease is prevailing.

Place of Insertion.—The part to be preferred for introducing the matter, is about midway between the top of the shoulder and the elbow, just below the insertion of the deltoid muscle, on account of there not being so much motion in that part; or, it may be done below the elbow, or under the knee on the calf.

The General Characteristics of the Genuine Vaccine Disease.—First: Little or no inflammation until or after the third day from the time the puncture is made.

Second: About the fourth or fifth day, a small point of inflammation appears, which gradually enlarges, and in about two days a small vesicle is formed, which is depressed in the centre, and without inflammation in the adjoining skin. The vesicle enlarges, remains circular, with a regular and well-defined margin, more depressed in the centre, and a small crust begins to form in the centre of the depression, by the seventh or eighth day.

Third: Between the seventh and eighth days, there is an areola or blush of inflammation formed around the margin of the pustule. This circle of inflammation enlarges, and frequently by the ninth

day it will be two or three inches in diameter, but remaining circular. The crust in the centre grows darker, "the turgid margin shining, as if the lymph were assuming the character of pus."

Fourth: The vesicle generally reaches its acme by the *eleventh* day, when the surrounding inflammation begins to subside, first immediately around the pustule, and gradually declines towards the circumference, where it leaves at last a mere ring.

Fifth: The fluid in the vesicle becomes thick and turbid, and soon forms into a smooth crust, of a dark brown or mahogany color. The crust, in many instances, does not loosen and fall off under three weeks. "It leaves a permanent circular cicatrix, about five lines in diameter, and a little depressed, the surface being marked by many little *pits*, or indentations, denoting the number of cells of which the vesicle had been composed."

The Constitutional Symptoms attending the course of the vaccine disease, are generally very slight, especially in children. In some instances, there are chills and fever, and headache, which may need some attention, though generally they soon subside without any treatment. The glands under the arm are apt to be swollen and sore, and care should be taken to avoid lifting the child with the hands under the arms, as is the usual practice.

Characteristics of spurious or imperfect Vaccination.—First: There is generally considerable inflammation and raising of the skin, on the second day after the puncture is made.

Second: The scabbing commences by the third or fifth day from the commencement of the inflammation, and runs its course in a much shorter time than the genuine.

Third: There is no depression in the centre of the pustule; it is raised up high, and has an irregular margin.

"When the inflammation commences on the formation of the vesicle, and assumes an erysipelatous character early, with much swelling, and the pustule assumes a blue appearance, it should not be considered as genuine."

Local Treatment.—When the inflammation becomes so great as to require attention, as it often does when the disease is of a spurious character, the parts should be bathed occasionally with tincture of lobelia, and a salve of simple cerate, or a preparation of sweet oil and lime-water applied. In some instances, a poultice of slippery elm and ginger, kept wet with the tincture of lobelia, answers better than salves. In severe cases, accompanied with much pain, the bowels should be relieved by injections, and the patient kept slightly nauseated with lobelia, or if necessary a vapor bath and an emetic given. When the swelling is very great the arm should be kept at perfect rest, in a sling, or on a pillow.

SECTION III.

VARIOLOID—MODIFIED SMALL-POX.

This is an eruptive disease, which bears some resemblance to small-pox. It is in general, however, of a much milder character, and runs its course in about half the time required for small-pox.

It is the prevailing opinion among medical men, that varioloid is genuine small-pox, operating upon a system which has previously undergone vaccination.

Symptoms.—The first symptoms are lassitude, languor, loss of appetite, chilliness, pain in the head, back and limbs, sickness and vomiting, and sometimes delirium. The fever, in some instances, is as violent as in severe cases of small-pox, though, in general, it is of a mild character.

By the third or fourth day of the fever, the eruption begins to appear, and in the early stage resembles the eruption in this stage of small-pox. There is seldom any fever after the eruption comes out. There is no *secondary* fever in varioloid, such as occurs in the *suppurative* stage of small-pox. In varioloid the eruption generally comes out at different periods, in successive crops; first on the face and breast, and often disappears there, by the time it first appears on the feet.

By the fourth or fifth day the pustules begin to dry, and by the sixth or seventh day, begin to fall off; whereas, in small-pox, the scabs seldom fall off before the fifteenth day.

The appearance and course of the eruption in varioloid, is very diversified. In many instances there is a rash resembling measles, which precedes the eruption. It frequently happens that a portion of the eruption dries up in the course of two or three days, whilst another portion will become filled with a watery limpid fluid, by the first or second day, and by the fourth day, usually burst, and another set will become pustular, somewhat resembling small-pox pustules, and remain four or five days longer before they form into scabs. In some cases the eruption becomes confluent, by the vesicles running together in masses or patches; but even in this form of the disease, there is seldom any secondary fever.

Varioloid is not often fatal under judicious treatment; much less so than genuine small-pox.

Treatment.—The general points of importance to be kept in view in the treatment of varioloid, are to cleanse the stomach by emetics, preceded, if necessary, by the vapor bath; the bowels to

be regulated by injections; and the constitutional efforts sustained by pure stimulants, and appropriate nourishment.

In the more violent cases, where the patient is much distressed, the *emetic* or *course of medicine* should be repeated at proper intervals, as long as the symptoms present an unfavorable aspect.

In many mild cases, simple herb teas, and a proper attention to diet will be sufficient in the way of treatment.

The *vapor bath* may be employed in any stage of the disease, and will be of especial benefit where the skin remains in an unhealthy condition after the eruption has passed off.

Varioloid seldom leaves the skin permanently pitted.

SECTION IV.

VARICELLA—CHICKEN-POX—SWINE-POX.

Chicken-pox is an eruptive disease, and generally of a mild character. Some medical writers maintain that varicella is a modification of small-pox; others contend that it is a separate and distinct disease.

Chicken-pox is almost universally confined to children, and a second attack, in the same individual, is of very rare occurrence. Neither small-pox nor vaccination affords any protection against chicken-pox, nor does chicken-pox prevent small-pox.

Peculiarities of Chicken-pox.—In general there is some slight fever, for one or two days, when the eruption begins to be disclosed, first appearing on the neck and back, in the form of small vesicles, filled with a pellucid fluid, which dry away and disappear on the seventh or eighth day,—before *small-pox* passes through its first stage.

The vesicle of chicken-pox will discharge itself, on being punctured with a pin. A small-pox pustule is cellular, and will not discharge its contents if punctured.

In chicken-pox the eruption comes out in successive crops, some drying away whilst other crops are appearing, and thus continue for some days. The eruption produces a tingling feeling in the skin.

Chicken-pox, however, like other forms of disease, assumes various modifications. Severe cases closely resemble genuine small-pox, leaving the same kind of pits in the skin.

Chicken-pox is seldom attended with danger, instances of death from it being very rare.

Treatment of Chicken-pox.—Where the case is so severe as to demand particular attention, the treatment should be conducted on the same plan as is recommended in the mild form of small-pox; cleansing the stomach by emetics; injections to relieve the bowels, and occasionally some mild stimulant, such as composition or ginger-tea, or herb teas, such as pennyroyal, mint, &c. Where large sores are formed, they should be covered with some simple salve, to exclude the air, and favor the healing process.

SECTION V.

MEASLES.

Measles are contagious, and seldom occur more than once in the same individual.

This disease may be contracted at any period of life; but mostly occurs in childhood. The middle of winter is the season in which it generally prevails.

The disease usually becomes developed either on the fifth or seventh day, after exposure to the contagion; but occasionally, it is not manifested until two, or even three weeks from the time the disease is contracted or imbibed.

Symptoms.—Restlessness, chilliness, and shivering; pain in the head; an increased flow of tears, and a discharge of watery humors from the nostrils, are the usual symptoms in the first stage of the disease. Fever comes on, the throat becomes sore, there is hoarseness and a dry cough, thirst, nausea, and vomiting; hurried and oppressed breathing, and pain in the loins and back. Sometimes there will be profuse sweating.

In about four or five days from the commencement of the fever the eruptions appear in small red spots, similar to flea-bites, first on the face, and then spreading over the body and limbs. As these spots enlarge, they unite and form red patches, of an irregular shape, leaving a portion of the skin retaining its natural color and appearance.

When the disease is of a violent character, slight delirium often occurs about the third day from the commencement of the fever; and in children, convulsions are not unfrequent, a few hours preceding the appearance of the eruption.

The eruption on the face usually reaches the height of its development on the second day after its first appearance, and on the following, begins to fade and subside. The face is mostly swollen, and in severe cases so much so as nearly to preclude

sight. The eruption on the body fades away in the same progressive manner in which it made its appearance; so that about the eighth day from the commencement of the fever, it disappears finally on the back of the hands, where it remains longest.

In measles, there is usually more or less fever during the continuance of the eruption; more especially at night. Short and difficult breathing, and a harassing cough, frequently prevail.

Looseness of the bowels is apt to take place when the eruption begins to decline, which is not unfavorable at this stage of the disease; but where a diarrhœa occurs just before the eruption is making its appearance, it is to be considered as an unfavorable occurrence, as it tends to interfere with the regular progress of the disease, or cause it to retrocede. Active purging with cathartics in the early stage of the disease, may prevent the eruption from coming out, and be the means of bringing on convulsions.

Measles occasionally resemble scarlet fever so closely that it would be difficult to distinguish between them. This, however, is a matter of little consequence, as the same course of treatment is applicable in both diseases.

Although measles, in general, are not dangerous, yet, in persons of feeble constitution, and delicate health, they occasionally become a very formidable disease, assuming the form termed congestive or typhous. In this form of the disease the vital powers are prostrate; a proper reaction or fever does not ensue, or takes place very slowly and imperfectly. The countenance is pale, and the breathing slow and oppressed; the pulse feeble and laborious; the extremities cold—in short, all the vital energies are depressed. Infants are peculiarly liable to this form of the measles.

Treatment.—In ordinary cases of measles, much medicine is not required. The vapor bath and an emetic in the early stage, will lighten the disease and render the patient much more comfortable; after which, give small doses of the tincture of lobelia, and warm teas—as, composition, ginger, pennyroyal, summer savory, balm, &c., in order to keep a determination to the surface, and promote perspiration. It is a good practice to administer daily an injection of composition tea, adding from a fourth to a half of a teaspoonful of green lobelia.

The oppressed breathing and harassing cough may be relieved more or less by placing the system under the influence of lobelia.

When the disease is of a more violent character, the patient much distressed, or the eruption slow in coming out, a course of medicine, or at least an emetic and injection, should be given, and if the symptoms continue violent, repeated every day, until there is a manifest improvement.

If the weather be cold, the patient's room should be kept comfortably warm and of an equable temperature, and the patient

should avoid exposure to a current of air. Still, a proper ventilation of the room will be advisable, which may be effected without risk, when the patient is in bed. When a stove is used in the room, a basin of water should be kept on it, to prevent the air from getting too dry.

Where coal is burned, every precaution should be used to prevent the escape of gas into the sick-room, as it is exceedingly pernicious, retards the recovery of the patient, and increases the liability to sore eyes, running from the ears, and swelling of the glands.

Where several children of the same family are sick at the same time, let them be kept separate, if possible; for if several children sick with measles be crowded together in the same room, the disease will be much more difficult and dangerous.

The vapor bath may be administered with great benefit in all cases of measles; it not only tends to shorten the disease, but makes the patient more comfortable, and lessens the liability to diseases that are apt to follow measles.

Affections liable to follow Measles.—There is no disease which leaves the system so susceptible to the morbid influence of cold, as measles. In fact, the effects which frequently ensue as a consequence of measles, are more unpleasant and troublesome than the primary disease.

Coughs, consumption, inflammation of the lungs, scrofula, diseases of the eyes, rheumatism, eruptions about the head, and running from the ears, are not of uncommon occurrence after measles.

The liability to these affections, however, will be greatly lessened when the Thomsonian practice is employed. A vapor bath about the time the eruption disappears, and the skin is peeling off, will tend to restore a healthy action in the skin, and diminish the liability to secondary forms of disease. If the tongue have an unhealthy appearance, and other symptoms which indicate a disordered stomach and bowels, a full course of medicine should be given, and some stimulants used to keep up a determination to the surface, together with a dose of the bayberry or sumac-tea once a day.

Death seldom occurs from measles under Thomsonian treatment. Under unfavorable circumstances, however, as when two or three patients are crowded in a small room, badly ventilated; or when it occurs in persons predisposed to consumption, or to scrofula, it occasionally becomes an unmanageable disease.

The treatment for disorders following measles must, of course, be regulated by the condition of the patient: in slight affections giving some simple tonics; and where the symptoms indicate much derangement, vapor baths, injections and emetics may be required,

followed by tonics, and such things as are considered good for restoring health; for instance, a strong decoction of pipsissewa, yellow dock-root, and sarsaparilla.

If there be a discharge of offensive matter from the ears, they should be syringed every day with castile soap-suds; then wet a piece of cotton or wool with tar-water, or tincture of myrrh, or Haarlem oil, and put it in the ear, pressing it in so that the liquid may pass into the cavity. A drop of Haarlem oil put into each ear every day, during the first four days of the disease, may prevent running.

Diet.—During the early stage of measles, and until the patient becomes convalescent, the diet must be light; elm-gruel, crust-coffee, barley-water, &c.

SECTION VI.

SCARLET FEVER.

Scarlet fever assumes many grades of violence, from a very mild to that of a most malignant form of disease. It is generally treated of under three varieties.

First. The *simple* or milder variety.

Second. The *inflammatory*, where reaction or fever is of a high grade: and

Third. The *malignant*, where the vital powers are greatly enfeebled by the force of disease. The treatment, however, is to be conducted upon the same general principles, varying in promptness according to the violence of the disease.

General character and course of the simple variety.—Beginning with the usual premonitory symptoms of acute disease, such as paleness of the skin, loss of appetite, lassitude and chilliness, which continue for an indefinite period, “varying from one to three or four days,” when reaction takes place, and the patient experiences flushes of heat, pains in the head, loins, and extremities, and sickness of the stomach; the skin becomes dry and hot, and the pulse frequent and quick.

“Generally, within the first forty-eight hours after the commencement of the fever, a scarlet eruption comes out, first on the face, and then, successively, on the neck, trunk, and extremities.” “The rash consists of innumerable red points, which, running into each other, give a diffused blush over the skin.” In some cases

the eruption appears in patches, "leaving the skin, in the intermediate space, of its natural color."

Usually, by the fourth or fifth day, the eruption and fever begin to decline; critical evacuations ensue, such as a copious discharge of urine, depositing a reddish sediment; a general warm perspiration, and sometimes diarrhœa. About the eighth day after the commencement of the eruption, the skin begins to roughen and peel off, at which time there is considerable itching over the surface.

Sometimes the disease assumes a more violent character; there is much distress and sickness at the stomach, together with severe headache, and general weakness. The reaction or fever comes on early, "with a feeling of stiffness and dull pain in the muscles of the neck and under the ears, and angles of the jaws." The throat becomes swollen, which renders it difficult for the patient to swallow; a hoarseness of the voice takes place, and there is a "sense of constriction in the throat." The fever assumes a high grade of violence; the skin is dry and harsh; the tongue dry and of a bright red along the edges, and over its surface the little glands or papillæ may be seen projecting. "The eruption does not come out as early in this as in the milder form of the disease, and it is seldom diffused over the whole surface—appearing in irregular and not very large patches, on different parts, more particularly about the elbows. In some instances, the rash disappears and reappears partially, at unequal periods of time, but without any corresponding change in the general disorder, and the whole duration of the complaint is thus lengthened.

If the disease begin to decline by the fourth or fifth day of the fever, the throat rarely ulcerates, the swelling and inflammation subsiding as the disease abates. When the disease is more protracted, "small ulcers are apt to form on the palate and tonsils, which are soon converted into superficial sloughs." "There is always a considerable quantity of viscid mucus secreted in the fauces, which often concretes into white flakes on the inflamed parts, and presents the appearance of ulcers, where in reality none exist." As the disease gives way, "the sloughs in the throat begin to separate, and leave red ulcerated surfaces, which generally heal without difficulty. Sometimes, however, instead of separating about the eighth day, the sloughs enlarge, become brown, and discharge an acrid sanious fluid; and in such cases the glands about the neck are generally swollen, hard and painful; and the patient is harassed with painful diarrhœa and tenesmus. The inflammation occasionally extends into the trachea, and the patient dies under symptoms of acute bronchitis. The brain often becomes prominently affected during the eruptive stage, giving rise to deep and sometimes fatal stupor."

Malignant Scarlet Fever.—This form of the disease is marked

by a general prostration of vital power. The reaction, though it may be apparently vigorous in the commencement, soon declines into a low, or typhoid fever.

The eruption comes out irregularly, and is usually pale in the commencement, but acquires a dark or livid hue in the progress of the disease. The eruption often strikes in soon after its first appearance, and in two or three days reappears on some part of the body.

The skin varies in its temperature; generally it is not very high, though occasionally there is a burning, acrid heat over the surface. The brain is much affected early in the disease. The patient becomes delirious; the eyes are inflamed and dull, and the cheeks suffused with a livid flush, readily distinguished from the bright red which occurs in a less malignant form of the disease. "The tongue is dry and covered with a brown or dark fur, and the breath fetid." The ulceration of the throat assumes a very malignant character, and frequently it is converted into black and offensive sloughs, accompanied with an acrid secretion from the nose, which excoriates the parts with which it comes in contact. "The fever and ulceration of the throat frequently exist without there being any eruption developed during any period of the disease: this is called putrid sore-throat. In some instances, the vital powers are prostrated in the commencement of the disease to such a degree that reaction does not take place." "The patient becomes pale, faint and oppressed;" there is much distress and oppression at the stomach, with nausea and vomiting, giddiness, a sense of weight in the head, and extreme debility. The breathing is oppressed, and sometimes there is a mixture of paleness and lividity on the cheeks. "The pulse is slow, irregular and weak." "The bowels are torpid in the beginning, but towards the termination of the disease diarrhœa almost always occurs in fatal cases." The eruption is at first pale, or of a copperish hue, which subsequently becomes purple.

Malignant scarlet fever, in some instances, terminates fatally as early as the second, third or fourth day. In other instances, the vital powers will struggle with the cause of disease for weeks, occasioning a low typhoid fever, until finally either the disease or the energies of the system are exhausted, thus terminating either fatally or in convalescence.

A milder form of scarlet fever may assume a dangerous character, from two or more patients being sick of the disease in the same room; more especially if the room be small, and the patients near each other. The exhalations from a patient sick of scarlet fever, will sometimes occasion a tingling in the nose, and even in the skin of the physician or nurse; and when patients are placed near each other, the disease will always become aggravated by it and, in many instances, prove fatal.

Scarlet fever, in its mild form, occasionally so closely resembles measles, that it becomes difficult to distinguish between them. The indications of treatment being the same, however, in both diseases, the difficulty of determining the name will occasion no embarrassment in directing the treatment.

Causes.—Though evidently contagious, still there is the most conclusive evidence that the disease is frequently produced by atmospheric causes, together with exposure to cold and dampness.

Treatment of Scarlet Fever.—A course of medicine, administered in the early period, will generally moderate the symptoms through the whole subsequent course of the disease, and in some instances will almost break it up at once.

In the mild form of the disease, after giving a course of medicine, or simply an emetic, as long as the symptoms are of a mild character, nothing more will be required than to give occasionally of some mild stimulant, such as composition or ginger-tea, or simple herb teas, such as pennyroyal, catnip, sweet-marjoram, &c., and an occasional enema, to relieve the bowels; together with small doses of the tincture of lobelia, more especially at night.

When the patient continues to be much distressed, a course of medicine should be administered daily, and small doses of lobelia given every hour or two, in composition, bayberry, or pepper-tea. It is not always requisite to administer the vapor bath previous to giving an emetic, as in some instances free vomiting should be produced two or three times in every twenty-four hours. When the skin is very hot and dry, it will be difficult to produce perspiration, even by the vapor bath, without frequently washing or sponging the surface with cold water, or tepid vinegar and water, or, what is still better, sal eratus water. A tablespoonful of cold water may be allowed the patient occasionally. During the early stage of the fever, and when the patient is restless, and the skin hot and dry, cold ablutions may be employed, provided they do not occasion chilliness. But in a later period of the disease it will be safer to use tepid ablutions, to reduce the heat of the skin, and quiet restlessness.

Injectiions constitute an important part of the treatment of scarlet fever. They should be prepared in the usual form—either of composition tea, adding from half a teaspoonful to a teaspoonful of lobelia powder; or of bayberry tea, adding a teaspoonful of the third preparation of lobelia.

In severe cases the injections should be repeated every few hours. An occasional injection prepared of lobelia powder and warm water, will be found of benefit in relaxing the system, when the fever is very high; the injection should be retained in the

bowels fifteen or twenty minutes. Sometimes this will occasion free vomiting, and prove of especial benefit. Persons unacquainted with the strange symptoms sometimes occasioned by lobelia injections retained, would very naturally become alarmed by their occurrence; the patient will become restless, tossing about, with vomiting, and frequent retching; the system becomes greatly relaxed, the eyeballs are turned up, the lids partly closed, the countenance pale, and the breathing accompanied with a kind of sobbing. During the continuance of these symptoms, the face, breast and hands should be bathed with vinegar, or vinegar and water. The most signal benefit is derived from placing the system fully under the influence of lobelia, in the early stage of scarlet fever, before the throat becomes seriously affected, as it frequently does in this disease. This will prove the most effectual preventive of malignant disease of the throat. Under the powerful influence of lobelia, the nervous energy is concentrated in the great sympathetic system of nerves, and its whole force brought to bear against the cause of disease; and however great may be the distress and its operation, it almost invariably produces the best kind of results. I have seen a simple scarlet rash cured by a lobelia injection. Genuine scarlet fever, however, like small-pox and measles, will run a definite course, and all that can be accomplished by medical treatment, is to guide the disease to a favorable termination by lending a helping hand to nature.

Care will be necessary not to keep the patient too warm, *externally*, when the fever is high. A hot stove-room is very oppressive to the sick, unless water be kept constantly evaporating on the stove, to prevent the air from becoming too dry.

The vapor bath proves a powerful auxiliary agent for the cure of scarlet fever; and the more frequently and more thoroughly it is administered, the better it will be for the patient. It can never do any harm, except by compelling a patient to sit up longer than his strength will bear. If the patient be too weak to sit up without being over-fatigued, the vapor may be applied on a bed or mattress. There is, probably, no means better adapted to aid the efforts of nature to remove scarlet fever poison, and every other kind of poison from the blood, than the steam or vapor bath.

Precaution.—More than one patient affected with scarlet fever should never be admitted into the same room, where it can be avoided. This precaution is of the very greatest importance. If the poisonous effluvia emanating from the body of one laboring under scarlet fever, be inhaled by another patient sick of the same disease, it will be like adding poison to poison, and will often prove fatal under any treatment that can be adopted.

Treatment of Malignant Scarlet Fever.—Generally, the reaction commences violently, the system being thrown into a state of tumultuous excitement; but, from the power of the cause of disease, the vital energies soon become exhausted, and the fever assumes a low malignant or typhoid character. In other instances the vital powers are overwhelmed in the outset of the disease, and are unable to bring on reaction. The patient remains cold, and in a state of stupor, or he is thrown into convulsions. In either case, the treatment should be prompt and energetic, consisting of emetics, of either the liquid of the third preparation of lobelia, or the lobelia powder prepared in composition tea. This, together with stimulating injections, and external warmth, will be the surest means of establishing reaction. To sustain the curative efforts of nature, active stimulants should be employed, as the third preparation of lobelia, in composition, bayberry, and cayenne-tea. Wine whey, and carbonate of ammonia, will also be of advantage in the advanced stages of the disease, when the strength of the patient is far exhausted.

If the skin be dry, a *moist* heat should be kept around the patient, by hot bricks wrapped in damp cloths; but where the skin is cold and clammy, a dry heat will be proper, together with warm frictions and stimulants to the surface, and when the patient is oppressed by too much external heat, the surface should be bathed with tepid water, vinegar and water, or whiskey.

Malignant Sore Throat.—"The *capsicum*," says Dr. Eberle, "appears to be a particularly valuable remedy in this variety of the disease. This article was first employed in malignant scarlatina, by Dr. Stephens, in a very fatal epidemic which prevailed at St. Christopher's, (West Indies,) in 1787, and it has since received the decided approbation of many eminent practitioners." The form in which the faculty employ it, is similar to Dr. Thompson's pepper sauce—a tablespoonful of capsicum, and two teaspoonsful of fine salt, to half a pint of boiling water. Strain, and add an equal quantity of good vinegar. For an adult, a tablespoonful every half hour; for children, a less quantity, in proportion to their age. The throat to be frequently gargled or washed with it. "Stephens asserts that he employed this remedy in about four hundred cases, and with surprising success. The ulcers in the fauces soon cast off their sloughs, and commenced to heal; a general pleasant warmth was diffused through the system; and the vital powers speedily assumed a more active condition." There is, however, such an antipathy against cayenne pepper, that nurses sometimes refuse to give it, because it makes the child cry, and they have heard others say it is too hot for children. I have never observed any ill effects from the use of cayenne pepper, either in the young or old; but many children die, who probably might have been restored to health, by a free use of this pure

stimulant. The capsicum-tea I find to answer as well, or even better than the pepper-sauce, more especially in cases where the stools are of a green cast, or emit a sour smell. As much cayenne as will lay on a five-cent piece, and double the quantity of composition powder, mixed in a tablespoonful of bayberry-tea, answers better, in many instances, than giving the tea without the powder; the dose to be repeated every two or three hours.

If the patient be affected with diarrhœa, purified charcoal or prepared chalk may be mixed with other medicines given, with a view to improve the acrid condition of the secretions and excretions.

In protracted cases, ulceration of the mucous membrane of the bowels sometimes takes place, giving rise to painful diarrhœa, attended with extreme emaciation of the flesh, and a dry husky condition of the skin. When these symptoms prevail, such remedies must be employed as are adapted to correcting the secretions, and sustaining the healing action. Stimulating poultices applied warm to the abdomen, will afford relief and may prove especially beneficial.

Applications to the Throat, externally.—In all cases where the glands of the throat or neck are swollen, a warm poultice should be applied. This may be made of Indian mush, well boiled, adding a portion of lard and ginger, and when the poultice is spread, cover the surface of it with lobelia powder. The poultice should be renewed, or warmed occasionally, and not allowed to become cold. Slippery elm or flaxseed will answer as well as the Indian mush.

Gargles.—In the early stage of the disease, the tincture or tea of lobelia answers well as a gargle. Capsicum tea or pepper sauce, however, forms the best gargle in the more advanced stages of scarlet fever, and may be used during the whole course of the disease. Swabbing the throat with the capsicum tea or pepper sauce is still more effectual than the use of gargles, especially if the throat be ulcerated; and in young children who cannot use the gargle, the swab must necessarily be used. This is to be done with a piece of sponge or rag, tied firmly on the end of a stick. Dip the swab in the preparation, and rub over the throat. This is sometimes a difficult operation in children, but the benefit to be derived from it should induce nurses and parents to be persevering in its use. A soft piece of wood placed between the jaws, will enable the nurse to apply the swab more effectually. The child's head should be held firmly at the time.

When clothing is removed from patients affected with a contagious disease, it should be immediately put in cold water, instead of being thrown into a closet or in a corner.

The Diet, in the early period of the disease, should consist of liquids, such as barley-water, arrow-root gruel, crust coffee, elm gruel, and gum arabic water. In a later period of the disease, a more nutritious diet may be allowed the patient, as milk-porridge, essence of beef, egg-soup and custards. In a sinking state of the system, wine-whey, with carbonate of ammonia, will be proper.

When there is difficulty of swallowing, slippery-elm powder, mixed with the liquids to be taken, will enable the patient to swallow with much less difficulty. The elm-powder, added to milk-porridge, renders the latter more easy of digestion.

Scarlet fever is liable to be followed by dropsical affections, from exposure to cold, or inaccuracies in diet, before the patient has fully recovered from the primary disease. As long as the tongue remains coated, or does not present a healthy appearance, care should be taken to avoid exposure to cold or dampness; and the diet should be confined to such articles as are easy of digestion. I attended a little boy, in Second street, who had anasarca, or general dropsy, following the scarlet fever. Under the treatment, the symptoms all became more favorable, and the patient began to recover rapidly; but, from eating heartily of broiled mackerel, which his stomach could not digest, dropsy of the chest ensued suddenly, and the case terminated fatally in less than forty-eight hours.

An occasional vapor bath, followed by a shower bath, the surface being rubbed dry, and bathed over with some stimulating preparation, as pepper sauce, or No. 6 and water, in equal parts, will tend to prevent dropsy, or other affections that might otherwise ensue as a consequence of scarlet fever. The spice bitters, or other tonics, as Virginia snakeroot, or colombo, should be given two or three times a day, to assist in restoring digestion.

Where dropsy has ensued, the bath should be administered daily, as above directed, and followed sometimes by an emetic; broken doses of lobelia given either in tincture or pills, together with an occasional dose of composition or pepper-tea, or, if the patient prefer it, the compound lobelia pills. In the early stage of dropsy, the compound lobelia pills may be used in the place of all other remedies; between courses of medicine, and in slight attacks, they may be found sufficient to remove the complaint. When the dropsical symptoms disappear, a strong tea of poplar bark, or of some other tonic, may be employed.

A Case.—I was called to attend a young man who had been ill of scarlet fever about a week. The rash had been, from the beginning, alternately appearing and disappearing. The fever was of a low grade, and attended with delirium. The principal medicines used in this case, and which proved successful, were the

liquid of the third preparation of lobelia, in a strong decoction of bayberry tea,—a teaspoonful of the former to a teacup half full of the latter, repeated every two or three hours, in continued succession, for several days and nights; together with an occasional injection of the same kind of compound. This medicine always quieted the delirium for an hour or two, and occasionally under its influence the patient would sleep. As the delirium returned, the dose was repeated, and these symptoms would again subside. The patient generally vomited once or twice in the course of twenty-four hours, but seldom complained of sickness at the stomach. Under this treatment, together with an occasional vapor bath, administered on a mattress, the patient recovered. The diet consisted principally of wine-whey and essence of beef.

The Thomsonian practice is generally successful in scarlet fever, when applied in the first outset of the disease, though occasionally it baffles the most thorough and judicious treatment, more especially when there is more than one patient sick of the disease in the same room. The treatment pursued in the above case is given in order to point out a course that may prove successful in other *desperate* cases. In bad cases of scarlet fever, the floor should be sprinkled three or four times a day with a few teaspoonfuls of the chloride of soda, or the chloride of lime should be placed in vessels about the room. This is more especially necessary where there is more than one patient in the same room.

SECTION VII.

NETTLE-RASH—HIVES.

This is an eruption resembling the rash produced by striking the skin with nettles. The skin is raised and whitish on the top, with a hardness around the margin of the swelling, and more or less inflammation, and is attended with painful itching and tingling.

There is a tendency in nettle-rash to disappear and reappear suddenly, and thus continue for several successive days.

In some instances, the eruption comes on only at night, with an itching and tingling over the whole body; and when the skin is scratched or irritated, large *wales* immediately rise up, with a paleness or whiteness on the centre, and light-red margins, attended with intolerable itching and stinging pain.

Occasionally the disease becomes chronic, the swelling remaining stationary for weeks, or even months.

Cause.—Nettle-rash is caused by a disordered condition of the stomach and bowels. Eating shell-fish will sometimes bring it on. Balsam copaiva, where it disagrees with the stomach, will occasionally produce this kind of eruption.

Treatment of Nettle-rash.—The vapor bath, and a lobelia emetic, will, in many instances, remove the disease at once. If the first operation fail of effecting a cure, repeat it at proper intervals, until the general health is restored, giving occasionally composition or spice bitters; and cleansing the bowels by using injections, prepared in the usual form.

In milder cases, purified charcoal, taken in composition tea, two or three times a day, together with one or two injections, will be sufficient to rectify the constitutional derangement.

Lime-water is useful in all cases of nettle-rash, as the complaint is always attended with an excess of acid in the stomach and bowels. The dose for a child is from a teaspoonful to a table-spoonful in boiled milk, taken two or three times a day.

A friend of mine informs me that half a teacupful of saffron tea, sweetened, and taken at bed-time, will overcome the symptoms.

The Diet should be simple, avoiding all gross food. Where the disease has become seated, let the accustomed diet be changed to other articles of equally nutritious qualities.

Local Applications.—In recent cases, the tincture of lobelia, vinegar and water, or alcohol and water, may be applied immediately to the eruption. In chronic cases, the stronger stimulants should be applied to the swellings, as the No. 6, third preparation of lobelia, pepper-sauce, or stimulating liniment, &c. All eruptive diseases of this kind are to be treated upon general principles,—the grand object to be kept in view, being to correct the constitutional disorder that gives rise to eruptions.

SECTION VIII.

ERYSIPELAS—ST. ANTHONY'S FIRE, OR ROSE.

This form of disease is characterized by a redness of the skin, swelling, and a tingling burning pain.

Erysipelas probably never occurs except there be previous derangement of the general health. Usually the first symptoms are languor, chilliness, headache, loss of appetite, and other signs of a

disordered stomach. These symptoms are usually followed by two or three days' fever, before the erysipelas makes its appearance. In some instances the fever is violent; in other cases it is of a milder character, and occasionally, though very rarely, the inflammation appears simultaneously with the fever.

"The inflammation comes out in the form of an irregularly circumscribed stain or blotch, which soon spreads over a greater or less extent of the contiguous surface." There is always more or less swelling, even at the commencement of the inflammation, and a burning, tingling pain, but the part does not throb or pulsate, except in very violent cases, and where suppuration takes place in the cellular tissue.

Usually by the third or fourth day, blisters are formed on the inflamed surface, filled with a "limpid or yellowish serum." In the course of two or three days, the blisters break, occasionally forming crusts, or large scales. In less than a week, in favorable cases, the inflammation and swelling begin to subside; the skin becomes pale, or of a yellowish cast, and presents a rough appearance, and shortly after the old skin peels off.

Erysipelas is generally confined to the skin, though in some instances, the inflammation extends to the adjacent cellular tissue. In cases of this kind, the pain is more severe, and the parts become extremely tender, and painful on the slightest pressure. The constitutional disturbances are generally severe, and the complexion sallow, indicating derangement in the functions of the liver. Frequently, in the severe form of the disease, suppuration takes place in the parts beneath the skin, and the patient experiences irregular chills: "the redness of the skin and the pain subside, but the swelling increases; there is much doughiness, and the parts remain in this state for some time" before the pus will find its way to the surface. When the fluid escapes, it frequently has the appearance of whey, and contains shreds of cellular tissue, like tow, or shreds of cotton.

The face and limbs are most liable to erysipelas. When it attacks the face, the swelling, in many instances, is so great as to entirely close the eye-lids. More or less mental derangement usually attends such cases, especially when the inflammation extends over a considerable portion of the scalp.

The danger from erysipelas is not great, except when the brain is attacked by it, or when it occurs in vitiated or broken down constitutions, and the disease assumes a typhous character. There is a form of erysipelas which attacks females about a year old, appearing first on the privates, and subsequently becomes inwardly seated, and generally fatal. I have seen a case of this kind, attended with sloughing of the vagina, and where the inflammation finally extended over nearly the whole of the body. This patient died in about three weeks from the commencement of the

attack. In this case the stomach and bowels were much disordered previously to the occurrence of the erysipelas.

In many instances, the disease is brought on by eating unwholesome food.

Treatment.—A Thomsonian course of medicine will, in many instances, check at once the farther spread of the inflammation. Where the inflammation is on the face or head, it is a good practice to evacuate the bowels by injections, in the commencement of the course of medicine. In mild cases, and where the general health is not much impaired, the treatment may be correspondingly mild. An enema to evacuate the bowels, together with hot teas, to keep up a moderate perspiration, will be sufficient in the way of constitutional treatment, as long as the symptoms continue favorable.

Where the countenance is sallow, indicating derangement of the liver, or where the fever is high, or the patient much distressed, the treatment should be more thorough. The enemata should be repeated occasionally, always containing a portion of lobelia. An emetic should be given as often as every day, in violent cases, and continue to give broken doses of lobelia, in composition or bayberry tea, or lobelia may be given in the form of pills. A teaspoonful of lobelia powder, given by injection in warm water, and retained in the bowels, will in general relax the system more, and prove more serviceable than when administered in any other way. Free vomiting may often be effected in this way. *In all severe cases, attended with high fever, it is important to keep the system more or less relaxed by small doses of lobelia;* and likewise to give occasionally, either composition or pepper tea. The room should be kept of a moderate temperature. Very hot stove-rooms are pernicious.

The parts affected should be kept elevated, if practicable:—thus, if on the face, the head must be raised higher than the body, or if on the limbs, they should be kept elevated, to favor the return of the blood from the inflamed part.

Of all means for the cure of erysipelas, *emetics* are the most effectual. Besides fulfilling other important indications, they have an influence in restoring the secretions of the liver. It is the opinion of some medical writers, that the *liver* is more or less diseased in all cases of erysipelas. Emetics may be given without previously administering the vapor bath, but when the inflammation is on the face, it will be proper to use the warm foot bath, and an injection, previously to giving the emetic; and to continue warmth to the feet, by hot bricks wrapped in damp cloths.

Injections.—A case of erysipelas came under my care recently, where the symptoms assumed a typhoid grade, and the sensibility

of the bowels was so low that injections of a tablespoonful of the third preparation of lobelia in bayberry tea, were not felt by the patient until after they had been repeated several times. When the sensibility of the bowels was restored, the injection occasioned violent pain and distress several hours. The erysipelas which had spread over nearly the entire surface of one of the legs, assumed a more favorable aspect immediately after the injection, it having aroused a new and more healthy action in the system.

The Diet should be confined to the lightest kind of food, as slippery elm gruel, barley-water, crust-coffee, &c. In mild cases, or where the patient is on the recovery, more generous diet may be allowed, such as milk-porridge, custards, boiled chicken, toast and tea, &c.

Where the attending fever is of a low typhoid character, with great prostration of strength, stupor, or low muttering delirium and coldness of the extremities, active stimulants and tonics should be employed. The remedies most to be relied on in such cases, are the liquid of the *third preparation of lobelia*, in a strong tea of the *bayberry or sumac* to cleanse the stomach; quinine as the best of tonics; and essence of beef, and wine whey as nourishment. I have used quinine with marked benefit, in erysipelas, attended with extreme debility. From twelve to thirty grains may be given every twenty-four hours.

Local Applications.—As a local application to the inflamed surface, the liquid part of the third preparation of lobelia has done well in all cases where I have employed it: for although a powerful stimulant, patients generally experience less burning in the part than before its application. Soap liniment, opodeldoc, sweet oil and lime water, or tar ointment, may either of them be applied to the parts affected. There are some skins which all kinds of grease disagree with; in such cases, scorched flour or powdered slippery elm bark may be applied in a dry state. When the inflammation is on a limb, and the part remains swollen after the inflammation subsides, a bandage should be applied, commencing at the extremity of the limb, and bandaging upward.

Where there is evidence of an accumulation of matter in the parts, deep incisions should be made in order to give the matter an early opportunity to escape.

Children predisposed to erysipelas should not be vaccinated until the general health is restored.

As a general rule, poultices do not answer a good effect in erysipelas, except when the parts ulcerate, or become gangrenous; then the application of stimulating poultices may be useful. In case of simple ulceration, use a poultice composed of elm, ginger, pond lily, and pounded cracker; but in case of gangrene, or mor-

tification, the charcoal or yeast poultice will be more appropriate. A portion of cayenne or of composition powder should be added to the poultice.

In cases of erysipelas in children, the tincture of lobelia answers very well to bathe the inflamed surface. Salt and vinegar is equally beneficial.

Erysipelas is much less dangerous where there is active inflammation, than where the parts are much swollen, and feel doughy, with less redness, and less heat. Erysipelas is occasioned by debility, and it is by an inflammatory action that the vitality of the affected surface is preserved; therefore when the inflammation is of a low grade the third preparation of lobelia should be applied freely externally, and given in frequently repeated teaspoonful doses internally, until the stomach is thoroughly cleansed and the secretions restored—then give quinine freely.

SECTION IX.

SHINGLES.

This complaint is characterized by a cluster or band of vesicles or blisters on an inflamed surface, commencing, in most instances, on the right side of the abdomen. In some instances, this band of vesicles extends down towards the groin; in others, it passes upwards. It is very rarely that the eruption occurs on the left side of the body.

“This disease bears a very close resemblance to erysipelas,” and arises from a disordered state of the system. “Loss of appetite, lassitude, slight headache, nausea, more or less febrile irritation, together with scalding heat and tingling in the skin, and shooting pains through the chest and stomach, are the symptoms which usually precede the eruption.”

The vesicles are transparent until the fourth or fifth day, when they acquire a yellowish or milky appearance, and in the course of a day or two break and form brown crust, and in a few days after fall off. In some instances, the skin ulcerates, leaving scars after the parts heal.

Shingles very seldom attack any but young persons, and rarely, if ever, occur in children under three years of age.

Not dangerous.—Shingles are rarely dangerous. The eruption, however, occurring in a highly diseased or exhausted constitution, may be followed by dangerous consequences from the supervention

of gangrene. "There is a vulgar but erroneous notion that the eruption proves fatal when it surrounds the whole of the body."

Treatment of Shingles.—Little need be said in relation to the treatment of this disorder. The same local applications may be used, as are recommended in erysipelas; and when the general health is much affected, an emetic to cleanse the stomach will be proper. Mild stimulants, as composition, ginger, pennyroyal, &c., may be used to promote perspiration. If the bowels require attention, use enemas. Lime-water, with milk, is good to correct the secretions, where the stools are acrid or of a greenish cast.

The diet should be light, consisting of gruels, milk, toast and milk, elm-gruel sweetened with loaf-sugar, adding a portion of lemon juice. Cold drink, of which lemonade is generally the most grateful, may be allowed the patient in moderate quantities. When the bowels are costive, a gruel made of unbolted wheat flour has a good effect.

The patient should be cautioned against rubbing off the heads of the blisters, as troublesome ulceration may follow as a consequence of their premature rupture.

SECTION X.

SCALD-HEAD.

This name is given to a certain form of eruption, which comes on the *head*. It commences with small ulcers, which discharge a humor that forms into thick crusts or scabs. In some instances, nearly the whole of the scalp becomes affected, forming a continuous mass or scab, attended with paroxysms of intolerable itching, and emitting an offensive odor. Sometimes the humor discharged is extremely acrid, producing an eruption wherever it comes in contact with the skin, and, in this way, the disease not unfrequently spreads partly over the face, and extends down the neck to the back and shoulders. The glands about the ears are also often swollen.

Scald-head is occasionally met with in adults, though it is very generally confined to children, and, unless correctly treated, may continue even for years.

Treatment.—A most important point, in the treatment of scald-head, is the exclusion of air from the parts affected. To accomplish this, cut the hair off close, and apply some kind of salve or

plaster that will exclude the air, such as Thomson's healing salve or an ointment made of tar and suet, and put on a cap, either of bladder or of oiled silk. This will prevent the formation of scabs, though the discharge of matter will continue until the parts heal. The cap should be taken off every day, and the parts that suppurate be cleansed. By gently pressing a dry cloth on the parts, the pus will adhere to it, and in this way be removed. Then apply fresh ointment, and put on the cap, which should be rubbed over on the inside with tallow or oil, to prevent its adhering too closely to the salve or ointment.

The eruption should never be wet with any kind of wash, except the tincture of myrrh, or bayberry. These may be used every time the head is dressed. Tincture of bayberry, or soot tea, may be employed as a wash to allay the tormenting itching so common in this complaint.

Constitutional Treatment.—In bad cases, a sweat and an emetic should be given every week or oftener, as the symptoms indicate. This will greatly facilitate the cure. Lobelia, given in small doses, is of especial benefit in all kinds of eruption. It may be given in pills, or in tincture, several times a day, in quantities merely sufficient to excite slight nausea.

The composition powder, mixed with sugar and warm water, should be taken once or twice a day; more especially, if the tongue be coated. The bayberry or sumac tea may be used for the same purpose.

The spice bitters, or any other simple tonic, may be given to strengthen digestion.

Extract of Pipsissewa, given in the form of pills, is a favorite medicine with some practitioners, in eruptive complaints.

Costiveness may generally be relieved by proper articles of diet, as stewed prunes, gruel made of unbolted flour, with the addition of a few raisins, stewed figs, rye mush, roasted apples, and ripe fruit in season. The diet of course is not to be confined to such articles exclusively.

The following preparation may be used in the place of the external application above mentioned:

Liver of sulphur, three drachms,
Spanish soap, one drachm,
Lime water, eight ounces,
Rectified spirits of wine, ten drachms.

To be mixed and melted together, and applied to the affected parts night and morning.

After the complaint is cured, the head should be bathed every

day with tincture of myrrh to prevent a return of the eruption. On the first appearance of its return, salve should be applied, and the parts excluded from the air; and, if the general health be bad, constitutional treatment should be resorted to.

There is a scabby eruption that prevails among children, generally commencing back of the ears, and frequently spreading over the cheeks, and on the head, resembling scald head. This eruption is to be treated in the same manner as scald head:—apply ointment to exclude the air, keep the parts dry, and restore the general health by appropriate constitutional treatment.

Tar water.—Scaly eruptions on the face and other parts of the surface, may be cured in many instances, by simply washing the parts with tar water, two or three times a day.

SECTION XI.

TETTER.

There are various forms of eruptions, to which the name tetter is generally applied, all of which, however, depend chiefly upon a disordered state of the stomach and bowels, and require much the same kind of treatment.

That which is termed *dry tetter*, consists of red blotches on the skin, covered with pimples, which itch very much. The eruption forms white scales, like fine bran, which fall off, leaving the skin apparently healthy. The eruption reappears and repeats the same operation as before, and in this way, will continue to disappear and reappear indefinitely.

Pustular Tetter.—In this variety, the eruption appears in clusters of small vesicles or blisters, containing at first a thin serum, which in a few days becomes yellowish, and breaking, forms thin crusts or scabs, which fall off, leaving the skin, in many instances, in a healthy condition, except a slight degree of redness; occasionally the skin becomes excoriated. There is a sense of smarting, and sometimes pain, attending the eruption. Not unfrequently the eruption reappears at intervals, and the disease may be prolonged in this way for weeks or even months.

Corroding, or Eating Tetter, as it is called, commences with small painful sores or ulcers, which soon spread into large spots of various forms and sizes, and discharge a thin watery humor. This humor is sometimes so acrid, as to produce new sores wherever it comes in contact with the surrounding surface. This

species of tetter is apt to spread rapidly, and occasionally forms deep ulcers, which are difficult to cure.

Another Species.—There is another species of tetter, appearing in the form of hard, dry, red spots, usually about the size of a millet seed. This eruption is mostly observed on the face and neck, though in some instances, it extends over the whole body. Depending in general upon chronic derangement of some internal organ, especially torpor of the liver, and obstinate constipation of the bowels, it not unfrequently becomes a seated disorder, and can be cured only by restoring the disordered functions of the system.

General Constitutional Treatment in Tetter.—Every variety of tetter may be produced by constitutional disorder, and as a general rule it is brought on by derangement in the system. Generally, there is a superabundance of acid in the stomach, the digestion is feeble, and the bowels constipated. The constitutional treatment must be adapted to the character of the symptoms; an occasional emetic or full course of medicine, and the use of such means as are proper to assist digestion, rectify morbid secretions, and restore the function of the bowels, will be required in all obstinate cases. An emetic or course of medicine once a week, together with a liberal use of purified charcoal, say, from three to four teaspoonsful, daily, mixed in cayenne or spice bitter tea, and from two to four of the compound lobelia pills given every night, will rectify the constitutional derangement in all ordinary cases. In some cases, the constitutional derangement or debility may be rectified by a change of habit. For instance, if the habits be sedentary, the patient should take exercise in the open air, especially after meals; and use especial care to keep the feet warm and dry. A change of residence from one part of the country to another, or from the city to the country, will, in many instances, cure long standing complaints, where medicine, without change of residence, may fail.

The diet should be such as best suits the patient's constitution, avoiding, however, hot bread, sweet cakes, fat or salt meat, or strong coffee. Bread made of unbolted flour, is proper in all cases of costiveness. Eating freely of parched corn, promotes the natural action of the bowels, and is also a remedy much prized by some in the cure of acidity of the stomach. Washing or sponging the body occasionally with salt water, or rising from bed, and using friction to the skin with the flesh brush, or a dry salted towel, will give tone to the nervous system, and increase the constitutional strength. The vapor bath, followed by the shower bath, may be used when the patient is too chilly to bear the washing with cold salt water alone. Exercise in the open air, cleanliness, and warm clothing, are of importance in all long standing disorders of the skin.

Local treatment in Dry Tetters.—There are various washes and ointments that may be used with benefit. The best, however, according to my experience, is a tincture of sumac berries in No. 6., or the third preparation of lobelia, to be applied frequently, and the parts anointed, especially at night, with Thomson's healing salve, tar ointment, or yellow dock ointment.

Local treatment in Pustular Tetters.—An application that will prove favorable in one case of pustular tetters, will act unfavorably in others, so that it is not always an easy matter to select the proper remedy in each particular case. To protect the parts from the air is an essential part of the treatment in all cases. The following is a popular remedy for tetters:

Take an ounce of pounded yellow dock root,
Half a pint of sweet oil,
Half a pint of spermaceti oil,
And a pint of vinegar.

Stew these together until the vinegar is all evaporated. To be applied two or three times daily, and the parts covered with some kind of dressing to exclude the air. In some cases of pustular, or running tetters, all kinds of salves and ointments disagree, aggravating the disease and causing it to spread rapidly. In such cases the parts should be dressed, and wet occasionally with salt and brandy, tincture of myrrh or tincture of bayberry. If these should not prove of benefit, and the eruption be located on the hands or on parts that will admit of it, bind on scorched flour, dry slippery elm, prepared chalk, or charcoal, in order to absorb the acrid discharges from the sore.

Pustular tetters sometimes spreads over a considerable portion of the surface. I saw a case in which the eruption spread over the whole surface of the lower extremities. The disease had existed over two years, and during the greater part of this time the patient was unable to sleep covered in bed, on account of the itching. The skin and adjacent tissues had become thickened and much harder than natural. Severe cases like the one above described, require constitutional treatment, especially the vapor bath, emetics and injections; and these should be continually administered at proper intervals for weeks or even months, before the disease will be cured. The object of continuing the use of emetics is to evacuate from the stomach the acid which feeds the eruption.

Treatment of Eating or Corroding Tetters.—This variety of tetters demands a more active course of treatment, especially where there is a tendency in the disease to spread rapidly. A full course of medicine should be given and followed by the usual stimulants and

astringents, such as composition, ginger, capsicum and bayberry, in order to promote perspiration, and to correct the secretions of the stomach and bowels.

The yeast poultice, or a compound of white pond lily, elm and ginger, wet with a strong tea of raspberry leaves, to be applied to the parts affected, and renewed at proper intervals until the ulcers assume a healthy appearance, when the salve or ointment may be used as recommended in pustular and dry tetter.

SECTION XII.

ITCH.

This disease, it is said, is caused by an insect which penetrates the skin, and produces small vesicles or pustules, attended with an intolerable itching.

The wrists, and between the fingers, are the parts affected, though it is occasionally observed on various other parts of the body, excepting the face.

Treatment.—The sulphur ointment will cure the real itch sooner, probably, than any other application. There are other remedies, which may be used with benefit, as frequently washing with salt water, or the preparation recommended by Dr. Thomson, which is spirits of turpentine, with about four times as much of No. 6: to be well shaken before applied.

Sulphur ointment is made by rubbing together one ounce of the *flour of sulphur*, and four ounces of *lard*. This ointment is to be applied every night. It is recommended that a part of the body only be covered with the ointment at a time,—say, one-fourth. The addition of a few drops of the oil of lemon or bergamot will conceal the disagreeable smell of the ointment.

The following is said to be an effectual cure in this disease:—Half an ounce of muriate of ammonia, mixed with two ounces and a half of water. The affected parts to be washed every day with the mixture.

Another preparation:—Mix together one drachm of sulphuric acid, and one ounce of lard, and apply the ointment.

SECTION XIII.

RING-WORM.

This name is applied to an eruption consisting of very minute vesicles or blisters, closely compacted together, and forming a ring or circle. There is great diversity in the size of the ring, varying from an eighth of an inch to two or three inches in diameter. In the centre of the larger rings, the skin is of its natural appearance. "The eruption is always attended with a troublesome itching and tingling sensation." In four or five days the vesicles break, and form crusts or scales, which, in general, fall off by the eighth or ninth day. In some instances, new circles of the eruption appear in succession for several weeks.

Occasionally we see cases of eruptions resembling ring-worm spread over a great portion of the surface of the body and limbs, and proving obstinate of cure, unless a very thorough course of treatment be instituted.

Treatment.—Ring-worm may be readily cured, in most instances, by washing the part with the third preparation of lobelia, or with No. 6 and sumac berries; or a strong tincture of some astringent. Ointments of every kind are often found to disagree with the complaint.

When the eruption proves obstinate under local application, it will be proper to use constitutional treatment. Take a dose of composition or spice bitters, two or three times a day; or, a teacup half full of composition tea, mixed with a teaspoonful of purified charcoal, may be taken night and morning. Lime-water, in milk, answers a good purpose, taken two or three times a day. A course of medicine, however, is the most effectual means of cleansing the system of all morbid humors.

Mr. T. M——, a machinist employed in the laboratory of the University of Pennsylvania, was affected with an eruption which covered the whole of the surface of the abdomen, and a considerable portion of the back and limbs. The eruption presented a red appearance, and large quantities of white scales like dandruff were constantly forming and falling off. He had the advice of the Professors of the institution, and followed it for two years, without getting any better. He applied to me as a last resort, and was effectually cured in a few weeks. A full course of medicine was administered once a week, a vapor bath every other day, composition and charcoal three times a day, and the eruption washed with No. 6.

SECTION XIV.

CHAFING IN CHILDREN.

Fat children are liable to chafe about the neck and other parts where the skin is doubled upon itself.

Treatment.—Apply scorched flour, or interpose a piece of muslin or linen slightly scorched, to absorb the secretions of the skin, which cause the excoriations.

Washing the parts with tar-water, will cure such sores in many instances. Scaly eruptions about the head may be cured by washing with tar-water. A strip of patent lint, or a narrow strip of old soft muslin or linen, covered with tar ointment, and placed on the chafe, where the skin is folded, will cure it.

Where the buttocks become excoriated, or break out in sores from an acrid condition of the stools, apply some soothing liniment, as a mixture of lime-water and sweet oil, and correct the secretions of the bowels by injections; and, if the stomach be disordered, give an emetic. Prepared chalk, or lime-water, may be used with advantage, in correcting the acrid state of the secretions of the stomach and bowels. Lime-water is taken with boiled milk; the chalk may be mixed in strong bayberry tea, and sweetened.

SECTION XV.

PRICKLY HEAT.

Prickly Heat, as it is called, is believed to be caused by impurities in the blood being thrown to the surface. Children are most liable to this eruption in very warm weather, and during the period of teething. Derangement in the digestive powers is, in almost every instance, the original cause of the complaint. The eruption is mostly confined to the neck, breast, and shoulders.

Treatment.—A few doses of lime-water, together with the use of the tincture of lobelia, in small quantities, merely sufficient to produce slight nausea, will generally correct the derangement in the stomach and bowels. But the eruption will continue in many cases until the teeth are through the gums, and the irritation has subsided.

Local Applications.—Bayberry, or sumac tea, made very strong, will allay the itching; a teaspoonful of the tincture of lobelia, with an equal quantity of the bayberry tea, frequently applied, will cure the eruption.

It sometimes happens that the eruption strikes in suddenly, and the child becomes very sick; in which case an emetic of lobelia, in composition tea, will be proper, and injections administered, prepared in the same manner as the emetic. Eruptions will disappear when a child is under the operation of lobelia; this, however, is very different from a striking in of the disease from loss of internal vital energy.

CHAPTER III.

DISEASES OF THE CHEST AND LUNGS

SECTION I.

ACUTE BRONCHITIS—SEATED COLD.

THE name bronchitis is applied to a diseased condition of the mucous membrane of the wind-pipe, and air-vessels of the lungs. In severe colds the bronchial vessels are more or less diseased, and sudden attacks of *bronchitis* are usually called "*violent cold*,"—a much more appropriate term than *bronchitis*, which means *inflammation* of the *bronchial vessels*; whereas the disease is not necessarily accompanied with inflammation. Common sore throat which is so frequently connected with colds, is not called bronchitis, unless the mucous membrane of the air-vessels become diseased. There is a disease called *laryngitis*, signifying inflammation of the larynx. This is a very common complaint under the common-sense name of *sore throat*.

Symptoms.—This disease is greatly diversified, both in character and symptoms. Generally there is, in the first place, great lassitude, chilliness, loss of appetite, much oppression at the chest; the head feels heavy, the skin is cold, and the face pale. The breathing becomes shorter, and sometimes difficult. The cough is mostly slight at first, consisting of a mere hack, and, in some instances,

dry; or the expectoration, in the commencement, is frothy, or clear and tough, like the white of an egg. In some instances, there is no pain in the chest; in other cases, it is nearly constant. Sometimes pain is only felt during the act of coughing. In most cases of acute bronchitis, there is more or less fever in the after part of the day, and an increase of cough at night. In many instances, the patient sleeps but little, until the disease forms a crisis.

The cough, in the majority of cases, is dry at first, and, in some instances, the complaint passes away with but little expectoration. Usually, however, in the course of a few days from the commencement of the dry cough, a tough mucus is expectorated; and during the continuance of this kind of expectoration, the oppression in breathing, pain in the head, and fever, are more or less severe, indicating the existence of inflammation in the mucous membrane of the air-passages. "But in proportion as the inflammation approaches to resolution," (a favorable termination) "the appearance and qualities of the sputa are changed; the mucus loses by degrees its transparency, is mixed with masses that are opaque, and of a yellow, white or greenish color; and these masses, few at first, increase more and more in number, until they constitute the whole of the sputa. Such expectoration as this is commonly accompanied by a marked remission in the different symptoms of the bronchial inflammation; it announces that the inflammation is terminating in resolution. It is such as the ancients spoke of as being *concocted* or *ripe*."

In the young and plethoric, reaction comes on early in the disease: the pulse is high, the countenance becomes flushed, and the breathing hurried; whereas, in the aged and feeble, there is seldom much inflammation or fever, as the system is not able to establish and support an inflammatory action.

"Infants are especially liable to this form of disease. In them, the disease manifests itself by a short, quick, oppressed and wheezing respiration; uneasiness on being placed in the recumbent position; slight cough, somewhat hoarse at first, but humid and rattling as the disease advances; *a uniformly pale and anxious countenance*, pulse frequent and tense; skin above the natural temperature on the trunk, but the hands and feet commonly cool, or at the regular temperature."

Bronchitis varies greatly in different cases in regard to its grade of violence. In some instances a crisis is effected in a few days; whilst in others it will require weeks, or even months, and, in some rare instances, the vital energies are depressed so long in the commencement of the attack, that no reaction occurs, the patient remaining cold, with weak pulse, stupor, and great oppression.

Causes.—Exposure to cold and moisture, is the most common cause of those violent colds which medical men call acute bronchitis.

Favorable Signs.—Improvement in respiration, an easy expectoration of a thick yellow matter, and more especially when the secretions of the *nose* are restored, the stools of a natural color, and a general warmth and moisture of the skin. It is in the acute form of the disease that the free expectoration of a thick yellow secretion is to be considered as particularly favorable, as chronic bronchitis is generally attended by such a discharge of matter, and may continue many years.

Unfavorable Symptoms.—Great distress and oppression, cold skin; little expectoration and ropy, like the whites of eggs; tendency to stupor or delirium, and a suspension of the secretions of the mucous membrane of the nose. These symptoms, most of which frequently attend the early stage, are not to be considered alarming, unless where they continue an unusual length of time, or reappear in a late period of the disease.

Treatment.—Slight attacks of acute bronchitis in general require nothing more than an occasional dose of the composition or pepper tea, with broken doses of lobelia; the use of a warm foot-bath, and a strict attention to diet, keeping the body and feet warm.

When the symptoms are more distressing, emetics will be proper: a full course of medicine is best in severe cases. The functions of the skin will be greatly assisted by the application of the vapor bath.

There is no plan of treatment upon which so much reliance can be placed, as courses of medicine. During the intervals between the courses, the patient should take cayenne or composition, and broken doses of lobelia. The compound lobelia pills taken in quantities sufficient to occasion slight nausea, will supply the place of all other medicines in the early period of the disease. It will be advisable, however, that the patient drink some kind of warm tea, such as pennyroyal, or dittany, to promote perspiration.

Expectorants.—In the early stage of the disease, or as long as the cough is hard and dry, or the expectoration resembles the white of an egg, the patient should be kept slightly nauseated with lobelia, given in broken doses, either in the form of pills, tincture, or infusion. There are other articles which may be used to ease the cough, and promote expectoration, such as a tea of bran, flaxseed, elm, or liquorice root, acidulated with lemon juice, and sweetened with honey, or rock candy; equal parts of olive oil, vinegar, and honey, stewed together, and taken frequently, in teaspoonful doses. Onions or garlic sliced and covered with sugar, and kept from the fire, will form a syrup which answers a good purpose, more especially in patients of weak nerves.

Carbonate of ammonia, given in hot wine whey, will afford great relief in cases of extreme oppression of breathing.

When the bowels are costive, injections should be used. Lobelia administered in this way, in simple lukewarm water, sometimes excites an almost magic influence in equalizing the circulation, and counteracting an undue determination of blood to the lungs.

Inhaling the steam of hot water, or of vinegar and water, is very soothing and useful when the cough is dry, or expectoration difficult.

The best gargle for sore throat is cayenne tea, or pepper sauce. The use of these excites the secretions, and thereby relieves the inflammation. For children, milder gargles should be employed, such as sage tea and honey, vinegar and honey, &c.

The Diet, in the early period of the disease, should consist of light food, as barley water, tapioca, rice, sago, crust coffee, elm gruel, &c. The expectoration becoming copious and yellow, with other favorable symptoms, the patient may be allowed a more strengthening diet, as fresh beef, mutton, soft boiled eggs, stale bread, &c.

The expectoration presenting a favorable appearance, and the secretions of the nose being restored, the quantity of lobelia may be lessened, and three or four times a day the patient should take a teacup half full of strong bayberry or No. 3 tea, adding a teaspoonful of composition powder, or half a teaspoonful of capsicum to the tea, or the composition or pepper may be taken in the usual way. The spice bitters may be used as a substitute for the composition.

The continuance of this, as well as other forms of disease, depends in a great degree upon the condition of the digestive functions. As a general rule, a favorable crisis is formed soon after the tongue begins to clean, and the patient recovers his appetite.

The Tincture of Myrrh, or *Thomson's No. 6*, may be used with benefit, more especially in the latter stage of the disease, and where the patient is affected with flatulency, or oppression at the stomach after meals, which is a proper time for taking it.

Night Sweats.—From the debility usually induced in protracted cases of bronchitis, night sweats are apt to occur. Under these circumstances, the medicine at bed-time should consist of a strong tea of the bayberry, or No. 3, or when liquids oppress the stomach, the compound lobelia pills may be employed, and in the morning, the surface bathed with No. 6 or pepper sauce; avoiding exposure to cold air. The clothing to be put on perfectly dry. A flannel garment wet with salt and vinegar, dried and worn next the skin, is recommended by some experienced physicians to check night sweats. The vapor bath I have found of benefit, in some cases, in preventing night sweats. A very moderate temperature of steam,

however, will relax the system. It should, therefore, be as hot as the patient can bear, washing the face and breast during the steaming with vinegar or spirits and water, and at the close the patient may be showered, rubbed dry, and the surface bathed with salt and vinegar. Depending, however, upon debility, it will be difficult, in many instances, to prevent night sweats until the system gains additional strength.

Remark.—All the different forms of acute disease of the chest, lungs, and air-passages, must be treated, if treated correctly, upon general principles, such as have been recommended in acute bronchitis, without regard to the particular name or location of the disease.

SECTION II.

CHRONIC BRONCHITIS—OR DEEPLY SEATED COLD.

From repeated colds, unwholesome air, and improper diet; bad treatment, such as bleeding and active purging; confirmed dyspepsia, or other constitutional disorders, acute bronchitis is liable to become protracted for many weeks, or even months, and to become a deeply seated complaint. It then receives the name of chronic bronchitis.

To describe all the various modifications of symptoms which attend chronic bronchitis, would be a task difficult to perform, and of but little practical utility. The disease appears in every grade of violence, from a slight affection to that of a deeply confirmed, and sometimes incurable disease. A majority of the cases of consumption arise from neglected or badly treated catarrh, or bronchitis. Clergymen are extremely liable to an affection of the throat which is usually called bronchitis, or the clergyman's sore throat.

Symptoms in a well-marked case of Chronic Bronchitis.—A troublesome cough, and free expectoration; general debility and wasting of the flesh; short, oppressed, and wheezing respiration; paleness of the countenance, and blueness of the lips; chilliness in the early part of the day, followed by more or less hectic fever; night sweats, and extreme sensibility to cold; loss of appetite with tenderness and distress at the pit of the stomach; and an unhealthy condition of the stools; more or less pain in the side or chest, particularly on coughing; and an inability to lie on one side.

The symptoms, however, in chronic bronchitis vary, as the character and circumstances of the case differ. Thus, while, in some

cases the cough is frequent and harassing, in others there is but little cough or raising, except in the morning. Night sweats and hectic fever, though common, do not always attend the complaint. The degree of derangement of the digestive powers varies greatly in different cases, and the condition of the digestive functions exerts a controlling influence over the disease of the bronchial vessels. In fine, it is upon the integrity of the stomach, that, in a great degree, depends the cure of the disease in the lungs and throat.

Stone and glass cutters are peculiarly subject to affections of the air-vessels of the lungs, from mechanical irritation kept up by inhaling particles of dust.

Treatment of Chronic Bronchitis.—To correct the disordered condition of the stomach, promote digestion, and supply the lungs with fresh wholesome air, are objects of primary importance in the cure of chronic bronchitis.

Thomson's Course of Medicine is the most effectual means of cleansing the stomach and bowels; it also promotes the healthy functions of the skin, and of the mucous membrane of the bronchial vessels. The course of medicine should be given as the circumstances of the case require. A very good rule to be observed is,—that so long as the patient has an appetite, and is getting better, to omit the course. Morning is the best time for giving a course of medicine in chronic diseases. The skin should be bathed with some stimulant after the last bath in the course. An emetic in the morning before rising, the patient previously drinking some composition tea, will answer, in many instances, the place of a full course. The lobelia emetic must be prepared in bayberry or No. 3 tea. Half a pint of a strong tea of bayberry, or of bayberry and sumac, taken in the morning fasting, will in many instances, operate as an emetic, and by cleansing the mucous coat of the stomach of foul tenacious secretions, place it in a more favorable condition for the reception of food. Many cases of chronic bronchitis have been cured by adopting the practice of administering an emetic every morning for a week or more in succession. The propriety of this course of treatment must be judged of by the effect produced.

Tonics.—The Peruvian bark, colombo, Virginia snakeroot, wild cherry bark, gentian, spice bitters, Thomson's No. 4 bitters, should be given either singly or combined, where there is much debility and night sweats, and not confine the patient to a particular kind, but keep changing. I have used the *elixir of vitriol* with decided benefit, in cases of night sweats; from fifteen to twenty drops may be given in a wine-glass of a tea of Peruvian bark, or of some

other tonic, and repeated three or four times a day. The bayberry or No. 3 should not be used at the time of using the Peruvian bark or elixir of vitriol.

Fresh Air.—In chronic bronchitis the patient should use moderate exercise in the open air as much as possible, provided it prove agreeable to his feelings; and he must observe an especial care to keep the body and feet protected from the cold. There is an instrument recently introduced into use, called a *respiratory*, by wearing which the patient can go out in severe cold weather, and experience no inconvenience in the lungs from the cold. Recoveries from this disease are greatly facilitated by fresh air.

A change of residence, more particularly to a *pine* country, or to the sea-board, provided salt air agrees with the patient, will, in many instances, prove of signal benefit. In other instances a removal from sea air is attended with striking improvement in the health of the patient.

Vegetable Balsams.—These are sometimes found of especial benefit in cases of chronic disease of the bronchial mucous membrane. The balsam copaiva, balsam tolu, and Canada balsam, are those generally employed. The balsam copaiva is considered the best; to be given at first in doses of from twenty to thirty drops, gradually increasing the quantity to fifty or sixty drops, and repeated three or four times a day. (The dose and mode of preparing the other balsams will be found in the *Materia Medica*.)

Astringents.—The bayberry or No. 3 in strong decoction, adding a teaspoonful of No. 6, or a small portion of pepper, should be given as often as once a day, where the tongue is coated. A very good mode of preparing bayberry for taking is to rub the powder up with honey, and then add a portion of luke-warm water, or what is better, a tea of aspen, poplar, or some other tonic. Powder taken without being scalded, will make more impression upon the stomach than when taken in decoction. The No. 3 pills may be used in place of the above preparations, if the patient be averse to liquids.

The *purified charcoal* and white mustard seed may be used with advantage when the bowels are costive.

Inhaling the smoke of cayenne pepper, though a harsh remedy, has, in many instances, been attended with the most signal benefit. It is applicable to cases of long standing. The proper mode of doing it is to put a small portion of cayenne pepper on a red-hot shovel, the patient being covered with a blanket to confine the smoke; or let the patient breathe the smoke whilst in a vapor bath. I recently met with a gentleman from Massachusetts who had been affected with a harassing cough, attended with considerable

expectoration, which continued for many months without any abatement, although he had been under treatment in a Thomsonian infirmary. At length resorting to the inhaling of pepper smoke, his cough was cured in a few days. This gentleman described the effect of the smoke upon the lungs to be at first almost suffocating, and very distressing, but in a short time the sense of suffocation passed off, perspiration became profuse, and the secretions from the eyes, nose and mouth ran copiously during the operation. The secretions from the lungs, in a few hours after the first operation, changed their aspect, and were raised easily, and the mucous membrane was speedily restored to a healthy condition. The inhalation of the smoke of pepper is adapted to cases of long standing, attended with profuse expectoration of yellow thick secretion, and where the substance of the lungs is not affected. It is when the mucous membrane of the air tubes is in a weakened condition, requiring the application of a powerful stimulant, in order to excite them to a more healthy action, that a recourse may be had to this severe application.

The External Applications proper for the chest, are stimulating liniments, mustard poultices or plasters, or strengthening plasters. Cayenne pepper strewed on the plaster will render it more efficient.

Diet.—The most nourishing kinds of food should be used, as eggs, custards, stale wheat bread, and all kinds of wholesome articles that suit the stomach. Meats are allowable, unless they be found to disagree with the stomach, avoiding veal, fresh pork, sausages, and all food fried in fat. A milk diet generally agrees with the patient, such as porridge, rice and milk, boiled milk and toast. Where the bowels are costive, a gruel made of unbolted wheat flour, or bread made of the same article, should be used.

SECTION III.

PULMONARY CONSUMPTION.

The organs of respiration are subject to various forms of confirmed and deeply seated disease, constituting different varieties of consumption. These are:—*Tubercular or Scrofulous Consumption; Bronchial Consumption, or Chronic Bronchitis; Pleuritic Consumption, or Chronic Pleurisy; and Throat Consumption, or Ulceration of the Wind-pipe.*

1st. *Tubercular Consumption*.—This variety of consumption commences with the formation of small roundish bodies (called tubercles) throughout the lungs; and as they increase in size and suppurate, that part in which suppuration takes place is destroyed, or the structure changed and rendered incapable of performing its natural function.

Tubercles, in the first place, are about the size of a millet seed. and are generally found in clusters or masses. There can be no doubt that tubercles exist in the lungs of some persons for many years without increasing in size, or causing any considerable inconvenience.

Tubercular consumption prevails to a great extent in the United States and in Great Britain, and is of all the varieties of consumption the most difficult to cure. This form of consumption occurs, almost exclusively, in scrofulous constitutions, or in persons of an *hereditary* tendency to tubercles. There are few cases of this form of consumption that commence in persons above thirty-five years of age, the disease occurring almost exclusively at an earlier period of life.

The Causes which usually bring on *tubercular consumption* in constitutions predisposed to the disease, are repeated colds or catarrhs, indigestion, sudden check of perspiration after exhausting exercise, the introduction of antimony or mercury into the system,* the intemperate use of spirituous liquors, copious bleeding, excessive venereal indulgence, active purgative medicines, confinement in ill-ventilated apartments, and unwholesome food. If one or both parents be predisposed to scrofula, or tubercular consumption, all their children will be liable to pulmonary consumption; whilst in other instances, this hereditary disposition will exist in some of the children only, the rest being entirely exempt from it. Children are more apt to partake of the constitution of the mother than that of the father. There are instances, however, where both parents have been consumptive, and all their children robust and healthy; and then, again, both parents may be healthy, and their children delicate and consumptive.

Symptoms.—Tubercular consumption usually commences with a short dry cough, which may continue for many months without expectoration, except of small portions of glairy mucus. The breathing is short and oppressed, with a sense of tightness or uneasiness in some portion of the breast whilst taking a full inspiration. There is much debility, and a gradual wasting of the flesh; the appetite fails, digestion is impaired; the skin is pale and sickly-

* Tubercles have been produced in the lungs of animals by giving them mercury by way of experiment.

looking; there is extreme sensibility to cold; the voice altered from its natural tone; the nerves weak, and the hands often tremulous. Patients may, however, have all the symptoms above described, and yet be exempt from even a predisposition to consumption."

"*Cough* is one of the earliest symptoms of consumption, and it is that which commonly first attracts the attention and awakens the fears of the patient, or the patient's friends. It is at first generally slight, occasional and dry; it occurs upon the patient's getting out of bed in the morning, or if he makes any unusual exertion in the course of the day. It feels to him as if it was caused by irritation about the throat. Sometimes it will cease for a while, as in the warm weather of summer, and recur in winter when the external temperature is lower. By degrees it begins to be troublesome in the night, and to be attended with more or less mucous expectoration.

"Now when such a cough steals upon a person gradually, and when no reason can be assigned for its occurrence, that circumstance alone is enough to excite suspicion as to its nature and cause. But chronic cough may exist without any tubercular disease of the lungs. It may depend upon a disordered state of the *stomach*; the *pneumogastric* nerve may be irritated *there*; it may be the cough of *chronic catarrh*; it may result from disease of the *heart*; it may be the nervous, barking, importunate cough of *hysteria*."

As the disease progresses, emaciation and debility increase; the cough becomes more harassing, and the breathing shorter and more oppressed; night sweats occur, which leave the patient in an extremely languid condition. There is chilliness in the fore part of the day, followed by a flush on one or both cheeks, and a burning in the palms of the hands and soles of the feet. The tongue is usually coated with a thin white fur, or sometimes clean and of a pale pink color. The symptoms just described may also prevail where there is no seated disease of the lungs. They often accompany dyspepsia, chlorosis, and marasmus.

Sooner or later in the disease, the tuberculous masses become softened into the consistency of pus, and portions of the suppurated matter are discharged into the air-vessels, and coughed up in the form of a thick yellow-like or greenish matter, assuming the character of genuine pus, and frequently streaked with blood. When this change in the character of the expectoration occurs, the cough, in some instances, becomes less distressing, but the general weakness increases, the flesh continues to waste, night sweats become more profuse, and usually there is a slight chill in the morning and towards evening. After the evening chill, hectic fever comes on, during which the pulse is seldom less than 120 per minute. In the absence of fever the pulse is soft, languid and weak, but seldom beats less than 100 per minute. As the disease

advances, the expression of the countenance becomes changed, the eyes assume a pearly whiteness; the voice becomes weak and hoarse, or hollow; the feet swell, and a diarrhœa comes on, accompanied with rapid exhaustion; the mind is, in many instances, free from depression, and but little impaired until near the termination of the disease, when there is apt to be some degree of delirium, and "occasionally total imbecility about a week previous to death."

Of other Modifications of Symptoms.—In some instances tubercular consumption runs its course, at least to an advanced stage, with scarcely any prominent symptom of disease in the lungs,—there being no pain or difficulty of breathing, except on taking exercise, and but little cough or expectoration. There is a general wasting of the flesh, night sweats, failing of the appetite, the countenance is pale, and the flesh soft and flabby. Frequently, in these cases, there is more or less blood raised, and sometimes the lungs bleed freely. As the disease advances, however, the cough becomes more troublesome, with frequent inclination to vomit, and a rapid wasting of flesh and strength. The bowels are generally either much constipated, or relaxed; the nose becomes pointed and cold, the lips pallid or bluish, and the expression of the countenance is changed.

Persons acquainted with the different sounds given off in a healthy and a diseased condition of the lungs, by applying the ear to the chest, and by tapping over the breast with the ends of the fingers, may, in general, form a pretty correct opinion in relation to the healthy or unhealthy condition of the lungs. Those who desire information in relation to the physical signs of consumption, should consult the following works:—Gerhard on the Chest, and Bath and Rogers's "Manual of Auscultation and Percussion."

2d. *Bronchial Consumption.*—This variety of consumption, which probably occurs next in frequency to the one just described, is seated in the mucous membrane of the air-passages of the lungs and wind-pipe. *Chronic bronchitis* is the term usually applied to this form of disease, which, from old age, bad digestion, neglect, or improper treatment, is apt to terminate in confirmed consumption. This form of disease is mostly confined to children, and to the aged. The general character, symptoms, and treatment are described under the head of *chronic bronchitis*. The great majority of the *cured* cases of consumption have been of this variety.

In some instances *chronic bronchitis* accompanies tubercular consumption, the two forms of disease being blended.

3d. *Consumption consequent on Pleurisy.*—From bad treatment, or under unfavorable circumstances, pleurisy is occasionally fol-

lowed by the formation of an abscess in the chest, which is apt to produce ulceration of the lungs and thus cause pulmonary consumption.

The Symptoms which characterize abscess in the chest, are cough and difficulty of respiration; a sense of oppression or load in the chest on lying down; more or less pain and tenderness to pressure in the affected side; hectic fever, and, above all, a dull sound given by *percussion on the chest*. These symptoms, together with the previous existence of pleurisy, will afford strong evidence of the existence of an abscess.

Sometimes the abscess ulcerates through the lungs into the air-vessels, and is discharged by coughing. There are night sweats, hectic fever, and wasting of flesh and strength. After the abscess is in this way discharged, the patient may experience a mitigation of his sufferings, and occasionally there are recoveries; but more frequently the disease terminates fatally, and sometimes death takes place suddenly.

4th. *Throat Consumption*.—This variety of consumption consists of ulceration of the throat and wind-pipe. It is usually rapid in its course, and when fully seated before proper treatment is applied, it is most commonly fatal.

Cause.—Throat consumption is generally brought on by the neglect of repeated colds. Sometimes it follows measles and whooping cough. Chronic bronchitis sometimes terminates in ulceration of the throat and wind-pipe.

Symptoms.—In the first place there is derangement of the general health, such as want of appetite, feeble digestion, cold and torpid bowels, a diminished temperature of the body, and extreme sensibility to cold. There is uneasiness and pain in the wind-pipe, which is increased by coughing; the patient frequently puts his hand to the throat, in consequence of the uneasy sensation in that part. The voice sooner or later becomes changed to a hoarse and feeble whisper. More or less pain is experienced in the throat on "bending the head backwards, or on turning it round." The cough is apt to be severe in the morning, and is almost always brought on by attempting to swallow. The expectoration is slight in some instances, in others copious.

When the disease is fully established, the countenance becomes pale, and the skin sallow; the flesh wastes away; chilliness occurs followed by hectic fever towards evening, and profuse sweating during sleep: the mind is dejected and irritable, and there is a haggard expression of countenance.

There are cases, however, of disease of the throat, in which the

voice becomes indistinct, or entirely lost, and still the patient continues to enjoy good health.

Treatment of Scrofulous Consumption.—Tubercular or scrofulous disease of the lungs, when fully seated, is generally incurable under any and all plans of treatment. To mitigate the symptoms, and in some degree check the progress of the disease, is generally all that can be reasonably looked for from medical treatment, after tuberculous matter has become developed throughout both lungs. We have good reason to believe, however, that, in some instances where tubercles exist in the lungs, a strict attention to the preservation of the general health, a favorable climate, and a judicious use of remedies, may prevent a further growth or increase of the tubercles, and even effect their removal by absorption, and the lungs be restored to a healthy condition.

The *formation* of tubercles is a consequence of original defective organization; or it may be the effect of debility induced by various depressing influences.

Persons predisposed to consumption, should avoid all debilitating influences, such as unwholesome food, the impure air of small and ill-ventilated apartments, exposure to wet and cold, over-fatigue, intemperance, sedentary and solitary habits, purgative and all kinds of poisonous drugs, and too close application to business or study; and adopt such a system of diet and regimen as will tend to invigorate the physical strength. The diet should consist of the most nourishing kind of food, but easy of digestion and adapted to the condition of the stomach. Moderate exercise in the open air is highly important, observing the strictest precaution, however, to protect the body and feet from cold and dampness. Sponging the surface in the morning with cold salt-water, together with the application of friction to the surface with a flesh-brush, or salted towel, tend to invigorate the system, and to lessen the liability to take cold. Change of climate, especially a removal from a cold to a warm atmosphere, has often proved of signal benefit in improving the health, and warding off consumption.

There is no plan of medical treatment, upon which so much reliance can be placed, in the prevention and cure of consumption, as full Thomsonian courses of medicine. Although this, and every other plan of treatment may fail of arresting the progress of the disease, still it should be tried, inasmuch as it will do no injury, and may do much good, more especially if the tubercles be in the incipient stage of development, or confined to a small portion of one lung.

Besides courses of medicine, lobelia should be given in broken doses in all cases of consumption, either in the form of tincture, syrup, or pills. There is, probably, no remedy that exerts so beneficial an influence in diseases of the lungs, as lobelia inflata.

Composition, spice bitters, cayenne and conserve of hollyhock, are medicines that may be used, as the fancy of the patient or judgment of the practitioner may dictate. They are perfectly safe even where the case is beyond the reach of remedies.

Costiveness is to be overcome by the use of purified charcoal, white mustard-seed, well-parched corn, unbolted flour gruel, rice-mush, and ripe fruit, when it can be obtained. If these means do not prove effectual, injections must be used. It is a good practice to use an injection every night, in all cases of disease of the lungs, attended with costiveness. A very ready way of preparing an injection is to mix a large teaspoonful of composition powder and half a teaspoonful of green lobelia powder in half a pint of lukewarm water, not allowing it to settle, but have the powder thrown into the bowels with the liquid.

Case 1.—Thomas B——, aged 23 years, had been affected with chronic dry cough, shortness of breath, pain in the side, wasting of flesh, and other symptoms of approaching consumption, for more than a year, during which time he was under medical treatment, and continuing to get worse, he was advised by his physician to go to a warmer climate. This advice he did not follow, but determined to try the Thomsonian practice. A course of medicine was administered, and repeated once a week, and the usual intermediate treatment pursued. There was scarcely any perceptible improvement until after the eighth course. Soon after the emetic was taken, (in the eighth course) the patient became distressed, with violent pain, which continued half an hour or more, followed by what are called the *alarming* or *crises* symptoms. After continuing in a most singular state—turning and twisting, getting out of bed, winding himself in the bed-clothes, sobbing, uttering broken sentences, rubbing his abdomen, &c., for a period of eight hours, he vomited freely, and on having an injection administered, he passed a considerable quantity of false membrane, or skinny-like substance, with hardened fæces, from the bowels, took some nourishment, and slept soundly, perspired freely, and from this time improved rapidly, and regained his health.

Case 2.—W. B—— in his nineteenth year was attacked with a dry hard cough, pain in the breast, short breathing, chilliness in the morning, wasting of the flesh, and occasionally raised some blood. He remained in this condition about two years, occasionally undergoing the operation of a course of medicine, and taking daily more or less of Thomsonian medicine. Finally, a more thorough plan of treatment was adopted; a course of medicine administered every other day, until twelve courses were given, which brought about a favorable crisis in the disease, followed by a gradual restoration to health.

Case 3.—Miss E. P——, aged 16, of delicate frame, had symptoms of approaching consumption, which occasioned much anxiety with her parents, they having lost two daughters of consumption under the old-school practice. This young lady had a dry cough, distress in the left side of the chest, immediately below the clavicle, frequent faintness, and difficulty or oppression of breathing. After these symptoms had continued several months, Thomsonian treatment was employed, and after three courses of medicine, and the use of purified charcoal and tonics for some weeks, the patient was restored to health.

Such cases as the above, and such results from Thomsonian treatment are by no means of rare occurrence, and although the facts do not prove the curableness of tubercular consumption, after it has become seated, they furnish pretty strong evidence of the practicability of curing many cases where the symptoms of approaching consumption are strongly developed.

Treatment of Bronchial Consumption.—The character and symptoms of this form of disease are described under the head of chronic bronchitis. A vast majority of the cured cases of consumption have been of this variety,—the disease being seated in the mucous membrane of the bronchial vessels. This disease, though generally under the control of medical treatment, frequently does, under unfavorable circumstances, prove incurable: as when it occurs in persons far advanced in life, or when the constitution is vitiated by intemperance.

Confinement in the foul air of ill-ventilated apartments, an unwholesome diet, and frequent careless exposure of the feet to dampness, are also unfavorable to the cure of the disease.

The course of treatment laid down for *chronic bronchitis*, will be proper in this variety of consumption, the latter being an aggravated or long continued disease of the mucous membrane of the bronchial vessels.

In Consumption from Chronic Pleurisy, the same general plan of treatment should be adopted as in the former varieties, namely,—to cleanse the stomach and bowels, and promote a healthy action of the general system by an occasional *course of medicine*; broken doses of lobelia as an expectorant, as well as to lessen morbid excitement; the No. 3 pills, or a strong decoction of bayberry once or twice a day to prevent the accumulation of morbid secretions on the mucous coat of the stomach; the vapor bath to promote the action of the skin, and assist in equalizing the circulation; stimulants and tonics to restore and sustain the digestive and nutritive functions; and injections to relieve the bowels when required.

Throat Consumption requires a plan of treatment similar to that required in chronic bronchitis.

As the same general or constitutional treatment may be applied with safety to all diseases of the chest, any anxiety on the part of the patient, or friends, or practitioner, respecting the peculiar forms which these diseases may assume, may be dispensed with, and these general directions with regard to the treatment persisted in. Even diseases of the heart have been cured by Thomsonian courses of medicine, with proper attention to diet and regimen.

SECTION IV.

ASTHMA, OR PHTHISIC.

Asthma is a disease of the organs of respiration, generally occurring by fits or paroxysms.

In some persons, the *predisposition* to asthma is induced. In others it is *hereditary*, beginning its attacks in childhood, and occurring at intervals through the whole course of a long life. Sometimes children will be affected with phthisic for a few years, and, as they advance in age, become entirely free from its attacks. Although asthma may occur at any age, still those who are past the meridian of life are most liable to it.

The Season of the year in which Asthma occurs, varies in different individuals. Thus while in some the attacks are principally confined to cold and damp weather, others are only liable to it during mid-summer. Others again may have it during any season.

Causes.—Asthma is in general a disease of enervation,—a deficiency of the nervous power which governs the function of respiration. Hence it may be brought on in a person predisposed to the disease, by any cause that tends to weaken or impair the nervous influence, such as exposure to cold and dampness, inaccuracies in diet, over-exercise or fatigue, venereal excesses, and certain electric conditions of the atmosphere. The disease, in the great majority of instances, is associated with feebleness of digestion. Absence of day-light depresses the nervous powers, and this will explain the cause why the disease generally comes on at night, and *subsides* on the approach of *day-light*.

Asthma, in some instances, arises from organic disease of the heart. In other instances, a mere functional derangement of the circulating organs will occasion an attack; and, on the other hand, an attack of asthma may be attended by palpitations of the heart,

which entirely subside as the paroxysm of asthma passes off. Asthma may be considered in general as a *secondary* affection, the *primary* seat of the disease being in the stomach.

Not a Fatal Disease.—Asthma seldom proves fatal, though in some cases, it is extremely difficult to cure. When connected with organic disease of the heart, it may prove fatal at any time.

Symptoms.—Asthma is characterized by a sense of tightness across the chest, great difficulty of breathing, and a distressing sense of suffocation. It is seldom accompanied by fever.

An attack of this disease is generally preceded by a sense of weight and fullness at the pit of the stomach, sour eructations, heart-burn, flatulency, weight over the eyes, and itching of the skin. When the paroxysm comes on during sleep, the patient is apt to have frightful dreams, and to wake up in great distress, with a sense of tightness through the breast, great difficulty of breathing, and a short dry cough. "These symptoms soon acquire a most appalling degree of violence. The breathing becomes wheezing, extremely laborious, gasping and suffocative; the countenance is expressive of intense anxiety and distress, and the heart usually palpitates violently. The desire for fresh air, in very violent cases, is inexpressibly urgent; the patient insists on the doors and windows being thrown open; and is totally unable to remain in a recumbent posture. The extremities are generally cold, and the skin moist and clammy; the face is bloated and livid, or pale, and the veins of the neck hard and turgid. After these symptoms have continued for an indefinite time, the breathing becomes less laborious and anxious, and towards morning a copious expectoration of viscid mucus generally ensues, which always brings with it considerable relief. During the ensuing day the patient usually feels but little oppression or uneasiness in the chest. On the next night, however, the paroxysm of suffocative respiration returns; and in this way the disease proceeds, with remissions by day and exacerbations by night for three or four days in succession, and in some instances much longer, before it finally subsides."

Paroxysms of asthma may occur at any period of the day or night, though they usually come after midnight. In some instances they continue without any complete intermissions of the difficult breathing, for several days or even weeks, but *always* worse at night.

Treatment of Asthma.—In many instances, where the attack is slight, the tincture of lobelia given in composition or pepper tea, and placing the feet in warm mustard water, will be sufficient to afford great relief, and sometimes will overcome the symptoms.

The Vapor Bath.—I have found the vapor bath not only to assist in breaking up paroxysms of asthma, but in many cases almost indispensable, as the emetic in some instances will not operate effectually, unless a vapor bath be previously administered.

The Hot Air Bath from Burning Alcohol.—When the skin is cool and inclined to moisture, the hot air bath will answer as well, and be attended with much less trouble than the steam bath, more especially in hot weather, when fire is not required in sick-rooms.

The stimulating liniment, pepper sauce, or No. 6, should be applied over the surface after the bath. Previously to applying the stimulant to the surface, let the patient be showered, or washed over with spirits or vinegar, and then rubbed dry.

Emetics.—Immediately after the bath, an emetic of lobelia must be given prepared in the usual way. If the patient be of full habit with redness of the face, and strong pulse, the brown lobelia should be preferred to any other form of lobelia as it is an important object in the treatment to effect relaxation of the system. On the other hand, if the patient be weak, pale, and the flesh soft, the third preparation of lobelia will be the form of emetic best adapted to the case.

A *Course of Medicine* given in the evening, or before the time the asthma comes on, or as soon as the first symptoms arise, indicating its approach, will in general keep off the paroxysm, or at least greatly moderate its violence in bad cases. The tincture of lobelia will often fail of making sufficient impression on the stomach; but the brown powder, or the third preparation, I never knew to fail in relieving the most severe paroxysms of asthma.

Injections.—These are important in the treatment of asthma, and, in some instances, will afford instant relief. Lobelia administered in this way, and retained, will relax the system as effectually as when taken into the stomach, and generally will excite free vomiting.

The Skunk Cabbage answers a good purpose in many cases of asthma, though in general far inferior to lobelia.

Treatment during the remission or interval between the paroxysms.—Broken doses of lobelia, either in *tincture* or the *compound lobelia pills*, together with an occasional dose of composition or pepper, will often be sufficient. Where the disease becomes protracted, however, and the system is in a feeble condition, *tonics* will be useful. Boneset tea, taken cold, I have found to be de-

cidedly useful in some cases. The scutalaria or scull-cap, may be used as a tonic, and answers as a nervine.

English Garlic operates as a stimulant on the nervous system, and is, therefore, well adapted to cases of asthma; more especially when the disease, being protracted, requires an occasional change in the medicine. Let the patient chew and swallow a clove of the garlic every morning before breakfast.

Stimulating Applications to the Surface.—In asthma the skin is usually below its natural temperature, and inclined to moisture. When this condition of the skin prevails, the stimulating liniment, No. 6, or pepper sauce, should be applied over the surface before going to bed. A plaster of the stimulating liniment spread over a piece of bladder or silk oil-cloth, and bound on the pit of the stomach, will have a tendency to prevent the occurrence of the paroxysm. The same application may also be made to the soles of the feet.

Diet.—The first symptoms, in many instances, on the approach of an attack of asthma, are, an unpleasant sense of weight, or stricture, and coldness at the pit of the stomach; and this frequently occurs soon after eating. The stomach not being able to digest what had been taken, is oppressed, and asthma follows as a consequence of that condition of this great central organ. As long as the patient is liable to the attacks, especial care should be observed to avoid any article of difficult digestion, more especially at the evening meal. When the patient craves acids, the pepper sauce, or lemon-juice and sugar, will frequently be grateful to the stomach, and favor expectoration.

A Cold Shower Bath every morning, by giving tone and vigor to the nervous system, will often prove especially useful in asthma, more particularly in hot weather. It may also prove a preventive to the disease. A dash of cold vinegar upon the breast will sometimes afford relief during the paroxysm, by producing reaction.

SECTION V.

SUMMER CATARRH, OR HAY ASTHMA.

There is a catarrhal affection of the mucous membrane extending from the nose to the lungs, which comes on in warm weather, and in some persons it occurs periodically every summer. It is a disease of *enervation*—*deficiency of nervous energy*.

The dust from fresh dried hay is very apt to bring on the disease in those predisposed to it, and from this circumstance, it is in some places called "*hay fever*." Other kinds of dust, however, will have the same effect.

In some delicate persons the slightest exposure to cold or damp air, will occasion catarrh. Dr. J. K. Mitchell mentions the case of a female who would invariably be seized with a catarrh from taking hold of a tumbler of cold water.

Symptoms.—At first there are symptoms of indigestion, and a sense of fulness in the head. There is watering of the eyes, and the nose discharges copiously a thin secretion. A cough generally comes on, and an expectoration resembling that which attends ordinary colds.

Treatment.—*Tonics* are particularly indicated. Colombo, gentian, Virginia snakeroot, bayberry, xanthoxylum, balmony, and poplar, may either or all be employed.

If the tongue be coated, or there be other symptoms of a foul stomach, a strong decoction of the bayberry should be taken as often as once a day, and if this be ineffectual, an emetic may be administered. The surface of the body should be bathed occasionally with some stimulant, as pepper sauce, or No. 6.

Eating raw onions relieves the symptoms in most cases.

As a preventive use the shower bath, or sponge the body with cold water every morning for a few weeks before the time at which the disease usually comes on.

SECTION VI.

HOOPING-COUGH.

This disease is contagious, and occurs but once in the same individual. It is almost exclusively confined to childhood, and generally prevails as an epidemic.

This, like most contagious diseases, runs a certain course, or succession of stages, constituting its "rise, progress and declension." In some instances, however, the disease may be cut short by medicine; in others the disease will continue longer than the usual period, notwithstanding the treatment may be thorough and applied with judgment.

Hooping-cough is seldom fatal, except when under unfavorable circumstances, as in weak and delicate infants a few months old, or when it attacks children of scrofulous constitutions. Under these circumstances it is liable to be followed by consumption, or other

forms of disease of serious character. When the disease commences in the autumn, the cough is apt to continue until the succeeding summer.

Symptoms.—The disease commences like an ordinary cold or catarrh, with languor, sneezing, hoarseness, cough, and occasionally oppression in breathing. The tongue is mostly contracted and pointed, and of a darker color than natural, and is in most instances nearly clean, or very slightly coated. There is more or less cough from the commencement, but it does not differ from the cough attending common colds, until after the lapse of eight or nine days, or two weeks, when the hooping commences, distinguished by a continued succession of short hard efforts at coughing, until apparently all the air is expelled from the lungs, and the little patient turns red or purple in the face. Then there is a long-drawn inspiration attended with a peculiar crowing, or hooping noise. As soon as the lungs are filled with air, the coughing returns, until the lungs are again exhausted of air; and in this manner the paroxysm of coughing goes on until a quantity of mucus is discharged from the lungs, or the patient vomits. As soon as the coughing fit is over, the patient is generally active and lively; and very commonly craves for food after vomiting.

The fit of coughing may last from half a minute or less, to four or five, or even ten minutes. Usually, after the third week from the commencement of the hooping, there is a copious discharge of a viscid mucus, after a spell of coughing. In very aggravated cases, the child is sometimes thrown into convulsive fits, from congestion of blood in the brain, occasioned by the violence of coughing, and the suspension of breathing during the paroxysm.

After the expectoration has continued free for a week or two, the paroxysms of coughing in many instances begin to decline, both in frequency and violence, whereas in other cases the disease continues for six or eight weeks before there is any abatement in the violence of the cough.

Treatment of Hooping-Cough.—Throughout the entire course of the disease the treatment should be adapted to the character of the symptoms. Nauseating doses of lobelia promote expectoration—generally ease the cough—quiet restlessness, and promote the secretions of the skin. In bad cases, where the breathing is much oppressed, or the patient is very restless, an emetic will be proper. The vapor bath will assist the operation of the emetic.

Injections must be used when the bowels are costive, or otherwise disordered. Lobelia, (say a quarter of a teaspoonful of the green powder) administered in this way, in lukewarm water, and retained ten or fifteen minutes, will have a decidedly beneficial effect, especially where there is an undue determination of blood

to the head or lungs. Under its influence the circulation becomes more equalized, the system becomes relaxed, and very often free vomiting is produced.

When the face remains swollen and suffused with blood, an unusual length of time after the paroxysms of coughing, attended with stupor, stimulating injections and an emetic of lobelia should be given, and the feet be placed in warm water with a portion of mustard or cayenne added to it, or a vapor bath administered. This will prove the most effectual plan of treatment for preventing spasms.

In a more advanced stage of the disease, when the secretions become profuse, attended with severe fits of coughing, which come on periodically, an emetic or an injection, as above described, administered previous to the time at which the paroxysms of coughing commonly occur, will mitigate the cough and favor the expulsion of the viscid mucus from the lungs.

Alkalies.—Super-carbonate of soda or saleratus-water, should be given two or three times a day, when there is evidence of acidity in the stomach: lime-water and milk may be given for the same purpose.

Cough Medicines.—Liquorice-root tea; flaxseed tea, with lemon juice; a mixture of honey with sweet oil; onion or garlic syrup, are all good for the cough. The tincture or syrup of lobelia, however, is the best expectorant, and may be used in combination with any of the above-named articles.

The yolk of a fresh egg, beaten up with two or three teaspoonsful of sugar, and a teaspoonful of it given at a time, and repeated frequently, will moderate the violence of the cough in some cases, more especially in the latter period of the disease.

Stimulants are more particularly indicated in the advanced stage of the disease, when the appetite is bad, and the system in a feeble condition. A small portion of the composition powder in a wine-glass of bayberry tea, and administered once or twice a day, will cleanse the mucous membrane of the stomach, and also furnish a stimulus to the vital powers of the system.

The compound lobelia pills will supply the place of all other medicines in ordinary cases, when the patient can be induced to swallow pills.

Haarlem Oil.—Five or six drops of Haarlem oil given in a teaspoonful of boiled milk three or four times a day, will be useful in many cases of Hooping-cough, more especially in the latter stage of the disease. For adults, the dose should be increased to twenty or thirty drops.

Oil of Amber.—This oil rubbed along the spine, morning and evening, will prove serviceable in allaying the violence of the Hooping-cough.

The Cold Bath, if the patient remain in a feeble condition after the Hooping-cough, will have a signal influence in toning the system. It is safer to commence with the tepid bath, with the water at about 90 degrees, and gradually diminish the temperature as the patient can bear it. The patient should be suddenly dipped, or showered, and immediately rubbed dry, and wrapped in a warm blanket. The proper time for administering the bath is the morning.

Change of Air.—To move from the city to the country, or from the country to the city; or even a change of residence in the same neighborhood, will sometimes speedily cure the lingering cough and debility which is apt to follow Hooping-cough.

SECTION VII.

PLEURISY.

Pleurisy is an inflammation of the membrane that lines the internal surface of the chest, which is called the pleura. This membrane also forms the *external* coating of the lungs.

Any portion of the pleura is liable to become diseased, but that on the right side is more commonly affected.

It is asserted by medical authors that pleurisy mostly attacks the robust and plethoric, but, under my own observation, the disease has occurred almost exclusively in the dyspeptic, the feeble, or the intemperate.

Under Thomsonian treatment, pleurisy is seldom fatal, unless complicated with extensive derangement of some important organ; or when it attacks age or debility, or vitiated constitutions.

Causes.—Exposure to wet and cold; sitting in a current of air, or in a cold room, after severe fatiguing exercise, or sleeping in damp sheets, are common causes of pleurisy. Persons are often liable to be attacked with the disease after severe surgical operations.

Symptoms.—An acute or lancinating pain in the side of the chest; hurried and painful breathing; a short dry cough, attended

with slight expectoration of a glairy and almost colorless phlegm, are the symptoms which characterize pleurisy. The pulse in general is hard and frequent, the face flushed, the tongue coated, the skin dry and hot, and the urine scanty and high-colored.

The symptoms, however, in this, as in other forms of disease, are modified by the various circumstances under which the disease may occur, as the age of the patient, the strength of the constitution, the extent of derangement of important organs, especially of the stomach and liver; or the degree of susceptibility of the lungs to become affected. Thus in the young and vigorous the reaction is apt to be strong, whilst in the aged and feeble the countenance may remain pale, and the pulse weak. In some cases the breathing is greatly oppressed, whilst in others there is but little oppression and no pain. The cough, which is usually harassing, is almost wanting in some instances. The expectoration, though in general colorless in the commencement, is occasionally tinged with blood, from the first, and when the disease extends to the substance of the lungs, the expectoration is mostly copious, and consists of a ropy mucus, mixed with blood. The condition of the stomach modifies also the character of the symptoms, and influences, to a great degree, both the violence and the duration of the disease. The liver being torpid, or the flow of bile obstructed, the skin and eyes become yellow, or the countenance presents an appearance of a "sickly mixture of red and yellow." Such a case would be called Bilious Pleurisy.

Inflammation of the pleura is very liable to produce adhesions between the side of the chest and lung, an occurrence, however, not productive of danger, and seldom of much inconvenience. Under unfavorable circumstances, an abscess is sometimes formed, which is always attended with more or less hazard to the patient.

Favorable Signs.—A free expectoration of a thick yellow matter; an increased flow of urine, which, on standing, deposits a sediment; a general and warm perspiration, together with an abatement of the pain and oppression, indicate a favorable termination of the disease.

The unfavorable signs are, an increase of pain and oppression in a late period of the disease; the cough continuing dry an unusual length of time, or the expectoration resembling a dirty mixture of blood and water; a sense of suffocation, and a sudden raising up in bed, or a "constant effort by the patient to bare the breast and to raise his head and shoulders;" a weak and irregular pulse; a livid appearance of the lips and countenance; a sense of burning on the surface and coldness internally, together with a rattling in breathing, and a tendency to delirium or stupor. These

symptoms, though indicative of great danger, should not be considered as necessarily of fatal omen, for recoveries occasionally happen after symptoms of the most alarming character have been presented.

Treatment.—Slight attacks of pleurisy will, in general, require nothing more than warm teas, and small doses of lobelia, together with the vapor or foot-bath to excite perspiration, the patient to be kept warm.

When the symptoms are of a severe or violent character, a full course of medicine must be administered, and this repeated daily until the symptoms abate; and between the courses broken doses of lobelia in the form of pills, powder or tincture must be given, together with the free use of cayenne or composition, and an occasional injection composed of composition tea, adding a teaspoonful of green lobelia to each injection.

The Vapor Bath is of great advantage in pleurisy. When the patient's strength will not permit his sitting up, the vapor can be applied in bed, and in this way continued for hours, if necessary.

An Emetic must be given occasionally after a vapor bath, or whilst the patient is in a perspiration by other means.

A dry heat should not be applied around a patient when there is much fever, as it will increase the distress before perspiration is induced.

A warm poultice applied to the side, will, in many instances, be attended with an immediate mitigation of pain. The poultice may be made of Indian mush, well boiled, or of boiled potatoes mashed, or slippery elm and flaxseed stewed together. A portion of ginger should be added to the poultice, and, when spread, the surface should be covered with powdered lobelia. The poultice should not be allowed to get cold, but be kept warm by means of a hot brick, or a jug of warm water placed in contact with it.

Bilious Pleurisy, as it is called, usually commences with the symptoms of ordinary bilious fever. This and every other variety of pleurisy, however, must be treated upon the same general principles. In bilious pleurisy the course of medicine should be more frequently repeated than in simple pleurisy. If the patient has vomited freely, and the stomach continue a long time unsettled, throwing up every thing that is taken, then the purified charcoal will be likely to prove serviceable in settling the stomach. It may be given in pepper tea, or any other of the teas used as medicine,

and the dose repeated every hour, or every few hours, as may be deemed necessary.

The Diet, during the active stage of the disease, must be restricted to the lightest kind of food, as elm gruel, barley-water, crust coffee, arrow-root, gum arabic water, or flaxseed tea, sweetened with honey.

As the disease abates, and the tongue cleans, a more nourishing diet may be allowed the patient, such as chicken tea, essence of beef, soft-boiled or poached eggs, milk porridge, &c.

In cases of extreme prostration of strength, essence of beef, wine-whey, or even clear wine may be requisite to sustain the strength of the patient.

In some instances, the treatment will require to be continued several days before an abatement of the disease will be perceptible. The expectoration of a thick yellow matter is one of the first, as it is also one of the surest indications of a favorable change being about to take place.

Some medical writers state, that an increased oppression of breathing and suppression of expectoration are apt to occur in pleurisy about the fifth or sixth day.

Tonics, such as spice bitters, colombo, Virginia snakeroot, &c., must be given, when the patient remains weak after the disease has formed a crisis, and the fever has subsided. A dose of composition or bayberry tea should be taken once or twice a day during the convalescence, until the tongue becomes clean and of a healthy appearance.

SECTION VIII.

CATARRH—COLDS—INFLUENZA—GRIPPE.

Catarrh, or Colds, prevail to a greater extent than disease in any other form. At particular seasons, especially in the spring and winter, when south winds prevail, the majority of persons exposed to the weather will be more or less affected with catarrh. Not only do catarrhal affections prevail more during the general thaws of spring and in open winters, but other forms of disease also prevail, to a much greater extent during those seasons when the atmosphere is chilly and charged with moisture and damp from rain, or from the thawing of frozen earth. The majority of cases of consumption originates from neglected colds, contracted during winter and spring. There is scarcely a form of disease that may

not be produced by exposure to cold and dampness. Even contagious diseases, such as scarlet fever and measles, are much more common during winter and spring than at other seasons of the year: and in many instances children are taken down with a contagious disease from certain conditions of the atmosphere, without their having been exposed to any one affected by the disease.

Catarrhal Affections, like other forms of disease, arise from a loss of heat, and diminution of the nervous energy. When south winds prevail during spring and winter, the atmosphere is highly charged with moisture, which condenses on the walls, and thus renders houses damp and unhealthy; the clothing of those exposed to the weather becomes damp, which, together with exposure of the feet to the wet ground, will almost necessarily occasion more or less disorder of the system. If the power of digestion be enfeebled, the system will be rendered more susceptible to cold, than when the digestive functions are in a healthy condition. Persons often become affected with severe cold whilst confined to the house and in a warm room. If the power of producing heat and nervous energy be diminished in consequence of loss of digestion, the patient will consequently become cold and chilly, and the same symptoms may be produced as prevail in colds taken through exposure.

Symptoms of Common Catarrh.—Most of the symptoms attending ordinary catarrh, are such as usually prevail in the first stage of almost every form of disease; such as lassitude, chilliness, loss of appetite, torpid bowels, and a dry skin. There is usually more or less cough. The secretions from the nose are thin and watery. Soreness of the throat is very common in colds, attended with dryness of the parts, and pain on attempting to swallow. The breathing is much oppressed in some instances, and but slightly so in others. Generally more or less fever comes on in the after part of the day, and the patient is restless at night.

A severe form of catarrh, or cold, sometimes prevails epidemically, popularly called *influenza*. It differs from ordinary catarrh only in the severity of the symptoms. There is more chilliness in the commencement; the pain in the head is more severe, attended with a sense of tightness across the forehead. The strength is extremely prostrate, early in the attack; digestion suspended, or at least the stomach and bowels are extremely torpid; often attended with distress at the pit of the stomach, giving origin to the name "*grippe*" as frequently applied to the disorder. The sense of taste is lost; there is a copious flow of thin watery humor discharged from the nose; the eyes are tender and watery; there is a troublesome cough; oppressed breathing; frequently fever, though in some instances the skin remains cool and damp. In most cases there is a profuse expectoration of frothy mucus, and

in a later period of the disease, the sputa is thick and yellow, or greenish.

It is useless in a practical point of view to make a distinction between bronchitis, catarrh, and colds in general, for the same plan of treatment is demanded in all these various modifications of disease; the treatment to be adapted to the symptoms without reference to names of disease.

Favorable Symptoms.—Cleaning of the tongue; a free expectoration of thick yellowish, or cream-like mucus; the discharge of thick secretions from the nose; a tendency to warm perspiration, and a returning appetite, are favorable. It usually requires from four or five days to a week, to effect a crisis in the disease, and in some cases two or three weeks are required.

Treatment.—Ordinary catarrh requires nothing more than an occasional dose of composition, capsicum tea, or simple herb teas, such as pennyroyal and dittany, and a strict attention to diet, and care to avoid exposure to cold or dampness.

When patients are exposed to the open air, while engaged in their usual avocations, or to sudden changes of temperature, the medicine, such as capsicum and composition powder, should be taken in cold water. Taking freely of hot teas will open the pores of the skin, and may render the patient, at the time, more liable to take fresh cold, if exposed to dampness, or a current of cold air. Still, perspiration induced in this way does not render the system so liable to cold as when it is brought on by severe exercise. When the patient is in bed, or not exposed to the cold air, hot teas should be taken to promote perspiration, assisted by warm applications to the feet. Simple teas of pennyroyal, dittany, or camomile, are beneficial, and may be drunk freely, to induce perspiration.

When liquids oppress the stomach, the compound lobelia pills will answer as a general medicine.

When the cough is hard and dry, the patient must be kept slightly nauseated with lobelia, and cough mixtures employed, such as flaxseed or elm tea, with the addition of a portion of lemon juice and loaf sugar; onion syrup; bran tea; lemon juice with loaf sugar; or liquorice root tea may be used.

For sore throat wrap a stocking around the neck on going to bed, and keep the neck warmly covered at all times. Molasses and butter melted together, adding a portion of cayenne pepper, taken at bed-time, will be useful.

There are cases of catarrh or influenza that require thorough treatment, especially vapor baths and emetics, or full courses of medicine. The vapor bath is especially beneficial in all cases, and cannot be employed too frequently. In severe cases it is import-

ant that the patient be kept in a warm room, and have warm applications to the feet. When the complaint becomes protracted, the patient continuing feeble, tonics must be given, the best of which is quinine.

CHAPTER IV.

DISEASES AFFECTING THE MOUTH AND THROAT.

SECTION I.

CROUP—HIVES.

THIS dangerous disease is peculiar to childhood, usually occurring between the first and fifth year.

Causes.—Exposure to cold and dampness; having the feet damp many hours together; and the presence of undigested food in the stomach, are the general causes of croup. Some children are peculiarly liable to this form of disease; whilst others will bear almost any degree of exposure without having an attack of it.

Symptoms.—The disease sometimes comes on suddenly; the child, for instance, goes to bed as well as usual, and is suddenly attacked with it during the night. Generally, however, its approach is gradual, with the usual symptoms that accompany a cold. Slight oppression of breathing, with a peculiar hoarse and shrill cough; the eyes watery and heavy, and the child dull and fretful. These symptoms frequently continue some days before the disease assumes a violent form. The cough becomes at length more troublesome and shrill, and agitates the child very much; the face becomes swollen and red; the breathing more difficult; the skin dry and hot, with a quick and tense pulse; and as the disease advances, the breathing becomes extremely difficult, accompanied with a hissing noise. Sometimes the cough is quite dry, and in other cases there is a copious secretion from the wind-pipe from the commencement of the disease. If the symptoms be not relieved, and the disease progress in violence, the breathing becomes still more distressing, the child manifesting by its countenance and actions, the greatest degree of suffering; the head is

thrown back; the eyes are half closed, and cast about with an imploring expression for relief; the face grows pale, and covered with large drops of cold sweat; the lips livid; the voice becomes extinct; the extremities grow cold; slight stupor ensues; and finally the heat and sensibility continue to diminish until the breathing ceases.

Spasmodic Croup, (as it is termed,) generally comes on suddenly, and without fever. The cough is not of that peculiar sound that generally characterizes common croup, and, in some instances, there is an entire absence of cough.

Frequently Fatal.—The great danger attendant on croup, arises from obstructions in the throat or wind-pipe preventing the free admission of air to the lungs. The obstruction may consist either in the formation of a false membrane in the wind-pipe,—filling up its cavity; swelling and inflammation in the epiglottis; or from spasm in the muscles of the throat. The free admission of air into the lungs being obstructed, the blood loses its vitality in proportion as the supply of air is lessened, and is thus rendered incapable of supporting life. Croup terminates fatally to the patient, unless checked in its early stage by appropriate treatment.

Treatment.—The means to be relied upon for the cure of croup are, emetics, injections, and the vapor bath.

Emetics.—In the early period, when the symptoms are of a mild character, and the child in good health otherwise, an emetic of the tincture of lobelia may give immediate relief, and remove the disease. If this should not afford relief in a short time, say, ten or fifteen minutes, the dose should be repeated at frequent intervals, and injections administered composed of composition tea, with the addition of a teaspoonful of lobelia powder, and the feet placed in warm water. As a substitute for the tincture, infuse a large teaspoonful of brown lobelia in water not quite scalding hot, and give the tea freely. The same may also be administered by injection and retained. The distress sometimes occasioned by the operation of the medicine can do no harm under any circumstances. The lobelia strikes at the very root of the disease, and though patients may suffer under its influence, it will do more for the patient than any other medicine.

Vapor Bath.—Unless the patient be entirely relieved by the above means, the steam bath should be administered, and, during the steaming, the head and face bathed with whiskey, or vinegar and water; and if the patient be faint, cold vinegar or water dashed on the breast. It is said that a sudden dash of cold water on the

breast, in croup, has been found beneficial by exciting reaction, when the child had become affected with stupor.

When the symptoms are not so urgent as to require an immediate emetic—for instance, when the child has had a cold for two or three days more or less, which begins to manifest symptoms of approaching croup, the vapor bath should be administered, previously to the emetic, in order to ensure an effectual operation.

After the bath, a prompt emetic must be given, and frequently repeated until the disease be expelled. The liquid of the third preparation of lobelia, with an equal quantity of brown lobelia, forms the most efficient emetic: to be given in bayberry or sumac tea. For very young children, or in the outset of the disease, when there is much heat of the skin and rigidity of the tissues, the brown or green lobelia may be prepared in the above tea, or in composition tea, omitting the third preparation. The lobelia cannot be given too freely to a child in croup, and the more effectually the system becomes relaxed under its influence, the greater certainty there will be of effecting a cure.

When the system is relaxed under the influence of lobelia, the patient is usually thirsty, and if a child be allowed to take the breast freely, it may do harm, by oppressing the stomach with food that it is not able to digest. Therefore, it will be safer to give the child small portions of water frequently, or, what is still better, composition, ginger, or simple herb teas.

Injections.—These should be frequently administered in bad cases of croup, not only with a view to relieve the bowels, but more especially to excite an afflux of blood to the bowels, and in this way to lessen the determination to the throat. I have, on several occasions, observed signal benefit from the administration of an injection of a small teaspoonful of green lobelia powder in lukewarm water, and retained in the bowels ten or fifteen minutes, or even longer. No injury will arise if it should remain for hours. Under the influence of lobelia thus administered, free vomiting will very generally be produced, the system will become relaxed, and the symptoms of croup diminish, and sometimes entirely disappear by this alone.

The treatment should be pursued as long as symptoms of croup continue, or until the case prove hopeless. There are few cases of croup, probably, which might not be cured by Thomsonian remedies, if early and perseveringly applied. But after the disease has reached a certain stage—for instance, the wind-pipe nearly closed by the formation of a false membrane within its cavity, or effusion has taken place in the substance of the epiglottis, and thus permanently enlarges it, the obstruction in breathing which must necessarily attend either of these conditions, will be almost certainly fatal.

External Applications.—In the first stages of all cases of croup, a portion of cotton, wet with camphor, whiskey, or vinegar, may be applied to the throat. A poultice composed of brown lobelia, pulverized, adding a portion of slippery elm, wet with hot water, and applied to the upper part of the throat, is highly recommended by some practitioners. The poultice must not be allowed to become cold. By having two poultices, and changing them as the one applied becomes cooler, full benefit will be obtained without exposing the throat, except momentarily, to the air. It is important to protect the skin of the throat, after a poultice has been applied; and, after the removal of the poultice, the skin may be bathed with No. 6, or stimulating ointment.

Cases of croup are sometimes cured even after the symptoms have assumed a character indicative of a fatal termination. Dr. Chapman mentions a case of croup to which he was called, in which the disease had continued for three days, without the symptoms having been relieved, and as a last resort, they placed the child in a vapor bath, and as soon as the patient began to sweat, the symptoms were relieved. The child was kept in the bath three hours, and recovered. I knew an instance of croup, where a child nine months old, took two ounces of the third preparation of lobelia, in the course of seven hours, and was cured, when a much milder course of treatment would very probably have failed. The free use of the third preparation of lobelia, and the continued application of the vapor bath, together with stimulating injections, will be the most effectual means where the powers of life are far exhausted. The steam bath, by warming the blood, and expanding the tissues, gives the air greater access to the lungs—the vitality of the blood is increased in proportion as the supply of air is greater, and the warmth imparted to the skin attracts the blood to the surface, and tends to equalize its circulation. I have never applied the vapor bath in a case of croup, without relief to the symptoms, though in far-gone cases the benefit will not be of long continuance. A child, held on the lap, will bear a moderate steaming for several hours at a time, provided a proper attention be paid to bathing the head and surface of the body, and giving stimulants. The vapor should be of a temperature sufficient to keep the skin warm, and the patient in a moderate perspiration. In violent cases, the lobelia may be given during the application of the bath.

Children are subject to asthma or phthisic, which, in many of its symptoms, resembles croup. But any one acquainted with the croup cough, will be able to distinguish it from asthma. With regard to treatment, however, that which would be most effectual in croup, would be equally appropriate in asthma.

Recapitulation.—In the early stage of croup, attended by fulness of the face and fever, give brown lobelia in infusion with warm

water. Giving it by injection, say the fourth of a teaspoonful of the brown lobelia in a little warm water, and retained, will prove very effectual in relaxing the system.

In cases that are more difficult, apply the vapor bath, and give the third preparation of lobelia.

If the tongue be thickly coated, there will be more necessity for the frequent application of the steam bath, and for the free use of the third preparation of lobelia given in strong bayberry tea.

SECTION II.

QUINSY—INFLAMMATORY SORE THROAT.

The term Quinsy is applied to a sudden inflammation and swelling of the tonsil gland, situated on each side of the throat, and behind the root of the tongue.

Sometimes the inflammation is confined to one side, in other instances both tonsils are affected, and very frequently the inflammation extends to the uvula and soft palate. It occurs in every degree of violence from that of a slight affection to that of a most painful, and even formidable disease.

Symptoms.—At first there are symptoms of constitutional disorder, as chilliness, loss of appetite and furred tongue, followed by more or less fever. The throat becomes swollen, and swallowing is painful. As the inflammation and swelling increase, the efforts to swallow become more difficult and painful, and in some instances the patient is entirely *unable* to swallow. There is at first a sense of dryness and constriction in the throat, and a feeling as though something were sticking there. The dryness of the throat soon gives place to a copious secretion of transparent mucus which is frothy and viscid, and adheres to the inflamed surface, so as to be detached with difficulty; and the patient is tormented by continual and painful efforts to hawk up, or to swallow this mucus.

In ordinary cases, however severe the disease may be, there is scarcely any affection of the breathing. But the throat is so blocked up, that the voice becomes thick, guttural and inarticulate.

Inflammation of the tonsils is extremely liable to terminate in suppuration. In many instances an abscess will be formed, and discharge in a few days from the commencement of the inflammation. There is chilliness at the time the abscess is forming, and usually pains shoot from the throat to the ear.

Causes—Persons predisposed to quinsy are liable to an attack

from a sudden check of perspiration, more especially after severe exercise or fatigue. Exposure to cold damp air, and standing on damp ground, are the principal exciting causes of this disease.

Quinsy is rarely attended with much danger, when properly treated from the commencement.

Treatment.—To promote perspiration, and to cleanse the stomach and bowels, are important in the treatment of quinsy. A full course of medicine will be proper in the commencement, as the surest means of moderating the violence of the disease, and in some instances, it will put a stop to a farther increase of the inflammation and swelling.

In mild cases, where the inflammation is not severe, and the constitutional health but little disturbed, much medicine will not be required. An injection once a day to relieve the bowels; the use of mucilaginous drinks, such as elm gruel and barley-water; an occasional dose of composition tea, and a warm poultice kept to the throat, will suffice in the way of treatment.

In violent cases, the patient should be kept slightly nauseated by broken doses of lobelia in composition, or such other warm teas as are good to promote perspiration. When there is great difficulty in swallowing, the lobelia may be administered by injections, in small portions of luke-warm water, and retained. Vomiting may be very readily effected in this way, and prove of benefit in any stage of the disease.

After the stomach has been cleansed by an emetic, one of the best remedies that can be given is powdered gum guaiacum. It may be administered in teaspoonful doses, mixed in a mucilage of slippery elm, and repeated twice a day.

A strong tea of bayberry or sumac, with a portion of cayenne pepper, given occasionally, and more especially when the coating on the tongue begins to soften, is peculiarly serviceable to cleanse the stomach.

The feet should be kept warm, and occasionally placed in warm water, or, what is still better, a vapor bath administered.

Gargling very cold water, or vinegar and water, in the throat, appears to be particularly serviceable in this affection. If the cold gargle should not feel pleasant to the throat, it should not be used. Gargles of pepper sauce, or of bayberry and pepper, may also be employed with a view to excite the secretions and clear the throat of mucus. The tincture of lobelia may be usefully employed as a gargle.

Poultices.—Slippery elm, ginger, and green lobelia, form a good poultice, to be applied warm to the throat, and to keep the poultice from getting cold, five or six thicknesses of flannel should be ap-

plied over it; or, in place of a poultice, spread a plaster of stimulating liniment, or salve, on a piece of silk, oil-cloth or bladder and apply to the throat; this last application is preferable to a poultice, at night, on account of the liability of the poultice to become dry and cold.

Inhaling the vapor from vinegar and water will give relief, and hasten the cure.

Quinsy usually runs its course to a favorable termination in a few days, the inflammation and swelling of the throat subsiding by the fifth or sixth day from the commencement of the attack. Very commonly, however, where but one tonsil is affected at first, the other subsequently becomes inflamed, and thus prolongs the disease.

If the swelling and inflammation continue five or six days without abating, and then is accompanied with chilliness, and pain shooting from the throat to the ear, it is a pretty sure indication that supuration has commenced. When the matter is discharged, the patient experiences instant relief, and the disease may be considered as cured.

When an abscess is formed in the tonsil, and the patient greatly distressed from the swelling, it may be opened with a lancet, in order to allow the matter to escape—an operation attended with no danger, and one which gives immediate relief. After the abscess has discharged, a gargle of bayberry or sumac tea should be used, adding a portion of the No. 6, or tincture of myrrh.

The Diet should consist of soft solids, such as rye mush, jellies, &c.

Preventives.—Those predisposed to quinsy, should make it a practice to gargle the throat every morning with cold water, and occasionally sponge the body with cold water, immediately on rising in the morning, and keep the feet dry and warm.

SECTION III.

MUMPS.

This is a disease of the parotid glands, which are situate below the ears, and behind the angle of the jaws. It is contagious and often prevails epidemically.

Sometimes the gland on one side only is affected, which does not prevent the disease from occurring subsequently on the other side; but, where both glands are affected, there is rarely ever a second attack.

Children and young persons are most liable to this disease.

Mumps is not a dangerous affection, though, from exposure to cold, it is liable to be translated to other glands—in the male, to the testes, and in the female to the mammæ, and the former, particularly, sometimes requires judicious and thorough treatment.

Symptoms.—There is swelling below the ear, extending partly over the cheek and neck, and stiffness of the jaws. The swelling increases and the parts become hard and extremely tender, and in some cases the patient is scarcely able to move the jaws. The swelling usually begins to lessen by the fourth or fifth day. There is more or less fever from the commencement, attended with restlessness, and sometimes slight delirium.

Treatment.—Mild cases seldom require other treatment than keeping the parts warm, and the use of some mild stimulant, with a view to promote moderate perspiration, as composition, ginger, or pennyroyal tea.

When the symptoms are more severe, the bowels should be relieved by injections, and the stomach cleansed by an emetic. If the symptoms continue to be distressing, broken doses of lobelia should be given, with warm tea.

The Local Applications to the swelling, should consist of volatile liniments; sweet oil and spirits of hartshorn; or camphor, opodeldoc, &c., and the parts kept warm with flannel or cotton. Especial care should be taken to avoid taking cold.

When the disease is translated to the testes, a full course of medicine should be administered, and the patient be kept in a perspiration by being in bed, and drinking of warm teas, and broken doses of lobelia. In severe cases, the patient should lie on his back, and have the testes supported by a soft cushion, and frequently bathed with volatile liniments, or apply a soft emollient poultice.

SECTION IV.

COMMON SORE THROAT.

Sore Throat is a common attendant on colds, and is usually preceded by chilliness and flushes of heat, checked perspiration, and impaired digestion. The throat is dry at first, and there is pain on attempting to swallow, with a cough, and sometimes an inclination to vomit. A discharge of a thick yellowish mucus takes place sooner or later, and the soreness and inflammation subside.

The treatment should consist of hot medicines to warm the stomach and bowels, and promote perspiration, assisted, if necessary, by the warm foot bath or vapor bath, and the feet should be kept warm.

An emetic will be of benefit in severe cases, and small doses of lobelia should be given to produce slight nausea. This is more particularly indicated when the skin is dry or when there is fever.

The best Gargles for sore throat are capsicum tea, or pepper sauce. When the inflammation subsides, and a thick yellowish mucus is secreted, astringent gargles should be used, such as sumac or bayberry tea.

There is a variety of other remedies useful for colds and sore throat, as flaxseed, or slippery elm tea, with the addition of a portion of lemon juice, and sweetened with rock candy, honey and vinegar. Molasses and fresh butter stewed together, with the addition of a portion of red or black pepper, is a good remedy for ordinary sore throat.

A stocking filled with hops moistened with hot vinegar, and applied to the throat at night, will generally put a stop to a further increase of the inflammation.

The Constitutional Treatment for sore throat, is precisely such as should be employed in bronchitis, catarrh, quinsy, or any other disorder of the kind. Herein is the excellency of the Thompsonian system: embracing a few general principles, which are applicable to all cases. The human constitution is governed by general laws which are unvarying and unchanging. And although disease may appear in a variety of forms, yet it is always the same in principle, requiring the application of but few general remedies to suit the circumstances of the case.

SECTION V.

ACUTE LARYNGITIS.

Acute laryngitis consists of an active inflammation of the parts composing the larynx, or upper portion of the wind-pipe. It is a species of croup that sometimes attacks adults, and of which it is said, Washington died.

“The *symptoms* of acute inflammation of the larynx are these. The patient complains of *sore throat*. If you look into his throat

you will commonly perceive some redness of the vellum and uvula, and of the fauces generally. But there is a degree of restlessness and anxiety about the patient, more than proportionate to the apparent inflammation. Among the earliest symptoms that bespeak danger is *difficulty of swallowing*, for which no adequate cause is visible in the fauces (throat); and to this is presently added *difficulty of breathing*, for which no adequate cause can be discovered in the thorax. The mode and character of the respiration are peculiar; it is attended with a throttling noise; the act of inspiring is protracted and wheezing, as though the air were drawn in through a dry narrow reed. If you ask the patient what is the *seat* of his distress, *where* the disease is situated, he points with his finger to the upper part of the throat. If he coughs, he coughs with a peculiar harsh, stridulous, husky, abortive sound. He either speaks quite hoarsely, or (what is more common) all power of audible voice in the larynx is lost, and he speaks by means of his lips and tongue only, in a whisper. There is tenderness in the upper part of the throat. The face is flushed; the skin hot and dry; the pulse hard. As the disorder advances, the patient's general distress increases; but some of the symptoms alter; his countenance becomes pale and livid, anxious and ghastly; his eyes protrude; he is miserably unquiet, impatient for some relief, declares or makes signs that he wants air, and begs that the windows may be opened; and if he does not *obtain* timely relief, he perishes—he dies strangled."

Treatment.—In this form of disease, prompt and energetic remedies are demanded; such as are required for the cure of severe cases of croup in children. If there be strong reaction, use the brown lobelia in preference to any other preparation of it, with a view to relax the system fully in the very onset of the disease, immediately after administering a vapor bath. The vapor bath, lobelia emetics, and the usual stimulating injections, are the means most to be relied upon in the active stage of the disease, and after relaxation is effected, or the febrile symptoms abate, the third preparation of lobelia must be given freely, and administered by injection in bayberry or composition tea. If the difficulty of swallowing prevent getting medicine into the stomach, the injections must be repeated frequently, say every half hour. In the early stage of the disease, when the febrile symptoms are violent, the brown lobelia may be administered by injection with the same effect upon the system as if taken into the stomach.

Chronic Laryngitis—Common Sore Throat.—Common inflammation of the larynx, except where it exists as a consequence of consumption, is generally curable by swabbing the throat with the liquid of the third preparation of lobelia, several times a day, and

continuing this treatment, together with an occasional course of medicine; or simply a lobelia emetic, and the use of the compound lobelia pills every night. Much benefit may be derived by sponging the neck and breast every morning with cold salt water; and, after rubbing the surface dry, apply stimulating liniments, or tincture of capsicum.

SECTION VI.

APHTHOUS SORE MOUTH.

Infant's Sore Mouth.

In this disease there is a secretion which forms in patches over the tongue and mouth, resembling whey curd. In some cases the disease spreads and covers the tongue, and occasionally extends to the stomach and bowels, appearing at the anus,—these parts becoming excoriated.

Local Treatment.—In the first place rub off these white patches with a dry rag; then wet a finger, and cover it with fine bayberry powder, and rub over the tongue and sides of the mouth. Then lay on the tongue some finely powdered chalk, mixed with an equal quantity of loaf sugar. These applications will generally cure it after a few repetitions. Rubbing the dry powder over the surface stimulates the mucous glands, and induces a more healthy condition of the secretions.

Constitutional Treatment, in mild cases, is seldom necessary, more than to allow the child to swallow the chalk and sugar laid on the tongue.

In more obstinate cases, give the child two or three times a day, a tablespoonful or more of the strong decoction of bayberry or sumac, with the addition of half a teaspoonful of powdered chalk, sweetened. If there be symptoms of the disease having spread throughout the stomach and bowels, besides the above mixture, give three or four times a day, half a teaspoonful of composition powder, in a tablespoonful of bayberry tea; and use injections to regulate the bowels. If this is not sufficient, apply the vapor bath to warm the blood, and give an emetic to cleanse the stomach.

SECTION VII.

ENLARGEMENT OF THE UVULA—FALLING OF THE PALATE.

The uvula, a small fleshy body, hanging from the middle of the arch of the palate, over the root of the tongue, is liable to become elongated, from exposure to cold and damp weather, or from an acid or otherwise disordered stomach. Sometimes there is but a slight lengthening of the uvula, and in other instances it becomes greatly enlarged, having sometimes the appearance of a bladder of water, and is very troublesome to the patient from the unpleasant sensation occasioned by it in the throat.

From a frequent occurrence of this affection, the uvula is liable to become permanently elongated, and excite frequent coughing, which, in some instances, does injury to the lungs. Cough of long standing is sometimes cured by the removal of a part of the uvula.

Treatment.—Recent cases of this affection may, in general, be readily cured by a few doses of composition, or of bayberry and pepper, and using a gargle of black pepper and whiskey, or a strong decoction of some vegetable astringent, as bayberry, sumac, witch-hazel, or marsh rosemary, adding cayenne pepper; or, by applying the dry powder of bayberry or composition to the uvula. The most convenient way of doing this, is to place the powder in a teaspoon, and place the spoon under the uvula, then raising it up, so as to allow the uvula to come in contact with the powder, and become coated with it.

When the uvula becomes permanently lengthened, and excites troublesome coughing, a portion of it should be cut off, provided the above gargles have no effect in exciting it to contraction. The clear No. 6, or the third preparation of lobelia, may be also used as a gargle where the parts have been long affected.

CHAPTER V.

DISEASES AFFECTING THE STOMACH AND BOWELS

SECTION I.

COLIC.

COLIC is usually divided by medical writers into at least three varieties, namely, *Accidental or Flatulent Colic*, *Bilious Colic*, and *Colica Pictorum, or Painter's Colic*.

Flatulent Colic is produced by a collection of wind or flatus in the stomach or bowels, from indigestion. Persons of weak digestion and acid stomach, are liable to colic from inaccuracies in diet, or from drinking freely of cold liquids, such as lemonade, ice-water, or cold milk. Colic generally comes on an hour or two after eating, yet sometimes immediately after. Before the pain seizes the patient, he generally feels a sensation of fulness and distress at the pit of the stomach. In some instances, the food passes into the bowels imperfectly digested, and the colic does not come on until several hours after eating, and the pain is chiefly about the umbilicus or navel. When the pain is severe, the patient bends his body forward, and twists about with his hands pressing hard upon the abdomen. The bowels are constipated, and there is an absence of fever. The pain is generally lessened whenever there is wind forced upward or downward. Sickness at the stomach almost always accompanies colic; and if free vomiting take place, the distress is greatly mitigated, and sometimes entirely relieved.

Treatment.—There is a variety of stimulants, either of which may answer in mild cases; such as capsicum or composition tea, Thomson's No. 6, oil of juniper, spirits of turpentine, hot brandy toddy, or essence of peppermint. The teas must be drunk as hot as the patient can bear them.

Emetics.—A prompt emetic of lobelia is the most effectual means of curing colic, when the pain is in the stomach. The liquid of the third preparation of lobelia to be given in hot composition or bayberry tea; or the lobelia powder and No. 6, used in place of the third preparation.

The Vapor Bath not only has a tendency to relieve colic, but it assists the operation of the emetic; the bath, however, will seldom be necessary except in very severe cases, and in case the system be very cold or torpid.

Injections.—When the pain is seated in the bowels, injections may be given, prepared in the usual way. A prompt emetic, however, will generally overcome pain in the bowels. When the stimulating injections are expelled suddenly, without affording relief, the lobelia powder should be administered in warm water, and care should be observed to retain them as long as possible.

External Applications.—Flannels wrung out of hot water, or wet with hot whiskey, or No. 6; or hot bricks, wrapped in damp cloths, should be kept to the stomach and bowels. Heat applied to the feet is also beneficial.

Anti-acids.—In most cases of colic there is acid in the stomach, interfering with the free operation of emetics, which require to be neutralized by alkalies, such as sal eratus, bi-carbonate of soda, or a tea of hickory ashes. Soot tea answers the same purpose, and will, of itself, when drunk freely, cure mild cases of colic.

When lobelia is not at hand, or cannot be readily obtained, a teaspoonful of mustard in warm water, a tumbler of warm soot-water, or warm camomile or boneset tea, may be given to produce vomiting.

Infants are peculiarly liable to colic pains, which may be relieved generally by the most simple remedies; as, warm tea of catnip, ginger, calamus, or mint. Adding a few drops of the essence of peppermint, or tincture of lobelia, will render the teas more effectual.

Soot tea is very good for colic in infants; emetics, however, are sometimes necessary, and always safe.

SECTION II.

CHOLERA MORBUS.

This form of disease is occasioned by indigestion from unwholesome food, or from want of vital power in the system. It is common in hot weather, but more particularly in autumn.

Symptoms.—Cholera morbus usually comes on suddenly, commencing with distress and pain at the pit of the stomach and in

the bowels, followed by severe vomiting and purging. When the symptoms are violent, the strength is rapidly exhausted, and great distress is felt at the pit of the stomach. The thirst is excessive—and, in many instances, the patient is harassed by cramps in the muscles of the abdomen and lower extremities, and the pulse is usually irregular and feeble. The severe and continued retching, and strong efforts to vomit, generally occasion more or less bile to be thrown up, which is observable also in the evacuations from the bowels.

The *aggravated* form of this disease which prevailed a few years since, received the name of *Asiatic cholera*.

Cholera is generally rapid in its course, and, under unfavorable circumstances, frequently terminates *fatally*; as, when it occurs in vitiated and broken-down constitutions, the patient subjected to an improper course of treatment, such as large doses of narcotics, or calomel; or when the vital powers are prostrated by the loss of blood.

Causes.—There are certain atmospheric influences that evidently predispose the system to cholera morbus. The general exciting causes of the disease are a sudden check to perspiration; unwholesome food, or that which is hard of digestion; intemperance, and drinking copiously of cold water on an empty stomach. In some seasons, almost every person that is sick will have more or less of bowel complaint. Intermittent fever sometimes commences with a violent attack of cholera morbus. During the season that the cholera prevailed throughout this country, almost every person had, more or less, a looseness and disorder of the bowels, showing very plainly that there must have been a cause existing in the air which tended to weaken the vital principle and enfeeble the powers of digestion.

Treatment of Cholera Morbus.—The most important remedies for the cure of cholera morbus are, active emetics and injections. The vapor bath should be administered, or hot bricks, or bottles of hot water, wrapped in damp cloths, placed around the patient. As long as the symptoms of retching and purging continue, together with pain and cramp, the third preparation of lobelia *must be given in full and frequent doses*. A milder stimulant—composition, for instance—will, in many instances, be thrown off the moment it is swallowed, without producing a sufficiently beneficial result. I have witnessed cases in which every thing swallowed had been rejected instantly, with the exception of the third preparation of lobelia, which remained several minutes before it was thrown off, and would bring morbid matter from the stomach, which could not have been thrown off without it. I know of no form of medicine of such efficacy, in all bad cases, as the third

preparation of lobelia in bayberry tea. Patients in many instances have continued retching and vomiting for hours in succession, raising scarcely any thing, yet, by taking a vapor bath to warm the blood, and restore the nervous power or excitability of the system, followed by a prompt emetic, large masses of undigested food have been thrown off, and the stomach become settled in a short time. Therefore it will not do to be satisfied without giving an efficient emetic, as long as the stomach continues its efforts to relieve itself, or the system remains in a collapsed state. Even though the stomach should not contain any thing that requires to be removed, and the retching continues from an unsettled, or, as it is termed, an irritable condition of the stomach, the emetic would be as likely to quiet the stomach as any medicine that could be given.

Dr. George McClellan stated in one of his lectures, that in the post-mortem examinations that he made where patients died of cholera, he invariably found the stomach more or less filled with masses of undigested food, and in many instances observed substances that must have been swallowed many days previous to their death. The doctor adopted the practice of giving prompt emetics in every case that came under his care, and by this course of treatment he succeeded in raising every patient to whom it was applied.

Flannels wrung out of hot brandy or No. 6, should be applied over the abdomen.

After the disease is checked, which it almost always is under thorough Thomsonian treatment, the patient must remain quiet, and warm in bed, and take occasionally some spice bitters and pepper tea; or the No 5 syrup, or cholera syrup, may be taken occasionally.

The digestion being left weak, care will be necessary to regulate the diet, and to avoid all kinds of fruit, pastry, and every thing difficult of digestion. Milk porridge, barley water, custards, &c., will be proper; and, if the patient desire it, he may take moderately of boiled or broiled ham, and also the thin part of a salt mackerel *boiled*, but neither broiled nor fried.

To allay thirst, the mouth and throat may be gargled frequently with cold water, but cold liquids must not be swallowed, except in very small quantities. Capsicum tea, by exciting the secretions, will generally allay thirst.

A mustard plaster over the pit of the stomach will have a tendency to allay the vomiting and relieve the pain; taking care to remove the mustard, however, before it produces a blister.

SECTION III.

CHOLERA INFANTUM—CHOLERA OF INFANTS.

(Vomiting and Purging of Infants.)

Infants are especially liable to bowel complaints arising from indigestion, particularly when they are teething. When there is both vomiting and purging, it is called *cholera infantum*. It seldom comes on suddenly violent, as happens in the cholera of adults; but generally commences with diarrhœa, which continues several days, before vomiting takes place: occasionally, however, the vomiting and purging come on simultaneously.

Infantile cholera, like that of adults, arises from a loss of the power of digestion; the food being imperfectly digested, becomes sour and acrid, and offends the stomach and bowels, similar to an irritating cathartic, like mandrake or jalap—the constitution endeavoring to cast off the undigested matter by vomiting and diarrhœa.

Cholera of infants is usually much more protracted in duration than that of adults; generally continuing for several days, and not unfrequently becoming chronic. In many instances, however, the vital powers sink rapidly, and the disease, if not subdued, will become suddenly fatal. When the disease is unchecked, the strength soon becomes greatly exhausted; the flesh wastes rapidly; the countenance becomes shrunk and pale; the extremities cold; the belly swollen and hot; the skin dry and husky, or cool and flaccid; the discharges from the bowels frequent, watery, and acrid; the little patient dozes with his eyes half closed, and rolls his head when awake. The eyes become sunken and glassy; the lips blue; the breath cool; and finally the patient sinks into a state of insensibility, and in many instances dies with symptoms of dropsy on the brain. Patients have recovered from this disease, however, even after the occurrence of the above symptoms. A feverish state of the system is always more favorable than an opposite condition. In many instances the evacuations from the bowels consist of a deep green fluid—the green color, probably, is owing to the acid in the bowels, acting upon the coloring matter of the bile.

Thomsonian treatment will generally succeed in curing cholera infantum, if timely and properly administered.

Treatment of Cholera Infantum.—The same general course of treatment is required in this form of disease, as in that for adults—

relying chiefly upon the vapor bath, emetics, and injections, in the early stage, together with the use of stimulants to support the vital powers, to determine the blood to the surface, and to promote healthy secretions; astringents to "remove the canker;" anti-acids and absorbents to neutralize acid; and finally tonics to restore digestion.

The Vapor Bath.—Whoever has witnessed the effects of steaming in cholera infantum, must become convinced of its utility. I have, in many instances, seen little patients made comfortable, at least for a time, by the bath, when they before were suffering the most severe spasms of pain. It is a universal opinion among practitioners of the old school, that the liver is in a state of torpor in this disease, and by failing to secrete bile, occasions the stools to be of a light color.

From the close sympathy existing between the skin and the liver, the vapor bath, by its prompt action upon the skin, tends to restore action in the liver. Besides this, the vapor bath, when well applied, warms the blood, and also thins it, by quickening its circulation through the lungs. Steaming will also increase the natural sensibility of the system, and cause the emetic and other remedies to operate more promptly and effectually. The best mode of steaming infants is to do it on the mother's lap, or if they can sit on a chair this will be better. The steaming may be continued from fifteen minutes to half an hour, and repeated as often as the case may require, washing over the surface occasionally while in the bath, with spirits, vinegar, or simply with water. The shower bath, or dipping the child instantly from the steam into a tub of cold water, may be practised with perfect safety, except in very low cases, when there is not heat or nervous energy sufficient to excite reaction. Exciting reaction in this way, it is in many instances of especial benefit, more particularly in chronic cases. After this, the patient should be clothed warmly, and have a flannel bandage over the abdomen, which may be wet occasionally with No. 6, or the third preparation of lobelia.

There is no form of disease in which I have found the vapor bath more beneficial than in bowel complaints. To keep the head constantly wet with vinegar and water, when steaming, is both grateful and beneficial to the patient.

Emetics may be prepared in various ways. I have generally found the following form to answer as well as any other:

An even teaspoonful of green lobelia,
Ditto of No. 6,

In a small teacup, half full of very strong bayberry or No. 3 tea. The lobelia to be added to the tea when mode-

rately hot. To be strained and sweetened; and to an infant give a tablespoonful every ten or fifteen minutes, until free and full vomiting is produced.

In severe cases I have used the third preparation of lobelia, together with a portion of the green lobelia, adding the bayberry tea. Green lobelia in composition tea does very well in mild cases.

In cases where I have deemed it necessary to continue the use of a diffusive stimulant, and occasionally to relieve the stomach by vomiting, I have given the liquid of the third preparation of lobelia in a small quantity of boiled milk. The best time for giving an emetic is immediately after steaming; still it may be given at any time without the previous use of the bath.

In some cases it may be necessary to repeat an emetic every two or three hours; in other cases once or twice a day; and in others still less frequently: the nature of the case, however, will point out when an emetic is necessary. I have never witnessed any injury to arise from the frequent repetition of prompt and efficient emetics in *cholera infantum*; but, on the contrary, patients are apt to be permitted to suffer, and even to sink, from oppression of the stomach, which might have been relieved by the early administration of emetics, before the powers of the constitution had sunk under the effects of the disease; and the heat and nervous energy become too far exhausted for medicine to have a proper effect. The operation of an emetic has a beneficial influence upon the liver in arousing it from a state of torpor.

Injections.—In the early stage of bowel complaint, an injection repeated three or four times will, in some instances, be sufficient to check the further progress of the disease. They should be prepared in the usual form, of composition tea and green lobelia, or tincture of lobelia; or of a strong decoction of some suitable astringent, such as bayberry, sumac, raspberry leaves, or dewberry root, adding a portion of No. 6 and green lobelia, or a small teaspoonful of the third preparation of lobelia. When the evacuations are green, denoting the presence of acid, or if they be of a frothy acrid character, a portion of sal-eratus, or a teaspoonful of the bi-carbonate of soda, should be added to the injection. When the parts become sore and irritated from repeated evacuations, or the frequent introduction of the syringe pipe, a gum elastic tube, made for the purpose, placed on the pipe of the syringe, will cause much less irritation than the metallic pipe, and by introducing the gum elastic tube four or five inches, the injection will have a more decidedly beneficial effect. In those cases where injections, given with an ordinary syringe, are immediately rejected, the gum elastic tube, or a large catheter must be used for the purpose of throwing

the injection so far into the bowels as to prevent its *immediate* expulsion, without having the desired effect.

In all protracted cases of this complaint, the mucous membrane of the stomach and bowels becomes coated with thickened secretions, forming a false membrane, and which may often be seen in the ejections from the stomach, and in the evacuations from the bowels. Until this false membrane is removed, digestion cannot be restored; and until the digestive functions are restored, the diarrhœa will continue. The false membrane that forms on the mucous membrane of the stomach and bowels, resembles that which forms on the wind-pipe in some cases of croup. The reason why so many children die of bowel complaints under the old school practice is, doubtless, because the medicines employed are not adapted to the removal of the false membrane, coating the stomach and bowels. Small portions of cayenne given in bayberry tea, composition powder, (prepared as mentioned in the next paragraph below,) bayberry powder, or spice bitters, (prepared in the same way,) or a strong tea of these articles, are the means to be employed, together with frequent steaming of the patient, and the use of prompt emetics and injections.

Composition Powder.—As much of the composition powder as will lay on a ten cent piece, rubbed up with an equal quantity of sugar, and then stirred into a tablespoonful of strong bayberry, or sumac tea, and given, repeating it every two or three hours, will in general prove far more beneficial than the composition tea. In slight cases, this dose repeated two or more times a day, will be sufficient to check the disease, at its *commencement*. The composition, prepared in this way, may be given in all cases, and when repeated two or three times a day, or as the case may require, it frequently has proved more effectual in my hands than any preparation of cholera syrup that I have ever used.

Capsicum, though unpleasant to administer to children, is nevertheless one of the most valuable medicines in all cases of disordered bowels. There are few cases, probably, of cholera infantum, that may not be cured by a timely and free use of cayenne pepper. An additional quantity of capsicum, added to the composition or spice bitters, will render their use more effectual. A very good way to administer pepper to children, is to add it to a small quantity of boiled milk. It is generally more effectual, however, given in the form of simple tea sweetened. When the tongue is dry and the patient thirsty, the pepper tea should be used instead of the composition and bayberry. I frequently combine pepper with ginger, making a strong tea of them, and give a teaspoonful, with the addition of ten or fifteen drops of the tincture of *lobelia*, every half hour.

External Applications.—These may consist of stimulating liniment, No. 6, or the third preparation of lobelia, applied to the abdomen; or warm poultices over the region of the bowels, composed of composition powder, slippery-elm, and green lobelia, moistened with warm water, enclosed in gauze or book muslin, and applied to the parts. The poultices must be kept warm, for if they become cold they will be likely to do harm. It is a good plan to have two poultices, and change them when they become too cold or dry. Mustard plasters over the stomach are useful in some cases, more particularly where the stomach remains irritable and the patient continues retching after the operation of an emetic. The mustard must be removed before it draws a blister.

Anti-acids.—A weak tea made by pouring boiling water upon common soot, and sweetened, will relieve colic pains by causing the removal of the flatus from the stomach. The soot tea, or saleratus, or bi-carbonate of soda, is sometimes necessary to be given to neutralize the acid in the stomach, before an emetic will operate effectually.

Diet.—During the active stage, or until the disease be checked, a most careful attention will be necessary in the selection of food. It is better to give the patient no food, at least for a reasonable length of time, than to introduce such into the stomach as it cannot digest. Bermuda arrow-root, gum arabic, crust coffee, milk porridge, Irish moss, oat-meal gruel, and barley-water, form the most suitable articles of diet. It will be proper, in severe cases, to use some one of the above articles for infants that have not been weaned, for the mother's milk will in some cases be thrown up in solid masses soon after it is swallowed, or passed off by the bowels in an undigested state. The excessive thirst attending the disease will induce an infant to take the breast almost constantly, and take large quantities of milk into the stomach, which sometimes forms into masses of cheese-like substance, and will greatly increase the suffering, and even endanger the life of the patient. Drink, as well as food, should be given in very small quantities. A teaspoonful of gum arabic water, or of barley-water, is as much as should be given at once, to infants, in cases where the stomach is very weak; this quantity, however, may be given frequently. By dissolving gum arabic in composition, or spice bitter tea, it will supply both food and medicine. The following constitutes a suitable article of diet in cases of bowel complaints in general, to wit—tie a portion of wheat flour in a bag, put it in a kettle of boiling water, and boil it four or five hours; then scrape off the wet part and grate the flour and make a gruel. To be salted to suit the taste.

As long as food passes through the bowels undigested, such

articles of diet must be given as are least disposed to sour or ferment, such as baked flour gruel, elm gruel, boiled milk, thickened with elm, or baked flour, gum arabic mucilage, and crust coffee; and even these should be used in very small quantities. The thirst may arise from a curative action in the stomach, and if large quantities of liquids be taken, the stomach may thereby become oppressed, and unable to recover its natural action.

A mixture of salt and vinegar is a favorite remedy in some families in all cases of complaints of the bowels. This remedy has in some cases proved of signal benefit. The vinegar should not be diluted, and should have as much salt mixed with it as it will dissolve. To an infant a teaspoonful may be given every two or three hours.

As the stomach and bowels become settled, and the stools present a more favorable appearance, such as small portions of natural fæces, with thick secretions, in appearance like small flakes of a skin-like substance, together with bilious matter, showing that the functions of the liver are being restored, then stronger food may be given, as chicken tea, essence of beef, with crackers or stale bread, and milk porridge. Salt should be added to the food, as this is a most important article in most cases where patients are recovering from sickness. Patients, in recovering from cholera, very often have a craving for salt food, as old bacon, and salt fish, which may be found not only to gratify the patient, but to tone the stomach, and cause an immediate improvement in the symptoms. The thin part of salt mackerel boiled, or a small piece of salt ham boiled, or broiled, may be given, and the use of it continued, provided it be found not to disagree with the stomach or bowels. "I have seen many children recover," says Dr. Rush, "from being gratified in an inclination to eat salted fish, and the different kinds of salt meat. In some instances, they evince an appetite for butter, and the richest kinds of gravies from roasted meat, and eat them to the obvious relief of all their symptoms." Patients are subject, however, to morbid cravings for food which may be found to disagree with the digestive organs, and it will therefore be necessary to exercise proper discretion in granting much indulgence to extraordinary cravings for particular articles of food or drink. A child may crave sweet cakes, as gingerbread and pound cake, but this kind of food should not be allowed in any case; or there may be a craving for cold water, which if given too freely will prove injurious. To restore digestion, the No. 5 syrup may be used, or a tea made by steeping poplar and bayberry bark in boiling water. The tea to be sweetened with loaf sugar, and given in tablespoonful doses three or four times a day. This preparation will in many instances cure ordinary diarrhœa, both in children and in adults, and is not unpleasant to take. It becomes more effectual by the addition of a portion of No. 6.

Country Air.—When the disease becomes chronic, and medicines have failed of effecting a cure, or if the child be subject to frequent relapses, there is probably no means so likely of success, as a change of air. It frequently happens that taking a child with this disease from the city to the country air, will in a few days restore the appetite, and the patient will begin to gain rapidly in flesh and strength.

The Cold Salt Water Bath.—In most cases of chronic disease of the bowels, where the patient continues feeble and emaciated, much benefit may be derived by dipping the patient every morning in a tub of cold salt water. If the patient be excessively weak, it will be prudent to temper the water at first by adding a portion of hot water. After being dipped, the child should be wrapped in a blanket, and placed in a warm bed, in order to favor reaction; and if the child becomes warm in fifteen minutes or half an hour, it will most certainly be beneficial.

Lancing the Gums is often of benefit in the early stage of cholera infantum; more particularly when the diarrhœa first commences; but where the disease has prostrated the strength of the little sufferer, and more particularly if the gums be spongy, cutting them will prove useless, for the teeth will not grow under the circumstances just mentioned.

Injections Retained.—A strong tea of poplar bark, or of Peruvian bark, administered by injections and retained, and those repeated as often as twice a day, will strengthen the bowels. They may be employed in any stage of this complaint.

Preventives.—Cleanliness; cold baths in the morning; avoiding all unripe fruit, sweet cakes, pastry, &c.; lancing the gums when teething; residence in the country, and a flannel bandage over the abdomen, are good preventives.

Poulticing the Abdomen.—Since the first edition of this work was published, I have observed great benefit to be derived from the use of warm poultices to the abdomen. Take of composition and slippery elm powder equal parts, adding a portion of lobelia powder, wet the poultice with hot water, and then mix some lard with it to prevent the poultice drying. If the above compound be found too stimulating, a greater proportion of elm may be used; or a poultice of Indian mush, adding a small quantity of ginger.

SECTION IV.

BILIOUS COLIC.

When colic is accompanied with bilious vomiting, or the skin and whites of the eyes become sallow, it is termed bilious colic. The supposition that an overflow of bile occasions the disease, has given rise to the name bilious colic, when, in reality, the liver is in most instances in a torpid condition, and secretes less bile than when in a state of health. The digestion being impaired or suspended, the bowels cold and inactive, the bile is not used, but being retained in the duodenum, it is drawn into the stomach by the act of vomiting, and thrown up. A vitiated state of the bile is, doubtless, a frequent cause of the sickness and vomiting; but this unhealthy condition of the bile is an effect and not the cause of the disease.

Bilious colic is more liable to occur in autumn, and especially in localities where ague and bilious fever prevail. Many persons, however, are subject to attacks of colic at all seasons of the year.

In most instances, the general health is considerably deranged before the attack of colic is manifest. The appetite is impaired, the tongue furred, and the bowels costive, or otherwise disordered. The skin is dry, and frequently there is pain and soreness in the back; an uneasy sensation at the stomach, chilliness, bad taste in the mouth, and headache. These symptoms are followed by cutting pains in the stomach and bowels; sickness at the stomach, and vomiting; frequently bile is thrown up. The pain increases by spells, and, in many instances, assumes a very violent character. The bowels in almost every instance are obstinately constipated, having lost their power of action. As the disease continues, the abdomen becomes sore and tender to pressure, and in most instances the complexion has a sallow tinge. The duration of the disease varies greatly in different cases, and as it occurs under different circumstances: sometimes it is overcome in a few minutes, by proper treatment in the commencement; and in other cases it will continue with more or less severity, at intervals, several days in succession.

Treatment of Bilious Colic.—A full course of medicine, timely administered, will overcome the pain, and check the further progress of the disease in a great majority of cases.

Lobelia Emetics are more effectual in general than any other curative means in the treatment of bilious colic. Even where the pain is wholly confined to the bowels, it is generally relieved by

free vomiting, together with the relaxation produced by the lobelia. In sudden attacks, where the pain is violent, an emetic of the third preparation of lobelia, or of lobelia powder and No. 6, must be given, without waiting to administer the vapor bath. If, after the full operation of the emetic, the pain still continues, a full course of medicine will be necessary, or the emetics repeated, together with the application of hot fomentations to the abdomen, or the application of hot bricks, wrapped in damp cloths, to that part. In some cases, the emetic will require to be frequently repeated. When the patient has warning of the approach of colic, a regular course will be more likely to keep it off than a simple emetic without the bath and enema.

There are many persons subject to periodical attacks of colic. Such persons are generally dyspeptic, and exhibit marks of a torpid liver. I have known several cases of this kind, of long standing, effectually cured by an occasional course of medicine, together with appropriate intermediate treatment, and strict attention to diet.

Injectiōns.—The bowels being obstinately constipated, will require the aid of injections, more especially if the pain be chiefly in the *lower* bowels. The usual stimulating injections may be used, and they always should contain lobelia. In obstinate cases, a stomach tube, or large catheter, introduced eight or ten inches into the bowels, and an injection passed through it, will prove more effectual than when the injection is given by the syringe alone. The introduction of the tube, however, requires care, and sometimes it is difficult to accomplish it, even by those who have had experience in the operation. Injections of spirits of turpentine are highly recommended by many practitioners. The mode of preparing it is, to mix together a tablespoonful of turpentine and the yolks of two eggs, adding a pint of warm water; or, mix the turpentine with some dry slippery elm powder, and then add warm water. When the turpentine injections are found to afford more relief than the usual Thomsonian injections, they may be employed freely.

Charcoal.—When the patient has been vomiting a great deal and the stomach rejects composition, cayenne, &c., mix a tea spoonful of purified charcoal in each dose of the medicine, and give it freely. The retching and straining efforts to vomit, may, however, prove beneficial, by exerting an influence over the circulation and secretions of the liver.

The Warm Bath generally affords considerable relief, and may be used to prepare the system for an emetic; but it is inferior in point of efficacy to the vapor bath.

External Applications.— Besides the vapor and warm bath much benefit may be derived by the application over the abdomen of warm stimulating poultices, hot fomentations or mustard plasters. The mustard must not be allowed to remain on so long as to cause a blister.

After the disease is subdued, but the nervous system continues weak and agitated, the valerian or scull-cap tea may be administered; the latter answers both as a nervine and a tonic. To prevent a relapse, the patient should take occasionally stimulants and tonics, and pay strict attention to diet.

To remove soreness of the abdomen either during or after the attack, the vapor bath and stimulating poultices are the most effectual of any means that can be employed.

Persons subject to periodical attacks of colic, should use cayenne freely with their food, or immediately after meals; and if costive, take a tablespoonful of white mustard seed once or twice a day, or make free use of purified charcoal.

White Turpentine taken in the form of pills, is a favorite medicine with some practitioners, as a preventive of colic.

However severe the attack, I have never yet known of a case of death from bilious colic under Thomsonian treatment. The treatment will require to be perseveringly applied in different cases. Many permanent cures have been effected in persons who had been subject to periodical attacks for many years.

A Case.—J. M. E. had been subject to attacks of bilious colic, and applied to the Homœopathic practice, after the regular treatment had failed. The Homœopathic medicine gave him almost instant relief from the pain, and he continued to use the medicine whenever the attack of colic came on, until finally the spells became much more frequent, and attended with neuralgic pains throughout the system. He became alarmed, and placed himself under Thomsonian treatment; and by taking a few courses of medicine, at proper intervals, and stimulants intermediately, he was effectually cured. This patient had not more than two returns of the spells, after the first course of medicine was given him.

The above case affords an example of the difference between the Homœopathic and Thomsonian principles; the Homœopathic medicine, by its poisonous properties, creating another disease stronger than bilious colic, or deadening the sensibilities, and in this way relieving the pain; the Thomsonian assisting nature to throw off the disease by means that harmonize with the system.

SECTION V.

COLICA PICTONUM—PAINTER'S COLIC.

This most distressing malady, which has received a variety of appellations, such as painter's colic, lead colic, and dry bellyache, is caused by exposure to the fumes, but more particularly to the dust, of white lead. Painters, and more especially those who assist in the manufacture of white lead, are particularly liable to this form of disease.

Symptoms.—As the system becomes gradually poisoned by the metallic substance, the general health is correspondingly impaired. There is an uneasy sensation at the stomach; failing of the appetite; constipation of the bowels; general debility and lassitude; a sense of weight and constriction in the abdomen, with transient pains in the stomach and bowels. By degrees the symptoms become more distressing; the pain in the stomach and bowels increases; the abdomen is hard, and instead of being distended, as in other forms of colic, it is retracted, and the natural action of the bowels is suspended. Vomiting almost always accompanies this disease; and immediately after vomiting, the patient experiences more or less mitigation of the pain. This disease is not only of an agonizing character, but it is apt to be protracted in duration, continuing in many instances for two or three days with but slight mitigation of the suffering. In the more violent cases the pain extends from the bowels up to the chest and into the arms, and downward to the bladder and rectum, accompanied with a distressing sensation of weight and bearing down, and frequently great difficulty in evacuating the bladder. Cold sweats break out over the face and extremities; and, in some instances, there are delirium, stupor, and convulsions. If the disease be not subdued, the vital powers begin to sink; the abdomen becomes swollen and puffy, yet with an abatement of the pain; the thirst is excessive; the sight is impaired; the feet become swollen; the countenance pale and haggard; there is difficulty of breathing, and finally the patient sinks into a state of stupor, terminating in death.

By a continued exposure to the poisonous influence of lead, the vital powers become so far exhausted, as to be insufficient, even by the aid of medical means, to eradicate the poison from the system, and to restore the organs to a healthy condition. Patients that have had two or three attacks of painter's colic seldom recover fully from the effects of the poison. The appetite is bad; digestion greatly impaired; the natural temperature of the body very low;

the extremities always cold; the bowels continue obstinately constipated; the spirits sunken and depressed; the complexion sallow and of a leaden hue; the flesh wastes away; the skin is dry, harsh, and contracted; the temper is peevish and sullen, and the countenance is expressive of gloom and suffering. In the first attack of the disease, however, it is almost always curable; though it requires several days in almost every instance to effect a *favorable* crisis in the disease. In most instances a cure may be effected, aided by the recuperative efforts of nature, during the first attack.

Treatment.—Painter's colic requires the same general plan of treatment recommended for the cure of bilious colic.

The Vapor Bath, besides fulfilling other important indications, will prove more effectual than any other means used to remove the poison from the blood. Besides applying the steam, hot poultices or warm fomentations should be applied to the abdomen.

Emetics are as essential in this form of disease as they are in that of bilious colic, or cholera morbus. In many cases free vomiting affords almost the only relief from pain, until the disease be subdued. The third preparation of lobelia answers well for the emetic. The straining efforts to vomit when the system is relaxed by lobelia, though distressing at the time, are doubtless, in many instances, beneficial to the patient.

The Compound Lobelia Pills may be given in sufficient quantity to keep the patient constantly under their influence.

Stimulants.—Cayenne, composition, or bayberry tea and cayenne, must be employed as general remedies, unless the compound lobelia pills be used freely.

Injections.—These will be of great service to moderate the pain, and may be administered frequently, especially if they afford relief. They may be prepared as directed in the treatment of bilious colic. Injections of essence of beef, or milk porridge retained, will not only soften hardened feces in the bowels, but also afford nourishment to the system.

The extreme torpor of the bowels which prevails in lead colic, renders the use of cathartics particularly pernicious; for unless ejected by vomiting, they remain so long in the bowels that they become absorbed, increase the suffering, and always injure the patient. More patients die from the effects of cathartics than from lead colic.

Astringents are especially beneficial in all cases of painter's

colic. A strong decoction of the compound of the bayberry and sumac berries, does better than the tea of the bayberry alone. I succeeded in curing a case of the disease that had become chronic, the patient having been several years employed in Mr. Wetherill's white lead manufactory, where he was daily exposed to the deleterious fumes of this noxious mineral. In this case I found astringents peculiarly beneficial, administered three or four times a day, with the addition of a small portion of capsicum.

This patient also used injections of the same, and occasionally had a vapor bath and an emetic. Large quantities of a thick membranous substance were passed from his bowels by the injections.

It must be borne in mind that painter's colic is not to be cured, in general, short of several days, and in some instances not under two or three weeks. The grand object always to be kept in view in the treatment, is to assist the efforts of nature to work off from the system the poison and its effects, by such means as have been mentioned, and persevere in their use, varying them to suit the nature of the case.

During convalescence the patient should take tonics, and once or twice a day, a teacup half or two-thirds full of a decoction of the bayberry or sumac berries, with from half to a teaspoonful of cayenne added, and avoid exposure to the fumes of lead.

Precautions.—Those engaged in the manufacture of white lead should make use of fat meats, or use freely of palm oil at meals, and never be exposed to the lead in the morning with an empty stomach. A tablespoonful of palm oil taken in the morning is said to afford protection to the stomach against the effects of this mineral poison.

It has recently been discovered that a free use of sulphuric acid lemonade affords an almost sure protection to the system against the fumes of white lead.

SECTION VI.

DYSENTERY.

THIS disease is characterized by severe griping pain in the bowels; a frequent inclination to go to stool; and the evacuations consist of blood and mucus. Sometimes the evacuations consist chiefly of mucus;—at other times they are very bloody.

These dysenteric symptoms are generally preceded by lassitude, chilliness, with flushes of heat, loss of appetite, torpid bowels, bad taste in the mouth, and nausea.

From the commencement of dysentery, until there is considerable amendment, the natural fæces of the bowels are retained, or voided in very small quantities, consisting in general of small hard balls, called *scybalæ*. The passing of these hard balls through the diseased bowels, is attended with severe pain.

Dysentery prevails most during the latter part of summer, and also in autumn.

Causes.—Perspiration suddenly checked by cold, especially where the system is exhausted from over-exertion, is a common cause of dysentery. "A cold and moist autumn succeeding a warm and dry summer, is peculiarly favorable to the production of dysentery."

Dysentery frequently prevails as an epidemic in low marshy districts of country, probably from the combined influence of marsh effluvia and dampness. The same causes that produce dysentery in one person may occasion bilious fever (as it is called) in another; and hence it often happens that both forms of disease prevail, and some patients will have all the symptoms of dysentery and bilious fever, at the same time.

Among the occasional causes of dysentery may be mentioned unripe fruit, and other unwholesome articles of food, taken into the stomach.

Fatality of the Disease.—When dysentery prevails, epidemically, it frequently proves fatal, and particularly so under the old school practice. Except under very unfavorable circumstances, however, the Thomsonian practice, promptly and judiciously applied, seldom fails of bringing the disease to a favorable termination.

Dr. Thomson, in his Narrative, makes mention of a malignant form of dysentery which prevailed in the town of Jericho, in 1807, where out of twenty cases under the treatment of the medical faculty, but two recovered. The inhabitants became alarmed, and sent an express for Dr. Thomson, who began to treat the disease according to his system of practice, and of thirty cases which came under his treatment, all except two recovered. "I had," says the doctor, "but little medicine with me, and had to make use of such as I could procure at this place. I found the cause of the disease to be coldness and canker; the digestive powers being lost, the stomach became clogged, so that it would not hold the heat. I made use of red peppers, steeped in a tea of sumac berries, and sometimes the bark and berries, to raise the heat and clear off the canker, which had the desired effect. After taking this tea, those who were strong enough, I placed over a steam, as long as they could bear it, and then put them in bed. Those who were too weak to stand, I contrived to have set over the steam, and this repeated as occasion required." To restore digestion, the

doctor made use of a syrup made of black birch bark and cherry stones bruised.

Treatment of Dysentery.—Courses of medicine repeated at proper intervals, and a well regulated treatment between the courses, will cure dysentery sooner and more effectually than any other kind of treatment. The *course* should be repeated daily in bad cases.

During the intervals between the courses, or when the disease is of a mild form, not requiring a course of medicine, any one of the following preparations may be given at intervals of one or two hours, viz:—

A strong decoction of bayberry or sumac, adding a portion of cayenne pepper, and sweetened; cayenne in tea, pills, or in cold water; or the compound lobelia pills taken at the rate of from two to four pills every two hours.

The composition powder rubbed with a little sugar, with sufficient lukewarm water added to make it easy to swallow, will prove more effectual than the tea of composition.

When the patient is not very feverish, and the tongue is thickly coated and not very dry, the following preparation will prove highly beneficial, given every hour or two—namely, take two teaspoonsful of No. 6, one teaspoonful of fine bayberry powder, and one teaspoonful of sugar. Mix these well, and if too thick to swallow, add a little warm water.

The Vapor Bath is signally beneficial in dysentery, and should be frequently administered. After the bath, and the patient is rubbed dry, apply stimulating ointment, the third preparation of lobelia, or No. 6, over the surface of the abdomen. Bottles of hot water, or hot bricks wrapped in damp cloths, should be kept to the feet and body.

As a substitute for the vapor bath, in mild cases, wrap the body, from the hips to the arm-pits, with a bandage of flannel. The constant application of warmth and pressure is of great importance, and well adapted to all cases of bowel complaints, both acute and chronic.

Injections.—Injections assist the restorative action, and remove acrid secretions. They should be composed of astringents and stimulants. A strong decoction of bayberry, dewberry root, or raspberry leaves, adding a teaspoonful of the liquid of the third preparation of lobelia and a tablespoonful of sweet oil or lard to half a pint of the tea; or scald a teaspoonful of pepper with the other articles, add a teaspoonful of lobelia powder, and stir the mixture. Lobelia in some form, either the powder or liquid of the third preparation, should generally be added. If the stimulating

injections cause much pain, and increase the bearing down feeling some time after its operation, then milder injections must be employed; for instance, a strong decoction of bayberry, adding to half a pint of it a teaspoonful of green lobelia powder, or a large teaspoonful of lobelia powder infused in half a pint of warm water.

When the stools are very offensive, purified charcoal should be added to the injections, and also be given occasionally with the medicine otherwise taken. In the place of the charcoal the chalk mixture may be used; or the bi-carbonate of soda or sal-æteratus.

Castile soap and water forms a mild, and in many cases, a very efficient injection in cases of dysentery. On making a trial, if it be found to agree with the case by mitigating the violence of the pain, it should be employed.

The chief objection to frequent injections, is the irritation produced by the metallic pipe of the syringe. It should be well covered with tallow; or a gum elastic tube made for the purpose, placed on the metallic pipe.

Professor Chapman, in a lecture on dysentery, in 1840, stated that at Vera Cruz, the only successful treatment in the malignant dysentery that prevailed there was a free use of cayenne pepper tea, and injections of the same.

A case of dysentery occurred in Chester county, of the most severe character, in which a quarter of a pound of cayenne pepper was used by injection and given in tea during one night, together with a large quantity of the No. 6, and bayberry tea. The patient speedily recovered, and no doubt by means of this energetic treatment.

Poulticing the Abdomen.—Warm poultices composed of slippery elm and composition; or of Indian musk, with a portion of cayenne added, applied to the abdomen warm, will always prove beneficial, and sometimes will entirely remove the griping pains.

Diet.—This must be of the lightest kind of food, such as barley water, arrow-root gruel, weak chicken tea, sago, rice, slippery elm, Iceland moss, the bene plant, &c. When the patient becomes convalescent, stronger food may be given, as boiled chicken and wild game, custards, eggs, and almost any kind of wholesome diet.

To assist in restoring digestion, the spice bitters and other tonics may be employed.

Favorable Symptoms.—“The appearance of bile, and natural fæces in the stools, indicate a favorable change.” When the pain, and inclination to stool, “and tenderness of the abdomen abate, at

the same time that the skin is uniformly moist, we may regard the case as approaching a state of convalescence; and more certainly if the stools assume a more natural appearance."

SECTION VII.

DIARRHŒA—RELAX.

THIS complaint is a consequence of indigestion. It prevails most during hot weather, and presents in different cases great diversity of character, being in some instances an obstinate and painful disease, and in others a slight affection. Children are extremely liable to this form of disorder throughout the hot summer months, and also in the damp and changeable weather of autumn. Diarrhœa is a milder form of disease than cholera morbus or cholera infantum.

General Causes.—Diarrhœa may be produced by any cause which weakens the power of digestion. The usual causes are, continued spells of damp, murky weather; wearing damp clothes; a sudden check to perspiration, when the system is exhausted by fatigue; unwholesome articles of food, especially sour fruit; and drinking too freely of cold liquids, as ice water or lemonade.

Symptoms.—At first there is usually loss of appetite, general debility, coldness of the feet, and bad taste in the mouth. The patient experiences unpleasant sensations at the pit of the stomach: there is generally a rumbling through the bowels, followed by copious evacuations, consisting of thin offensive secretions, and imperfectly digested food, and frequently attended with pain. The skin is either cool and clammy, or dry. When the disease comes on suddenly, and is attended with vomiting, it is called cholera morbus. The color of the stools, in many instances, is light, indicating a want of bile: in other instances they are partly composed of vitiated bile.

Diarrhœa, Dysentery, and Cholera Morbus, may arise from the same cause, or combination of causes.

Distinguishing Signs between Diarrhœa and Dysentery.—In *diarrhœa*, the bowels are in a relaxed condition, with copious evacuations, consisting chiefly of imperfectly digested food, and

generally free from blood or mucus. In *dysentery* the bowels are costive, the natural fæces retained, and the stools consist principally of blood and mucus, small in quantity, and the disease is attended with severe griping, and a frequent inclination to go to stool.

Treatment of Diarrhœa.—In slight cases, a few doses of composition or bayberry tea, with the addition of No. 6, will, in general, check the disorder, and correct the digestion. A variety of other remedies may be used for this complaint, such as cholera syrup, Thomson's No. 5 syrup, lavender brandy, burnt brandy and loaf sugar, chalk mixture, lime-water, and purified charcoal. A mixture of salt and vinegar has been employed with remarkable success, in many families, in the treatment of bowel complaints that prevail in hot weather.

When the symptoms are more distressing, or the case proves obstinate, the most effective means will be a *full course of medicine*, succeeded by the use of the hot medicine, and the patient kept comfortably warm and quiet.

Warm stimulating poultices applied to the abdomen are particularly serviceable in diarrhœa and in bowel complaints generally.

In the commencement, in many instances, but more especially when the disorder has been checked, bitters should be used to restore digestion.

Flannel Bandage.—Persons subject to frequent attacks of diarrhœa, will derive benefit from wearing a flannel bandage covering the whole of the abdomen. This will keep the skin regularly warm, and prevent a sudden check to perspiration from vicissitudes of weather. This simple plan of bandaging the belly will often prevent the "*summer complaint*" in children, even during their second summer, provided they be bathed daily, and a proper attention be paid to their diet.

When the disease becomes protracted, and the symptoms distressing, a prompt course of treatment should be pursued until the disease be removed. The vapor baths and emetics should be repeated as the nature of the case may require. In cases of children I have frequently witnessed more benefit derived from one vapor bath and an emetic, than would have been accomplished probably in two or three days under a mild course of treatment. When medicine has to be forced upon children, it is always best to give such as will be the most effectual to break up the disorder. Let the No. 3, or bayberry powder, be made into a strong decoction, and to a teacup half full of this tea, add an even teaspoonful of composition powder. This given two or three times a day, will prove an effectual remedy in most cases of simple diarrhœa. Another very effectual preparation for checking diarrhœa, is half a

teaspoonful of prepared chalk mixed with half a wineglassful of No. 5, or cholera syrup. To be given several times daily.

Injectiōns of bayberry tea, adding a portion of No. 6 and green lobelia, or a teaspoonful of the third preparation of lobelia, will be found especially beneficial to strengthen the bowels.

Diet.— Especial attention to diet is necessary in all cases of bowel complaints. In general, milk porridge, well prepared, will agree with the stomach, and in some cases will check the disorder, by confining the diet to it alone, or with the addition of stale bread cut thin and toasted thoroughly, or soda or water crackers. Fruit of every description is apt to disagree with the bowels in diarrhœa, unless it be fresh picked, and eaten with some solid food.

Boiled rice and milk, Bermuda arrow-root, elm gruel, sago, tapioca, fresh eggs slightly cooked, essence of beef, boiled chicken, crust coffee, and Irish moss, are such articles as are generally adapted to cases of diarrhœa. Rice scorched, ground, and made into coffee is a favorite remedy with some for this complaint.

Cases of chronic diarrhœa have been cured by a free use of capsicum at meals.

SECTION VIII.

PERITONITIS.

(Inflammation of the Peritoneum.)

Disease of the peritoneum (the membrane lining the cavity of the abdomen, and which also forms the external coating of the bowels) is not of very frequent occurrence, excepting, however, that form of it connected with what is called child-bed fever, or puerperal inflammation: when it does take place, however, it is in many instances extremely difficult to cure, unless a vigorous and persevering course of treatment be instituted in the first onset of the disease.

Causes.— Long exposure of the body to cold after fatiguing exercise, is the usual cause of peritonitis. It may arise, also, from other causes, as taking too freely of ice water; mechanical injuries of the bowels; the escape of fæces into the cavity of the belly from wounds of the intestines, or by ulceration through the coats of the bowels; wet and cold feet; and, in females, from bad man-

agement during, or after confinement. In two fatal cases that came under my notice, one was brought on by washing the body in cold water, the patient remaining undressed, and completely chilled more than half an hour; the other case was produced by standing some hours in cold water, up to the waist, in a well.

Inflammation of the peritoneum sometimes comes on after tapping for dropsy; the stimulus of distension being removed, the vessels are left in a feeble condition, and unable to carry on the circulation when inflammation ensues.

Symptoms.—The first symptoms are such as usually occur in the commencement of other forms of disease, such as chilliness, lassitude, pain in the limbs, and distress at the pit of the stomach. *The symptoms which characterize this disease*, are extreme tenderness to pressure over the surface of the abdomen, the patient assuming a bent posture in order to relax the muscles of the belly; he cannot sit up, nor usually lie on his side, but remains always upon his back. The knees are drawn up towards the abdomen; the breathing is short, and effected chiefly by means of the ribs, in order to avoid the usual movement in the abdomen that accompanies respiration. The febrile symptoms are usually of an aggravated character; the pulse is quick, and sometimes full in the commencement of the fever, but soon becomes feeble; and the countenance is expressive of anxiety from the commencement. The pain is of an acute and lancinating character, generally confined at first to a small space, and spreading gradually, and sometimes shifting suddenly from one spot on the belly to another.

In most instances there is at the commencement, and always in the latter stage, if the disease terminate fatally, more or less vomiting. "Generally, in the course of from twenty-four to thirty-six hours from the beginning of the attack, the abdomen becomes swollen, tense, and elastic from flatulent distension of the intestines, and is extremely tender. The pulse is frequently over 140 per minute, and in all cases quicker than natural. The secretion of urine is invariably more or less diminished, and in some instances almost wholly suppressed. When the peritoneal coat of the bladder is the seat of inflammation, the evacuation of urine will almost uniformly be suspended, and much pain felt in the pelvis. The peritoneal covering of the inferior surface of the diaphragm is occasionally the principal or sole part of this membrane that is inflamed, and in this case almost constant hiccough attends."

In general, peritoneal inflammation terminates by the sixth or seventh day, either favorably or fatally. In some cases its course is much more rapid, the patient sinking by the second or third day from the commencement. Occasionally, however, the disease is

prolonged to the thirteenth or fourteenth day; and sometimes becomes a chronic disease.

Always Dangerous. — This disease is extremely liable to terminate in gangrene. "When this occurs, the abdominal pain suddenly subsides; the pulse becomes very small, frequent, and often intermitting; great muscular prostration ensues; the extremities become cold and clammy; and the countenance pale, hollow and contracted;" there is a sort of gulping up of liquids swallowed, and occasionally there is more or less delirium, but more commonly the mind is clear to the last.

When peritoneal inflammation ensues after confinement (constituting puerperal inflammation) the lochial discharge ceases, and the secretion of milk is suspended, or nearly so. Under such circumstances, the disease is usually rapid in its course.

Treatment. — There is probably no form of disease requiring more vigorous treatment than *peritonitis*. The first and most important remedy is a vapor bath, which should be continued for hours together; or blankets wrung out of hot water be kept constantly applied to the abdomen; the patient being on a cot or mattress, if too weak to sit up; and at the same time frequent and full doses of the third preparation of lobelia should be given, together with injections of composition tea, adding to each injection a teaspoonful of lobelia powder. The injections to be repeated frequently, and retained a few minutes if practicable; and as often as every hour or two, an additional injection, consisting of from a teaspoonful to a tablespoonful of the liquid of the third preparation of lobelia in bayberry tea. The patient must not be subjected to the fatigue of getting up to evacuate the bowels. In place of the vapor bath, blankets wrung out of hot water may be applied to the abdomen, or a large poultice composed of elm powder, green lobelia and ginger, applied all over the belly, as hot as can be borne, to be kept warm by the frequent application of cloths, wrung out of hot water. This will also prevent the poultice getting dry.

It is important to relax the system in the early stage of the disease, by giving, besides the third preparation of lobelia, frequent doses of an infusion of the brown lobelia. The more the system becomes relaxed by the lobelia in the early period of the disease, the greater will be the chance for the inflammation to establish a favorable crisis.

When the patient sinks into a state of extreme exhaustion, as is frequently the case even when a favorable crisis has been effected, diffusive stimulants should be employed, such as wine whey, carbonate of ammonia, essence of beef, brandy and water, and capsicum tea.

• There is a period in some cases of abdominal inflammation when the disease is nearly subdued, yet a tendency to gangrene exists from deficiency of vital power. At such a time the pain will vanish, the pulse become weak, the vital powers sink, and a coldness overspread the body. These symptoms are too often indicative of mortification; but every experienced practitioner must have occasionally witnessed cases of recovery even from this alarming state." Therefore the free use of stimulants under these circumstances may have the effect to turn the scale in favor of recovery, and even if mortification should have taken place, stimulants can do no injury.

Especial care must be observed to avoid giving the patient during the active stage of the disease, such articles as are prone to fermentation, especially sugar, and gruels. Even the medicines should be given without sweetening. It is said that sap-sago cheese, grated and mixed with warm water, is the best article of food that can be taken in cases of peritoneal inflammation, as it is the least disposed to generate gas in the stomach and bowels. Next to this, essence of beef and egg soup should be preferred; but in the early period the patient will be as well, if not better, without food of any kind.

Many women have died within the last few years of peritoneal inflammation after confinement. One physician in Southwark lost fourteen women in the course of a few months. No case of death from this complaint has happened under the Thomsonian treatment in Philadelphia. Dr. Samuel McClellan, Professor of Midwifery in the Pennsylvania College, in a lecture to his class, in the winter of 1843, stated, that the treatment he had found most successful, was to apply blankets wrung out of hot water to the abdomen, use emollient injections very frequently, and give simple rhubarb tea. This course of treatment, though much more rational and safe than that generally pursued by the profession, would doubtless prove far less effectual than thorough Thomsonian treatment, such as the employment of the vapor bath, prompt emetics and injections, containing lobelia. Fomentations to the abdomen or hot poultices should be employed in all cases.

SECTION IX.

CONSTIPATION—COSTIVENESS.

Costiveness, in general, is a consequence of diminished peristaltic action of the bowels, from diminished nervous power. The habitual use of purgative medicines destroys the natural tone of the bowels, and thus proves one of the most common causes of constipation. A patient becomes uncomfortable in consequence of the sluggish state of the bowels, and a dose of physic is taken. In a few days, however, the same bad feelings return with loss of appetite, furred tongue, and bad taste in the mouth; there is heaviness and languor, and oppression at the stomach. The patient supposes he is bilious, requiring another dose of physic to purge off the accumulation of bile, and in this way continues to use some kind of cathartic at frequent intervals, harassing the stomach and destroying the natural action of the bowels. Costiveness is sometimes *constitutional*, and in general it arises from causes which depress the nervous energy, such as sedentary habits, foul air, intemperance, and all kinds of deleterious medicines, whether mineral or vegetable. The practice of giving anodynes to infants weakens the tone of their bowels, and in numerous instances the foundation of habitual costiveness is thus laid. It is very common in the old practice for a physician to recommend laudanum, or some other preparation of opium, for children and infants when sick, and on the following day prescribe a dose of oil to move the bowels, which had become torpid in consequence of the anodyne; the physic disturbs the stomach and impairs digestion; and the little patient consequently becomes fretful; another dose of anodyne is administered, which benumbs the sensibility of the nervous system, and the child sleeps, but the medicine instead of removing the disease, rather increases the difficulty; costiveness continues, and another cathartic is prescribed, and thus one medicine is given to counteract the bad effects of the other. Not only is such a course generally pursued in the treatment of infants and children, but a similar one is resorted to by many physicians in the majority of cases of sickness in adults that are placed under their care. It is very rare to find a person affected with obstinate constipation of the bowels, who has never been in the practice of taking cathartics.

There are persons constitutionally costive, whose bowels are not moved oftener than once a week, and yet the general health remains good. Such instances, however, are very rare, for most persons feel more or less uncomfortable without an evacuation as often as once in twenty-four or forty-eight hours.

Although purgative medicines may relieve distress of the head, pain, and other uncomfortable feelings arising from constipation, still, they will impair the digestive and nutritive functions, leaving the bowels in a worse condition than before the cathartic was taken. To provoke the bowels to action by the use of cathartics is one thing; to promote the natural action of the bowels is quite a different matter. I will not presume to say that there are no cases of constipation in which small portions of rhubarb or bitter root may be serviceable. The true nerves of sensibility, by which the bowels are stimulated to expel their contents, are seated in the lower portion of the rectum, and nowhere else; and no matter how irritating a substance may be, it will not move the bowels until some portion of it reaches these nerves of true sensibility, situated at the lower extremity of the intestine.

Means to remove Costiveness.—There are a great diversity of remedies and means to restore the action of the bowels.

A proper Diet.—Certain articles of food will in a great many instances keep the bowels regular, such as stale bread, or gruel made of ground wheat unbolted, Indian bread, ripe fruit, rye mush, oat-meal gruel, and calves'-foot jelly. No certain plan of diet can be proposed that will suit every one. Bread made of unbolted wheat flour will probably agree with almost every one, and its efficiency has been so well attested as not to admit a doubt of its utility. I have known *obstinate* cases of *constipation* overcome by the free use of a gruel made of the unbolted flour, together with the use of cayenne pepper, and the entire absence of every kind of cathartic. In the use of the unbolted bread or gruel, other kinds of food need not be excluded. Animal food is necessary to the health of some, and should be used when it agrees with the stomach. Beef, mutton, and all kinds of wild game are as readily digested as vegetables.

Charcoal.—Finely pulverized charcoal, taken in large teaspoonful doses, repeated three or four times a day, is a valuable remedy for costiveness, especially when constipation is accompanied by a sour stomach or heartburn. Costiveness arising from pregnancy, may, in most instances, be removed by the free use of charcoal. In the latter stage of pregnancy, however, it is sometimes necessary to resort to the use of stimulating enemas, in order to evacuate the bowels. The charcoal should be first moistened and rubbed into a paste, and it will then mix readily with liquids. I generally direct it to be taken in composition or spice bitters tea. It may be taken also in simple warm water, or in boiled milk. The dose is from a teaspoonful to a tablespoonful, repeated three or four times a day before meals.

White Mustard Seed is a favorite remedy used by many to stimulate the bowels, and overcome costiveness. The usual dose of the mustard seed is a tablespoonful once or twice a day, taken in warm water or molasses.

Capsicum.—This is one of the purest and best of stimulants, and is especially beneficial in most cases of torpid bowels. Taken freely at meals, it will not only assist the action of the bowels, but will be sufficient, if used freely, to cure many cases of dyspepsia. There are many kinds of food that will sit well on the stomach, if highly seasoned with cayenne, which, without it, would occasion oppression, and distress the stomach. Those who do not relish food highly seasoned with pepper, may take the cayenne immediately after eating, in a little cold water, or, as some prefer, swallow the whole pods of the bird-pepper. These pods are not thicker than a small goose-quill, and scarcely ever an inch in length, so that half a dozen may be swallowed at a time, and no burning produced in the mouth. Ten or fifteen of these pods taken daily will be sufficient, in general, to keep the bowels regular. The use of cayenne in cases where there is a superabundance of acid in the stomach and bowels, will sometimes occasion pain in the bowels, and other unpleasant sensations; and occasionally active purging comes on; the cayenne increasing the sensibility of the bowels and the acids operating as a cathartic. As soon as the acids are expelled, the patient may increase the quantity of pepper taken to twice or three times the quantity before taken, without any cathartic effect being produced by it.

Parched Corn eaten freely, is a good regulator of the bowels, and relieves heartburn. The corn should be well parched, and then it may be taken freely in any case. The best kind is the little "chicken corn," or, as some call it, "pop corn."

Astringents.—When the tongue is thickly furred, and not dry or parched, the astringents recommended by Thomson will be useful in cleansing the cankered bowels and increasing their tone. The best astringent is the bayberry, or a compound of bayberry and sumac. The No. 3 pills may be used in place of a decoction of the above powder. Injections assist very much in cleansing the bowels of morbid secretions, and also have a tendency to increase their tone.

Bitters.—Vegetable bitters are particularly indicated when the system is relaxed, as in recovery from sickness when the bowels remain torpid. A teaspoonful of bayberry powder taken two or three times a day will be sufficient to keep the bowels regular, in those cases where tonics are indicated. The golden seal, balmony

or black aspen poplar may be employed for the same purpose. In continuing the use of tonics it is proper to change one for another, or to compound them differently every few days.

Injections should be used occasionally, until, by other means, the natural action of the bowels be restored. When constipation is attended with piles, an injection of a strong decoction of the witch hazle, at bed-time, retained in the bowels until morning, will in general procure a passage from the bowels, and also assist in curing the piles.

Cleanliness, exercise in the open air, the warm bath, the shower bath, the daily use of the flesh-brush or salted towel over the surface, and whatever else will invigorate the nervous system, will have a salutary effect upon digestion, and assist the peristaltic action of the bowels.

The habit of soliciting a stool at a certain hour daily, more especially in the evening, though it may fail at first, if persevered in, will generally prove successful.

Three or four of the compound lobelia pills, taken at bed-time, have proved successful, in many cases, in regulating the bowels and in promoting the secretion of bile.

SECTION X.

DYSPEPSIA—INDIGESTION.

DIGESTION is accomplished by a series of actions extremely complicated, liable to derangement from various causes. Hence dyspepsia is a common complaint, and prevails in all classes of society.

Causes.—Dyspepsia in many instances is a consequent of original feebleness of constitution. Apart from this, the following are among the common causes of dyspepsia, or bad digestion:

1. *Exposure to Cold and Dampness—especially damp feet.*—This is a common cause of dyspepsia during damp seasons of the year. It is a singular fact, that exposing the feet to dampness, is far more liable to occasion derangement in the function of digestion, and cause disease, than getting the feet thoroughly wet, and even standing in water.

2. *Tobacco.*—The inordinate use of this article is a fruitful source

of dyspepsia. It causes imbecility of mind, and in some instances melancholy.

3. *Purgative Medicines.*—The long-continued use of cathartics impairs the functions of the stomach and bowels, and in frequent instances, where there is but slight derangement in the stomach at first, "the drugs are poured down," and the case becomes one of confirmed dyspepsia.

4. *Anodynes.*—All the various preparations of opium, such as laudanum, Godfrey's cordial, &c., enervate the stomach, and weaken the power of digestion. Hence the seeds of dyspepsia are often sown in childhood by the prevailing practice of giving anodynes during infancy.

5. *Sedentary Habits.*—Persons engaged in sedentary pursuits—seamstresses, shopkeepers, shoemakers and tailors, are liable to dyspepsia, especially when confined to small and ill-ventilated apartments.

6. *Unwholesome Food and Over-eating.*—Many who by a proper diet might enjoy good health, are tormented with indigestion, in consequence of the use of food difficult to digest, such as hot bread, fresh pork, hot cakes, sausages, pies, &c. Hearty suppers, especially of such food as sausages, hot cakes, and strong coffee, cause restless and disturbed sleep, frightful dreams, and nightmare. Over-eating is probably a more common cause of dyspepsia than the quality of food.

7. *Blood-letting.*—Many cases of dyspepsia may be traced to the profuse depletion frequently practised by physicians in the various forms of acute disease. The system becoming exhausted from loss of blood, the organs are left in a languid condition, incapable of performing their functions properly, and in many instances confirmed dyspepsia is occasioned.

8. *Poisonous Medicine.*—Professor Chapman asserts that the majority of cases of chronic disease of the liver so prevalent in the Southern States, may very justly be attributed to the inordinate use of mercury, it being a practice among the physicians to administer it in enormous doses. Digestion never can be properly performed whilst the liver is diseased, and therefore, all such cases are more or less dyspeptic. Calomel is often converted into corrosive sublimate, by combining with certain acids that are very liable to be formed in the stomach in disease. A late writer in the medical profession asserts that calomel is always inert until portions of it are converted into corrosive sublimate, and that the system must

become poisoned with corrosive sublimate in order to effect salivation. Arsenic is often employed as a medicine, both by the old school and the homeopathic physicians. It may change the symptoms of disease, but it cannot be employed, even in homeopathic doses, without danger of laying the foundation of a dyspepsia, much more difficult to cure than the complaints for which it may be prescribed. The same may be said with regard to many other articles employed as medicine, particularly *veratria*, strichnine, and prussic acid, frequently used in the homeopathic practice.

9. *Intemperance* is a fruitful cause of dyspepsia. The practice of taking a morning dram, which prevails in some districts of country, is usually followed sooner or later by indigestion. It is much more injurious to the stomach to drink any kind of liquor, when the stomach is empty, than soon after meals.

10. *Abstinence* may be practised too rigidly to be compatible with health, and it may even produce dyspepsia. The exclusive use of a vegetable diet, together with cold water at breakfast and supper, in the place of something warm, will enervate the stomach, in many instances, notwithstanding it may agree with some.

There are cases in which an exclusively vegetable diet suits the stomach; but with the great majority of mankind, animal food, such as beef, mutton, or wild game, will be found more easy of digestion than a vegetable diet. Experience, however, proves that a mixed diet, partly animal and partly vegetable, is more easy of digestion than an exclusively animal or an exclusively vegetable diet.

11. *Bad Teeth*.—Irritation of the gums arising from teeth that are either decayed or affected with tartar, is a frequent cause of dyspepsia.

A lady from Natchez consulted Professor Chapman for dyspepsia of long standing, and the doctor perceiving the bad condition of her teeth, suspected this to be the cause of the dyspepsia; the decayed stumps were removed, the mouth put in good condition, and the dyspepsia was soon cured. Subsequently this lady had a new set of teeth put in, but being badly done, the dyspepsia returned with great violence. The teeth were removed, and by being properly adjusted, so as not to irritate the gums, she was soon restored to perfect health.

12. *Piles* often produce dyspepsia, and in many instances it may be cured by their removal.

13. *Mental Depression*.—From the close sympathy existing between the brain and stomach, moral impressions have a controlling influence over digestion. If a person, soon after eating a hearty

meal, hear bad news, digestion will at once be weakened, if not suspended. Close application to study soon after meals, by concentrating the nervous energies in the brain, weakens the power of the stomach to perform digestion.

In fine, any cause that weakens the nervous energy impairs the digestive functions; hence *venereal excesses* are a common cause of dyspepsia.

Symptoms of Dyspepsia.—There are scarcely two cases of dyspepsia with precisely the same group of symptoms. They vary from simple oppression caused by difficult digestion, to the most tormenting feelings, both physical and mental. The most common symptoms are cold hands and feet; oppression, tenderness, and distress at the pit of the stomach; heart-burn; frequent belching; sour eructations; costiveness; drowsiness after meals; lowness of spirits; restlessness at night; disturbed sleep; frightful dreams; extreme sensibility to cold; and not unfrequently a feverish feeling after meals. Pain in the head; pain in the left breast and sides, and palpitation of the heart, are symptoms frequently attending dyspepsia.

Dyspeptics are generally affected with what the world calls nervousness; the spirits at times depressed, and the imagination dwelling upon ideal evils; the temper sour and easily disturbed.

In some cases of dyspepsia the stomach is extremely sensitive, the least deviation from certain articles of diet causing severe pain and tenderness; and in others the sense of feeling is so low that the patient can scarcely be persuaded to believe that his digestion is bad, because he "don't feel bad at his stomach."

In the more aggravated form of dyspepsia, the mind is liable to become much depressed, approaching in some instances to extreme melancholy, with harassing belchings; water-brash; stools clay-colored, indicating the absence of bile; the skin dry and husky, yet sometimes cool and clammy; wasting of the flesh, and sometimes ulceration of the tongue and mouth.

Treatment of Dyspepsia.—Dr. Thomson's *course of medicine*, administered at proper intervals, as the symptoms indicate, together with proper intermediate remedies, will effect a cure in a great majority of cases. If the continuance of the disease depend upon *bad habits*, a cure cannot reasonably be looked for whilst they are continued.

If close confinement in unhealthy apartments be the cause of dyspepsia, exercise and fresh air will be as essential as medicine.

When dyspepsia arises from a bad condition of the teeth, they should be attended to by a dentist who is properly acquainted with his profession.

In most cases of dyspepsia it is necessary to keep the feet not

only protected from wet, but there should be cork or gum-elastic in the soles of the shoes, except in the summer season. It is of little use for the dyspeptic to take medicine if the feet are not properly protected from dampness.

Emetics. — An emetic of lobelia, prepared in the usual form, or the compound lobelia pills taken in quantities of from one to two or three every half hour until free vomiting is effected, will sometimes relieve the stomach sufficiently without the necessity of a full course of medicine.

To promote a healthy action of the skin, an occasional vapor or warm bath, and the daily use of the flesh-brush or salted towel, will be the most effectual means.

Capsicum. — The free use of cayenne pepper at meals, will be sufficient to cure dyspepsia in many instances. It is useful to prevent heart-burn and water-brash, and has a tendency to regulate the bowels.

The Compound Lobelia Pills probably constitute one of the best reparations ever employed for the cure of ordinary dyspepsia. From two to four pills should be taken every night at bed-time; and if the patient be confined to the house, the pills may be taken at intervals of an hour or two, in order to keep the system moderately under their influence. Taking them in quantities sufficient to cause vomiting every few days will answer the place of courses of medicine.

Composition Powder. — Dyspepsia of a mild character may be cured by taking a dose of composition two or three times a day. When the patient is exposed to the weather it is best not to prepare the composition in boiling water, but first moisten the powder, and then add half a teacupful of *lukewarm* water, stir it well, and swallow it before it settles.

The Spice Bitters may be taken in the same way and for the same purpose as composition.

The Conserve of Hollyhock is a mild stimulant and tonic, and useful in cases of feeble digestion. It is a convenient medicine for persons travelling.

Charcoal. — Purified charcoal being an absorbent and anti-septic, and operating as a mechanical stimulant to the bowels, may be used with advantage in cases of sour stomach, attended with costiveness.

Wheat Bran.—A tablespoonful of wheat bran taken every morning fasting, is a good remedy for costiveness.

Parched Corn eaten freely will overcome costiveness in ordinary cases.

White Mustard Seed has been found successful in curing cases of dyspepsia. The dose is a tablespoonful, to be repeated two or three times daily.

Tonics.—In dyspepsia accompanied with a pale tongue, want of appetite, relaxed skin, and general debility, the stronger tonics must be used, such as Dr. Thomson's No. 4 bitters, quassia, wormwood, gentian, &c., either prepared in decoction, tincture, or extract. Extract of gentian will, in general supply the place of all other tonics, and when formed into pills is so easily taken, that most patients will prefer it to taking decoctions.

When there are symptoms of dyspepsia with extreme insensibility of the stomach, benefit may be derived from mechanical means, as riding on a rough trotting horse, or in a rough carriage after dinner, or punching or kneading the stomach as discovered and introduced by a Mr. Halstead of New York, who was cured of dyspepsia, attended by extreme insensibility of the stomach, by making a false step, by which his stomach received a severe jar.

Alkalies.—When there is offensive gas ejected from the stomach, the use of lime-water will be beneficial.

In cases of simple acidity of the stomach, the super-carbonate of soda, or sal-ærat, will neutralize the acid. Prepared chalk may be used for the same purpose, and in some instances will have a better effect than soda or sal-ærat.

The following was a favourite remedy with the late Dr. Physick of this city.

Take a quart of hickory ashes, and a teacupful of common soot, pour on them a gallon of boiling water. The dose a wineglassful after meals.

A decoction of wormwood and hickory ashes fulfils the purpose both of a tonic and anti-acid.

In some cases of dyspepsia, acids will be found to be more beneficial than alkalies, even when there already exists a superabundance of acid in the stomach. A mixture of vinegar, salt and pepper, will be of benefit in many cases. From ten to thirty drops of the elixir of vitriol, in a wineglassful of water, or of bitter tea, three or four times a day, will be grateful to the stomach, and assist digestion.

Pain in the stomach.—Dyspepsia is very frequently attended with pain in the stomach, though, by no means, a necessary consequence of indigestion, for many dyspeptics experience no pain. Some experience pain, only when the stomach is empty, and even when there is no oppression from gas in the stomach; and they are promptly relieved by taking food. This kind of pain may be also relieved, by taking alkalies, especially lime-water and milk, or, absorbents, as wheat bran, charcoal, and prepared chalk. When the case proves obstinate, a course of medicine administered once a week and the patient taking three or four times a day a teaspoonful of charcoal in spice bitters tea, and from 3 to 5 compound lobelia pills every night at bed-time, will effect a cure unless the disordered condition of the stomach depend upon organic disease of the stomach, or of some other important organ.

In many cases of dyspepsia pain in the stomach occurs *immediately* after eating, and continues during the whole process of digestion, or, until vomiting ensues, which gives instant relief. In other instances the pain does not come on until from two to four hours after meals, and continues several hours. Some will be attacked with violent spells of colic, at uncertain periods, accompanied with shooting pains through the back and between the shoulders.

Pain in the stomach, that occurs during the process of digestion, may often be relieved, by taking stimulants in hot water, such as Thomson's No. 6 composition and cayenne. Infusions or decoctions of bitter tonics, the volatile tincture of guiacum, spirits of turpentine, camphor, and spirits of lavender may be used for the purpose of allaying pain in the stomach. When these means prove ineffectual, or, when the attack is violent, an emetic of lobelia, or a full course of medicine should be given.

Many persons of full habit and who exhibit an appearance of health, are subject to a distressing, burning pain in the stomach after meals, which may be at once relieved by taking a teaspoonful of the super-carbonate of soda dissolved in a tumbler of water.

Pain in the lower bowels may be relieved by injections. Distress and pain in the stomach may often be relieved by injections containing lobelia. Warm fomentations, warm stimulating poultices, or mustard plasters applied over the seat of pain, are beneficial in all cases.

Gouty people are sometimes attacked with *spasm* of the stomach, or as it is popularly termed *gout* in the stomach, for which a course of medicine, and a free use of stimulants, and the volatile tincture of guiacum are the most appropriate remedies. For instance, after administering a course of medicine, give the patient half a teaspoonfull of the tincture of guiacum in a tea-cup half full of cayenne or composition tea; repeating it as often as may be deemed requisite.

There is another modification of uneasiness and disorder of the stomach, of which the distinguishing characteristic is the vomiting, or, rather eructation of a thin watery liquid, sometimes sourish, but usually insipid and tasteless, and often described by the patient as being cold. This is termed *pyrosis* or *water-brash*. The first symptom of it is a pain in the stomach, with a sense of constriction, as if the stomach was drawn towards the back. The pain is increased by raising the body into the erect posture, and therefore the body is bended forward. The pain is often very severe; and after continuing some time, it brings on an eructation of a thin watery fluid, in considerable quantity. It usually comes on in the morning and forenoon when the stomach is empty. Obstinate costiveness usually accompanies this form of dyspepsia. Water-brash, unless connected with organic disease of the stomach, may generally be cured by a lobelia emetic, given as often as once a week; together with using daily such means as will regulate the bowels and improve the condition of the stomach. The remedies recommended in the treatment of costiveness in a previous section, will be applicable here. To improve the condition of the stomach in this form of dyspepsia, astringents are required; either a strong decoction of bayberry or sumac, or the No. 3 pills, described in the latter part of this work, should be taken freely. This distressing complaint, however, is often difficult of cure as it is not unfrequently associated with inveterate dyspepsia, and sometimes arises from organic disease of the stomach.

Many cases of dyspepsia of long standing have been cured by a persevering course of Thomsonian treatment, especially by full courses of medicine, repeated at proper intervals, a free use of cayenne at or immediately after meals, and once or twice daily a teacup half full of bayberry tea, made very strong of the astringent principles, adding a portion of cayenne, or composition powder. By pursuing this treatment, a skinny substance will sooner or later be passed from the bowels, and also thrown up by vomiting, and after the mucous membrane becomes clear of the false membrane which coats it to a greater or less extent in all cases of dyspepsia, the digestion will, in most instances, be restored or greatly improved under the use of tonics.

Diet.—No system of diet can be proposed suited to all cases of dyspepsia. Boiled milk and toast, and cream toast agree with most dyspeptics. Milk, when taken cold and in large quantities, sometimes forms an indigestible mass, of a cheese-like substance, occasioning great oppression at the stomach.

As a substitute for milk when it disagrees with the patient, cacao or chocolate, black tea, or, what is better, the anti-dyspeptic cacao, prepared by A. Comfort, of Philadelphia, may be used. In

some cases of dyspepsia, coffee, well prepared, may be taken, not only with impunity, but with advantage. Much of the evil arising from the use of coffee, is owing to the bad quality of the article, and to the careless manner in which it is frequently roasted and prepared. There are cases of dyspepsia, however, where even the best coffee is injurious.

Animal Food. — All kinds of wild game, when in season; fresh fish, eggs, chicken, turkey, fresh beef and mutton, are the most digestible. Salt fat pork agrees with many. Fresh pork and veal disagree with the dyspeptic in almost every instance, yet, some cases have been cured by eating broiled fresh pork; such cases, however, are very rare. In some cases, animal food of every description will disagree with the stomach. All kinds of soups are objectionable, from their liability to sour in the stomach, unless combined with solids, though, in small quantities, they may not disagree. There is not the same objection to essence of beef, as to soups.

Bread made of unbolted wheat flour has become a favorite article of diet for dyspeptics, and answers a good purpose in preventing costiveness. Toasted bread agrees well with almost every one. It should be cut in thin slices and toasted through, so as not to have it doughy in the middle. Bread should not be eaten until at least twelve hours old. Hot cakes should be avoided. Cakes, however, made of Indian mush which has been previously well boiled, will agree with many. Regularity in meals is important. No food should be taken between meals. If a person of feeble digestion eat a piece of gingerbread or pie, an hour before dinner, the appetite will be weakened, and then if the patient eat the usual meal, the food will oppress the stomach.

One great and indispensable principle in the treatment of dyspepsia, is that of restricting the *quantity* of food taken at any one time. Over-distension greatly retards the process of digestion.

The stomach should also have time to digest a meal, and even allowed to rest an hour before more food is taken. Dr. Abernethy, who cured more cases of dyspepsia, probably, than any other medical man of the old school practice, owed his success, it is believed, mainly to restricting the amount of food taken at a time, within the limits of the capacities or powers of the stomach; and enjoining upon his patients to allow six hours interval between meals.

“Animal food is easier of digestion in the human stomach than vegetable food. It is nearer in its composition to the textures into which it is to be incorporated by assimilation And it is notorious that vegetable food, when the stomach is weak, is followed by more flatulence, that is, is digested with more tardiness and difficulty, than animal food. Nevertheless, a mixture of the two, of well-boiled or roasted flesh or fowl, with a moderate por-

tion of thoroughly cooked vegetables, is better suited, in my opinion, for a feeble stomach, than a rigid adhesion to either kind of aliment singly."

Change of Air.—A change of residence from the city to the country, or from the country to the city, or removing to a different neighbourhood, will, in many instances, restore digestion, when other means have failed. I have observed the most remarkable change effected in dyspeptics by a few weeks' residence in a pine country, or on the sea-board. The benefit which dyspeptics receive from visiting mineral springs, arises, probably, in the majority of cases, from the change of air, cheerful society, absence from care, and probably from the interruption of *bad habits*. A tour, in fine weather, and through a pleasant country; a voyage to sea, or a few weeks residence in a mountainous country, will often do more towards curing the desponding dyspeptic than any course of medical treatment that can be devised.

Cleanliness in person and in dress, promotes digestion, and exhilarates the mind. An occasional vapor bath, followed by a shower bath, is one of the best means for promoting a healthy action in the skin. When the patient is languid and nervous, a shower bath every morning will prove a powerful tonic to the nervous system, and in some instances will *cure* dyspepsia. The daily use of the flesh-brush or salted towel will also invigorate the system, cheer the spirits, and promote digestion.

SECTION XI.

WORMS IN THE STOMACH AND BOWELS.

IN treating of worms, Dr. Thomson makes the following observations. "A great deal is said about worms causing sickness, and there is scarcely a disease that children are afflicted with, which is not attributed to worms. The doctors talk about worm complaints, worm fevers, worm colics, &c., and give medicine to destroy the worms: by so doing they frequently destroy their patients."

The views of Dr. Thomson concerning worms, to wit: that they are produced by a disordered state of the stomach and bowels, and feed upon foul secretions, are doubtless correct.

Different Species of Worms.—There are

1st. *The Long Thread Worm*, which varies from an inch and a half, to two inches in length. About two-thirds of its length is almost as thin as a horse-hair, the remaining and posterior part being considerably thicker, terminating in a rounded or blunt extremity.

2d. *The Maw or Thread Worm*. — “This is a very small white worm—the male being not above two lines in length, with rounded or blunt extremity anteriorly, tapering to a point posteriorly. The female is considerably larger, being from four to five lines in length, terminating in an extremely fine extremity posteriorly, resembling the point of the finest needle. These worms are found only in the large intestines, and principally in the lower part of the rectum, where they are often collected in almost countless numbers,” occasioning a most annoying sensation of itching and tickling in the rectum. “Many individuals are infested with them in childhood, but get rid of them as they advance in years. Some, however, are troubled with them during the whole of a long life, though they are represented as less annoying after middle age than before. They usually appear periodically, both in children and adults, after intervals of from three to six weeks. During the interval they are neither felt nor seen in the discharges. Their periodical return is announced by a sense of itching and burning at the extremity of the rectum, felt principally in the evening, sometimes producing tumefaction and eruption of the neighbouring skin. This irritation continues to recur every night for perhaps a week or more, and then ceases. During this time the worms are discharged alive and active in every alvine evacuation.” The nidus of these animals, and perhaps the food also, appears to be the mucus which lines the alimentary canal. Buried in this substance, they resist the effects of the most violent cathartics and vermifuges, oil of turpentine and croton not excepted.”

3d. *The Large Round Worm*. — This is a species of worm varying in length from three to ten or twelve inches, and about the size of a common goose-quill. These worms inhabit the small intestines, and occasionally ascend into the stomach. “The symptoms indicating their presence are equivocal, but are commonly considered to be, starting in the sleep, itching of the nose, irregular, or excessive appetite, emaciation, &c. Nevertheless, these worms are often suspected of being present where they do not exist.”

4th. *The Tape Worm*. — The tape worm sometimes acquires a great length,—thirty to forty feet, and even longer. “It is about half an inch in breadth, flat, white, and composed of a series of

joints, resembling in shape, a gourd-seed. It inhabits the upper portion of the bowels and stomach.

The symptoms usually accompanying the presence of worms in the stomach or bowels are — paleness of the countenance, with occasional flushes on the cheeks; picking the nose; variable appetite, sometimes voracious — at other times entirely gone; copious secretion of saliva; and a furred tongue. The belly is swollen, and there are transient pains through the bowels, and starting in the sleep. These symptoms, however, may all exist, independently of the presence of worms, and even when there are worms, most of the attending symptoms may arise from a disordered condition of the stomach and bowels.

“The reason,” says Dr. Thomson, “why children are more troubled with what are called worm complaints, is because they are more subject to be disordered in their stomach and bowels than grown persons. When children are sick, and their breath smells bad, it is said they have worms, and every thing is laid to them; but this is owing to disease caused by canker, for there is nothing in the nature of worms that can affect the breath. In cases of this kind, the only thing necessary is to cleanse the stomach by getting rid of the cold phlegm, and restoring the digestive powers, when there will be no difficulty with the worms.”

The practice of giving poison to kill worms in the stomach and bowels, as Dr. Thomson says, “is like the story related by Dr. Franklin, of a man who was troubled by a weasel in his barn, and to get rid of the weasel he set fire to the barn and burnt it up.” “I had the following relation,” says Dr. Thomson, “from the doctor who attended the cases; — three children had what he called a worm fever; and he undertook to kill the worms. One of the children died, and the doctor requested liberty to open it, to find out what would destroy worms, in order to know how to cure the others; but the parents would not consent. A second died, and the parents consented to have it opened; but after searching the stomach and bowels, to their surprise, no worms could be found. The third soon after died. The fact was, their death was caused by canker on the stomach and bowels, and the medicine given increased the difficulty by drawing the determining powers inward, which aided the cold to promote the canker.”

Treatment.—The difficulty of ascertaining whether a child that is sick has worms, should occasion no embarrassment with regard to the treatment to be pursued. The stomach and bowels being disordered, the indications for the treatment will be the same whether the patient be affected with worms or not.

“I have had,” says Dr. Thomson, “a great deal of experience

in what are called worm complaints; and after having become fully acquainted with the real cause, had no difficulty in curing all that I have undertaken." * * * * *

"My practice," says he, "has been what I recommend to others to do in cases that are called worm complaints; to give the composition powder, or No. 2, to warm the stomach, a tea of No. 3, to remove the canker, and the bitters, or either of the articles described under No. 4, to correct the bile. If they are bad, carry them through a course of the medicine, and give the bitters. When there are nervous symptoms, give the nerve powder. Injections should also be frequently given. The butternut syrup is very good. If there should be danger of mortification, make use of No. 6, both in the medicine given and in the injections."

The composition I have found to be most effectual when the powder is given in lukewarm water, or in a strong decoction of bayberry or sumac. This mixture given two or three times a day, together with small doses of the tincture of lobelia, repeated every two or three hours, will, in many instances, remove all symptoms supposed to be occasioned by worms.

The compound lobelia pills given immediately after meals, will be found beneficial in such complaints, and they may be used as a substitute for the composition and tincture of lobelia.

A mixture of vinegar and salt given three or four times a day, is of especial benefit in correcting a disordered stomach, especially when the patient craves acids.

Milk boiled with a portion of tansy may be used to restore digestion; and sometimes it will cause the expulsion of worms from the bowels.

Lime-Water. — When the stools are green, or of an acrid character, or if the patient be affected with sour breath, and acid eructations, lime-water should be given to correct the secretions. The usual way of administering lime-water is to add about an equal quantity of boiled milk. To be taken two or three times a day.

Charcoal. — When the bowels are constipated, a teaspoonful of purified charcoal may be taken two or three times a day in boiled milk. This will overcome costiveness, and it is highly beneficial in the cure of what are called worm complaints.

Emetics, or a Course of Medicine should be given occasionally, as long as there is fever, or the tongue continues furred, and composition powder, capsicum, or spice bitters, to be administered twice or three times daily. When the fever has disappeared and the tongue is moist and cleaning, bitters may be given. Extract of gentian in the shape of pills, or any other simple bitter, may be

taken to strengthen the stomach, after it has been cleansed by the treatment before mentioned. When the patient continues in delicate health, after the above treatment, a cold shower bath in the morning, or a change of air, will be found particularly useful. A change of medicine occasionally will be proper in long standing cases; thus a certain kind of bitter may be given for a few days in succession and then change it for another; salt and vinegar may agree with the stomach for a time, and then require to be laid aside for some other remedy.

Oil of Turpentine is ranked as the best remedy for worms in the old school practice.

Worm Seed, or Jerusalem Oak, (*Chenapodium Anthelmenticum*) is much used for expelling worms. Of the efficacy of this article I cannot speak from observation, never having used it. *The Volatile Oil* of the worm seed is generally used; the dose for a child is from four to ten drops mixed with sugar, given in the morning on an empty stomach, and in the evening at bed-time; this may be continued several days in succession.

Treatment for the removal of the Thread Worm.— This species of worm being located in the rectum, is usually termed *seat worm*. These may, in many instances, be removed by the daily administration of injections, composed of a strong decoction of bayberry or sumac, adding a teaspoonful of No. 6; or mix from two to three teaspoonsful of composition powder, in less than half a pint of lukewarm water, and administer by injections at bed-time, and repeat every night, the patient retaining it as long as he can. This will remove the false membrane or tough slimy substance that coats the bowels. After the worms are expelled the injections should be administered every few days, to prevent their return. If the general health be deranged, constitutional treatment will be required; such as the daily use of stimulants and bitters, and occasionally an emetic, or a full course of medicine.

These small worms are contained in a tough mucus, lining the bowels, and being imbedded in it will frequently resist the most powerful cathartics, but administering stimulating injections to excite the secretions and render them less dense and tenacious, followed by the use of injections of a strong decoction of bayberry or sumac, adding a portion of No. 6, will seldom or never fail of expelling the worms when their use is persevered in. In obstinate cases of seat worms, an injection of a simple decoction of the bayberry or sumac should be administered at bed-time, and retained in the bowels through the night; in the morning administer another, containing a portion of the No. 6, or the third preparation of lobelia.

Treatment for Expelling Tape Worms.—Every species of intestinal worms is supported by the cold mucus or “canker,” lining the bowels. Dr. Thomson’s general plan of treatment, namely; first to give stimulating medicine to warm the stomach and bowels, then use the No. 3 to remove the “canker,” and bitters to restore digestion, is adapted to all cases of worm complaints. This is a plan of treatment adapted to all cases of disease of the stomach and bowels, whether worms be present or not.

No small amount of injury has been done by experiments that have been practised by physicians upon patients supposed to be affected with tape worm. A great variety of remedies and modes of treatment are recommended by different medical writers; one claiming to have been successful in expelling tape worms by a certain method of treatment; whilst another declares that a different and even opposite course of treatment has proved more successful in their expulsion. Dr. Eberle gives no less than seven different plans of treatment recommended by men who have been considered eminent in the profession. Most of the remedies employed by the medical profession for the expulsion of tape worms, such as tin filings, and irritating cathartics, frequently cause the formation of a false membrane on the mucous surface of the bowels, which will sometimes pass off in the form of a white skin, in pieces varying from half an inch to a foot, or even two or three feet in length, and this substance no doubt has frequently been mistaken for tape worm. Some writers speak of having cured many hundred cases of tape worms, but probably, in forty-nine cases out of every fifty, the supposed tape worm was nothing more than the white skinny substance above alluded to.

SECTION XII.

PILES.

This is a disease of the veins of the rectum, which prevails to a great extent in both sexes, and in all classes of society.

Piles commence by an enlargement of the *veins* in the rectum, forming tumors filled with dark blood, which, when inflamed, become extremely painful on going to stool, and frequently discharge a considerable quantity of blood; they are then called *bleeding piles*. When blood is not discharged they are termed *blind piles*. Sometimes the tumors emerge from the anus, forming *external piles*; when confined within the rectum they are denominated *internal piles*.

1st. *External Piles*.—These are at first formed within the rectum, by the blood collecting and forming into clots in the enlarged veins, and are afterwards forced down by the passage of hardened fœces, and by straining efforts to evacuate the bowels, sometimes attended with extreme pain, which may continue many hours. Piles are soft at first, but generally become harder in the course of a few days. When inflamed they look red, and are smooth like a cherry, but more frequently they have the appearance somewhat of a half-dried red or purple grape.

In severe cases of piles, where the disease has continued some years, a portion of the intestine is in many cases forced down every time the fœces are passed from the bowels, and requires to be pressed up by the hand. In some instances the patient will be unable to return the protruded intestine, in consequence of the inflammation and extreme tenderness of the parts. Under these circumstances the patient is compelled to remain in a recumbent position, being unable to walk or even to sit upright. The extreme pain which sometimes continues for many hours after the bowels have been moved, is caused by the piles being pushed down, and when the sphincter muscle of the rectum contracts, it grasps them firmly, and thus operating as a ligature upon them, occasions intense pain.

2d. *Excrescences* in the form of whitish fleshy bodies are apt to be formed around the verge of the anus, in consequence of frequently repeated inflammation of the diseased veins, by which their sides, as it were, are glued together, and adhesive matter is thrown out, which becomes organized, and a hard vascular tumor is produced. These excrescences are apt to occasion irritation and chafing of the parts, and although containing numerous small blood-vessels, they may be cut away with a pair of sharp scissors, without the least hazard to the patient, when they exist singly and stand out prominently, and are of a solid texture, readily distinguished from the soft spongy tumors formed by relaxation and distension of the mucous membrane of the rectum.

3d. *Internal Piles* may exist far in the rectum, without occasioning pain, or much inconvenience, the discharge of blood being the first symptom of their existence. By the frequent passing of hardened fœces, a relaxed condition of the bowels, or by the use of purgative medicine, the intestine is gradually drawn downward, and finally is protruded beyond the anus every time the bowels are moved, forming *prolapsus ani*. Under these circumstances there is generally much constitutional derangement and more or less fever.

Piles at first seldom continue long; they disappear and sometimes do not return, but more generally they return at intervals,

until finally the parts become permanently diseased, proving a continued source of annoyance, and frequently causing severe pain.

Piles vary in size in different patients, from a pea to a walnut. Their number also is equally variable. Sometimes there is but one; in other instances, there may be two or more; and in others, again, they are so numerous and large as to cause, by their protrusion through the anus, a permanently widened state of that aperture, and a habitual relapse, not only of the tumor itself, but also a portion of the bowel.

When a number of piles exist low down in the rectum, the passage of hard fœces is rendered extremely difficult and painful in consequence of the cavity of the intestine being nearly closed by the formation of these tumors into a body near the orifice of the rectum.

"Among the most common consequences of piles is a kind of tenesmus, or inclination to stool, with a protrusion of the inner tunic of the rectum, so as to form a prominent and extremely sensitive ring around the anus — particularly after each attempt to expel the fœces."

Piles are very liable to burst, followed by a discharge of blood, on which the tumors disappear, and the distressing symptoms abate until other piles are formed, which also burst and their contents are discharged; and in this way some patients will be subjected to frequent discharges of blood, which may become so profuse as finally to weaken and impair the general health.

Causes of Piles. — The free use of purgative medicines may be regarded as the most common cause of piles. They may, however, be produced by any cause that weakens digestion, or occasions an obstruction to the free circulation of blood through the veins of the rectum; such as venereal excesses, the intemperate use of ardent spirits, sedentary habits, long-continued diarrhœa, dysentery, tight lacing, gravel in the bladder, lifting heavy weights, pregnancy, difficult labors, obstinate costiveness, obstructions in the liver, and disease of the lungs.

Treatment. — In the early period of the formation of piles, the use of injections of some active astringent, as a strong decoction of bayberry bark, dewberry root, sumac, or witch hazel leaves, will relieve the symptoms, and may check a further development of this annoying complaint. The injection need not, however, be restricted to astringents alone; they will often prove more beneficial by the addition of a portion of cayenne and lobelia.

When a pile is inflamed and painful, relief may be obtained by the patient sitting over steam, or by the application of a warm poultice of wheat bread, slippery elm, Indian mush, or flaxseed.

Soft cloths wrung out of warm water may be applied in place of a poultice. Besides these applications, the patient should take freely of composition, or bayberry and cayenne and broken doses of lobelia, with a view to equalizing the circulation of the blood. This will in some degree lessen the determination of blood to the rectum.

A course of medicine, or at least a vapor bath and a lobelia emetic, will in many instances prove especially beneficial in relieving inflamed piles. Constitutional disorder is a frequent cause of the continuance of piles; and it will be requisite to place the system in a more healthy condition, by constitutional treatment, in order to effect a cure of piles. The compound lobelia pills may be used as a general medicine in all cases; and when the patient prefers medicine in the form of pills, the No. 3 pills may be used in the place of composition and bayberry and cayenne.

To prevent Costiveness. — "Throw physic to the dogs," and employ the means pointed out, in a former section, under the head of costiveness.

Astringent injections retained will cure piles in many instances, not of too long standing. Their use almost invariably affords relief, whether the complaint be of long continuance or recent occurrence. Take, for instance, equal parts of bayberry bark, witch hazel and sumac leaves; steep a sufficient quantity in boiling water to make half a pint of a very strong decoction; strain it, and use on going to bed, retaining it until morning. In general, there will be no difficulty in retaining the injection until morning, and then there is usually a natural movement of the bowels, even though the patient be of costive habit. The injections should be repeated every night, as long as there remains a necessity for their employment.

Injections prepared and used as above directed, have succeeded in some instances in checking habitual discharges of blood from the rectum; and by the additional aid of constitutional treatment, the general health has been restored, where the wan appearance of the patient showed plainly the consequences of the long-continued drain kept up by the bursting of piles.

Astringent Ointments. — Various astringent ointments may be used; for instance, the green persimmon ointment, or an ointment made by stewing, in lard, mutton suet, or tallow, some vegetable astringent; marsh rosemary, witch hazel leaves, or crane's bill. A sufficient amount of the astringent substance should be used to render the ointment actively astringent; and when stewed an hour or more it must be strained. The ointment, besides being applied externally, may be introduced into the rectum.

Pitch, or Tar Pills, are highly recommended as an internal remedy in cases of piles, attended with obstinate costiveness.

Ward's Paste. — The composition of this is given in the latter part of this work. It has long been extolled as a valuable internal medicine in chronic piles by the medical profession, both in this country and Europe.

Vinegar, Lemon Juice, and Essence of Spearmint, have each been used as a wash for piles. The mode of applying each of these articles is to wet a piece of cotton with the liquid, and bind it on by means of a T bandage.

Puncturing. — An external pile not larger than a cherry, and existing singly and distinct, with a small base, may be punctured with the point of a lancet, and the clot of blood squeezed out, without any risk; but under other circumstances, more especially where large knots of piles exist, it will be hazardous to open them. Operations upon piles should be performed only by experienced surgeons, except in simple cases, and for the removal of excrescences, before spoken of, that have small bases, and are hard like solid flesh, and not red or purple like a pile.

When the introduction of the injection pipe is attended with difficulty and pain, in consequence of the existence of large piles low down in the rectum, a gum elastic tube or large catheter should be used; or previous to introducing the metallic pipe, push a small tallow candle, softened by heat, two or three inches up the rectum. The relief derived by this simple operation of introducing a piece of softened tallow candle, is often most striking, in cases where the pile has been pushed down and then strangulated by being grasped by the sphincter muscle. The best position for the patient to be placed in to push up a pile above the sphincter muscle is on the knees, with the buttocks raised, and the breast low.

Pressure. — In cases of long standing, where the tissues about the lower part of the rectum have become permanently relaxed, and protrude through the anus, a pile truss should be worn; or the parts supported by means of a compress kept applied by means of a T bandage.

There are cases of piles, and diseased conditions of the rectum, where nothing short of an operation for their removal by the ligature, or by excision, or a portion of the tissues destroyed and adhesive inflammation induced by the application of pure nitric acid, will promise hopes of cure. Operations of this kind, however, should be conducted by experienced surgeons only.

Diet. — In all severe cases of piles, attended with constipation of the bowels, especial attention to diet will be requisite. Gruel made of unbolted wheat flour, or bread made of the same material; rye mush; cream toast; Indian mush; stewed prunes in small quantities, eaten with stale bread or biscuit; ripe fruit and calves' foot jelly, are suitable articles of diet in cases of obstinate costiveness, and where the piles are highly sensitive or sore and inflamed. Animal food can be used in connection with the above articles in all cases where it agrees with the patient.

CHAPTER VI.

SECTION I.

RHEUMATISM.

Causes. — Cold and dampness are the exciting causes of rheumatism in almost every instance. Where, however, there is a predisposition to the disease existing, inaccuracies in diet, over-exertion, loss of rest, or any other depressing influence may occasion the disease. I never knew a case of rheumatism that was not preceded or accompanied by a greater or less degree of derangement of the digestive functions. Patients, however, will sometimes insist that nothing is wrong about the stomach or bowels. The low degree of sensibility in the stomach and bowels induces patients to consider that no derangement exists in these organs, when at the same time, their functions may be so far depressed and deranged, as to give rise to the most painful affections in other parts of the system, as gout, rheumatism, headache, neuralgia, erysipelas, &c.

Parts Affected. — Rheumatism generally attacks the fibrous tissues around the larger joints: the hip, shoulder, elbow, or knee, and frequently the small joints become affected, more especially those of the fingers. The *synovial* membrane of the joints, containing what is called the "joint water," often becomes affected in rheumatism. Although in general confined to joints, rheumatism sometimes attacks the muscles only; those of the back, neck, and shoulders, are most liable to be affected in this way. When in the back it is called lumbago. The membrane covering the eyeball is liable to rheumatic inflammation. The head, heart, brain and womb are also liable to this form of disease.

Varieties. — When rheumatism attacks the young and athletic, the disease is usually accompanied with inflammation of the diseased parts, attended with pain, extreme tenderness, and frequently a redness of the skin, and generally there is more or less fever, especially at night. Such a case would be termed *acute* or *inflammatory* rheumatism.

When the disease occurs in the aged and infirm, and especially in those of broken-down constitutions, the powers of nature are often too feeble to establish an efficient curative action; the affected parts will remain pale, and seldom much swollen; though sometimes the synovial membrane, especially of the knee joint, becomes affected, the joint water is increased in quantity, and causes the parts to swell out, sometimes twice the natural size; the disease will be fixed in certain joints and not shifting about; there will be absence of fever, no thirst, the tongue pale, and the affected joints much less tender than in the former variety. This is called *chronic* rheumatism. The symptoms, however, in different cases, present great diversity of character, from the most acute and inflammatory to that of the lowest grade of chronic rheumatism; so that in some instances it will be difficult to decide whether to call the disease *acute* or *chronic*.

Acute rheumatism is often made chronic by bleeding, purging, and poisoning the patient with nitre, antimony, &c. Many a patient has been kept on his back for months by medical treatment, and in fact prevented from ever getting entirely well, who would have recovered perfectly in a few weeks, even without medicine, if kept warm.

Mercury sometimes occasions disease of the joints resembling rheumatism, and it also affects the membrane that covers the bone, and is most apt to be seated on the long and flat bones—the tibia or shin bone, the arm bones, shoulder blade, skull, &c. Sometimes it commences with a protuberance rising on the bone, without inflammation or pain, and either remaining stationary, or gradually disappearing under proper treatment, or, as is more commonly the case, the part becomes extremely painful, and is frequently followed by suppuration. This mercurial disease is not always confined to the covering of the bone, but occasionally the substance of the bone itself is diseased, occasioning its decay, attended with a discharge of acrid and offensive matter.

Symptoms of the Acute or Inflammatory variety of Rheumatism.—The disease generally approaches in a gradual manner, with a sense of coldness or numbness in the limbs, loss of appetite, weakness and languor. These symptoms continue for several days, or even weeks, in some instances, before the parts become either swollen, painful, or inflamed. In other instances the attack is sudden, commencing with a chill. Pain, tenderness, with more or less

swelling and redness about the joints, with a full, hard pulse, hot skin and flushed countenance, attend inflammatory rheumatism. "The patient generally lies on his back, and avoids every motion of the body or limbs; or if he does move, he experiences a sudden aggravation of pain; he cries out, and muscular motion is promptly checked." There is little languor or debility, and but little disturbance of the mental faculties." The tongue is usually coated, and there is generally perspiration on the face, and frequently on the whole body, which is acid, and exhales a peculiar, sour odor. The urine is high-colored, scanty, and deposits a sediment. The pain and distress are more aggravated at night, frequently attended with high fever, and sometimes slight delirium: or as it is usually expressed, the patient is "light headed." In some instances all the limbs are affected at the onset, the patient being entirely helpless. In other cases the disease is confined first to the lower extremities, and then sooner or later it extends to the shoulders, neck, elbows, and hands. If the patient fall to sleep, he is apt to be awakened by a sudden jerk or contraction of the muscles, causing severe pain.

The function of the *liver* in many instances is conspicuously disordered in rheumatism, attended with sallowness of the skin and whites of the eyes, and occasional sickness and vomiting of bile. After a spell of vomiting, the patient experiences temporary abatement of the rheumatic pains. Although bile be thrown off by vomiting, it does not prove that there is an unusual quantity formed; digestion being suspended or greatly impaired, the usual quantity of bile is not used in the process of digestion.

Not dangerous.—Rheumatism rarely proves fatal, except when seated in the brain, or translated to the heart, or other important internal organ.

Duration of Rheumatism.—The length of time required for the cure of rheumatism, varies in different cases, from a few days, to weeks and even months. The inflammatory variety is often cured in the course of a week or ten days; whereas where there is but little reaction, in consequence of constitutional debility, or the inflammatory action subsides without effecting a crisis, as it often does in consequence of a prostration of the vital energies by blood-letting, purging, and administering nitre, mercury, antimony, &c., the disease is apt to become deeply seated in the system, and receives the name of chronic rheumatism. "Some practitioners," says Dr. Willan, "continue to let blood in most cases of acute rheumatism, thinking themselves justified in their mode of practice by the sizzly appearance of the blood. The same principle might lead them to empty the whole sanguiferous system; for every time blood-letting is repeated, the blood becomes more dense or sizzly.

I have further observed that, by bleeding repeatedly, the pains, swellings, and febrile symptoms, were not only aggravated at the time, but often protracted infinitely; at least, I have seen them continue, under such a mode of practice, upwards of two months."

Treatment of Acute or Inflammatory Rheumatism.—It is admitted even by the opponents of Thomsonism, that the practice is adapted to the cure of rheumatic complaints. Experience has fully tested the insufficiency of the *regular practice* in the cure of rheumatism; and that in many instances, where this practice has failed, the disease has been cured by the aid of *warm weather* alone.

Courses of Medicine constitute the most effectual means for the cure of rheumatism, and should be repeated daily, or less frequently, as the circumstances of the case may demand. The more fully the system is relaxed by lobelia, the more effectual will be the treatment. When it is not convenient to steam the patient in the usual way, lobelia emetics may be administered without previously administering a bath.

A course of Medicine, early administered, before the disease becomes seated, will in some instances effect a crisis, provided the patient be kept warm in bed, and use be made of stimulants and lobelia, to continue perspiration and keep the system relaxed. Upon the degree of integrity of the general health retained, depends in a great measure the rapidity of the cure. Thus, if the digestive powers be greatly prostrated, or if there be chronic disease of the liver, the treatment will require to be continued for weeks, in many instances, before the rheumatism can be cured.

When the disease has become seated, and the patient cannot be moved without great pain, and more especially during the early period of the disease, the regular vapor bath may be omitted, for in some instances it is better for the patient to be kept at rest, with a moderate and regular heat around him, than to have the inflamed parts aggravated by getting out of bed, and by frequently changing the clothing.

During the interval between courses of medicine, or when courses are not administered, the patient should take freely of cayenne and bayberry, or composition, and broken doses of lobelia. The *compound lobelia pills* are well adapted to the cure of rheumatism; from two to five may be taken every hour or two as the case may require. To promote perspiration, the patient should take of composition, pepper, or simple herb teas. In many cases the compound lobelia pills, used freely, will supply the place of all other medicine. Many cases of acute rheumatism have been cured by the lobelia pills alone, not even using the vapor bath. They should be taken in sufficient quantity to excite vomiting at least once a

day. No other compound appears to be so well adapted to the cure of acute or inflammatory rheumatism as the compound lobelia pills. Keeping the system constantly under the influence of these pills, always relieves the rheumatic pains. And although the patient may complain of the sickness from the pills, he should be reminded that the sickness relieves the rheumatic pains, and also facilitates the cure.

The Vapor Bath. There is a period in rheumatism, or a certain condition of the system, when the vapor bath will prove most signally beneficial. As a general rule it is the most effectual, either before the disease becomes firmly seated, or whilst it is forming a crisis, or after it has reached its height, and also on its decline. In most cases, however, it is beneficial in all stages of the disease, provided the patient can bear, without inflicting too much pain, the motion of the joints required in getting from the bed, and maintaining the sitting posture required in steaming in the regular way.

The steam bath is as much called for in rheumatism where the patient perspires freely, as where the skin remains dry. The steam benefits the patient more by warming the blood than by causing perspiration. The temperature of the steam should be as high as the patient can bear, and when he complains of the heat being oppressive, apply cold vinegar, or water; or whiskey over the surface.

The patient should be showered after steaming, or washed with spirits or vinegar, rubbed dry, and the parts affected bathed with stimulating liniment, No. 6, or pepper sauce.

Injectiions are beneficial in all cases. When the rheumatism is principally seated in the lower extremities, injections of the third preparation, or of some form of lobelia, in the No. 3 tea, are especially demanded. The circulation in the lower extremities is to a greater or less degree influenced by stimulating injections.

From a half to a teaspoonful of lobelia powder administered by injection and retained, and thus repeated every few hours, will prove eminently beneficial in many cases, but more particularly where there is high fever and violent pain.

The parts affected by rheumatism possess a low degree of sensibility in health, but when they become so much diseased as to excite reaction and occasion inflammation, it frequently requires several weeks before the parts are restored to a healthy condition, even under the most judicious and persevering course of treatment. The condition of the stomach, bowels, and liver, influences in a great degree both the violence and duration of rheumatism.

Often requires perseverance in the treatment. The following

was one of those cases of rheumatism, accompanied with liver complaint, that often prove extremely difficult of cure except by a persevering course of treatment.

Case.—Mr. J——, whose health had been feeble for two or three years, attended with sallowness of the skin, was attacked with rheumatism, so as to be helpless. I was applied to, and administered two courses of medicine with marked benefit at the time, but he soon relapsed. I give it as my opinion to the patient, who was a man possessing high intellectual attainments, that there was a false membrane coating his stomach and bowels throughout, which must be removed by a persevering course of treatment before the rheumatism could be cured. Discouraged at not finding more permanent relief from the operations he had undergone, he determined on making a trial of the regular practice. Colchicum, and a variety of other remedies were used both internally and externally, but with no good result, on the contrary with a manifest exhaustion of strength. I received a message requesting me to call on Mr. J—— again. I found him evidently worse than when I left him. He said he had become convinced that what I had previously told him in regard to the false membrane was correct, and desired that a thorough course of treatment should be pursued until the stomach and bowels should be cleared of this false membrane. Accordingly, a thorough course of treatment *was* pursued, and in about two weeks the false membrane began to be discharged, sometimes passing from the bowels in pieces a foot long. At the end of three weeks the patient was cured, and has ever since enjoyed better health than during several previous years.

Salt and Brandy.—Patients, after an acute attack of rheumatism, sometimes remain feeble, with want of appetite, the tongue coated, or if it cleans off, soon becomes furred again, more or less of the rheumatic pains continue, the countenance is pale, and the muscles relaxed. Under these circumstances, salt and brandy taken in tablespoonful doses, several times a day, will give new tone to the stomach, and effect a sudden and striking change for the better in the patient's general health. In addition to the salt and brandy the patient may take freely of cayenne at meals, and a teaspoonful of tincture of guaiacum after each meal.

If the bowels remain costive, patients must use the syringe, at least once a day, until by the use of such means as cayenne, charcoal, white mustard seed, and suitable diet, their natural movements are re-established.

A cold Shower Bath taken every morning, has effectually cured many cases of rheumatism, where the case has been slow to ge-

well under the use of medicine alone. The cold shower bath should always be given after the vapor bath, that is, when the patient is able to sit up to have the vapor bath applied.

Tonics.—When the disease is on the decline, the patient feeble, clear of fever, and the tongue moist and cleaning, a decoction of peruvian bark, or of some other of the vegetable bitters, should be taken freely. *Guaiacum*, or as it is commonly called *gum guiac*, is much employed in rheumatism, when the inflammation is on the decline. The dose of the powdered guaiacum is from half a teaspoonful to a teaspoonful, mixed with molasses, or with slippery elm powder and sugar, adding sufficient water to render it easy to take. To be repeated three or four times daily. Tincture of guiac, may be employed in the place of the gum. The dose is a teaspoonful. It may be taken mixed with sugar and water, or milk. When mixed with water it turns white. Guaiacum is used in every stage of chronic rheumatism.

The Diet in rheumatism, as in every other disease, should be adapted to the condition of the digestive powers. In the acute or inflammatory form of the disease, digestion is in general, either suspended or much enfeebled, requiring the lightest kinds of food, such as crust coffee, barley water, elm gruel, toast and tea, milk porridge, &c. When a patient is suffering acute pain, the digestion is imperfect; and when the stomach is oppressed with food that it cannot digest, the rheumatic pains will be necessarily aggravated.

In a more advanced period of the disease, or when it becomes chronic, a stronger diet will be required, such as soft boiled, or poached eggs, stale bread and butter, moderate quantities of fresh beef, roasted or broiled; mutton, and wild game, together with wholesome vegetables. In some cases animal food agrees with the stomach, and in others an almost exclusive vegetable diet is required.

Local Applications.—There is probably no form of disease in which so many different local applications have been recommended as rheumatism. In some instances local applications are serviceable, and in others they prove almost useless. And again an application that agrees with one case, will increase the pain in another; and the same application that may ease pain in one stage of the disease, may prove entirely useless, or even injurious at another period. In general, however, a moist heat applied by means of hot bricks or bottles of hot water wrapped in damp cloths, and changed sufficiently often to maintain a proper degree of warmth and moisture, or wool or raw cotton, laid on the parts affected, having the part next the skin covered with scrapings of gum cam-

phor, are the best kind of application for inflammatory rheumatism. Wetting the cotton or wool occasionally with No. 6, will be beneficial. Dr. Thomson recommends one part of turpentine to be added to four parts of No. 6, for bathing in rheumatism.

Granvill's Lotion, Volatile Liniment, Stimulating Liniments, or any of the essential oils may be employed in Rheumatism as an external application.

A slice of thin fresh beef, bound on a part affected with acute rheumatic inflammation, will relieve pain.

Cases of rheumatism frequently occur, which are neither absolutely acute, nor absolutely chronic. The inflammation, without being intense in any one joint, lingers in many; and the fever, though not entirely absent, is moderate. The joints are not hot and painful, the skin is dry, and there is some thirst.

CHRONIC RHEUMATISM.

Chronic rheumatism is characterized by *absence of fever*, and a *low grade* of inflammation, or more properly *absence* of inflammation in the parts affected. In some cases there are local heat and swelling, with some degree of tenderness to pressure, and pain is produced by a movement of the joints affected. There is, however, *no fever*, at least during daytime. In some instances, pain is produced by external warmth, especially at night, on getting warm in bed. There is another kind of chronic rheumatism, where the joints are cold and stiff, and the patient always rendered more comfortable by external warmth. In chronic rheumatism, the smaller joints, especially those of the knuckles and fingers, are very liable to become crippled: they look knobby, and the fingers are drawn out of their natural position, being always turned outwardly from the thumb.

Treatment of Chronic Rheumatism.—In all cases the constitutional treatment should be conducted upon general principles, adapting the remedies to the condition of the system. Thus a patient experiences benefit by an occasional course of medicine. It will be right to administer the course as often as may be deemed requisite. As a general rule, chronic rheumatism does not demand courses of medicine, except at intervals of from one to three or four weeks.

Among the most efficient remedies for chronic rheumatism, besides courses of medicine, and vapor and shower baths, are the compound lobelia pills, the No. 3 pills, cayenne, guiacum, white mustard seed turpentine, and salt and brandy. While some of these remedies will agree well in particular cases, others of them will prove more beneficial in other cases.

Warm clothing; hot salt-water baths; warm frictions, with the

warm hand, horse hair mitts, or the flesh-brush, and stimulants, liniments, are adapted to the cure of chronic rheumatism.

Gum elastic.—Sheet gum elastic has obtained considerable celebrity as an external application in chronic rheumatism. The sheet gum is to be wrapped around the affected joint, and as often as once in every forty-eight hours, it should be taken off and washed clean with soap and water, and re-applied after washing the skin with soap and water.

Sea-bathing in warm weather, travelling in a mountainous country, or migrating to a warm climate, has often cured chronic rheumatism, where all medical means had failed.

SECTION II.

LUMBAGO—RHEUMATISM IN THE LOINS.

THE term *Lumbago* is applied to rheumatic affections of the muscles of the loins, and also to abscess of the lumbar region.

Symptoms.—Lumbago from rheumatism is usually sudden in its attack, attended with extreme pain on attempting to straighten the back, the patient consequently keeps his body bent forward, by which the affected muscles are kept relaxed. This species of lumbago is generally accompanied with a rheumatic affection of other parts.

The symptoms attending lumbago are such as accompany other forms of disease in the lumbar region, for instance disease of the kidneys, sprains of the muscles of the loins, and "crick of the back." It is useless, however, in a practical point of view, to attempt making nice distinctions between these different complaints, inasmuch as general constitutional treatment, adapted to a case of lumbago, would not disagree with any other of the affections of the loins.

Treatment.—A severe attack of lumbago demands the same general treatment as a severe attack of rheumatism in other parts of the system, such as courses of medicine, broken doses of lobelia, and pure stimulants, especially cayenne.

Twenty or thirty drops of the spirits of turpentine, three or four times a day, are an effectual remedy in many cases of lumbago. The use of turpentine, and an occasional vapor bath, together with a strengthening plaster to the back, may succeed in curing light cases. The stomach and bowels, however, are in most instances disordered, and require a course of medicine, and the use

of stimulants, such as capsicum and composition, prickly-ash, No. 6, and tincture of guiacum.

Steaming the back by means of hot bricks or bottles of hot water wrapped in damp cloths, is a good remedy.

Prickly-ash.—This medicine in decoction, taken freely, is decidedly useful in chronic rheumatism wherever it be located. The prickly-ash, finely pulverized, may be added to the spice bitter in the proportion of one part of the former to four parts of the latter.

SECTION III.

GOUT.

Gout is a constitutional disease, being always connected with a disordered state of the digestive organs. The disease usually comes on by fits or paroxysms, and the attacks, in most instances, occur at night. The pain is generally seated in the ball of the great toe, though it is liable to attack other parts of the limbs, and also internal organs, more especially the stomach and kidneys.

Its hereditary tendency.—Some families are peculiarly predisposed to gout, almost every male member of a family being more or less affected by it in advanced life, when the digestive powers usually fail. This hereditary tendency to gout may be transmitted from parents to children, through several generations. The same debilitating cause that would produce gout in one predisposed to the disease, might occasion pleurisy, erysipelas, or some other form of disease in another.

Not confined to the luxurious and indolent.—Gout prevails most among high livers, still it does occasionally attack individuals who have lived temperately, and have led an active life.

Causes.—When there is a predisposition to gout, an attack may be brought on by almost any debilitating cause, such as exposure to cold or dampness, over-exertion, or taking more food into the stomach than can be digested. The disease is most apt to occur in persons of a peculiar conformation of body, with large alimentiveness, and who are habituated to eating largely of the richest kinds of food, together with the free use of wine and brandy. At length the digestive powers become enfeebled. The habit of eating heartily having become established, more food is taken than the stomach can digest; the imperfectly digested food forms acids, the general system becomes disordered, and gout follows.

When this disease attacks individuals who lead an active life

and are temperate in their habits, it is owing to constitutional disorder; the general health being more or less impaired previously to the gouty attack.

The Symptoms of Constitutional Disorder which generally precede an attack of Gout, are, uneasiness and distress at the pit of the stomach; frequent belching of wind; sour eructations; furred tongue; a sense of tightness and weight in the abdomen; "giddiness; great lassitude; yawning, and stretching of the limbs; cramps in the muscles of the legs; drowsiness, with disturbed sleep, depressed spirits, and debility. In some instances a disagreeable itching of the skin comes on a few days previous to the attack, and in most cases the urine has a deep red color." Coldness of the extremities, with a sensation of numbness, is very often experienced before an attack of gout.

Characteristic Symptoms.—In most instances an attack of gout commences at night. It is attended by severe pain, tenderness, and throbbing in the ball of the great toe, with chilliness or rigors, soon followed by reaction; the skin becomes hot and dry, and the pain violent and throbbing, as though there was a continued succession of electric shocks passing through the tender part. At the approach of daylight, the pain abates, and a profuse perspiration ensues. "In some instances the pain and fever continue with unabated violence, until about the middle of the following night, when they decline under a moderate flow of sweat—the patient sinking into a quiet sleep towards morning. In very severe attacks, however, no obvious remission of the symptoms takes place, until the third or fourth morning. Yet in all instances, the sufferings of the patient are greater during the fore-part of the night than in the day. When the affected part is examined in the morning, after the accession of the paroxysm, it is found swollen, red, and the veins of the foot greatly distended with blood." The tenderness is so great, that the least pressure or motion in the part, occasions excruciating pain. The temper during the paroxysm, is irritable, the patient being difficult to please.

The duration of the first attack of gout, varies from four or five to eight or nine days; "but in subsequent attacks, it is often protracted beyond the second, or the end of the third week. After the disease has subsided in one foot, it sometimes attacks the other, and passes regularly through its course as in the first instance.

After an attack of gout the general health of the patient is usually much better than it was for some time previous to the attack. The disease, however, returns at longer or shorter intervals: in some instances only once in a few years; in others every year, and after the constitutional energies become greatly enfeebled, the patient will seldom be entirely clear of it, excepting during mid-summer

Gout attacks especially the *male* sex. Some few women, however, suffer it, in its regular and decided form.

Chronic Gout.—From great exhaustion of constitutional energy, gout is apt to assume the chronic form, and instead of occurring in paroxysms at different periods, the parts become permanently affected, not with acute inflammation, but by “chronic, wandering and irregular pains, bearing much resemblance to chronic rheumatism.”

“The pain in chronic gout is usually moderate during the day, the patient experiencing only a sense of alternate heat and coldness in the affected parts; at night, however, it is generally severe and aching. A feeling of numbness and weight is experienced in the diseased parts, slight cramps are apt to occur during the fore-part of the night, and the sleep is restless, and interrupted by sudden startings. The affected joints retain their natural, or present only a slight purplish hue; but they become œdematous, tender, and more or less stiff, and the neighbouring muscles are weakened or diminished in size. The inflammation often passes successively from one joint to another, or leaves its original seat, and fixes upon some distant joint, and after having remained there for awhile, returns to the part it had left.”

“There is rarely any very conspicuous fever; but the digestive and biliary organs are generally very prominently deranged. The dyspepsia attending this form of the disease is particularly characterized by great oppression, and flatulent distension of the stomach after a full meal, together with heartburn, and occasionally a sense of coldness in the stomach. The bowels are usually torpid or affected with mucous diarrhœa; the urine is turbid, and often charged with mucus; the skin dry, contracted and sallow; the bilious secretion deficient; and both the animal and vital functions much impaired. The temper in this variety of the disease is always very irritable, dissatisfied, morose, irresolute, and sometimes gloomy or hypochondriacal.

Gout is not exclusively confined to external parts, but is liable to attack the stomach and other internal organs, and also the brain. Cold applications to the diseased extremities, copious bleeding, continued active purging, or any other debilitating influence may occasion gout to be translated to internal parts. “When an acute attack of gout passes to the brain, coma, furious delirium, or symptoms of apoplexy, speedily ensue.” When it fixes upon the stomach, violent cramps or spasms of this organ ensue, which in many instances terminate fatally, or reaction becomes established, exhibiting symptoms of inflammation in the stomach.

Treatment.—A paroxysm of gout will require the same general plan of treatment as any other violent attack of disease. A course

of medicine will relieve the violence of the symptoms and assist in bringing about a crisis.

In the premonitory stage, before the reaction or pain comes on, a course of medicine will lighten the severity of the pain, and shorten the paroxysm.

Treatment during the Paroxysm.—An attack of gout should be treated in the same manner as a case of bilious colic, or inflammatory rheumatism; applying the remedies as the urgency of the symptoms may require. The bowels to be relieved by the use of enemas; the system warmed by the vapor bath, and the stomach cleansed by emetics. During the paroxysm, the vapor bath may be administered frequently, provided the patient finds relief from it. The capillary vessels should be relaxed by the free use of lobelia, either given by the mouth or administered by injection and retained; free vomiting generally relieves the severity of the pain.

The compound lobelia pills, or pills made of equal parts of brown lobelia, cayenne, and super-carbonate of soda, may be employed as a general remedy, between courses of medicine, and in all cases where the patient can take them better than decoctions.

If the tongue be thickly coated, and more especially when the fur on the tongue begins to soften, an occasional dose of bayberry or sumac tea must be given, adding a portion of cayenne.

Tonics.—The stomach having been cleansed, and the secretions restored, tonics must be employed. Peruvian bark, quinine, quassia, Thomson's No. 4 bitters, or any of the usual vegetable bitters. Injections of a strong tea of Peruvian bark, administered and retained, will answer a good purpose.

The chief remedy employed in the old school practice, in the treatment of gout is *colchicum*. The celebrated Dr. Sydenham condemns the use of evacuant remedies in gout, especially blood-letting and purging with colchicum. It was nature's prerogative, he said, to exterminate the peccant matter in her own way; namely, by depositing it in the joints, whence it might be dispersed by insensible transpiration. Evacuant remedies had no other effect than that of recalling into the blood this peccant matter, which nature had thrust forth to the extremities of the body; whereby it happened that the virus which should have been eliminated through the joints, fell upon some of the viscera; and so the patient, who was in no danger before, became in peril of his life.

Local Remedies.—In general, stimulating and volatile liniments afford more or less relief. The parts should be wrapped in flannel or cotton, provided the pain be not increased thereby.

After a paroxysm of gout, the treatment should be directed to effect a restoration of the general health, and thus to overcome the liability to another attack. This may in many instances be accomplished by an occasional course of medicine, together with the adoption of a judicious, and well-regulated system of diet and regimen. The continued use of the compound lobelia pills at night, will have a good effect on the bowels. In some cases where individuals are subject to attacks of gout, the habit of eating too freely of rich food has become so fixed with them that the stomach continues to be oppressed with more food than can be properly digested, and from this cause the patient is subjected to continued returns of gout.

"The instances are not few" (observes Dr. Watson of England) of men of good sense, and masters of themselves, who, being warned by one visitation of gout, have thenceforward resolutely abstained from rich living, and from wine and strong drinks of all kinds, and who have been rewarded for their prudence and self-denial by complete immunity from any return of the disease; or, upon whom, at any rate, its future assaults have been few and feeble. On the other hand, many who are liable to gout, are taught by sharp experience that a single debauch, or a casual glass or two of champagne, even unusual indulgence in the use of animal food, may suffice to bring their enemy suddenly upon them. I am sure it is worth the *young* man's while who has had the gout, to become a teetotaller. But the case is different with the *old*, and with those whose health has been broken by the inveterate disease. They must be allowed a certain quantity of their good cheer, or they become an easier prey to the disease. In such cases you must trim, as well as you can, between opposite dangers; between the Scylla of excess, and the Charybdis of debility."

In the chronic form of gout, besides an occasional course of medicine, the use of strong infusions of vegetable bitters, or the free use of quinine, will be required. Gum guaiacum, spirits of turpentine, and savine (*juniperus sabina*), may also be found useful in the chronic form of the disease.

Gout in the Stomach or Kidneys.—When the stomach or kidneys become affected with gout, the same general course of treatment, as already described, must be adopted. The stomach in these cases, however, is very often almost insensible to the impression of stimulants, requiring large and frequently repeated doses of the 3d preparation of lobelia, or some other form of active stimulant, in order to produce the effect desired. Hot stimulating poultices should be applied over the seat of the pain, and the steam bath administered as hot as the patient can bear. Injections must be employed. They should be made active with cayenne and lobelia, or the 3d preparation, and administered frequently.

CHAPTER VII.

SECTION I.

INFLAMMATION OF THE KIDNEYS.

THE kidneys may become diseased from various causes, such as exposure to cold and dampness, intemperance, blows, contusions, and strains, the use of cantharides and other irritating diuretics, translated rheumatism or gout, and the formation of gravel.

Symptoms—Arising from disorder of the general system, or from exposure to cold, constitutional derangement, such as chilliness and languor, loss of appetite, torpid bowels, flushes of heat, and fever, precede inflammatory action in the kidneys. When this takes place there is tenderness to pressure, and pain in the region of the kidneys, which is greatly aggravated by a sudden jar, from making a false step, or by suddenly bending the body forward. The pain is apt to shoot down towards the bladder and thighs. "With these symptoms are usually conjoined fever, nausea, and sickness, retching and vomiting, colicky pains and constipation. The urine assumes a variety of appearances,—it may be high colored, ropy, depositing sediment, fœtid, or bloody.

Acute Inflammation of the kidneys generally terminates favorably, except when it occurs in constitutions broken down by debauchery, or the vital powers greatly depressed by other causes.

The Favorable Signs are a subsiding of the pain; a general warm perspiration; a copious discharge of urine, generally either turbid or charged with mucus; cleaning of the tongue; and subsidence of the sickness and vomiting.

Where acute inflammation of the kidneys does not terminate in resolution (the restoration of natural action) by the seventh or eighth day, *suppuration* may ensue, and an *abscess* be formed.

The symptoms denoting the formation of an abscess, are shiverings and fever, occurring at irregular intervals, resembling ordinary *ague* or *hectic fever*; a pulsation pain in the kidney; a feeling of heaviness or numbness in the affected part; and great irritation of the bladder and urethra. Abscess of the kidney may "point externally, and be discharged, or it may open into the abdomen, and occasion severe and fatal peritonitis." In other instances the

matter passes down the ureters into the bladder, and is discharged with the urine. In some instances an abscess will continue to discharge in this way for many months, and even years.

Treatment.—Inflammation of the kidneys, occasioned as it is in almost every instance by derangement of the general health, demands for its cure the general plan of treatment required in all acute or recent attacks of disease. It is therefore not necessary to know whether the kidneys be affected or not, in regard to the course of treatment to be pursued, as *Thomson's regular course of medicine* is adapted to the cure of all sudden attacks of inflammation and pain, in whatever part it may be located.

In recent attacks, attended by violent pain, the course of medicine should be repeated daily, and the system be kept under the influence of lobelia to cause relaxation of the capillary vessels, and remove the obstructions to the circulation of the blood. Straining efforts to vomit will not increase the pain when the system is relaxed, except momentarily.

Injections.—The kidneys may be greatly influenced by medicines administered by injection. To move the bowels the injections should be made stimulating, and contain a portion of lobelia. When the skin is hot and dry, the secretions of the mouth suspended, and the pain in the kidney severe, lobelia should be administered by injection with the view of producing continued nausea, and the patient should take freely of pennyroyal or other simple herb teas, and an occasional dose of pepper or composition.

The Vapor Bath.—From the close sympathy existing between the skin and the kidneys, the vapor bath will prove highly beneficial, and may be administered frequently. Where the patient cannot bear the fatigue of sitting up, the steam should be applied to the patient on a couch or mattress. Not only is the vapor bath useful by exciting perspiration, but it attracts the blood to the surface and thus lessens the undue determination to the diseased part. The same effect is produced by the emetic. The vapor bath is more especially indicated where the secretion of urine is nearly, or wholly suspended; for where the functions of the kidneys are suspended, those of the skin should be promoted, otherwise the urea will remain in the blood and occasion serious consequences. In some instances, however, the patient requires to be kept in a state of perfect rest, and other means should be used for promoting perspiration, such as warm fomentations to the loins, and hot bricks wrapped in damp cloths placed at the feet. Warm drinks should be taken, composition, pennyroyal or dittany tea.

The foregoing treatment to be persevered in until the disorder abates.

Astringents, or anti-canker medicine.—After the pain has subsided, and more especially if the patient's tongue be coated, a strong tea of sumac leaves, berries or bark, or of all combined, should be taken, adding a portion of cayenne; and after the tongue becomes clean, *tonics* must be given. A strong tea of poplar bark may be used.

To stimulate the kidneys to action, after the inflammation has abated, balsam fir, balsam copaiva, spirits of turpentine, or oil of juniper may be employed.

The Symptoms of Calculi, or Gravel in the Kidneys, independently of inflammation, are—excruciating pain in the region of the kidneys down to the bladder; constant sickness at the stomach, with frequent retching and vomiting; pain in the inside of the thigh; retraction and pain in the testes, and strangury.

The gravel may pass off and give perfect relief, or the paroxysms may continue, and inflammation ensue.

I visited a patient who had symptoms of gravel in the kidneys, under the care of Dr. Fonerden. The patient had taken two or three courses of medicine, and at the time I saw him, the system was very much relaxed under the influence of lobelia, and he had what are termed the alarming symptoms; and the family of the patient being unacquainted with the effects of the medicine, were much alarmed. During this relaxation, the patient, in voiding urine, passed a calculous or gravel stone, about three-quarters of an inch in length, as thick as a common goose-quill, and was immediately relieved.

Gravel in the kidneys arises from a disordered condition of the digestive organs, and is generally associated with full living, particularly in persons predisposed to gout.

When the calculi are first formed in the kidneys, they are generally of acid deposits. The urine will be high-colored and will change litmus paper to red, and deposits a sediment of red, yellow, or pink color on standing. This acid character of the urine frequently attends childhood and persons about the age of forty.

As the constitutional energies become more enfeebled, the character of the gravel is apt to change from that of an acid to an alkaline deposit; the urine becomes pale, and deposits a white sediment or crust on standing.

Treatment of Gravel in the Kidneys.—To relieve the pain, and facilitate the expulsion of the gravel, and at the same time to lessen the tendency to severe inflammation, a regular course of medicine will prove most effectual.

Beside the course of medicine, injections of the lobelia powder should be given occasionally with a view to relax the system, and lessen the determination of blood to the kidneys. A teaspoonful or two of the third preparation of lobelia, in a teacup half full of bayberry tea, should also be given every hour or two, when the pain is severe, and cloths wrung out of hot water applied to the loins. Whether the disease be gravel or inflammation in the kidneys, lumbago, gout, or rheumatism, the treatment here recommended will be proper in each case.

Alkalies should be used in combination with the other medicines, when the urine is high-colored,—sal-æratum or the bi-carbonate of soda; the former is to be preferred. Alkalies may be occasionally used, as long as the urine indicates the existence of acid. The sal-æratum or soda may be added to sumac or poplar bark tea.

Acids.—When the urine is pale, and deposits a white crust or sediment, acids should be used, as vinegar, or the pepper sauce, especially at meals. Lemon-juice may be used in drinks, or a beverage may be made of other kinds of acid fruit.

Predisposition to the formation of gravel is to be overcome by restoring the general health by the use of pure stimulants, “anti-cancer medicine” and tonics, besides the use of alkalies or acids, as the case may require. An occasional course of medicine will be very useful to restore the general health.

Confirmed or Chronic disease of the Kidneys.—The kidneys may be diseased in various ways. Acute inflammation may terminate in a sub-acute or chronic inflammation; and again the function, and even the structure of the kidneys may be very much diseased without inflammation. In some instances the kidneys have been diseased to a great extent, the patient at the same time scarcely sensible of it. In cases of this kind, the complexion of the patient will present a dirty pale appearance, and there will be somnolency, or an unusual tendency to stupor.

Treatment.—In confirmed disease of the kidneys, besides general constitutional treatment, stimulating diuretics should be employed, such as vegetable balsams, spirits of turpentine, and oil of juniper.

Change of Air.—In deeply-seated complaints, benefit is derived in many cases, from a change of residence, where medicine fails of effecting any permanently good result. A few weeks’ residence at the sea shore, or in a pine country, or among mountains; at the

mineral springs, Schooley's mountain, Saratoga springs, and other like places of fashionable resort, has in many instances renovated the general health, and removed the tendency to gravel, when medical treatment had failed.

SECTION II.

INFLAMMATION OF THE BLADDER.

THIS is a disease of rare occurrence, except in a chronic form, the bladder not being liable, generally, to acute inflammation.

Causes.—Acute inflammation of the bladder is sometimes occasioned by repelled gonorrhœa. It has also been produced by the use of cantharides, (Spanish flies,) and by the excessive use of turpentine. The disease is accompanied by a disordered state of the digestive functions. Inflammation of the bladder may also be brought on by injuries inflicted by blows, retention of urine, by the use of forceps in labor, or by the injudicious introduction of the catheter. When the bladder is predisposed to disease, exposure of the feet to cold and dampness may occasion inflammation, —still the disease is of rare occurrence.

The Symptoms are,—an almost constant desire to pass urine; burning pains in the region of the bladder, which frequently shoot through the testes, and down the thighs; and extreme *tenderness* in the region of the bladder. The patient is seldom able to pass much urine, and that which is voided is of a deep red color, and frequently tinged with blood. There is much distress at the stomach, with sickness and vomiting. The bowels are costive, and if the inflammation extend to the rectum there will be generally more or less dysenteric symptoms.

MORE OR LESS REACTION attends acute inflammation of the bladder. The skin is dry and hot, the pulse quick, the tongue coated and dry, with excessive thirst; the patient is extremely restless, and the countenance is expressive of great anxiety. When the neck of the bladder is inflamed, there will be retention of urine, and any attempts to introduce the catheter or bougie, cause extreme suffering.

Terminations.—Inflammation of the bladder may terminate either in resolution, suppuration, gangrene, or a thickening of the coats of the bladder.

Favorable Signs.—When the inflammation is about to terminate in *resolution*, which signifies a restoration of the parts to their natural condition, there will be general perspiration, with a uniformly warm skin; subsidence of the pain; the parts less tender to pressure; and a free discharge of urine, with but little pain.

Suppuration.—Inflammation of the bladder very rarely terminates by suppuration. When this does occur, the pain and fever are lessened; the patient experiences chills or rigors, and a white matter is discharged with the urine.

Gangrene occurs much more frequently than suppuration. When gangrene is about to take place, the pain and fever suddenly cease; there is great prostration of strength; "cold extremities; profuse and clammy perspiration;" pulse weak and frequent; hic-cough; confusion of mind; and a death-like expression of countenance.

Sudden and severe attacks of acute inflammation of the bladder usually run their course to a favorable or to a fatal termination, by the seventh or ninth day. In some instances the disease becomes seated, or as it is expressed in medical language, the inflammation assumes the *chronic* form.

Treatment.—Severe attacks of inflammation of the bladder, require *ENERGETIC* treatment in the early period, and a persevering course to be continued until the disease abate, or the case prove hopeless of cure. As in all severe attacks of disease, *REPEATED courses of medicine* must be chiefly relied upon, or the system kept under the influence of lobelia, which will aid in equalizing the nervous influence, and will promote perspiration.

Injections to the bowels must be used freely in order not only to remove their contents, but also to influence the action of the bladder. The lobelia powder, administered by injection, and retained, will tend to relax the neck of the bladder, and favor the escape of urine; and besides this, it fulfils other important indications, equalizing nervous influence, and promoting the various secretions. Occasionally lobelia administered in this way will produce sickness and vomiting, and greatly relieve the pain in the bladder.

The Vapor Bath is useful in inflammation of any internal organ or tissue. It attracts the blood to the surface, and powerfully assists to equalize its circulation; it relieves pain; aids the efforts of nature to overcome obstructions; and renders the system more susceptible to the impressions of medicine. The bath is to be repeated as the circumstances of the case may require; and if the

patient find relief by the bath, it may be administered very frequently. If, however, the patient be more easy when kept quietly in bed, with warm poultices applied to the parts, the bath may be dispensed with for the time. Most physicians of the old school recommend the vapor bath in this disease.

Poultices composed of Indian mush and flaxseed, stewed an hour or more, then adding ginger and green lobelia, or composition powder, must be constantly applied to the abdomen. A poultice prepared by stewing wormwood and tansy in vinegar, and thickened with Indian meal or slippery elm, may be used.

Diet.—During the active stage of the disease, the stomach will not digest any food except it be of the most bland and mild character,—elm gruel, flaxseed tea, adding a small portion of loaf sugar,—barley water, and crust coffee.

If the tongue be thickly coated, the patient should take occasionally a strong decoction made of sumac leaves and berries, adding a portion of cayenne, or of the third preparation of lobelia. This preparation is also well adapted to those cases where suppuration occurs in the bladder, or the inflammation assumes the chronic form.

Chronic Inflammation of the Mucous Membrane of the Bladder is a common form of disease.

Symptoms. — “Slight lancinating pains, attended with a sense of burning in the region of the bladder, and a feeling of weight and tenderness in the perinæum; frequent and harassing desire to pass urine, with occasional spasmodic action of the bladder and urethra. The urine is loaded more or less with a tenacious mucus. Slow fever generally attends, accompanied with thirst; general debility, particularly about the back and loins; and in protracted cases, much emaciation and exhaustion supervene. There is, generally, considerable derangement of the digestive functions; loss of appetite; sometimes nausea and vomiting; costiveness; tongue covered with a white or brown fur, and the skin harsh and dry.

Chronic inflammation of the bladder is often associated with gout, and scrofula. It prevails most in the aged and infirm, and more especially in the *intemperate*.

Treatment.—Chronic inflammation of the bladder is to be cured by a course of treatment best adapted to restore the general health, together with stimulating injections to the bowels, composed of a strong decoction of sumac leaves or berries, adding a portion of cayenne and lobelia; and a free use of an infusion or tea, of either

pipsissewa, sumac bark, leaves, or berries, uva ursi or bear-berry, or buchu. In disease of the urinary organs, honey should be used in the place of sugar to sweeten the teas with, unless the former is found to disagree with the stomach. An infusion of peach-tree leaves is highly spoken of by some practitioners. Balsam copaiva has been used with much benefit in this disease. Equal parts of balsam fur and tincture of myrrh, shaken together in a phial may be employed with benefit in seated disease of the kidneys or bladder.

An occasional Course of Medicine, the patient being kept in a perspiration for several hours after, will in general prove the most effectual method for the cure of chronic as well as acute inflammation of the bladder.

When the patient is infirm and far advanced in life, it will generally be useless to attempt to effect a cure, more especially if the disease be of long standing. The treatment in such cases should be of a palliative character.

The same symptoms that accompany chronic inflammation of the bladder attend also disease of the prostate gland, stone in the bladder, stricture of the urethra, and ulceration of the neck of the bladder. The constitutional treatment, however, will require to be the same in each case, under similar conditions of the general health. Thus if the stomach be disordered, an emetic will be proper whether the patient be affected with stone, or with simple inflammation of the bladder. If there be retention of urine from spasm of the neck of the bladder, or from stricture of the urethra, the vapor or warm bath, and injections to the bowels, to relax the parts, will be equally applicable in either case.

A German applied to me, affected with retention of urine; the introduction of a catheter twice a day had been required for the three preceding weeks. A full course of medicine was given, and he did not need the use of the catheter after. Even where retention of urine is occasioned by stone in the bladder, a full course of medicine may overcome the difficulty in many instances, although permanent relief is not reasonably to be expected by it. Where there is a stone in the bladder, it can be removed only by an operation.

In all cases of disease of the urinary organs, especial care must be taken to protect the feet from wet or dampness.

SECTION III.

DIABETES—EXCESSIVE FLOW OF URINE.

The more prominent Symptoms of this form of disease, are—a profuse discharge of urine; excessive thirst; voracious appetite; clean tongue; dry skin; and wasting of the flesh.

Character of the Urine.—Various derangements in the system may exist, accompanied by an increased flow of urine, but essentially different from diabetes. Diabetic urine contains sugar, giving it a sweet taste and smell; “and if dropped and partly dried upon linen or paper, it is glutinous, and adheres to the fingers.” The amount of urine discharged varies in different cases, but it is always very great; and in some instances, seven or eight quarts have been discharged in the course of twenty-four hours, and this continued for several weeks in succession.

Causes.—A depraved state of the digestive functions, and an exhausted state of the vital powers, are the essential causes of this complaint.

The disease prevails commonly in old age, and in constitutions broken down by intemperance or debauchery. It sometimes prevails in children after protracted cholera infantum.

The disease difficult of cure.—Occurring as a consequence of a worn-out or broken-down state of the system, genuine diabetes is very rarely cured. Recoveries from it, however, do happen under a judicious and persevering course of treatment.

Where the disease is not overcome, the strength and flesh continue to waste, hectic fever occurs, and frequently consumption of the lungs, dropsy, or apoplexy supervenes.

Instances have occurred in which several members of the same family died of diabetes, thus showing, as it would seem, an hereditary tendency to the disease.

The disease, in some instances, terminates its course in a few weeks, whilst in others it will continue for many months, or even years.

Treatment.—The important indications are to restore the digestive and nutritive functions. To accomplish this, the chief dependence must be upon courses of medicine in the *early* stage of the disease. There are no means so effectual in revolutionizing the system, and in restoring the important vital functions, from a dis-

eased to a more healthy condition, as the regular *courses of medicine*. Yet in diabetes, unless administered in the very onset of the disease, and under favorable circumstances in relation to the constitutional vigor of the system, even these will be found unavailing. If the constitution be broken down, or the patient advanced in life, it would not be advisable to subject him to any unpleasant operation by medical treatment, for under these circumstances there cannot be a reasonable hope entertained of effecting a cure. It must be borne in mind, however, that the system is liable to disorders attended with a profuse discharge of urine, differing *essentially* from diabetes. True diabetes is comparatively a rare complaint; whereas an excessive flow of urine is of frequent occurrence.

Repeating the Course of Medicine.—In the early stage of the disease the course of medicine may be frequently repeated, provided the patient experience benefit by the operation. When the condition of the stomach does not require the emetic, the bath may be applied daily, with a view to increase the action of the skin, and cause a determination to the surface. The vapor bath may also have an influence in changing in some degree, at least for a time, the thickened state of the blood, which in diabetes is observed to be thick like molasses. The caloric and electricity imparted by the vapor bath, exert a most decided influence in vitalizing the blood, by facilitating its circulation through the lungs, and by restoring its natural temperature. The patient should be showered with cold water at the close of the steaming, unless it be found to occasion chilliness afterwards. A sudden shock to the system in this way is always beneficial, provided the patient has heat enough to react against the cold. When the patient is too feeble to bear sitting up, the vapor bath may be applied in bed, and in this way a moderate perspiration continued by it for an hour or two. When the skin is very dry and harsh, it may be difficult to excite perspiration, and the patient will consequently be more or less oppressed with heat, and require frequent sponging over the face and body with tepid water, or vinegar and water, until perspiration be brought on. Capsicum tea or other stimulants should be given, together with nauseating doses of the tincture of lobelia.

The sumac leaves and berries made into a strong decoction, adding a portion of cayenne, should be occasionally given; and during the first period of the disease, frequent doses of the tincture of lobelia, or the compound lobelia pills, should be administered.

Tonics will be proper, more especially when the symptoms assume a more favorable aspect. Quinine, or any of the vegetable bitters, may be used; occasionally changing them

The No. 3 pills may be used as a substitute for the sumac tea, if the patient prefer this convenient form.

Stimulating liniments, pepper sauce, or No. 6, should be applied to the surface of the body and limbs, after a vapor bath, and friction to the skin daily persevered in.

Diet.—The food must consist of the most nourishing kind that the stomach will bear. Eggs, beef, mutton, milk, &c., answer well in many cases. Meat, in the early period of the disease, however, and more especially if there be fever, may be improper.

Vegetables, in most instances, disagree with the stomach, and in some cases, even a small piece of bread will do injury. It is important in diabetes that all kinds of food that furnish sugar should be avoided. Hence almost every vegetable substance is inadmissible. The gluten of wheat may be used, as this cannot become converted into sugar in the stomach.

Animal Food is recommended in diabetes. In some instances, however, it will not suit the stomach, when custards, eggs, milk-porridge, &c., may be substituted.

From the feeble state of the digestive powers, and the voracity of the appetite, there is an extreme liability to eat more than is proper.

The clothing should be very warm, and especial attention is necessary to keep the feet dry and warm.

Exercise in the open air is beneficial where the patient is able to get out, either to walk or to ride.

Diabetes, however, is very seldom cured, when it occurs in depraved or otherwise broken-down constitutions: these commonly form an insuperable barrier to the success of the practitioner, though a ray of hope may be still held out, as in the most desperate cases cures are sometimes effected.

SECTION IV.

RETENTION OF URINE.

(Inability to discharge Urine.)

THE urine may be retained in the bladder either from inflammation or constriction in the neck of the bladder; mechanical obstructions in the neck of the bladder or urethra: or from a loss of the power to contract the bladder, and expel its contents.

1st. *Inflammation in the Neck of the Bladder* is one of the most common causes of obstruction to the passage of urine. The inflammation may arise from a diversity of causes, such as the application of fly blisters to any part of the body or limbs; the internal use of turpentine or cantharides; disease of the prostate gland, or of other parts in close sympathy with the bladder; exposure to cold and dampness; an acrid state of the urine; repelled gonorrhœa; and constitutional disorder, more especially in gouty patients.

2d. *Mechanical Obstructions.*—These are gravel in the neck of the bladder, or urethra; stricture of the urethra; enlargement of the middle lobe of the prostate gland; prolapsus uteri; and pressure of the uterus upon the neck of the bladder during pregnancy.

3d. *Paralysis, or a loss of power to contract the Bladder*, occurs from injury of the brain and spinal marrow; palsy of the lower half of the body; malignant disease, as typhus fever; blows or falls upon the back; over-distension of the bladder from retention of urine caused by mechanical or other obstructions; injuries sustained during child-birth; and from exhaustion of nervous power through bad habits or from old age.

Treatment.—Whether the retention of urine be occasioned by inflammation, or spasm in the neck of the bladder, or urethra, or from mechanical obstruction, the constitutional treatment proper in the one case, will be applicable in the others. Mechanical obstructions, however, in many instances, require other means besides constitutional treatment.

In ordinary cases, retention of urine may be relieved by evacuating the bowels by injections containing a portion of lobelia, together with the use of means for equalizing the circulation, and producing perspiration, by hot stimulating teas, and the vapor or warm bath, or a blanket wrung out of hot water, folded several times and laid over the abdomen; or by applying a bag of hops, wet with hot vinegar, to the region of the bladder.

Injections.—One of the most effectual remedies for stoppage of urine, is the use of injections of lobelia powder, in lukewarm water, and caused to be retained in the bowels. This, together with the application of warmth to the surface, as above mentioned, will seldom fail of removing the difficulty, unless the retention should arise from gravel in the urethra, or neck of the bladder, or from other mechanical obstructions. Even when there is a mechanical obstruction, the above means should be used, with a view to relax the parts, which will not only afford relief, but will render the

removal of the mechanical obstruction less difficult. Medical men resort to tobacco injections, in severe cases, for the purpose of producing relaxation. This, however, sometimes produces serious consequences, from the poison of the tobacco being absorbed into the blood. The lobelia will answer every good purpose that could be desired from the tobacco, and without any risk to the patient of bad consequences from its employment, even in large quantities: it contains no poisonous properties. In aggravated cases it may be found necessary to use powerfully stimulating injections to the bowels, with a view to prevent stagnation of the blood, in the diseased parts. For this purpose, the liquid of the third preparation of lobelia will be proper, and may be used in larger or smaller quantities, as the case requires.

The Vapor Bath fulfils several important indications in the stoppage of urine. It seldom fails of affording more or less relief from pain, and, in some instances, will be sufficient, when well applied, to remove the obstruction, more especially when it is occasioned by inflammation, or spasmodic contraction in the neck of the bladder, brought on by exposure to cold and wet.

Emetics.—In some instances retention of urine is associated with extensive derangement of the stomach, so that emetics may be found not only advantageous, but necessary; and when the obstruction is not overcome by the means above mentioned, it will be proper to give an active emetic of the third preparation of lobelia, or some like preparation, such as the brown lobelia, given in bayberry tea, adding a teaspoonful of capsicum to each dose. The vapor bath previous to the emetic will render the latter more effectual.

Retention of urine is always more or less dangerous when continued over twenty-four hours without any urine passing. It is therefore highly important to persevere in the treatment until the obstruction be partially or wholly removed. Thus in some cases it may be found necessary to keep the patient fully relaxed, for many hours together, under the influence of the lobelia injections, and also to repeat the emetics every two or three hours, together with the frequent application of the vapor or warm bath, or a constant moist heat kept around the patient. The drink should consist chiefly of elm gruel, flaxseed tea, watermelon-seed tea, barley water, &c. It sometimes happens, though very rarely, that a patient will be several days without passing water and yet experience no serious injury from over-distension of the bladder. I have a patient at this time, who has on several occasions been a week without passing water.

Introduction of the Catheter.—When the catheter can be intro-

duced, it gives instant relief, but when the urethra or neck of the bladder is highly inflamed, it will be worse than useless to attempt to pass a catheter. When the system is fully relaxed, the catheter may, in some instances, be introduced by one acquainted with the proper manner of using it. Much harm, however, often arises by repeated attempts to pass the catheter when there is much inflammation. It is in *paralysis* of the bladder that the use of the catheter sometimes becomes indispensable. But in those cases attended with a burning pain in the neck of the bladder, with tenderness to pressure, and a continued and painful desire to pass urine, the catheter cannot be introduced safely even by the most skilful surgeon, and every attempt made to introduce it, only tends to increase the difficulty. First employ means for equalizing the circulation of the blood and of the nervous fluid, and relax the system by *lo-nelia*, and when the symptoms of irritation of the neck of the bladder disappear, the catheter may be introduced if necessary.

Scabious (Erigeron Philadelphicum.)—A strong tea of this herb, drunk freely, has proved of great benefit in cases of retention of urine from irritation of the neck of the bladder. The addition of honey not only improves the taste of the tea, but it increases materially its diuretic properties.

Tapping the Bladder.—When gravel is lodged in the neck of the bladder, or in the urethra, and in cases of stricture, every effort to overcome the obstruction may sometimes prove abortive. Under these circumstances, the last and only resource is in tapping the bladder, as the only means of saving the patient's life. This operation, of course, will demand a surgeon, and one who is fully acquainted with the anatomy of the parts.

In retention of urine from falling of the womb, or from its retroversion, the introduction of a bougee may be sometimes necessary.

Treatment of Retention of Urine from Paralysis of the Bladder. The chief dependence here must be in the use of the catheter, stimulating injections to the bowels, together with the employment of such remedies as tend to give tone to the bladder, either by general constitutional treatment, when the circumstances of the case require it, and by the use of stimulating diuretics, such as the oil of juniper, balsam of fir, or Peruvian balsam.

In low forms of fever, the bladder, in some instances, loses the power to contract and expel the urine, and becomes greatly distended, which, if not relieved, may occasion serious consequences. This should be borne in mind by those who have the charge of patients very ill of typhus, or other malignant forms of fever; and when there is evidence of a great accumulation of urine, as will be manifested by a hard tumor in the right side of the belly, means

should be used for evacuating it; and when hot fomentations to the abdomen, and stimulating injections to the bowels fail of producing a discharge of urine, it should be drawn off by the introduction of a catheter.

In severe injuries of the back, paralysis of the bladder frequently occurs, and requires the repeated use of the catheter until the power of contraction is restored to the bladder.

When it depends upon the debility consequent upon old age, then fresh air, vapor baths, friction to the surface, stimulating diuretics, and if the patient can bear it, occasionally a shower bath in the morning must be employed. The urine should be drawn off before the bladder becomes greatly distended, for if this be permitted to occur, it tends still further to weaken the bladder. In some instances, to prevent distension of the bladder, the use of the catheter will be required three or four times in the course of twenty-four hours, in order to afford an opportunity to the bladder to regain power to contract and expel its contents.

Onions mashed fine, and applied to the perineum, are said to have had a good effect, in many instances, in restoring the tone of the bladder.

SECTION V.

STRANGURY.

(Difficulty and Pain in Voiding Urine.)

WHEN the urine is voided with great difficulty, and in small quantities, attended with severe burning pain, and a continued desire to urinate, it is called *strangury*. The difference, therefore, between strangury and retention of urine is, that in the former, the urine passes, though it may be by mere drops, and attended with a painful desire to void it; whereas in the latter, there is a complete obstruction to the passage of urine.

Causes.—Strangury is in almost every instance associated with constitutional disease. It is liable to occur at any period of life, sometimes attending the period of teething in children, and it is very common in old age. The application of a fly blister to any part of the body, will occasion strangury in some: and the same effects are sometimes produced by the internal use of turpentine.

Gout, gravel, and piles, are often attended with difficulty and pain in voiding urine. The intemperate use of spirituous liquors, venereal excesses; exposure to cold and dampness, or whatever

else tends to derange the general health, may occasion strangury in persons predisposed to it. "Nervous and hysterical females are liable to extremely violent pains in the neck of the bladder and urethra, and which are generally most intensely felt immediately after discharging urine." Strangury in the old and feeble, is sometimes occasioned by an enlargement of the prostate gland, but more commonly it arises from other causes, as disease of the coats of the bladder, irritating acids in the urine, and gravel.

Treatment.—Infants may be relieved of strangury by the warm hip bath, or fomentations to the belly, together with the use of injections to the bowels, composed of half a teaspoonful of the tincture of lobelia, or the same quantity of green lobelia in composition tea. If the general health be much deranged, an emetic, or full course must be given, followed by the use of flaxseed, scabious, parsley, or watermelon-seed tea, and occasionally by small doses of the tincture of lobelia.

When strangury is occasioned by a *blister*, this of course should be removed, and the patient take mucilaginous drinks, as elm, flax-seed tea, &c. If this does not remove the difficulty, recourse should be had to fomentations and injections. When it arises from the use of turpentine, the same constitutional treatment above recommended, will be proper.

Associated with gout, the chief dependence must be on constitutional treatment, with a view to correct the acrid state of the urine, and to restore the general health. As a means of affording relief during severe attacks, the warm bath, vapor bath, or hot fomentations should be used, together with injections containing a portion of lobelia. The patient may experience relief by drinking freely of scabious tea.

When it arises from gravel, constitutional treatment will be also proper, for which an occasional course of medicine will prove the most effectual. When the urine is high-colored, and deposits a reddish or yellow sediment on standing, alkalies should also be used, such as sal-æratum, bi-carbonate of soda, or a tea of hickory ashes.

Scabious tea, sweetened with honey, and drunk freely, affords almost instant relief in some cases.

Haarlæm oil is a favorite remedy with many for gravel, and difficulty of passing water. The dose for a child is from 4 to 6 drops, and for an adult, from 15 to 20 drops.

When strangury is occasioned by irritation from piles, a strong decoction, made by steeping witch hazel, or sumac leaves in boiling water, should be administered by injection, and retained in the bowels for several hours, which will lessen irritation in the piles, and in this way the occurrence of strangury may be prevented. The lobelia injections and hot fomentations may be found necessary to relieve the immediate symptoms of painful irritation.

When accompanied with hysterical symptoms, an emetic or a full course of medicine will be necessary. The same constitutional treatment that will cure hysteria, will also remove strangury. When strangury arises from prolapsus, or other displacement of the womb, the same constitutional treatment will be proper, more especially the enemata containing lobelia; the vapor bath, and hot fomentations. It sometimes happens, however, in displacement of the uterus, and more especially in its retroversion, that the introduction of a gum-elastic bougie into the bladder to draw off the urine, becomes necessary before the displacement of the uterus can be overcome.

Females affected with fluor albus, or whites, are subject to severe burning pain on voiding urine, in consequence of an extremely irritable state of the urethra. Injections of a strong decoction, prepared by steeping witch hazel or sumac leaves in boiling water, adding a small portion of capsicum, should be used two or three times a day, with a female syringe, beside resorting to the usual means for restoring the general health, by which the parts will become strengthened.

When attendant upon old age, or occurring in constitutions exhausted by debauchery and intemperance, a permanent cure of strangury is not to be anticipated: a relief of the symptoms will be all that can in general be effected by any course of treatment whatever.

Injections into the Bladder.—Warm water injected into the bladder with an ordinary syringe, will immediately relieve strangury in many cases, more especially when the urine is scanty, high-colored, and acrid.

Honey taken in teaspoonful doses, three or four times a day, has been used with signal benefit in some cases of strangury. It may be employed to sweeten medicine when it is found to agree with the stomach.

SECTION VI.

INCONTINENCE OF URINE.

(Involuntary Flow of Urine.)

Incontinence of Urine, though not in general attended with pain, is nevertheless, in many instances, a very troublesome complaint. It prevails most during childhood, and in old age.

Inability to retain the urine, with children, is commonly owing to constitutional weakness in the urinary organs. Sometimes it arises from an acrid state of the urine; and occasionally it is caused by gravel. Weakness of the urinary organs may be induced by frequently having wet and cold feet.

The aged and feeble are especially liable to incontinence of urine, from weakness or paralysis of the sphincter muscle of the bladder, which is designed to retain the urine at the command of the will. In some instances the action of this muscle is completely lost, and the urine is continually passing off by drops as fast as it enters the bladder from the kidneys. This complaint is frequently associated with palsy and gout. Involuntary discharges of urine often take place in protracted fevers, where patients are extremely low; and observation proves it to be an unfavorable symptom. In fine, the same causes that produce retention of urine in one, may occasion strangury in another, and in another an inability to retain the urine. Thus gravel, or stone in the bladder, which frequently occasions a stoppage of urine, will in other instances cause the urine to pass off involuntarily.

Treatment. — Incontinence of urine in children, is in most instances removed by the natural increase of constitutional strength. When the general health is impaired, constitutional treatment will be required, such as, an emetic to cleanse the stomach, and if the stools exhibit an unhealthy appearance, injections may be used to advantage, not only in correcting the bowels, but also to add strength to the urinary organs. The injections are to be prepared in the ordinary form. A strong tea made of the sumac bark, leaves or berries, or of the aspen poplar bark, will be beneficial in strengthening the urinary organs, either in the young or old. For an adult, a teacup, two-thirds full, and for a child, a wineglassful of the tea may be taken two or three times a day. If the urine be high-colored, and deposite a sediment on standing, alkalies must also be used, such as bi-carbonate of soda, sal-eratus, a tea of hickory ashes, or lime-water.

A cold shower bath in the morning; friction to the surface with a salted towel, nourishing diet, exercise in the open air, and whatever else tends to invigorate the system, will also strengthen the urinary organs.

Children often evacuate the urine involuntarily at night during sleep; and in some instances this habit continues even to adult age. Involuntary discharge of urine frequently takes place under the influence of a dream. "Incontinence of urine," says Mr. Charles Bell, "never takes place but when the boy is asleep upon his back; and the cure is a very simple one. He is to accustom himself to sleep upon his face or side; the urine is not passed, nor is he excited to dream of making urine, while he keeps this pos-

ture. The circumstance is unaccountable, until we reflect upon this master-spring of the neck of the bladder—the *sensible spot, a little behind and below the orifice of the bladder*. When a person lies upon his belly, the urine gravitates towards the fundus; but when he lies upon his back, it presses upon this sensible spot, and distends that part of the bladder which is towards the rectum.”

Long continued inability to retain the urine, more especially when associated with old age, is in general an incurable complaint. Benefit may be obtained, however, by the use of such remedies as a strong tea of sumac, aspen poplar, vegetable balsams, spirits of turpentine, and gum myrrh. Equal parts of tincture of myrrh and balsam fir, shaken together, will be found serviceable in many cases.

SECTION VII.

SUPPRESSION OF URINE.

(*The Kidneys ceasing to form Urine.*)

Suppression is to be distinguished from *retention* of urine. In the former, the kidneys cease to select the urine from the blood, consequently none is formed; whereas in *retention*, the *urine* is formed, but the passage by which it escapes from the bladder is obstructed. The chief danger attending retention of urine is over-distension of the bladder; but when the urine is not formed in consequence of a loss of action in the kidneys, the suppression is of serious consequence if long continued.

The loss of action in the kidneys is a consequence of great derangement in the system, and seldom occurs except in the last stage of disease, when the living powers are fast sinking, and the patient beyond the reach of recovery. Suppression of urine, however, does occasionally take place under circumstances different from those above mentioned, that is: it sometimes occurs when the living powers are not so far exhausted but that the patient may recover by energetic treatment.

Symptoms.—The suppression may be either partial or complete, and the only certain method of determining the suppression is by introducing a catheter into the bladder.

Suppression of urine cannot continue long without producing serious consequences. “There is fever, thirst, a taste similar to that of urine in the mouth, and a smell of urine in the perspiration; to these, nausea, vomiting, sometimes of fluids, having a urinous

odor, and hiccough succeed ; and to these, oppressed breathing, delirium, and eventually stupor and convulsions."

Treatment.—Suppression of urine, except when it occurs in the latter stages of disease, calls for prompt and energetic treatment, with a view to excite action in the kidneys. When the suppression takes place with a group of other symptoms, denoting a fatal termination, as in the last stage of a disease, all remedial measures must of necessity prove useless. When there is a probability of a recovery being effected, stimulating injections should be administered to the bowels, and a tablespoonful of the third preparation of lobelia may be used in each injection, and repeated frequently.

Steaming is of the greatest importance, not only to throw the *urea* out of the blood by perspiration, but to sustain and augment the vitality of the blood by the heat and electricity imparted to it, and by quickening its circulation through the lungs.

Emetics will also aid in restoring action in the kidneys.

Hot stimulating poultices must be applied to the urinary region, or small of the back, and kept warm.

The patient should be kept in a perspiration,—this is very important.

Case.—A gentleman near Germantown, had been confined to his room nearly the whole of the winter, and having, as he supposed, suppression of urine, desired me to attend him. No urine had passed during seventy-four hours, and as there was no distension of the bladder, there was strong evidence of *suppression*. A thorough course of medicine was administered, and stimulating injections repeated frequently, together with the free use of stimulating medicine. Not long after this treatment had been commenced, the kidneys resumed their functions, and the patient recovered rapidly ; the means used for restoring action in the kidneys, had the effect also of removing the original disease, which had occasioned the suppression.

CHAPTER VIII.

DISEASES OF THE LIVER.

SECTION I.

ACUTE INFLAMMATION OF THE LIVER.

Acute inflammation of the liver does not occur frequently in temperate climates; whereas chronic functional derangements of this organ, unattended with any symptoms of acute inflammation, are very common.

Causes.—Inflammation of the liver may be induced by blows or other injuries in the region of the liver; a sudden check to perspiration after violent fatiguing exercise; by gall stones, which are hardened secretions formed in the gall bladder, and found in the ducts; or it may be occasioned by the same influence that produces intermittent, or remittent fever.

The symptoms attending acute inflammation of the liver, are exceedingly diversified. Generally there is deep-seated pain in the right side about the false ribs; which is considerably aggravated by pressure. There is usually pain in the shoulder, and in some instances the pain is confined exclusively to that part. A deranged condition of the stomach and bowels always accompanies this disease, attended with more or less nausea and vomiting. The stools are generally light-colored; and the urine yellow, or red.

Professor Mitchell mentions the case of a boy whose liver was wounded by the discharge of a gun, in which no pain was experienced except in the shoulder. In another instance, a negro who was run through the liver with a sword-cane, complained of pain in the *shoulder*, and insisted strongly that the *wound* was there. Pain in the *shoulder* is not, however, a constant attendant on inflammation of the liver. Neither does costiveness always prevail, for sometimes there are acrid secretions from the *liver*, which cause purging.

Many of the symptoms which attend acute inflammation of the liver, such as pain in the chest, short and hurried breathing, difficulty of lying down, fever, and a dry hard cough, so closely resemble the more prominent symptoms of inflammation of the lungs, that either of these complaints might very readily be mistaken for

the other. A mistake, however, that would lead to no bad consequences, as the same general plan of treatment is required in each form of the disease, and in every other case of acute inflammation of internal parts, regardless of the name or precise location of the disease.

As the disease continues, the nervous system becomes affected; there is great anxiety, and sometimes delirium.

The *duration* of acute inflammation of the liver varies from four or five to ten or twelve days, when it terminates either in a restoration of the natural action of the organ, or in the formation of an abscess; or it may become a chronic disease.

There is always more or less danger attending acute inflammation of the liver. Much, however, will depend upon the promptness of treatment in the early stages of the disease.

Inflammation of the liver is frequently complicated with pleurisy, and inflammation of the lungs.

Treatment.—Acute inflammation of the liver requires the same general course of treatment as pleurisy, or inflammation of the lungs. A full course of medicine must be given early in the disease, and repeated daily, if the symptoms be violent, until a crisis be effected. If the patient cannot sit up, a moist heat may be applied to the feet and around the body, in place of the vapor bath. The system should be relaxed by broken doses of lobelia. Injections are especially indicated, not only to relieve the bowels, but to equalize the circulation, and also to effect a relaxation of the system by lobelia administered in this way. In all sudden attacks of pain or inflammation, or fever, besides the regular course of medicine, the system must be continued under the influence of lobelia, sufficient to occasion relaxation of the capillary vessels, and thereby remove the obstructions to the general circulation, and obviate undue determination of blood to the part diseased.

Retching and vomiting, although exceedingly harassing to the patient, are nevertheless often beneficial in assisting the liver to relieve itself of stagnant blood, and vitiated bile.

Stimulants must be given with a view to equalize the circulation; to maintain a determination to the surface; and to excite the secretions of the mucous membrane of the stomach and bowels. More especially should pure stimulants be *freely* used in the advanced stage of the disease. Capsicum tea is the best stimulant; and if the skin be dry, portions of lobelia powder or tincture must be added.

Local Applications.—A warm poultice must be applied to the affected side, and a hot brick, or a bottle of hot water, placed so

as to keep the poultice warm; or cloths wrung out of hot water, and applied as hot as can be borne by the patient.

The Diet must be light, consisting chiefly of gruel, barley-water, crust coffee, &c. In the more advanced period of the disease, when the strength is greatly exhausted, it will be necessary to give wine-whey and essence of beef.

Bitters may be used to restore digestion, after the tongue begins to clean, or the disease has formed a crisis.

The symptoms denoting the formation of an Abscess in the Liver are—irregular chills or rigors; pain and sense of fulness in the region of the liver; and night sweats. When this group of symptoms is manifested after acute inflammation of the liver, of several days' continuance, it furnishes strong evidence that suppuration has taken place. The abscess may point to the *surface* and be discharged *externally*; or the pus may be discharged through the gall ducts into the *bowels*; or it may escape into the *cavity of the abdomen*, and occasion *fatal peritonitis*. Abscess of the liver has in some instances penetrated the *lungs*, and its contents been discharged by *coughing*.

An abscess having formed, the indications for the treatment are,—to support the strength of the patient by the use of pure stimulants and bitters, and by a nourishing diet. The articles of diet, however, must be such as are suited to the condition of the enfeebled digestive powers.

CHRONIC AFFECTIONS OF THE LIVER.

Although acute inflammation of the liver is of rare occurrence in our climate, yet no organ in the body, with the exception of the stomach, is more liable to chronic derangement of its function, than the liver. Intemperance in the use of alcoholic liquor is a frequent cause of chronic disease of the liver. It may, however, proceed from a disordered stomach. A deranged liver is almost always a torpid one. Dyspepsia is mostly attended with a deficiency in the secretions of bile, from a want of proper circulation of blood through the liver. Costiveness is in general the consequence of a want of bile, and the use of purgative medicines with a view to overcome a costive habit is very injurious, as they aggravate and weaken the bowels, without restoring the action of the liver. The intemperate use of alcoholic drinks is very apt to produce, finally, torpor of the liver, and in some instances this organ becomes greatly enlarged, as a consequence of intemperate habits. Professor Chapman thinks, that the majority of the cases of liver complaint, so prevalent in the southern states, are occasioned by the

large doses of mercurial preparations, so much employed in those parts.

A disordered stomach lessens the nervous power which governs the function of the liver, and consequently the circulation of the blood through the liver is enfeebled, and the secretion of bile diminished; and if the cause that occasions the disorder in the liver be continued, as in habitual drunkenness, the liver may lose its power to perform its functions. The continued use of active cathartics, more especially of mercurial preparations, is pernicious not only to the stomach and bowels, but also to the liver. Close and intense study, confinement in illy-ventilated apartments, and exposure to cold and dampness, depressing passions, and excessive losses of blood, frequently occasion torpor of the liver. Derangement of the functions of the liver, however, are in most instances but one link in a chain of disordered functions, from loss of vital power in the system.

Torpor of the *liver* is associated with acute disease, such as dysentery, cholera morbus, pleurisy, erysipelas, and autumnal fevers. When patients are bled largely during an acute disease, the excessive loss of blood may occasion torpor of the liver, continuing for years, accompanied with dyspeptic symptoms.

If the debilitating influence occasioning *torpor* of the *liver* be continued, the circulation will become more obstructed and feeble, and finally the organ may lose its power to secrete bile, occasioning inveterate dyspepsia, dropsy of the abdomen, or jaundice. Hence disease of the liver, which at first is but a *link* in a *chain* of disordered functions, the seat of which is in the stomach, may finally be the *cause* of a *new train* of disordered action throughout the system, requiring a long course of treatment to effect a cure.

Symptoms attending chronic affections of the liver are extremely diversified. The most obvious symptom indicating obstruction to the flow of bile, is a yellowness of the skin and whites of the eyes. Sometimes there may be a low grade of inflammation in the liver, occasioning shooting pain in the side and shoulder, accompanied with a dry, harsh, contracted state of the skin; loss of appetite, bad taste in the mouth, extreme restlessness at night; and dizziness of the head. In such cases digestion is always impaired, there are flatulency and distress after meals, attended with heartburn, and constipation of the bowels. In some cases the patient will be affected with occasional diarrhœa, the stools presenting various appearances, sometimes clay-colored; in other instances bilious; or they may be slimy and hard, or have a green appearance. Sometimes the liver becomes enormously distended and hard, filling at least half the cavity of the abdomen, and its margins are distinctly felt by pressing the hand on the abdomen.

Treatment.—Depending for the most part upon a disordered stomach, the indications for the cure of disease of the liver are, to correct the disordered condition of the stomach and bowels, and to warm and invigorate the system by the use of stimulants and tonics, and by a well-regulated diet.

Torpor of the liver may be more *readily* overcome, in most instances, by a course of medicine, than by any other means. If the disease become seated, it will be necessary in most cases to repeat the *courses of medicine*, and during the intervals between them, to use bitters freely; and if the bowels be costive, take three or four of the compound lobelia pills after each meal and also at bedtime.

Acids.—Especial relief may sometimes be obtained by the use of *pepper sauce*, taken in moderate doses three or four times a day, and more especially at meals. This preparation is most likely to prove serviceable when there is a desire felt for something of the kind.

The Vapor Bath by its influence in restoring the functions of the skin, may be employed with benefit in diseases of the liver or of any other internal organ. *Thomsonians*, therefore, in applying remedies, do not require a particular investigation to ascertain the precise location of the disease, nor to know what name nosologists would very learnedly apply to it; for the same general treatment will be applicable to every other form of disease. Thus the vapor bath which proves beneficial in curing disease of the liver, will be equally applicable to disease of the kidneys, bladder, lungs, pleura, bowels and head, and in fine it may be administered in any disease with safety, though it may not always prove especially beneficial.

Emetics.—The most efficient means to remove obstructions of the liver, in general, are the application of the vapor bath, followed by a prompt emetic. Cases of very stubborn character have been cured by continued vomiting from sea-sickness, the patient being in a relaxed condition, similar to that produced by the influence of lobelia upon the system. In cases of long standing, however, and when the disease is associated with old age or an exhausted constitution, the frequent repetition of a course of medicine might be harassing to the patient, and fail to effect a cure. A change of organization, in the liver having taken place, as it sometimes happens when the disease has been long-continued, a palliation of the symptoms is all that can be reasonably looked for from medicine,—as a radical cure, under such circumstances, is rarely to be accomplished.

The function of the liver may be influenced to a greater or less

degree by means of medicine administered to the bowels. Hence injections will be useful, not only to relieve the bowels, but when properly prepared, to exert a beneficial influence on the liver. Lobelia administered in this way, and retained, diffuses its influence throughout the whole system, and at the same time that it occasions relaxation of the organs, it tends to restore their proper functions. Again, injections are useful to cleanse the bowels of morbid secretions, which they are more or less coated with, in nearly, if not in all cases of seated disease. The morbid secretions alluded to, usually pass off in the form of flakes, and sometimes in pieces, from a few inches to a foot, or even a yard in length, having somewhat the appearance of an intestine. Patients not aware of the frequency of its occurrence, sometimes become alarmed at the passage of this kind of substance from the bowels. There are, however, few if any recoveries from seated disease, in which there has not been more or less of this morbid secretion passed from the bowels.

Foot Bath.—The following mode of preparing and using a foot bath, is recommended by many practitioners who have tried it, namely: "Into a glass vessel, capable of holding a pint or more of fluid, put eight ounces of water, and then pour in four ounces of nitric, and the same quantity of muriatic acid. One ounce of this mixture to a gallon of water, will form a bath of medium strength. The feet and legs of the patient are to be immersed in this bath at the temperature of about 96°, and kept there twenty minutes or half an hour, just before going to bed. This should be done every night, and the same bath will remain good for five or six nights." The utility of the warm foot bath cannot be doubted, and as there can no harm arise from the use of the acids, they should be added as above directed.

If the tongue be coated with fur, a strong decoction of the bayberry or sumac, with the addition of a teaspoonful of composition powder, or half the quantity of capsicum, may be taken once or twice a day.

The use of bitters is called for in chronic affections of the liver. If there be any cases in which the bitter root (*apocynum androsæmifolium*) may be used with advantage, it is in chronic affections of the liver. It must be given in pills, or the powder taken in lukewarm water, but not in sufficient quantity to produce purging.

In every form of seated disease, where medicine is required for many weeks or months in succession, an occasional change of remedies will be proper.

Dandelion.—The dandelion, in the form of an extract or decoction, has been used with especial advantage in chronic diseases of the liver.

Change of habits.—Torpor of the liver, and indigestion are sometimes the consequence of retirement from active business. In such cases the patients should, if practicable, resume their former active habits.

A *sea voyage* has often cured diseases of the liver of long standing. A few weeks' residence near the *sea shore*, by effecting a favourable change in the constitution of the blood, will often remove chronic disease of the liver.

SECTION II.

JAUNDICE.

A DISEASED condition of the system, attended with either *suppression* or *retention* of bile, occasioning a yellow tinge in the skin and whites of the eyes, is termed *jaundice*.

Jaundice may arise from various morbid conditions of the liver, some of which are curable, and others again incurable. When jaundice depends upon mere functional derangement of the liver, from a deficient supply of nervous influence; or when it arises from mechanical obstruction in the ducts that convey the bile from the liver to the intestines, a cure may generally be effected: but on the other hand when the structure of the liver becomes changed, as it sometimes does, especially from long-continued intemperance, an alleviation of the symptoms is all that can be accomplished by medical treatment.

"When people have what is called jaundice," says Dr. Thomson, "it is the prevailing opinion that they have too much bile, and it is said they are bilious. This is a mistaken notion, for there is no such thing as there being too much gall: it would be more correct to say there was not enough. The difficulty is caused by the stomach being cold and foul, so that the food is not properly digested; and the bile not being appropriated to its natural use, is diffused through the pores of the skin, which becomes of a yellow color."

Symptoms.—The most prominent symptoms in jaundice, are, yellowness of the skin and whites of the eyes, and loss of appetite; bad taste in the mouth, costive bowels; the stools are of a lighter color than natural, though sometimes bilious, and occasionally there is diarrhœa. The urine is the color of saffron, and sometimes very dark, and communicates a bright yellow tinge to white linen. The mental powers are enfeebled, and the skin is dry. The pulse

is frequently unaffected: it is sometimes slower, and at other times quicker than natural. Yellowness of vision is frequently one of the first symptoms indicating the approach of jaundice, which may arise from the humors of the eye becoming tinted with the yellow coloring matter of the bile, and transmitting yellow rays of light. The patient is generally either restless and unable to sleep, or continues in a state of somnolency or partial stupor.

The color, in jaundice, may vary from a light yellow to that of a deep green, or almost black. The jaundiced appearance of the skin is sometimes confined to the face and neck, in other instances it is diffused over the whole surface of the body and limbs.

The approach of Jaundice.—Generally the disease comes on in a gradual manner, associated with symptoms of indigestion; “a general feeling of languor; disinclination to bodily and mental exertion; an irritable and dejected temper; weakness of appetite; constipation; acid eructations; slow and painful digestion; flatulent pains in the bowels; a slight feeling of fulness and tension in the epigastrium, (pit of the stomach); restlessness at night; turbid urine, usually depositing a copious pitchy sediment; slow and languid pulse; more or less nausea; and frequent transient chills, alternating with flushes of heat.” In some instances there is an intolerable itching over the surface in the commencement of jaundice.

Sometimes the disease comes on suddenly, with severe pain and distress at the pit of the stomach, attended with frequent vomiting, and an entire disgust for food.

Jaundice has occasionally been brought on by moral causes: severe fright, intense study, grief, fanaticism on the subject of religion, &c.

The duration of an attack of jaundice is extremely varied. In some instances it passes away in the course of a few days, whilst in others it will continue for months, and occasionally the disease assumes the chronic form, in consequence of permanent derangement of the digestive functions, and continues for years accompanied with symptoms of dyspepsia.

Treatment.—Jaundice being merely a symptom, arising from previous disease, it is to be overcome or removed by correcting the derangement of the general health.

If the symptoms be violent, the treatment must be thorough and early applied. A course of medicine should be given, and repeated every day or every other day, until the complaint assume a more favorable aspect. Besides a course of medicine, the compound lobelia pills may be given, together with an occasional dose of cap

sicum in composition. Although courses of medicine constitute the most effectual means for the cure of jaundice in general, there are cases of it, and more especially those of long standing, where the liver has become changed in its structure, the complexion of a greenish or very dark yellow hue, the patient far advanced in years, or the constitution broken down by long-continued intemperance or by the free use of poisonous drugs, in which courses of medicine, especially the emetics, do but little good, except when the patient is distressed with undigested food in the stomach, severe colic, &c.

Tonics. — The most powerful kinds of bitters are required in jaundice. In sudden and violent attacks, bitters may be employed after the symptoms abate, but when the disease comes on in a gradual manner, they may be used from the first, in combination with stimulants. A tablespoonful of the expressed juice of green wormwood, added to an equal quantity of whiskey, taken three times a day before meals, has been used by some with especial benefit.

Dr. Thomson, in treating of jaundice, says: "I have attended many cases of this kind, and never had any difficulty in effecting a cure. My method is to give No. 2, or the composition powders, to raise the internal heat, and No. 1 to cleanse the stomach, and promote perspiration; then give the bitters, No. 4, to regulate the bile and restore the digestive powers. If the complaint has been of long standing, and the system is much disordered, they must be carried through a regular course of medicine; and repeat it as occasion may require, and at the same time give the bitters two or three times a day, until the appetite is good and digestion restored."

Sometimes jaundice is occasioned by gall stones being lodged in the gall ducts, attended with violent paroxysms of pain in the right side, near the pit of the stomach, and continued straining efforts to vomit, the stomach at the same time forcibly rejecting any thing that is swallowed. In a case of this kind, the vapor bath must be applied; and the system placed in a state of relaxation by lobelia administered by injections; besides giving full and frequent doses of the third preparation of lobelia, until the symptoms are relieved. Gall-stones have been removed in many instances, by the operation of emetics.

Straining efforts to vomit, when the system is warm after a vapor bath, and by having hot bricks wrapped in damp cloths placed around the patient, and the muscular tissues relaxed by the influence of lobelia, will prove the surest means of removing obstructions, either in the gall ducts, or in the liver.

A warm stimulating poultice, applied to the pit of the stomach may relieve pain in the liver.

The warm foot-bath, prepared in the manner described in the

treatment for chronic disease of the liver, has been used with marked advantage in jaundice.

Haarlæm oil has been used with good success in some cases of jaundice.

Bitters, such as barberry, golden seal, and Thomson's No. 4, put into hard cider, will be found good for the patient in many instances, more especially when there is a desire for cider.

Celandine, agrimony, blood-root, hempseed boiled in milk, besides many other articles and compounds, have been recommended as specific remedies for jaundice, not one of which, however, can be relied upon. Although patients may recover from jaundice, under the use of celandine, hempseed, or some other of the reputed specifics, there is no evidence that the disorder would not have been removed sooner under Thomsonian treatment. Many cases of jaundice have been cured by a persevering course of Thomsonian treatment.

Change of Air.—In jaundice a change of residence, more especially a residence near the sea, during the summer season, will frequently be attended with a decided improvement in the general health, even where medicines appear to do little or no good.

Diet.—In jaundice the digestive powers are always weak, and therefore a strict attention to diet must be observed. In the commencement of the disease, and more especially if the symptoms be violent, the diet should be confined to the lightest kinds of food. In cases of long standing, it may be more nourishing, but it must be easy of digestion. As a general rule, in jaundice, butter and all kinds of fat meats disagree with the stomach.

Jaundice occasionally accompanies mental derangement, and requires moral treatment, especially a residence in an insane asylum.

CHAPTER IX.

SECTION I.

APOPLEXY.

SYMPTOMS.—A sudden suspension of consciousness; loss of the power of voluntary motion; stupor; heavy and laborious breathing; and a slow and full pulse, are the symptoms which charac-

terize apoplexy. The symptoms attending apoplexy are necessarily modified by the degree of severity of the fit. It might be difficult, in some instances, for even experienced physicians to determine whether the disease should be called apoplexy or palsy. The name, however, is a matter of little consequence, inasmuch as it should have no influence in governing the treatment.

An attack of apoplexy occasionally comes on suddenly, without any precursory symptoms. More commonly it is preceded by giddiness, and a sense of weight and deep-seated pain in the head, ringing in the ears, and dimness of sight. • These symptoms may last a few hours, or they may continue for a week, or even for months previous to the attack, and occasionally disappear without the occurrence of an apoplectic fit.

In some cases the attack comes on *suddenly*, the patient sinking at once into a profound stupor, from which he cannot be in any degree aroused — resembling a deep sleep — and each respiration attended with a puffing of the lips, and a frothy saliva blown out with a sputtering noise. These cases generally prove fatal in a few hours. In other cases, the patient may be seized with deep-seated pain in the head; sickness and vomiting; tremor of the limbs: dizziness; confusion of mind; and then gradually sinks into a state of stupor, from which he will partially recover, so as to converse, and be able to sit up, and probably walk about, but will still complain of pain and distress in the head, attended with giddiness and confusion of ideas.

Sometimes an attack of apoplexy comes on with palsy of one side, loss of speech, pain in some part of the head, and vertigo,— the patient retaining his consciousness. By degrees, in some instances, the brain becomes more oppressed and consciousness is gradually lost, until finally a deep stupor ensues.

Deep intoxication sometimes so nearly resembles apoplexy that it may be difficult to distinguish between them. The breath, however, will detect intoxication, together with the *relaxed* state of the muscles, particularly those of the jaws, the reverse of which occurs in apoplexy.

In cases of *suspended animation and fainting*, the pulse and respiration are almost imperceptible, whereas, in apoplexy, the pulse is usually as strong as in health, and respiration full.

True Apoplexy always Dangerous.—When there is a total loss of consciousness, the respiration accompanied with deep snoring, a sputtering from the lips, loss of the power of swallowing, the eyes fixed, and the urine and fœces passed involuntarily in the bed, the case may be considered as almost hopeless. Still we are informed that recoveries do take place, even after these symptoms have occurred.

Duration of the Apoplectic attack.—This varies from a few minutes to several days. In fatal cases the patient may live but two or three hours; or the case may not terminate under a week or more, from the commencement of the attack. In milder cases, the patient may recover perfectly in a short time; but more commonly the patient remains weak, both mentally and physically, for months or even years.

Medical writers of extensive observation, among whom I may mention Hippocrates, consider the occurrence of fever, in the early stage of apoplexy, a favorable symptom. When the pupil of the eye will contract by the near approach of a lighted candle; when there is a warm and gentle perspiration; the breathing free and regular, without noise or sputtering; together with the ability to swallow; and a copious discharge of urine is observed, hope may reasonably be entertained of a recovery.

Cause of Apoplexy.—The general immediate cause of apoplexy, is stagnation of blood in the brain, suspending the function of innervation, or the generation of the nervous fluid, that governs the voluntary movements and produces consciousness.

Apoplexy is most liable to attack persons of a peculiar conformation, namely, those who have large heads, thick necks, red faces, square shoulders, and a short stature. Very often, before an attack of apoplexy, the patient will experience at times violent pain in the head, ringing in the ears, together with slight derangements in the functions of the brain, such as impaired memory, squinting, double vision, falling of one of the eyelids, imperfect articulation, numbness of one or more of the limbs. "Among the mental conditions that bespeak a tendency to apoplectic disease, I have, (observes Dr. Watson) several times noticed a strange and vague *dread*, of which the patient can give no reasonable explanation; a sense of apprehension and insecurity, not accounted for by the apparent state of his general powers and functions; a painful degree of indecision and irritability; with a dislike and fear of being left alone.

Among the remote or predisposing causes of apoplexy are advanced age; intemperance in eating and drinking; the long-continued use of active cathartics; and the habit of being bled frequently. The professor of Materia Medica in Jefferson College, in the winter of '44, told his class that he believed many people had died of apoplexy, occasioned by frequent bleedings, as formerly was the practice with the disciples of Rush, of bleeding in almost all cases of sickness.

Exposure to extreme cold, by exhausting the heat of the body, and causing the blood to recede from the surface and form internal congestion, is capable of producing apoplexy.

Severely protracted chills have been observed to terminate in apoplexy.

Positions of the body which favor a flow of blood to the head, or impede its return to the heart, stooping with the head low, and lifting great weights, have been known to bring on a fit of apoplexy. It is only, however, where the predisposition to apoplexy exists, that it is liable to be brought on by such causes.

Among the occasional causes of apoplexy may be mentioned, *excessive evacuations*. The celebrated Boerhaave cites a case of apoplexy, apparently produced by excessive bleeding from the nose. Diabetes and cholera sometimes terminate fatally with symptoms of apoplexy. Excessive loss of blood is frequently followed by an extraordinary determination of blood to the brain. Experiments which have frequently been tried on animals, by abstracting large quantities of blood, and finally by bleeding them to death, go to prove, as has been observed on dissection, that *dropsy*, together with an *engorged* state of the blood-vessels of the brain and spinal marrow, are a general consequence of excessive losses of blood.

Treatment.—Such means and remedies must be employed in the treatment of apoplexy, as are best adapted to equalize the circulation of the blood throughout the system, and restore the functions of the brain, which are always either impaired or suspended in this disease.

Emetics.—The most important indication for the cure of apoplexy, and also for the preventing of an attack, is the evacuation of the foul contents of the stomach by emetics. Where the apoplectic attack is fully formed, attended with a sputtering of the lips, deep stupor, and an inability to swallow, it will be useless to attempt to get medicine into the stomach except by means of a stomach tube, and even this would prove useless except in cases where the attack is caused by an overloaded stomach.

Injections.—These are of the first importance in the treatment of apoplexy. The third preparation of lobelia should be employed, or some other combination of lobelia;—for instance, the lobelia powder and No. 6. One, two, or three table-spoonsful of the third preparation of lobelia may be administered at a time, in half a pint of lukewarm water, composition, or bayberry tea. This must be frequently repeated, with a view to attract the circulation from the head, and thus lessen the pressure of blood upon the brain, and to arouse the nervous energy of the system to carry on the circulation more equally, and with a more healthy activity.

If a patient have an attack of apoplexy within a few hours after a hearty meal, free vomiting will be imperatively demanded. The *third* preparation of lobelia must be poured into the mouth, and will be much more likely to be swallowed than a preparation of

lobelia less stimulating. The impression of a powerful stimulant in the throat will excite the act of swallowing, and the medicine will be taken into the stomach, when the lobelia powder in lukewarm water, or composition tea would fail to excite the act of swallowing, whilst the patient is unconscious. When the functions of the brain are suspended, as they are in apoplexy, large doses of medicine will be required in order to effect vomiting; or as an efficient aid to excite vomiting, the lobelia powder may be administered by injection in lukewarm water and retained. A tablespoonful of the powder may be used in the injection, which must be repeated promptly if necessary.

No unfavorable consequences will arise from exciting vomiting in apoplexy. It is not so much a determination of blood to the brain that occasions apoplexy, as it is stagnation of blood in the capillary vessels of the brain. To restore circulation, there are no means upon which we can place so much confidence as emetics.

"A robust man," says Dr. Eberle, "about fifty years of age, fell down in a fit of apoplexy about an hour after taking a full meal of animal food, together with several glasses of brandy and water. The coma was profound, and the respiration stertorous and sputtering. He was immediately bled to the extent of about forty-eight ounces, but although the pulse was considerably reduced, no perceptible improvement ensued. Twenty grains of the sulphate of zinc were with difficulty introduced into the stomach, and free vomiting ensued in about ten minutes after. Almost immediately after the contents of the stomach were thrown off, he became better." The patient recovered. The sulphate of zinc, being an active poison, would have proved detrimental, had it not been speedily thrown off. On account of the danger attending the administration of active poisonous emetics, most medical writers recommend milder articles,—camomile tea, ammonia in water, or mustard in warm water. But the sensibility of the stomach is generally too dormant to be acted upon by these *milder* remedies. The liquid of the third preparation of lobelia is the most effectual emetic. Apoplexy, however, is a disease which frequently baffles all remedial means.

Favorable Symptoms.—When the stupor becomes less profound, with some degree of awakened sensibility; the breathing regular and not stertorous, and no sputtering from the lips; together with a general warm perspiration, hope may be entertained of a favorable termination of the disease.

The compound Lobelia pills may be given in all cases as a general medicine, between courses of medicine, and during the patient's recovery.

If the tongue be thickly coated, a teacup of strong bayberry or

sumac tea, with an even teaspoonful of cayenne, should be given two or three times a day.

A mixture of salt, vinegar and pepper when the patient has an inclination for acids, will be proper occasionally.

Bitter tonics should be given when the tongue is cleaning, and the patient clear of fever.

External applications.—Besides the steam-bath, warm applications to the feet and legs; frequently rubbing the skin with the warm hand and the application of powerful stimulants to the surface, are of considerable importance.

Preventive measures.—When symptoms arise which denote the approach of apoplexy, such as headache and giddiness, dimness of sight, numbness of the extremities, drowsiness, faltering of the tongue, night-mare and stupor, *a course of medicine* should be given as the most efficacious means of preventing an attack.

SECTION II.

PARALYSIS—PALSY.

Symptoms.—These are a loss of the power of *voluntary* motion, sometimes of feeling, in one half or some portion of the body, the patient not losing his consciousness.

In some instances there is loss of the power of motion, but without loss of feeling in the parts. In other cases sensibility and the power of motion are both lost. This is termed *numb palsy*.

In general the paralyzed parts are colder than other parts of the body; they become soft and flaccid, sometimes puffy and dropsical. Very often patients complain of great coldness in the affected parts. Sometimes peculiar tingling, or creeping sensations are felt in the afflicted parts, as if small insects were creeping over them."

When palsy arises from disease of the brain, it is generally attended with an impairment of the mental powers—amounting in some instances, to complete imbecility. The memory especially, is apt to suffer in this affection; and sometimes in a very singular manner." Thus some patients will lose the power of recollecting certain words, or names, sometimes even their own names, the memory being good in relation to other things. "The natural temperament and disposition also sometimes suffer a total change

from a stroke of palsy. Individuals of amiable and placid dispositions have become sullen, peevish and irascible; and persons of an irritable and passionate temperament, have been rendered mild and simpering by a paralytic seizure."

Varieties of Palsy.—Paralysis of the whole of one side of the body is called *Hemiplegia*.

When both legs and the hips are palsied, it is termed *Paraplegia*.

When a single limb, or a particular part of the body is paralyzed, it constitutes the *Paralysis Partiales* of authors.

1. *Hemiplegia*—*Palsy of one side.*—Palsy of one side of the body is more observed than any other form. "This disease is very closely allied to apoplexy," the latter being in general a more severe form of disease. An attack of apoplexy is very often either preceded or followed by palsy.

Generally a stroke of palsy is preceded by symptoms of constitutional disturbance,—loss of appetite, costive bowels, distress or extreme insensibility of the stomach, giddiness and pain in the head, continual drowsiness, more or less impairment of speech, confusion of mind, and loss of memory.

Sometimes patients recover from a stroke of palsy in a few days after the attack; occasionally the disease terminates fatally, but most commonly the patient recovers gradually, until he is able to move about; continuing in this state in some instances many years without further improvement. Sometimes the recovery is complete.

It is a very common belief that few persons survive the third stroke of palsy; and although it may be true in general, it is not invariably the case; for instances have occurred where patients have survived ten and even fifteen strokes of palsy, and lived many years after.

Paraplegia—*Palsy of the lower half of the body.*—This form of palsy usually comes on in a gradual manner. The patient at first experiences numbness in the legs, succeeded by more or less difficulty in walking: his gait is awkward, and he requires a cane to assist in balancing his body. The bladder becomes more or less paralyzed, the urine being voided in a small weak stream, and at length passes off involuntarily. The bowels are generally constipated; but when the sphincter muscle of the anus becomes paralyzed, the fœces are evacuated without the consent of the will. In some cases the palsy is complete, the patient being unable to walk, or even to support himself in a sitting posture. In other instances he retains some degree of power over the motions of his legs, so that with the assistance of a cane or crutches, he is able to move about.

In persons past the age of forty, this form of palsy is generally

occasioned by diseases of the brain. In children, the paralysis is in most instances caused by injuries of the spine.

2. *Partial Palsy*.—Sensibility and voluntary motion depend upon a nervous fluid, which is generated at the great centres of the nervous system, the brain and spinal marrow, and is conducted from these centres to every part of the system, through the medium of the nerves, which act as conducting wires to the nervous fluid. There are nerves of motion, and nerves of sensation. If a nerve of motion be cut, the part to which it is distributed will become paralyzed. If a nerve of sensation be destroyed or injured so that it is incapable of conducting the nervous fluid, the part to which it leads will lose the power of feeling. If a portion of the brain or spinal marrow lose the power to generate nervous fluid, that part of the body will become affected whose nerves arise from that part. Thus one side of the body having lost the power of feeling, we know that the disease is seated in that portion of the spinal marrow in which its nerves of sensation originate. If that portion of the spinal marrow from which the nerves of motion arise, is diseased, the parts will become paralyzed to which they lead. And if both the anterior and posterior columns of one half the spinal marrow lose their functions, that side of the body will be affected with loss both of motion and feeling.

In partial palsy, when a single muscle or small portion of the body is paralyzed, it is generally owing to disease in the nerve which is designed to distribute nervous power to the part. Paralysis of one side of the face alone, is sometimes occasioned by injury of the nerves leading to the part affected.

Of the Causes of Palsy.—A loss of power in the stomach is frequently the original cause of palsy, more especially when the disease attacks one side of the body. Although the immediate cause of paralysis is a loss of function in some portion of the brain or spinal marrow, still the original cause, in most instances, is seated in the stomach. The functions of the brain and spinal marrow, as well as those of every other organ in the body, are, to a greater or less degree, influenced and governed by the state and condition of the stomach. Thus a person advanced in years, and predisposed to palsy from a weakened condition of some portion of the brain or spinal marrow, will be liable to an attack of it from prostration of the powers of the stomach. Both *apoplexy* and *palsy* are frequently brought on by undigested food in the stomach, long-continued exposure to severe cold or dampness, the intemperate use of spirituous liquors, loss of rest, over-exertion, grief, fear, and by other depressing influences.

“Among the exciting causes of *partial paralysis*, the poisonous

influence of lead is the most remarkable. The tendency of this article, to produce paralysis of the fore-arm and wrists, is peculiarly strong, as is evident from the frequent occurrence of palsy in persons who work in lead-mines, plumbers' shops, and in manufactories of white lead."

Treatment of Palsy in General. — In the early stage of palsy, a vigorous course of treatment is demanded, with a view to restore the lost function of that portion of the brain or spinal marrow, the *immediate* cause of the disease. Whether the loss of nervous power be occasioned by pressure of blood upon the parts, or from loss of power through mere debility, or whether it depend upon disease originally seated in the brain, a *course of medicine* will be especially indicated, besides the continued use of such remedies and means as will prove most successful in equalizing the circulation, and restoring the function of the stomach and bowels, with a view to restore the lost function of the brain and spinal marrow.

The Course of Medicine should be commenced with an injection. In most instances the bowels are extremely insensible, requiring the injections to contain strong stimulants, in order to produce the desired effect. A tablespoonful of the third preparation of lobelia, in half a pint of bayberry tea, forms a suitable injection in palsy, though in some instances double or treble the above quantity will be required in order to make a sensible impression upon the bowels.

When the patient is unable to sit up, the vapor bath will of course be applied in bed. It is always better to steam the patient on a couch or mattress, and thus avoid dampening the bed upon which he usually lies. Patients upon a couch or cot-bed will bear the continued application of the vapor for several hours in succession; the body to be washed over frequently with whiskey, vinegar, or cold water during the steaming.

When the patient is so situated as to be able to bear the steam a considerable length of time, an emetic should be given during the process of steaming. The best form of an emetic is the liquid of the third preparation of lobelia, adding a portion of brown lobelia powder, given in a strong tea of the bayberry or sumac. I have observed more benefit from emetics, than from any other means. To assist the operation of the emetic, and to bring the system more completely under the influence of lobelia, it will be highly important to administer an injection of lobelia powder, in lukewarm water. The course of medicine proves most effectual when the patient becomes very sick, and the system is fully relaxed under the operation.

The Compound Lobelia Pills, may be used with benefit. I have a case of palsy now under treatment, and the patient has so far re-

covered as to be able to walk. The use of the above pills, together with an occasional *emetic* and the *steam bath*, followed by a *shower bath*, two or three times a week, has constituted the principal treatment in this case. She is now using bitters, and the bowels are relieved by injections.

Palsy, however, is a disease from which patients recover very slowly, and therefore, in deeply seated cases, it will not be necessary to pursue a very thorough course of treatment, except during the earlier stages of the complaint; or when the symptoms assume a more unfavorable aspect. Thus after administering a few courses of medicine, repeating them every day, or every few days, the *course of medicine* may be omitted, except occasionally, say at intervals of one, two, or three weeks, as the circumstances of the case may seem to require.

When there is oppression at the pit of the stomach, fever, foul tongue, or general distress, an emetic should be given.

Capsicum is the best remedy to warm the stomach and bowels and restore the secretions of the mucous membrane. It may be taken in the form of pills, powder, or decoction. The compound lobelia pills contain a large portion of pepper, and answer as a substitute for other preparations of pepper. In all cases of palsy, the mucous membrane of the stomach and bowels is more or less coated with morbid secretions, which must be removed, or the disease will continue. When the tongue begins to clean around the edges, or the coating which covers its surface begins to soften, then the capsicum should be taken in bayberry tea. The pepper stimulates the secretions, sustains the circulation, and causes a determination to the surface; the bayberry combining with foul secretions of the stomach and bowels, causes them to become detached, leaving the mucous surface clean.

A mixture of *salt, vinegar and pepper*, is grateful to the stomach in many cases, and is usually found beneficial when the patient craves acid. The *pepper sauce*, or simple *salt and vinegar*, may be employed in many cases of disease, with signal benefit to the patient.

In palsy the bowels are generally costive, requiring an occasional injection. In palsy of the lower half of the body, the most powerfully stimulating injections will be required, in order to make a sufficient impression upon the bowels.

Mustard Seed.—A tablespoonful of white mustard seed taken two or three times a day, will stimulate the bowels to action, and is well suited to cases of palsy. *Mustard Seed and Horse-Radish* were favorite remedies with the late Dr. Barton, of Philadelphia, who used them with much advantage in the Pennsylvania Hospital in cases of palsy.

Tonics.—In an advanced period of the disease, or when the system is in a relaxed and feeble condition, strong tonics will be required; such as Peruvian bark, quinine, Thomson's No. 4 bitters, wormwood, or quassia. Prickly ash bark or berries may be added to the bitters with advantage.

External Remedies.—Besides the vapor and shower baths there should be a continued application of warmth to the affected side; the skin occasionally to be bathed with pepper sauce, third preparation of lobelia, stimulating liniment, or No. 6. Frictions of the surface with a flesh-brush or salted towel several times a day, will be of advantage. Occasionally a pepper poultice or mustard plaster should be applied to the nape of the neck, extending eight or ten inches below the spine. When mustard is applied, it should not remain on so long as to produce a blister.

Paraplegia.—(*Palsy of the lower extremities,*) requires the same constitutional treatment as above described, adapting the remedies, however, to the circumstances of the case.

The bladder is frequently paralyzed in this form of palsy, sometimes requiring the use of a catheter, to prevent an over-distension of the bladder. The bowels require stimulating injections, and the free internal use of compound lobelia pills, capsicum, pepper-sauce, or mustard-seed; and as often as once a day, a teacup two-thirds full of a strong tea of bayberry, adding a teaspoonful of cayenne pepper.

The Hip Vapor Bath is adapted to this form of palsy. The parts, however, being in some instances devoid of feeling, are liable to be scalded by the steam, unless particular attention is paid to regulate its temperature. Especial care will also be necessary to prevent the feet from being burned by hot bricks when they are placed near them.

Children are sometimes affected from birth with unusual debility, and want of power over the legs. Such cases require the cold salt water bath or shower bath, frictions of the surface with a salted towel, fresh air, wholesome food, stimulating applications to the skin, together with internal constitutional remedies when the general health is bad. If the digestion be feeble, or the bowels disordered, with a foul tongue and bad breath, an emetic must be given, and repeated when necessary.

Palsy of the lower half of the body, when of long standing, is often incurable. It is therefore important to institute a thorough course of treatment in the early stage of the disease, before it becomes immovably fixed. Palsy, however, sometimes arises from causes that cannot be removed, even though prompt remedial measures be early applied.

For Palsy of the Tongue the patient should keep some stimulant in the mouth, such as pepper, ginger, cloves, conserve of hollyhock, &c. In severe cases the third preparation of lobelia must be employed. When the muscles of the throat are affected, the patient will be able to swallow such substances as rye mush, jellies, and oysters, when thin liquids cannot be swallowed without the greatest difficulty.

In Paralysis of the Optic Nerve, termed *amaurosis*, a course of medicine frequently repeated in the early stage of the disease, will prove the most efficient means of cure. This disease frequently originates in a disordered stomach. It is not every case of *amaurosis*, however, that can be cured even by the most prompt and persevering course of treatment. The electro-galvanic battery has been employed with good success in some cases of *amaurosis*.

Palsy of one side of the Face has been cured by emetics. A full course of medicine will be more effectual. If the paralysis arise from a destruction of the nerve, as when the nerve is cut, there is, of course, no cure for such a case.

Mercurial Tremor.—(Shaking Palsy.)—"This disease affects workers in mercury, chiefly those employed in silvering mirrors."

Symptoms of Shaking Palsy.—At first there is slight tremor in the limbs, and sometimes salivation; "afterwards convulsive agitation of the limbs whenever they are moved. The articulation becomes imperfect. The hands are so agitated, that a partly filled cup cannot be conveyed to the mouth without spilling the liquid. On attempting to walk, the limbs dance and perform irregular movements. Whilst sitting still, the patient may remain free from chorea; but on every exertion of the volition, and on every occasion of mental agitation, the irregular movements are renewed. The sleep is disturbed; the patient wakes alarmed by terrific dreams; nervousness and debility attend, and the bowels are constipated."

Treatment.—In the onset of the complaint, a removal from the influence of the cause; vapor baths, and an occasional course of medicine, together with the use of stimulants and tonics, and exercise in the open air, may succeed in effecting a cure, or at least prevent the disease from getting worse.

SECTION III.

EPILEPSY.

(Convulsion Fits—Falling Sickness.)

AN attack of this disease is characterized by a loss of consciousness, and by a jerking or convulsive motion of the muscles. Sometimes the fit comes on suddenly, without any previous symptoms indicating its approach; at other times it is preceded by various symptoms of constitutional disorder, with giddiness, stupor, pain in the head, and confusion of mind. Some patients experience a sensation like that produced by a stream of cold vapor, commencing in the feet and gradually extending itself until it reaches the head, when the patient immediately becomes insensible. If the patient be standing or sitting when he is seized with a fit, he suddenly falls and is totally insensible; the eyeballs are distorted, the breathing greatly interrupted, the face swells, and *convulsions* ensue, which generally continue from five minutes to half an hour. In some cases the convulsive action of the muscles, particularly those of the face, is frightfully violent; the whole face is agitated; the eyeballs roll; the lips and eyelids are convulsed; the tongue is often spasmodically thrust from the mouth, which, with the grinding of the teeth and foaming at the mouth, gives the countenance a horridly wild expression. Sometimes the teeth are firmly pressed together; at other times the jaws are widely and fixedly distended. The limbs of both sides of the body are equally convulsed in some cases, but more frequently the muscular spasms are stronger on one side; and occasionally one limb only is affected with spasm. "The heart palpitates rapidly; the pulse is usually contracted, irregular, and frequent; and respiration oppressed, laborious, and, in violent cases, sonorous. About the termination of the paroxysm, a considerable quantity of frothy saliva usually flows from the mouth; and in some cases the fæces and urine pass off involuntarily." Sometimes the convulsions stop suddenly, but more commonly they decline gradually. The breathing becomes more free, the countenance assumes a more natural aspect, and the patient falls into a profound sleep. He is generally languid and stupid, and when he awakes, he has no recollection of what has passed.

The character of an epileptic fit varies greatly in different cases. In some instances it passes off in a few seconds—in others it continues for hours. The paroxysm is most apt to be protracted in *children*.

Some patients are subject to convulsions at *night* only; othe-

are liable to an attack at any period of the day. With some, the fits come on at regular intervals. Dr. Eberle mentions a case where the paroxysm returned regularly on the night of each full moon.

Sometimes there will be but one paroxysm. In other instances the patient will have them in continual succession during a period of many hours, sometimes passing from one into another, until he has had twenty, forty, or even sixty fits, in the course of twenty-four hours.

Causes.—Convulsions may be caused by disease seated exclusively in the brain or spinal marrow; or the epileptic paroxysm may be induced by a disordered condition of the stomach or bowels, the functions of the brain being thereby sympathetically deranged. Sudden fright has been known to bring on epilepsy. Excessive loss of blood has frequently led to convulsions.

In children, convulsions are often occasioned by undigested food in the stomach, and worms in the stomach or bowels.

In some families the children are peculiarly liable to convulsions during the period of teething.

Small-pox, scarlet fever, and measles are occasionally attended by convulsions, more especially just before the eruption appears; and also when the eruption leaves the surface for the internal organs, or, as it is commonly expressed, when the disease strikes in. The use of laudanum predisposes children to epilepsy. Suppressed menstruation, and diseases of the uterine organs are sometimes attended with convulsions.

Venereal excesses and abuses, and the intemperate use of alcoholic liquors, are among the exciting causes of epilepsy.

A sudden check to the menstrual flow, from exposure of the feet to dampness, is liable to cause violent hysteric convulsions.

Distinguishing Symptoms between Epilepsy and Hysteric Convulsions:

1. In *epilepsy* there is a total loss of consciousness, whereas in *hysteria* some degree of sensibility remains.

2. The eyes are more distorted, and the face more suffused and livid in *epilepsy* than in *hysteric convulsions*.

3. In *epilepsy* there is usually foaming at the mouth, which is absent in *hysteria*.

4. In *hysteria* the paroxysm does not terminate in a deep sleep, as it does at the close of an *epileptic paroxysm*.

5. *Hysteric convulsions* are generally attended by involuntary paroxysms of laughing or crying, and a sensation of a ball in the throat, none of which accompany epilepsy. Epilepsy and hysteria may proceed from the same cause, the symptoms being of a more aggravated character in the former than in the latter.

Treatment.—An important indication in the treatment of epilepsy, and every species of convulsion, is to overcome the spasmodic action of the muscles. The third preparation of lobelia is the remedy chiefly to be relied upon, this being the most efficient antispasmodic medicine in use. In many instances an attack of epilepsy may be prevented by the patient taking a tablespoonful or even a teaspoonful of the third preparation of lobelia, when the first symptoms of an approaching attack make their appearance. Many persons, however, have no warning of the approaching paroxysm, but fall suddenly into a state of insensibility. The third preparation of lobelia may be given during the convulsions, without any risk of strangling the patient, the stimulus of the medicine in the throat sometimes exciting the action of swallowing, and thus the medicine will be easily taken into the stomach. When the third preparation is not at hand, the tincture or a simple tea of lobelia may be used.

Emetics.—An oppressed or otherwise disordered stomach is a frequent cause of convulsions in children, demanding the use of emetics. If the convulsions be so strong as to prevent swallowing the medicine, it must be administered freely as soon as the paroxysm subsides, with a view to prevent a return of the convulsions. The third preparation of lobelia is the most efficient emetic. The lobelia, however, may be given in tincture, or the powder alone in lukewarm water.

Injections.—These, when rightly prepared and administered, are almost as effectual in overcoming convulsions, as medicine taken into the stomach. They may be administered during the paroxysm, provided the convulsions do not prevent it.

In *Adults* who have been subject to frequent attacks of epilepsy, during several successive years, the disease often proves incurable. Yet an effort should be made, for in some instances cures have been effected, even under circumstances which have promised little hope of success. Whenever patients have warning of an attack several hours previous to its occurrence, a course of medicine should be administered, and whilst steaming, keep the head wet with cold water, or vinegar, or occasionally dash a tumbler of cold water in the face. If a full course be not given, the feet of the patient may be placed in warm water—an injection administered, followed by full and frequent doses of the third preparation or some other form of lobelia, and the head kept wet with spirits, vinegar, or cold water. A dash of cold water in the face, or the application of volatile salts to the nostrils, will sometimes prevent an attack, at least for a time.

Patients are apt to injure the tongue during the paroxysm of epi-

lepsy, unless prevented by the insertion of a piece of wood or cork between their teeth. In cases of long standing, it may be useless to attempt to do more during a paroxysm, than to protect the patient from injury.

After a Paroxysm, in children, and in all cases where there is reason to believe that the disease is occasioned by a disordered stomach, or bowels, an emetic must be given as soon as the patient can be made to swallow. If the stupor continue, injections must be administered. Vomiting may be effected in this way, by the lobelia powder, administered in warm water, and retained in the bowels.

When convulsions are caused by suppressed menstruation, or a disordered condition of the uterine organs, the patient must be kept warm in bed, stimulating enemata used to the bowels, warm applications to the feet, and an emetic given whenever the symptoms demand it. Thus, if a female be subject to epilepsy or even hysteria, at a certain time in the month, she should go through a course of medicine a day or two previous to the time when the paroxysm is apt to occur, and continue for several days the use of the means above mentioned.

Epilepsy is generally incurable when it is caused by an organic disease of the brain or spinal marrow. When it arises from other causes, such as undigested food in the stomach, affections of the bowels, liver, or uterine organs, a cure may be effected.

SECTION IV.

INFANTILE CONVULSIONS.

CONVULSIONS frequently occur in childhood, and more especially in infancy. During this tender period, the functions of the brain are liable to become disordered, or suspended, from various causes. In some large families of children, the predisposition to convulsions is so strong that every one of them will have fits during the period of teething. In other families this form of disease is very rare, although the gums may be equally irritated and painful, and the digestion even more impaired.

Causes.—Undigested food in the stomach, irritation of the gums from teething, or worms in the stomach and bowels, are the general causes of convulsions in infants and children.

The use of anodynes, laudanum, and various other preparations

containing opium, predisposes infants to convulsions by their tendency to produce congestion of blood on the brain. The following circumstance was related to me by a lady, intimately acquainted with the family in which the melancholy affair happened. A nurse wishing to visit a friend, gave an infant a dose of laudanum, that it might not need attention in her absence. Soon after it was given, the child was seized with convulsions, which continued to return at frequent intervals, requiring constant watching day and night up to the time when this statement was made to me, being a period of two years. The faculties of the mind were destroyed by the fits, with scarcely the possibility of remaining for life other than an idiot.

Thousands of children have their intellectual powers injured by being forced to swallow anodynes. Laudanum occasions sleep by producing partial congestion of the blood in the brain; and it eases pain by benumbing the sensibility of the nervous system.

Children are peculiarly liable to convulsions during the early stages of eruptive disease,—small-pox, measles, and scarlet fever. More especially are they apt to occur a short time previous to the eruption. On the event of the eruption striking in, convulsions are very frequently observed. In very young infants, the cold stage of “fever and ague” is sometimes accompanied by convulsions.

In children, as well as in adults, the cause of convulsions is sometimes seated originally in the brain or spinal marrow, rendering medical means unavailing.

Fatality.—Death from convulsions, though of rare occurrence in adults, is by no means uncommon in infants and children. “In ordinary constitutions there is but little to be apprehended from convulsions during infancy, when the attacks are slight and of short duration; and this observation applies especially to those instances which, instead of leaving the infant in a dull lethargic condition, are almost immediately succeeded by the natural cheerfulness of the child.”

Unfavorable Symptoms.—When the convulsions are of long continuance, attended with a dark or purple appearance of the countenance, palsy of one side, or of a limb, squinting, and difficult and stertorous breathing, the case is to be considered unfavorable for recovery.

Treatment.—Infantile convulsions are caused in the great majority of instances by constitutional disorder, the seat of which is in the stomach and bowels, and require for their cure that kind of treatment best adapted to cleanse the stomach and bowels, and

restore their natural functions, and also to equalize the circulation of the blood and nervous fluid. The various preparations of lobelia, and the vapor bath are the means most to be relied upon.

When a child has symptoms of approaching spasms, such as twitching of the muscles, and fever; an emetic should be given at once, as this will prove the surest preventive to an attack.

Convulsions often occur in a far advanced stage of disease of the brain, produced by previous disease, especially bowel complaint and cholera infantum; and also under other circumstances where it will be useless to give an emetic, with the view of curing the patient.

Anti-Spasmodics are especially called for in the treatment of convulsions; the third preparation of lobelia is the best probably that can be used. I have never heard of an instance of a child being suffocated by stimulating medicine, but there have been instances where death has been occasioned by castor oil being poured into the throat. The simple tea of brown lobelia, made by pouring warm water upon the pulverized lobelia seed, will prove most effectual in relaxing the system, and it may be either given by the mouth, or administered by injections.

Injections should be given because of their tendency to attract the circulation to the bowels, and thereby lessen the pressure of blood upon the brain. If the patient remain in a state of stupor after the paroxysm, stimulating injections should be administered. From one to two teaspoonsful of the third preparation may be administered in each injection, in bayberry or composition tea, and this repeated every few minutes.

I have administered lobelia in the form of tea, and the third preparation, in frequently repeated doses, until at least the strength of an ounce of lobelia has been retained in the stomach before vomiting was effected, and it is not possible in some cases to effect vomiting. Some weeks since I attended a child in convulsions and deep stupor, and after having given freely of lobelia, and administered several injections, I introduced the feather end of a goose-quill, into the throat six or eight inches, and in this way excited vomiting, and the child recovered speedily. Some cases require much perseverance in the treatment, before vomiting can be brought on.

SECTION V.

CHLOROSIS—GREEN SICKNESS.

Symptoms.—THE term *chlorosis* is applied to a form of disease peculiar to young women and girls in which there is marked paleness of the skin, absence of the natural red color of the lips, swelling of the eye-lids, a soft and flabby state of the skin, loss of flesh, general coldness of the system, a tendency to a swelling of the feet and ankles, loss of appetite, and torpor of the bowels. The tongue is pale, and usually more or less furred; yet sometimes clean, but always paler than natural. Menstruation is deficient, and sometimes this evacuation is entirely suppressed. There is frequently a craving for pickles, chalk, or cinders.

As the disease becomes more deeply seated, the countenance is still more pallid, and sometimes assumes a yellow or greenish appearance. "The skin is smooth, but is preternaturally dry. The tendency to dropsical swellings of the feet and ankles increases, but there is seldom any further wasting of the flesh. The tongue clears and becomes smooth, but continues pale, with a slight but peculiar appearance of transparency, and has a lilac hue. The patient is affected with languor, lassitude and even serious weakness, being at once reluctant and unable to undergo fatigue." There are often severe attacks of pain in the side and head, palpitation of the heart, faintness and a sensation of suffocation. The bowels are inactive, with occasional attacks of diarrhœa; the stools are dark, fetid and scanty. The digestion is always greatly impaired, yet patients will sometimes have a craving appetite for food, as well as for indigestible substances, such as tea-leaves, coffee-grounds, mortar from old walls, chalk, pickles, or charcoal, &c.

There is a peculiar tendency in this disease to a bleeding from the nose, stomach and bowels, or uterus. The blood discharged is pale and watery, sometimes scarcely producing a stain on linen.

An attack of chlorosis, though not free from danger, is generally curable by judicious treatment early applied, before the disease assumes an inveterate character.

In chlorosis the amount of heat and nervous energy generated in the system is much less than is produced in a state of health; every organ in the body is in a torpid condition; the secretions are diminished, but little bile is formed; the mucous membrane of the stomach and bowels is coated with thickened secretions, forming a false membrane; digestion, assimilation and nutrition, are im-

perfectly performed; and the blood is in an unhealthy and impoverished condition.

Treatment.—The general course of treatment to be adopted for the cure of the above form of disease is as follows:

1st. To warm the system by the use of *pure stimulants* and *external warmth*.

2d. *Courses of Medicine.*—To be administered as the circumstances of the case may demand.

3d. *Injections* to evacuate and tone the bowels, and also to act upon the uterine functions, through nervous influence.

4th. The continued use of pure stimulants and the strongest kinds of bitters or tonics. Gentle exercise, fresh air, and a nourishing diet, are important curative means in the treatment.

Course of Medicine.—Under the influence of a course of medicine, a new action is awakened throughout the whole system. The steam imparts warmth to the blood, equalizes its circulation, strengthens the nervous energy, increases the sensibility of the stomach to the impression of medicine, and for a time restores the functions of the skin. By the emetic the stomach is relieved of matter which may have oppressed its functions; the efforts to vomit whilst the system is relaxed, tend to remove obstruction in the liver and in other important organs. The stimulus of the medicine augments the secretions, and occasions a determination to the surface. Injections relieve the bowels, and exert a beneficial influence upon the uterine organs, the functions of which are always deranged in chlorosis. Lastly, but not least in importance, under the operation of the course of medicine, more or less of the false coating or “canker” becomes detached and removed from the mucous membrane of the stomach and bowels. *This false membrane must be removed before the general health can be restored.* I have known, on several occasions, quarts of a skinny-like substance discharged by the bowels in cases of chlorosis, which probably had been formed in the early period of the disease.

Repeating the Course.—As a general rule the course of medicine will require to be administered most frequently in the earlier period of the disease. When the disease has become deeply seated, and the system cold, torpid, and much weakened, it may not be necessary to repeat a course oftener than once in two or three weeks.

Preparing the Emetic.—In all cases where there is great want of tone in the stomach, and a general torpor prevails throughout the system, the liquid of the third preparation of lobelia is the most appropriate emetic. It should be given in a strong tea of bayberry or sumac. There is no form in which lobelia can be prepared to

operate so effectually and at the same time so easily, and with so little retching, as that of the third preparation of lobelia combined with a powerfully astringent tea.

Milk-porridge, or gruel, seasoned with salt and pepper, must be given both during and after the operation of the emetic. This is an important part of the course of medicine in all cases of chronic disease, attended with marked debility.

Of Injections.—Stimulating injections to the bowels, by attracting the vital energies to the uterine organs, are well adapted to cure cases of suppressed or obstructed menstruation. The injections may be prepared of bayberry tea, adding to each injection a teaspoonful of the third preparation of lobelia, or a teaspoonful of No. 6, and a teaspoonful of green lobelia powder; or use composition, or pennyroyal tea, adding the green lobelia, cayenne and No. 6. The injections to be repeated once or twice a day, and continued. Besides these, a strong tea of poplar or Peruvian bark, used by injection at night, and retained until morning, will be useful.

White mustard seed or prepared charcoal may be used to aid in stimulating the bowels to action when costiveness prevails.

The Compound Lobelia Pills may be used as a general medicine in all cases of chlorosis. Ten or twelve of these pills may be taken daily, as they furnish a moderate and permanent stimulus to the stomach and bowels, and exert a beneficial influence in correcting their secretions. When liquids oppress the stomach, or the patient prefers medicine in the form of pills to decoctions, tonics as well as the stimulants may be given in this form—such as quinine pills, and pills composed of bitter extracts.

Tonics.—Bitter tonics may be employed in any stage of this or any other form of chronic disease, when the patient is clear of fever. They are particularly called for after the patient has been awhile under the treatment already described. Besides the usual tonics, precipitated carbonate of iron may be given with especial benefit in this and in other cases of chronic disease. The dose is a teaspoonful, mixed with an equal quantity of ginger, with a sufficient quantity of water to render it easy to take. The tincture of guaiacum is a favorite tonic with some practitioners in chlorosis and in other cases of obstructed menstruation.

Gum myrrh is a useful tonic in chlorosis. It may be formed into pills, and three or four taken after each meal, or the myrrh may be finely pulverized, mixed with quinine, precipitated carbonate of iron, or bitter extracts, and the compound formed into pills.

The following is a very good general course to pursue in this com-

plaint.—A course of medicine once a week; and between the courses a teaspoonful of composition powder prepared in lukewarm water taken every morning before or after breakfast; and from one to three compound lobelia pills two or three times a day. After this course of treatment has been pursued a week or two, give tonics throughout the day between the courses of medicine, and the compound lobelia pills at bed-time. If the patient becomes disgusted with any particular tonic, substitute others. Pills made of equal parts of pulverized myrrh and precipitated carbonate of iron constitute one of the most efficient of tonics.

The Diet must not be confined to vegetables. Wild game, fresh beef and mutton, eggs, and whatever is found to agree with the stomach may be given. Pastry and hot bread of every description must be avoided.

The patient should seek the open air; use gentle exercise; keep the feet well protected from dampness; and occasionally sponge the surface with salt and water in the morning, particularly when the weather is warm.

SECTION VI.

HYSTERIA—HYSTERIC FITS.

HYSTERIA presents in different cases a great diversity of symptoms. It mostly occurs in paroxysms, popularly called hysteric fits.

Hysteria never occurs in childhood, it being almost exclusively confined to the period which intervenes between the fourteenth and fiftieth years. It is almost peculiar to females; still, the disease, in a mild form, is occasionally observed in men, more especially those who lead a sedentary life, and are delicate, and of a nervous temperament.

Symptoms.—At one time “the fit consists of excessive laughter alternating with crying or screaming; and at another with mental alienation, rapid and incoherent talking, singing, suffocating spasms in the throat, a wild and furious expression of countenance, raving, gnashing the teeth, tearing out the hair, beating the breast with the hands, biting, &c. Occasionally these symptoms subside without terminating in convulsions. More commonly, however, convulsions of a terrific character speedily ensue.” During the spasms “the body is usually rigidly bent backwards, or variously and

most powerfully contorted; the breast is projected forward and the head drawn backwards; the face is swollen and flushed; the eyelids are closed and tremulous; the nostrils distended; the jaws often firmly shut; but there is no *distortion* of the countenance; the cheeks are at rest, unless when, as often happens, the patient is uttering screams or exclamations. If the hands are left at liberty, she will often strike her breast repeatedly, and quickly, or carry her fingers to her throat, as if to remove some oppression there; or she will sometimes tear her hair, rend her clothes, or attempt to bite those about her. The whole muscular system is thrown into such violent spasms, that scarcely any effort of the bystanders is sufficient to restrain the contortions, or prevent the patient from being thrown out of bed."

"When the paroxysm ceases, the patient is left in an exhausted or stupid and somnolent condition, which, if there be no return of the fit, in the course of an hour or two passes away without leaving any other affections than a feeling of general soreness, and a slight pain in the head and pit of the stomach." In many instances the convulsive paroxysms continue to return at frequent intervals for several hours.

Sometimes, instead of spasms there are stupor and insensibility; the limbs are in a relaxed condition, the jaws firmly closed, the eyes shut, the countenance nearly natural, the breathing irregular, the pulse slow and regular, the extremities are cold, and the power of swallowing is lost. Young females sometimes remain in this condition many hours, or even the whole day or night, and recover from this condition depressed in spirits, fatigued, and crying.

In some instances the patient experiences distress in the abdomen; a ball appears to roll about, and rise to the pit of the stomach, and then to the throat, producing a choking sensation; the act of swallowing is frequently repeated; the abdomen becomes distended with wind, loud rumblings and sudden belching take place; there is much palpitation of the heart, the patient is sad and sorrowful, and prone to shed tears.

After the paroxysms, these patients commonly void a large quantity of limpid urine, looking almost like water; and this is sometimes expelled during the fit.

Almost any part of the nervous system, in women predisposed to hysteria, is liable to fall into a disordered state of action, producing symptoms closely resembling those of other, and far more serious forms of disease. There are cases of hysteria that might very readily be mistaken for peritoneal inflammation. The patient complains of acute pain in the abdomen, aggravated by the slightest pressure; can scarcely bear to be moved in bed; and probably she will have a hot skin, quick pulse and furred tongue. The anxious and ghastly expression of countenance peculiar to peritoneal inflammation, does not accompany this form of hysteria.

Not dangerous.—Hysteria, however violent the paroxysms, very rarely proves fatal.

Patients subject to hysteric fits, are apt to feel a tenderness in some part of the spine when it is pressed upon, which fact has led some physicians to view hysteria as a disease depending upon irritation of the spinal marrow. Other theorists contend that its seat is in the uterus, whilst others again locate the disease in the brain. It would be useless in a practical point of view, to attempt to sustain or refute any of these theories, as the disease, in all cases, must be treated upon general principles, applying the remedies to suit the emergency of the symptoms.

Treatment.—Hysteric fits are generally preceded by extreme languor, coldness of the hands and feet, and distress at the pit of the stomach. At this period stimulants should be given,—capsicum, composition, or spice bitters. No. 6, essence of peppermint, or lavender brandy, may be also used to expel wind from the stomach. The feet should be placed in warm water, and volatile salts applied to the nose.

If the symptoms be not relieved by the above means, an emetic must be given, and the patient warmly covered, and warm bricks applied to the feet.

If spasms or fits come on, give the third preparation of lobelia; or brown lobelia powder in lukewarm water.

Females are sometimes thrown into violent convulsions in consequence of obstructed menstruation. In such cases the brown lobelia or third preparation must be given freely, warmth applied to the feet and injections administered if practicable.

The Vapor Bath.—Warm vapor applied to the surface soothes nervous agitation, and is signally beneficial in all cases of hysteric affections. When the system is very cold, a bath preceding an emetic will materially assist the operation of the latter.

Injections.—Stimulating enemas are scarcely less important, both as a preventive and curative means, in hysteria. The liquid of the third preparation of lobelia, or the lobelia powder in No. 6, is to be administered in warm water, bayberry, composition, or skullcap tea. When there is a violent determination of blood to the head, the use of stimulating enemas is particularly called for, as they prove an efficient means of equalizing the circulation of the blood, and of sustaining and equalizing the nervous influence. Mustard plasters applied to the feet and palms of the hands may have a beneficial influence in soothing nervous agitations.

Anti-spasmodics.—The third preparation of lobelia is the best

anti-spasmodic, and it also answers as an emetic and stimulant. This medicine may be given in teaspoonful doses at any time when the patient can swallow. Even during hysteric convulsions, the liquid of the third preparation poured into the sides of the mouth, when the teeth are firmly closed, will have an influence in shortening the paroxysm, even though the medicine should not be swallowed.

Musk may be employed with benefit in hysterical paroxysms. The high price of the article, however, together with the circumstance of its being rarely found in the shops free from adulteration, has occasioned the almost entire abandonment of its use in practice.

Warm fomentations are useful to relieve pain in the chest or abdomen. If the head be hot, cloths wet with cold water, spirits or vinegar, may be applied, and changed frequently.

"In that variety of paroxysmal hysteria," says Dr. Eberle, "in which the patient lies in a state of torpor and insensibility distinct from syncope, I know of no remedy so effectual for dispelling the attack as an emetic." If the patient cannot be made to swallow, lobelia administered to the bowels in full doses and retained, will have the same effect upon the system as when taken into the stomach. A mustard plaster, or pepper poultice applied to the pit of the stomach, will aid in exciting vomiting. When mustard is employed, it should be removed before it blisters the skin.

During violent paroxysms of hysteria it will be useless in many instances, to attempt to administer medicine until the spasms subside. As soon as the spasms give way, and the patient can swallow, an emetic should be given with a view to prevent the return of the convulsions. The best form of emetic in all such cases is, a large teaspoonful of the liquid of the third preparation of lobelia, with about an equal quantity of lobelia powder, mixed in a teacup two-thirds full of bayberry or sumac tea. The emetic to be repeated until vomiting is effected. Acids in the stomach interfere with the operation of emetics, and whenever the emetic is slow in its operation, a teaspoonful of the bi-carbonate of soda, or half the quantity of sal-eratus should be given, dissolved in a teacupful of lukewarm water.

It has been observed by some Thomsonian practitioners, that in cases of hysteric convulsions, when the patient complains of pain in the stomach, the spasms cease—the medicine in restoring the power of the stomach to control the nervous influence, equalizes the circulation and prevents a return of the convulsions.

Chronic Hysteria.—Unmarried women who either are naturally of a feeble constitution, or have been debilitated by disease, and in

whom the menstrual function is in some way disordered, are peculiarly liable to hysteric symptoms. "They are always complaining of some unpleasant or painful sensations; their temper is variable, often fretful, sometimes animated, talkative, and anon peevish and gloomy; they pass often rapidly from laughing to crying, from gaiety to melancholy, from despondency to hope, and *vice versa*, from the most trifling causes. They often complain of various distressing sensations in the abdomen, head, and chest, flatulency, a rumbling noise in the bowels, severe colic pains, a sense of weight and bearing down in the region of the uterus, pain in the neck of the bladder, dysury, a feeling of emptiness or fulness and tension at the pit of the stomach, variable appetite, slow digestion, eructations, occasional spells of great anxiety and alarm, palpitation of the heart," faintness, a peculiar sensation of weight, or of numbness in the top of the head, severe pains in the head, breast, or other parts of the body, and sometimes the sensation of a ball rising in the throat.

Hysterical persons are especially liable to affections of the throat. In some there is a sudden loss of the voice, and which again as suddenly returns; others are affected with what is termed *hysteric cough* characterized by a peculiar loud, dry, harsh sound, more like a bark than a cough. Difficulty of breathing is another symptom attending constriction or spasm of the muscles about the throat in hysteria. Then again there is the "*hysteric breast*;" one of the breasts becomes painful, tender, and enlarges; and the patient probably consults a physician, fearing it to be a cancer forming; but which requires constitutional treatment.

Spitting blood, or saliva streaked with blood, is by no means an unusual occurrence in hysteria, unaccompanied with disease of the lungs.

"Another prank belonging to hysteria" (observes Dr. Watson in his lectures) "and one which it is very necessary that you should be on your guard against, is that of mimicking disease of the bones of the spine. The patient complains of pain and tenderness in her back, and of weakness probably in her lower extremities, and it is now become notorious that scores of young women have been unnecessarily confined for months or years to a horizontal position, and had their backs seamed with issues, for supposed disease of the vertebra, who had really nothing the matter with them but hysteria, and who would probably have soon ceased to complain if, instead of being restricted to that unnatural imprisonment and posture, they had taken a daily gallop on horseback." "It is curious enough to notice how the mind is apt to become affected in some of these cases. After the patient has been lying supine for some weeks, she is unable to stand or walk, simply because she *thinks* she is unable."

Treatment of Chronic Hysteria.—Hysterical symptoms that have been of long continuance, can be cured only by restoring the general health of the patient. To accomplish this, an occasional *emetic* or *course of medicine*, stimulants and tonics, are the remedies chiefly to be employed.

Dr. Dean, of Harrisburg, (Pa.) observes, "in some cases where the patients had labored under this disease for ten years, and during that time had, by the advice and directions of respectable physicians, exhausted, with, at most, but temporary benefit, the whole class of remedies which are usually prescribed, I have, by the continued exhibition of vomits, either entirely removed the complaint or so far removed the habits of diseased action in the stomach, that anti-spasmodic and tonic medicines would in general complete the cure." (Eberle.) The proper time for giving an emetic or a course of medicine is when the patient feels more distress than usual.

Tonics—*Gum myrrh* is a useful tonic in hysterical complaints, when the disease is associated with an excessive flow of the menses. The myrrh should be finely pulverized, and formed into pills, three or four of which may be taken after meals; or a decoction made of it by steeping it in boiling water.

Other tonics, such as columbo, gentian, balmony, unicorn root, barberry, Virginia snake-root, and prickly ash, may be employed either simply or in combination.

The precipitated carbonate of iron may be employed with more benefit than any other tonic in some instances. The dose from half to a teaspoonful three times a day, taken in mucilage of slippery elm.

When the patient has a craving for some particular substance such as acids, chalk, or charcoal, they should be used unless they are found to disagree with the stomach.

I have in several instances known patients to eat freely of bread and butter dipped in vinegar, which agreed with the stomach.

Charcoal and white mustard seed are decidedly beneficial where the bowels are habitually constipated, or when the patient is harassed with sour eructations or heartburn.

When the bowels are habitually costive, to use injections of a decoction of aspen poplar and bayberry bark at bed-time, and retained until morning, will relieve the bowels and at the same time increase their strength and tone. Purgative medicines must be avoided, for notwithstanding they may afford momentary relief, yet eventually the functions of the bowels will be always weakened by them. By a proper course of constitutional treatment, joined with a well-regulated diet and regimen, and an abandonment of cathartic medicine, the functions of the bowels will finally be restored.

In those cases of hysteria that imitate disease of the spine,—the patient continuing for months in a lying posture,—it is necessary that the patient be induced to make the effort to walk, and to be carried in the open air, and ride out frequently, notwithstanding it may be much against their inclination to pursue this course.

Prolapsus uteri, and chronic inflammation of the womb, are not uncommon in this form of hysteria. They may either be the consequence or the cause of hysteria.

There is a form of hysteria called *clavus hystericus*, characterized by a severe pain in some point of the head, described by the patient as like the sensation that would be produced by driving a nail into the part. The pain is apt to come on regularly at a certain hour of the day. Courses of medicine and quinine are the best remedies for this form of hysteria.

The cold shower bath is highly beneficial in hysteria, more especially after a steam bath. The continued employment of the cold shower bath, and exercise in the open air, give tone and firmness to the system, and will often bring about a change in the system that cannot always be effected by medicine alone.

SECTION VII.

FAINTING.

A DEFICIENCY of arterial blood in the brain is the usual cause of fainting. Thus, persons bled whilst sitting up will faint much sooner than when lying with the head on a level with the body. Persons who are very weak from sickness, are liable to faint from sitting up too long. Some faint at the sight of blood; others from sudden fright or from any other violent mental emotion.

Symptoms.—These are, sudden loss of sensibility, and of the power of motion; the breathing and pulse scarcely perceptible, or entirely suspended, and the countenance and lips pale and bloodless.

Treatment.—The immediate cause of fainting being a deficiency of arterial blood in the brain, the most important indication is to place the head as low or lower than the level of the body, with a view to favor a supply of blood to the brain. Cold water may be sprinkled or dashed on the face; all tight dresses loosened; and salts of hartshorn, cologne, or camphor, applied to the nose.

If fainting occur in a close room or crowded assembly, the pa

tient must be taken into the open air, and if the weather be very warm, fanning will be of advantage. A person fainting in an assembly is very apt to be so closely surrounded by the bystanders, as to intercept the circulation of air. This should be prevented on all occasions where a patient has fainted.

Very weak patients are liable to faint from sitting up to take a vapor bath. When they first begin to feel faint, a dash of cold water in the face, holding the head downward for a few moments; for instance, resting the head low on a chair, or being held by an assistant, and applying some volatile stimulant to the nose, usually revive the patient and enable him to continue in the bath the usual time required in steaming.

SECTION VIII.

HYPOCHONDRIASIS.

(Dejection of Mind — Low Spirits.)

THIS unhappy and *ill-foreboding* state of mind, termed hypochondriasis, is principally confined to persons in advanced life, and it is always associated with feeble digestion. There is distress at the pit of the stomach; flatulency and acid eructations; extreme coldness of the hands and feet; torpid bowels; and either a dry, or cold and clammy state of the skin. Very frequently the countenance is sallow; indicating a torpid state of the liver. Lowness of spirits, however, attends bad health at all and every age; but it is not hypochondriasis, except when there is a fixed despondency, the conversation and appearance of the patient manifesting extreme depression of mind, or perversion of the imagination.

Characteristic Symptoms.—"A disposition to seriousness, sadness and timidity as to all future events; an apprehension of the worst and most unhappy state of them, and therefore, on slight ground, a dread of approaching evil." The patient thinks and talks about his unhappy condition, and observes every change of feeling in his body with apprehensions of danger. In some instances the nervous system will be shocked with the most trifling noise, causing the patient to startle even at the dropping of a knife at the table, and occasioning a very unhappy state of mind, sometimes exciting a revengeful feeling, even against their offspring. I have known patients laboring under this distressing weakness, to be

unable to bear the slightest noise from the innocent mirth and playfulness of their own children, requiring them to be kept out of sight and hearing. In other instances the mind sinks into a kind of sullen gloom, with constant forebodings of coming evil.

Causes.—The immediate cause of this dejected state of mind technically called “hypochondriasis,” is *exhaustion of nervous power*. Severe mental labor, indolent habits, inveterate dyspepsia, domestic trouble, debauchery, the excessive use of tobacco, or the long-continued use of opium, are, in many instances, the remote cause of that dejected state of mind consequent upon a torpid and enfeebled condition of nervous energy.

The habit of viewing the *dark side*, only, of events, and yielding the imagination to gloomy forebodings, exerts a depressing influence upon the brain—weakens the energies, and consequently impairs the powers of digestion, and thus may be laid a foundation for continued despondency.

The advice contained in the following lines may be found apropos to those of a desponding disposition.

“*Never look sad—nothing so bad
As getting familiar with sorrow ;
Treat him to-day in a cavalier way,
And he'll seek other quarters to-morrow.*”

“*Long you'd not weep, would you but peep
At the BRIGHT SIDE of every trial ;
Fortune you'll find, is oft most kind,
When chilling your hopes with denial.*”

“*Let each sad day, carry away
Its own heavy burden of sorrow ;
Or 'tis likely you'll miss half of the bliss
That comes in the lap of to-morrow.*”

“*When hope is wreck'd, pause and reflect
If error occasion'd your sadness ;
If it be so, hereafter you'll know.
How to steer to the harbor of gladness.”*

Patients advanced in years, however, whose nervous energy is greatly exhausted, have not the power to prevent despondency of mind, any more than they can prevent a fit of ague at will.—The general health must be improved, and the nervous influence aroused from its torpid state before the mind can be raised from its sunken, dejected condition.

Treatment.—When depression of mind is caused by a disordered state of the system, the most effectual medical remedies are, courses of medicine administered at proper intervals, stimulants and tonics, frictions to the surface, and cold water bathing.

A course of medicine, by cleansing the stomach, and awakening a new action in the system, will frequently be attended with the most happy effects upon the mind. In deeply seated cases, however, the course of medicine will have to be repeated occasionally for a period of several months, before the general health can be thoroughly restored.

Capsicum is the best stimulant, and should be taken at meals or soon after eating: the powder may be taken in lukewarm or cold water, or in the form of pills.

When the bowels are constipated as they usually are in this complaint, the same means may be employed as are recommended in the treatment under the head of costiveness in a former chapter.

The compound lobelia pills answer as a stimulant, and they will act efficiently on the secretions, both of the skin and mucous membrane of the stomach and bowels. A patient whose mind was greatly depressed from ill health, took from forty to fifty of the compound lobelia pills daily, besides three or four teaspoonsful of capsicum, without making any sensible impression on the stomach and bowels. After taking several courses of medicine, and continuing the use of the stimulants above mentioned, a skinny substance began to pass from his bowels, and continued to pass from them for weeks. At the time this skinny substance was passing, the patient experienced frequent griping pains in the bowels, a symptom which is complained of under the use of Thomsonian remedies in seated diseases. The above treatment, together with the use of bitters, the steam and shower bath, exercise in the open air, and a light nourishing diet, succeeded in restoring the general health of the patient, and raised his spirits from a state of extreme depression and melancholy.

There are cases of low spirits in which moral influences are of more importance in the cure than medical treatment. In two instances I have known despondency and extreme dejection of spirits to be occasioned by a retirement from business. In one of these cases, the patient took several courses of medicine, but still the low spirits continued until he resumed business, and his former active habits. In the other case the gentleman also resumed his former active habits, by which the strength, both of body and mind, was reinstated.

Absence from home, and residing with strangers, more espe-

cially in cheerful society, will sometimes cure despondency of mind.

When the nervous energy becomes depressed from too close application of the mind to study or business, exercise in the open air, travelling, and cheerful society, are important.

Reading entertaining books, and every kind of innocent amusement should be indulged in, to divert the mind, and bring new objects into view, when it is not convenient for the patient to perform a journey.

Various means have been successfully employed for the cure of the *hypo*, as it is usually called.

The following is from the *Medical Companion*, written by James Ewell:

"Some hypochondriacs have fancied themselves miserably afflicted in one way, and some in another—some have insisted that they were TEAPOTS, and some that they were TOWN CLOCKS. This that he had a big belly, another that his legs were glass,—one that he was extremely ill, another that he was actually dying. But I have never heard of any of this blue-devil class whose extravagance ever yet came up to the following, which was related to me by my noble-hearted old friend, the late Dr. Stevenson of Baltimore, whose name sounds in my ears as the summary of every manly virtue.

"This hypochondriac, who, by the bye, was a patient of Dr. Stevenson's, after ringing the change on every mad conceit that ever tormented a crazy brain, would have it at last that he was dead, actually dead. Dr. Stevenson having been sent for one morning in great haste by the wife of his patient, hastened to his bed-side, where he found him stretched out at full length, his hands across his breast, his great toes in contact, his eyes and mouth closely shut, and his look cadaverous.

"'Well, sir, how do you do? how do you do this morning?' asked Dr. Stevenson, in his blustering, jocular way, approaching his bed-side. 'How do I do?' replied the hypochondriac faintly, 'a pretty question to ask a dead man!' 'Dead!' replied the doctor. 'Yes sir, quite dead: I died last night about twelve o'clock.'

"Quick as lightning Dr. Stevenson caught 'his cue, which was to strike him on the string of his character, on which the Doctor recollected he was very tender. Having gently put his hand on the forehead of the hypochondriac, as if to ascertain whether it was cold, and also having felt his pulse, he exclaimed in a doleful tone, 'Yes, the poor man is dead enough—'tis all over with him, and the sooner he can be buried the better. Then stepping up to his wife, and whispering her not to be frightened at the measures he was about to take, he called to the servant, 'My boy, your poor master is dead, and the sooner he can be put under ground the better. Run to Mr. C——m, for I know he always keeps New England coffins by him, ready made, and do you hear, bring a coffin of the largest size, for your master makes a stout corpse, and having died last night, and the weather being warm, he will soon begin to smell.'

"Away went the servant, and soon returned with a proper coffin. The wife and family having got their lesson from the Doctor, gathered around him and howled no little, while they were putting the body in the coffin. Presently the pall-bearers, who were quickly provided, and

let into the secret, started with the hypochondriac for the church-yard. They had not gone far before they were met by one of the towns-people, who, having been drilled by the facetious Stevenson, cried out, 'Ah, Doctor! what poor soul have you got there?'

"'Poor Mr. B——' sighed the Doctor, 'left us last night.'

"'Great pity he had not left us twenty years ago,' replied the other, 'for he was a bad man.'

"Presently another of the towns-men met them with the same question, 'And what poor soul have you got there, Doctor?'

"'Poor Mr. B——,' answered the Doctor again, 'is dead.'

"'Ah, indeed!' said the other, 'and so the devil has got his own at last.'

"'Oh, villain!' exclaimed the man in the coffin, 'if I was not *dead*, how I would pay you for that!'

"Soon after this, while the pall-bearers were resting themselves near the church-yard, another one stepped up with the old question again: 'what poor soul have you got there, Doctor?'

"'Poor Mr. B——,' he replied, 'is gone.'

"'Yes, and to h—ll,' said the other, 'for if he has not gone there, I see not what use there is in such a place.'

"Here the dead man, bursting off the lid of the coffin, which had been purposely left loose, leaped out exclaiming, 'Oh, you villain! I am gone to h—ll, am I!—well I have come back again to pay such ungrateful scoundrels as you are.' A race was immediately commenced between the dead man and the living, to the petrifying consternation of many of the spectators, at sight of a corpse bursting from the coffin, and in all the horror of a winding-sheet, racing through the street. After having exercised himself into a perspiration by this fantastic chase, the hypochondriac was brought home by Dr. Stevenson, freed of all his complaints. And by strengthening food, generous wine, cheerful company, and moderate exercise, was soon restored to perfect health."

The disordered state of mind exhibited in the above case, doubtless was occasioned by a torpid circulation of blood through the brain, and from extreme deficiency of nervous energy. Whether any other means than those resorted to by Dr. Stevenson could have succeeded in arousing an action in the system sufficient to cure the disordered imagination of the patient, is a question not readily answered.

"A certain hypochondriac, who for a long time fancied himself dying of a liver complaint, was advised by Dr. Crawford, of Boston, to make a journey to the state of Ohio. After an excursion of three months, he returned home, apparently in good health, but upon receiving intelligence of the death of a twin brother who had actually died of a schirrous liver, he immediately took the staggers, and falling down, roared out that he was dead, and had, as he always expected, died of a liver complaint. Dr. Crawford being sent for, immediately attended, and asked the hypochondriac how he could be dead, seeing he could talk. But still he would have it that he was actually dead. Whereupon the sagacious Doctor exclaimed, "Oh yes, he is certainly dead, and it is more than probable his liver was the death of him. However,

to ascertain the fact, I will hasten to cut him open before putrefaction takes place." And thereupon, getting a carving knife and whetting it as a butcher would to open a dead calf, he stepped up to him and began to open his waistcoat, when the hypochondriac, horribly frightened, leaped up with the agility of a rabbit, and crying out, "Murder! Murder!" ran off with a speed that would have defied a score of doctors to catch him. After running a considerable distance, until he was almost exhausted, he halted; and not finding the doctor at his heels, soon became composed. From that period this gentleman was never known to complain of his liver; nor had he for more than twenty years afterwards any symptoms of this disease."—*Ewell's Medical Companion*.

Persons laboring under depression of spirits from ill-health are often accused of being "*hipped*," a term employed to designate a weakness which the patient could overcome or control at will. Insinuations of this kind, generally come from persons ignorant of the controlling influence which a disordered condition of the digestive organs exerts upon the spirits.

SECTION IX.

ST. VITUS' DANCE.

SYMPTOMS.—It commences with twitching or jerking of the muscles of some portion of the body, generally first observed in the face or in one of the limbs. These sudden contractions of the muscles are usually slight at first, occurring only occasionally, and more particularly when the mind is grieved or agitated. By degrees these jerking motions increase, until, in many instances, almost every muscle in the body is affected with spasmodic contractions. In most instances the contractions are much stronger on one side of the body, and frequently they are confined almost exclusively to the left side. The disease occurs in young girls much oftener than any other persons. If the patient is told to put out her tongue, she makes sundry attempts to do so before she can accomplish it; and then the tongue is suddenly thrust out, and as suddenly withdrawn. The muscles of the face seldom escape being affected, twisting the features, with all sorts of ridiculous forms. She cannot keep her hand or arm half a minute in the same position. When, at meals, she desires to carry her hand to her mouth, it is arrested midway, and suddenly pulled back again, or pushed off in some other direction; and it is only after many deviations and fruitless efforts that she succeeds. "From the im-

perfect command of the will over the voluntary muscles, the patient, when she attempts to walk, has a starting, hobbling, and irregular gait, with an awkward dragging of one of the legs." Sometimes the arms and legs are thrown into such confused motions, that the patient will be unable to walk, or even to stand alone.

"At first the expression of the countenance, in the intervals of the spasmodic motion, is that of good humor and contentment." In a later period of the disease, however, the countenance loses its expression of cheerfulness, the temper is irritable, and sometimes the intellect is enfeebled. "Slight paralysis occasionally occurs on one side of the body."

When the patient sleeps, the jerking motion of the muscles is entirely suspended.

Patients affected with St. Vitus' Dance are generally worse at a particular time of the day.

The appetite is variable; sometimes voracious—at others feeble. The tongue is slightly coated, and generally somewhat contracted. Digestion is more or less impaired; the bowels are usually inactive, and the stools seldom have a healthy appearance.

St. Vitus' dance is usually confined to the period of life which intervenes from the eighth to the twentieth year.

Causes.—Constitutional disorder, more especially a deranged condition of the digestive organs, is the chief cause of St. Vitus' dance. Among the occasional causes of this disease are, violent mental emotions; sudden fright, or anger; "repelled cutaneous eruptions;" suppression of the menses; and exposure to cold and damp.

Not Dangerous.—St. Vitus' dance very rarely proves fatal. The few instances that have been known to terminate fatally, with "*slow irritative fever*," have probably been experimented upon by medicines which have poisoned the stomach, and destroyed the vital principle.

Duration.—In some instances this disease continues only a few days; in others it is prolonged to many months, or even years. When the disease is wholly dependent upon a disordered condition of the stomach and bowels, it is more readily cured than when it has been brought on by sudden alarm or other violent emotions of the mind. Girls attacked with St. Vitus' dance, about the age of thirteen or fourteen, are seldom permanently cured until menstruation becomes fully established. The disease is also apt to become protracted when associated with chronic derangement of the general health.

Treatment.—The following plan of treatment I have known to succeed in curing several cases of St. Vitus' dance, viz:—In the first place, give broken doses of lobelia, sufficient to occasion slight nausea; a course of medicine administered occasionally; a shower bath every morning, sometimes preceded by a vapor bath; and as the tongue begins to clean, or the skin becomes pale, and the system relaxed, give *tonics*.

On administering Broken Doses of Lobelia.—Lobelia may be administered in the form of pills, tincture, or the powder mixed in warm water. In some cases it is necessary to give as much as a teaspoonful of brown lobelia powder at a time, and this frequently repeated in order to effect even slight nausea.

In the case of a little girl laboring under St. Vitus' dance, the brown lobelia powder was given in full doses, and frequently repeated without producing the slightest nausea, or causing any perceptible degree of relaxation, until several courses of medicine had been given. At the end of the third week from the commencement of the treatment, the patient became much distressed and deathly sick under the influence of lobelia administered after the vapor bath. She tossed about in every direction, and continued in this way six or seven hours, the system being much relaxed. After this operation, the patient began to mend rapidly. The compound lobelia pills are convenient to take, and may be used with as much benefit, probably, as any other form of lobelia. From twelve to twenty pills should be taken daily.

The Vapor Bath is particularly beneficial in St. Vitus' dance, especially when the skin is in an unhealthy condition. The bath may be repeated daily, or every few days, as the circumstances of the case may indicate. After steaming, the patient must be showered with cold water, rubbed dry, and the surface bathed with No. 6, or some kind of stimulating liniment.

Emetics.—These may be given once a week, or at longer or shorter intervals, as the character of the symptoms may demand. Brown lobelia powder, infused in strong composition tea, is a proper form of emetic to administer to children. Lobelia, administered by injection, in warm water, and retained several minutes, will occasion vomiting and relax the system as effectually as when swallowed. I have been sent for on several occasions where families have become alarmed by the extreme relaxation occasioned by lobelia injections. All that is required is to bathe the face, breast, and hands with spirits, or vinegar and water. It is well, however, to give occasionally some stimulant, No. 6, capsicum tea, composition, or even simple herb teas, pennyroyal or mint, together with some light nourishment—milk porridge or chicken tea.

I never knew an instance of St. Vitus' dance in which the disease did not moderate after the patient was fully relaxed under the influence of lobelia. I have on several occasions, however, given from six to eight teaspoonsful of lobelia powder to patients laboring under this form of disease, without causing any perceptible relaxation, or effecting even slight sickness; and then again, at another stage of the disease, one teaspoonful, or even half that quantity, will operate effectually both in cleansing the stomach, and relaxing the system.

The Cold Shower Bath is much employed in the treatment of St. Vitus' dance. This remedy is particularly appropriate in the more advanced stage of the disease, after the stomach has been thoroughly cleansed. The proper time for administering the cold shower bath, is in the morning, as soon as the patient is out of bed. After the bath is administered, the patient must be rubbed dry, wrapped in a blanket, and put in bed, and remain there half an hour or longer. If the patient experience a glow of warmth over the system, after the shower bath, it will be almost certain to prove beneficial.

Infusion of black snake-root, and Pipsissewa in connexion with the use of the warm foot bath, and vapor bath, is recommended by Dr. A. C. Logan, in cases of St. Vitus' dance.

Tonics.—The spice bitters may be used in any period of the disease. In the more advanced stages of it, stronger tonics will be required; such as quinine, carbonate of iron, centuary, balmony, golden seal, or Virginia snake-root. The skull-cap (*scutellaria latereflora*) may be employed both as a tonic and nervine. It may be taken singly in decoction, or combined with other tonics.

Injections.—When the bowels are very costive, injections may be used occasionally, composed of salt, molasses and water, adding an even teaspoonful of green lobelia to each injection. Lobelia administered by injection, and retained, will benefit the patient as much as when taken into the stomach. When the disease has been of long continuance, however, or the patient feeble and emaciated, the vomiting will be best effected by the *third preparation of lobelia* taken into the stomach.

Astringent, or anti-canker medicine.—In the latter stages of the disease, or during any period when the tongue is thickly coated and manifests a tendency to clean, a strong decoction of bayberry or sumac, or of the two combined, must be given as often as once a day. In every case of St. Vitus' dance that I have attended, there has been a false membrane discharged from the bowels, and flakes of a similar substance have been thrown off by vomiting.

about the time the disease gives way. Indeed I have sometimes been inclined to believe that a coating of thickened secretions over the mucous membrane of the stomach and bowels was a principal cause of the protraction of the disease. The fact that patients recover soon after such a substance is observed to pass from the bowels, furnishes some proof in support of this opinion. May it not be the presence of a false membrane lining the stomach that renders this organ so extremely insensible to the impression of lobelia, observable in many instances in St. Vitus' dance?

The No. 3 pills will answer in the place of the astringent teas, and are much more readily taken. From three to six of these pills may be taken three or four times a day on an empty stomach.

Sea Bathing has been found particularly beneficial in the cure of St. Vitus' dance.

The Diet must be nourishing, and easy of digestion, such as boiled milk and toast, stale bread, crackers, fresh beef and mutton, poultry, eggs, custard, boiled rice, and all wholesome vegetables. All kinds of confectionery, cakes, hot bread, and pastry, must be avoided. The supper should always be light.

When St. Vitus' dance is dependent upon, or associated with, obstructed menstruation, the method of treatment already laid down will be appropriate to the case. Particular attention, however, will be necessary to keep the feet dry and warm, and to use frequently warm foot baths. When the period arrives at which the patient should be *unwell*, stimulating enemata should be administered to the bowels, composed of pennyroyal tea, adding a teaspoonful of lobelia powder to each; or of bayberry tea, with the addition of a teaspoonful of the third preparation of lobelia; the foot-bath should be used daily, and the patient drink freely of composition or pennyroyal tea, and if the general health be much deranged, an emetic should be given. If there be much pain in the back or loins at this period, the patient should be kept warm in bed, and bottles of hot water or hot bricks wrapped in damp cloths be applied to the back and feet.

SECTION X.

TETANUS — LOCKED JAW.

CAUSES.—Locked jaw is sometimes caused by wounds; in other instances it is brought on by exposure to cold, when the vital powers are in an enfeebled condition. Sleeping in the open air is

very commonly an exciting cause of tetanus in hot climates. The use of narcotic poisons may also occasion tetanus. *Veratria*, an article frequently employed in the old school, but more generally in the Homœopathic practice, has caused tetanus in several instances in this city. Wounds of the head, gun-shot wounds, and punctured wounds in the soles of the feet, and palms of the hands, are the kinds most apt to occasion locked jaw. "Tetanus is particularly apt to follow wounds in which a nerve is partly divided or lacerated, without being completely divided."

Symptoms.—This formidable disease usually comes on in a gradual manner. At first there are pain and stiffness in the back of the neck, slight spasms in the muscles of the throat, and distress at the pit of the stomach. In some instances these symptoms continue several days before the jaws become fixed. As the disease increases, the jaws become stiff and at length immoveable; great distress is felt at the pit of the stomach; the whole, or a part of the muscles of the body and limbs become rigidly and permanently contracted—the head is thrown backward, and the body is bent either backwards, forwards, or sideways. Sudden paroxysms of pain, and retraction at the pit of the stomach occur at frequent intervals, attended with violent spasmodic contraction of the muscles. "These paroxysms last usually but a few minutes—the muscles of the trunk and extremities resuming for awhile a comparatively relaxed state; but those of the jaws remain firmly contracted during the remissions. In the latter period of the disease, the spasms remit but slightly and transiently: the patient is in an almost continued rack of torture; the muscular contractions are general and extremely violent; the countenance becomes frightfully distorted; copious sweats break out; the pulse is quick and irregular; the respiration hurried and laborious; the voice grating and unnatural; the eyes dim and watery, and the jaws immoveably locked. Towards the fatal termination of the disease, slight delirium generally occurs. At this period a severe spasm often terminates the scene."

"The usual mode of termination in fatal cases is by apoplexy. In some instances, all the muscles become completely relaxed a short time before death takes place. The patient seems to have emerged from his terrible malady. Every part of the body is in the ordinary state of relaxation. Suddenly, however, extreme prostration of strength ensues. He becomes insensible and comatose; the countenance assumes a cadaverous expression, and death speedily follows."

Duration.—Locked-jaw usually terminates before the fifth or sixth day. Occasionally, however, the disease is protracted for weeks.

Favorable Symptoms.—The remissions between the paroxysms becoming complete and of longer duration; a tingling sensation in the extremities, as if ants were crawling over the parts; a moist, and uniformly warm skin; an increased flow of saliva from the mouth; “and above all when the patient enjoys sleep,” strong hopes may be entertained of an eventual recovery.

Locked jaw occasioned by causes which operate upon the system generally, such as sleeping on damp ground, or sudden exposure to extreme cold, is in general less fatal than when the disease is caused by wounds.

Preventive means in case of Wounds.—For severe wounds, more especially gun-shot wounds, especial care should be observed to prevent the admission of cold or damp air to the wound. This will be the surest means of protecting the patient from locked jaw. Warm stimulating poultices must be applied to the parts to favor suppuration.

When a punctured wound is received in the palm of the hand or sole of the foot, for instance, from a nail or pin, the wound should be enlarged a little with the point of a small lancet, bistourie or penknife, and No. 6, or spirits of turpentine poured in; and this repeated several times a day, and a warm stimulating poultice applied, with a view to favor the action of suppuration; or beat the part gently with a piece of wood, or the handle of a knife, with a view to attract blood to the part and to excite adhesive inflammation. Locked jaw rarely or never occurs from such wounds when they discharge matter. “It has been observed,” says Dr. Ewell, “that the less inflammation there is in the injured part, the greater will be the liability to tetanus. This circumstance has suggested the propriety of exciting inflammation in the wounded part by means of irritating applications.” In almost every instance where locked jaw has been brought on from punctured wounds, as when a nail has penetrated the foot, the disease has not appeared until after the wound has closed, and the part become free from inflammation.

If the patient be dyspeptic, or the general health otherwise deranged, a course of medicine must be given, followed by the free use of composition or capsicum, with a view to keep a determination to the surface. “An equable and comfortable temperature, with a simple diet and rest, are important auxiliaries in preventing this disease after wounds.”

Treatment of Locked jaw.—On the first appearance of symptoms which indicate the approach of locked jaw, such as slight spasms in the throat, a sense of stricture and distress at the pit of the stomach, and stiffness in the neck and shoulders, a thorough and persevering course of treatment must be instituted. The means chiefly to be

relied upon, are vapor baths, the third preparation of lobelia, and powerfully stimulating injections.

A full course of medicine must be administered without delay; after which the third preparation must be continued in teaspoonful doses, in bayberry tea, repeating the dose every hour or two as the circumstances of the case may require. When the symptoms are severe, the third preparation may be given in tablespoonful doses, and repeated as often as every half hour, until the symptoms assume a more favorable aspect, when the quantity may be lessened accordingly.

Steaming is highly important in the treatment of locked jaw, and in the early stage of the disease, and when the patient can sit up without difficulty, the vapor bath should be administered two or three times a day. The patient should be dashed with cold water at the close of the steaming, and after being rubbed dry, the surface bathed in No. 6, and when the patient is in bed, hot bricks, or bottles of hot water, wrapped in damp cloths, applied to the feet.

Injections composed of a teaspoonful, or even a tablespoonful of the third preparation of lobelia, in bayberry or composition tea, must be administered at intervals of every two or three hours. The strictest caution must be observed to protect the patient from the influence of cold air on getting out of bed, when he is in a perspiration. Unless the air in the room be at the summer temperature, the patient should continue under the bed-clothes.

When there is great difficulty in swallowing, the injections retained several minutes, and frequently repeated, will prove nearly, or quite as beneficial as if the medicine were taken into the stomach.

When the spasms are violent, a tablespoonful of lobelia powder may be administered occasionally by injection in lukewarm water, and retained, with a view to relax the muscles. When the third preparation of lobelia can be retained in the bowels, it should be used in general, in preference to the simple lobelia powder.

When the symptoms have abated, and the patient is weak and relaxed, wine-whey may be given freely as nourishment. Large quantities of wine have been given with benefit.

Quinine is as good a tonic as can be employed. It may be given in large quantities—from 10 to 20 grains at a time, and this repeated every few hours. Quinine is best adapted to a late period in the disease, when the symptoms have assumed a more favorable aspect by the course of treatment as before mentioned.

Local Treatment.—If the disease arise from a gun-shot wound, or from any injury attended with sloughing, or with symptoms of mortification, a poultice should be applied, prepared in the following manner, viz: To a pound of wheat flour, add half a pint of yeast, and a large tablespoonful of fine ginger, and after mixing

them well together, set the mixture by the fire until it begins to rise, then spread and apply it. The poultice must be kept warm, and changed morning and evening.

When a punctured wound is the cause of locked jaw, the wound should be opened with a lancet or other instrument, and every effort used to excite inflammation and the formation of matter, by pouring spirits of turpentine or No. 6 in the fresh wound, and applying warm stimulating poultices, such as a mixture of slippery elm and cayenne pepper. If the injury be on the hand or foot, the part should be steamed occasionally, in order to attract an afflux of blood to the part, and favor the formation of pus.

Either a mustard plaster or pepper poultice must be kept applied to the spine, extending from the nape of the neck eight or ten inches down the back. The mustard should not be allowed to cause a blister.

SECTION XI.

HYDROPHOBIA.

Bite of a Mad Dog, or other Rabid Animal.)

THIS terrific disease is occasioned in the human system by the bite of a rabid animal. The poisonous saliva from the mouth of the animal is conveyed by its teeth into the wound, and when absorbed and carried into the system, brings on hydrophobia.

When this dreadful disease becomes firmly seated in the system, there is scarcely the possibility of effecting a cure by any medical treatment. Therefore when an individual is bitten by a mad animal, the most prompt measures should be used to prevent the absorption of the poison which may have been deposited in the wound. The most important preventive means are cutting out the parts that are bitten, or burning with a red-hot iron, or with caustic potash.

Hydrophobia seldom occurs until three or four weeks after the bite is inflicted. More commonly the disease does not become developed until the sixth or seventh week after the insertion of the poison. "It is said that the disease comes on much earlier in hot climates than in temperate latitudes." The disease, however, may generally, if not always, be prevented, by cutting out the parts bitten, or by cauterizing them with a red-hot iron, down deeper than the wound itself.

When persons are bitten through their clothes, the poisonous saliva will in general be rubbed from the teeth as they pass through

the clothing. Thus many who have been bitten by mad animals have escaped hydrophobia without having the wound either cut out or cauterized with a red-hot iron, having relied upon some reputed specific, such as elecampane stewed in milk, or other equally simple preparation, which could have had no possible effect in preventing the absorption of the poison, if it had been deposited in the wound. It is doubtful whether hydrophobia was ever prevented in a single instance by any of these reputed preventives. The reason why the disease has not come on when no other means have been used than those falsely called preventives, is simply because the *poison* was either rubbed from the teeth of the animal by the clothing, or from some other cause did not happen to be deposited in the wound.

A case of hydrophobia occurred not long since in Lancaster county, Pa. The patient, after being bitten by a mad dog, used no other means to prevent the disease than a preparation that was supposed to be a certain preventive to the disease. Poison, however, happened to be deposited in the wound, and being allowed to remain there, it was absorbed, and by contaminating the system, brought on hydrophobia, of which the patient died.

Means to be employed to prevent Hydrophobia. — Any one, on being bitten by a mad dog, or other rabid animal, should immediately have a cord applied around the limb above the wound, so as to stop the circulation, the wound washed with cold water, and then, as soon as possible, have the surrounding flesh pared away, as deeply as the wound had penetrated, or sear the whole of the wound with a red-hot iron, or with caustic potash, in order to remove or destroy the poison. The sooner the parts are cut away, or cauterized, after the bite, the more certainly will it prevent hydrophobia. If this should have been neglected at first, even for several days after the bite, it should still be done. Doctor Marshall Hall, on the treatment of hydrophobia, makes the following observations: "But the most important point in practice is to excise the part on which the bite has been inflicted, early, nay immediately, if possible, but late rather than not at all: indeed it is not too late if the symptoms have not yet appeared." Some surgeons recommend the application of a cup after the parts are pared away, and then cauterize the wound freely.

Besides the local treatment above mentioned, constitutional treatment should at once be instituted, with a view to assist the constitution to expel the poison from the system, in case there should be a portion of it absorbed. A course of medicine must be administered every few days, and the patient take broken doses of lobelia; drink skull-cap tea; keep the bowels regular by the use of injections; have a vapor bath administered every day, and use light nourishing food. When the above preventive measures are

early employed, there would be scarcely the possibility of the occurrence of hydrophobia.

Symptoms of Hydrophobia.—"The only symptom which is never wholly absent in this disease, as it affects the human species, is the extraordinary dread or horror of liquids—more especially of water. Patients laboring under rabies, may indeed sometimes experience a temporary abatement, or even absence of this torturing symptom, but in all instances it occurs in a greater or less degree, and generally remains throughout the whole course of the malady. In general the mere sight of liquids, or the sound of pouring water from one vessel to another, brings on violent suffocative spasms; and the attempt to swallow water, or to bring it to the lips, commonly excites a degree of horror and agitation truly frightful. Even the sight of polished surfaces, as of a mirror, or the rustling sound of bed curtains, or of running water, will, in the more violent grades of the disease, immediately renew the spasms and feeling of horror. Occasionally, however, this extraordinary horror is only manifested against *water*; for patients have been known to take small quantities of other fluids, as of soups, milk, and wine, in a lukewarm state. The thirst is always extremely urgent, and although the suffering from this source is generally very great, the patient does not attempt to swallow any liquids. The secretion of saliva is profuse, and from an inability to swallow it, the patient continually spits it out in every direction, often desiring those around him to stand aside, as conscious that he might thereby injure them. During the whole course of the disease occasional remissions occur. Whilst these continue, the patient often appears calm, talks deliberately about his feelings or his affairs, and cautions those about him not to approach him too closely when under the paroxysm of madness, lest he should injure them. Notwithstanding this partial calm, there is always a peculiar wildness and appearance of alarm in the expression of the countenance; the motions are quick and hurried; the eyes cast about with an air of suspicion; and if the patient attempt to lie down and obtain some rest, he usually soon starts up again with great agitation and anguish of feeling. During the exacerbations, the expression of the countenance is wild, furious, agitated, and agonizing; the eyes are blood-shot, sparkling, projecting, and expressive of rage and terror; the muscles of the face, throat, and chest, and sometimes of the extremities, are thrown into spasms; respiration is interrupted or convulsive; the arms are thrown about; the fists clenched; the teeth violently gnashed; the mouth foaming; with an unconquerable disposition to bite every thing that comes within the patient's reach. In violent paroxysms furious and maniacal ravings occur, attended often with an entire absence of consciousness. These paroxysms usually last from about fifteen to thirty minutes."

There is seldom any fever in hydrophobia, except sometimes in the later period of the disease. The pulse is generally natural, except towards the termination of the disease, when it becomes quick, irregular, and weak. The countenance is pale, except during the paroxysms,—then the face is turgid and flushed. The power of generating heat in the system is almost suspended, the patient being extremely sensitive to cold, and shudders at the slightest gust of air. The skin is dry and constricted, the bowels inactive, “and the blood drawn from a vein is often dissolved and very fluid.”

Duration of the Disease.—Hydrophobia, in most instances, terminates fatally by the second or third day from its commencement. It has, however, occasionally been protracted to the fourteenth or fifteenth day.

Treatment.—When symptoms of approaching hydrophobia appear, such as spasms in the throat, and a dread of water, prompt and energetic treatment must at once be instituted. The vapor bath and preparations of lobelia are the means chiefly to be relied upon.

Third Preparation of Lobelia.—This must be given in tablespoonful doses, and frequently repeated. Injections composed of two or three teaspoonfuls of lobelia powder in lukewarm water must be administered and retained, with a view to relax the system and equalize the nervous influence. This form of injection should be repeated so as to cause the system to be continually relaxed. A tablespoonful of the third preparation of lobelia may be occasionally added to the injection, for the purpose of stimulating the peristaltic action of the bowels, and to aid the curative efforts of the constitution to resist the disease. When the patient cannot swallow liquids, *injections* are to be chiefly relied upon. Especial care will be necessary to protect the patient from the influence of cold air.

The Vapor Bath.—From experiments that have been made in France, the vapor bath promises to be the most effectual means for the cure of hydrophobia that has ever yet been tried by the medical profession. A physician in France by the name of Buisson, on being attacked with symptoms of hydrophobia, went into a vapor bath at the temperature of 140°, and after remaining there some time, all the symptoms of hydrophobia left him, and he came out of the bath entirely cured. This took place in the first onset of the disease,—the only time, probably, when this or any other remedy will prove successful. M. Buisson, in a paper which he read before the Paris Academy of Arts and Sciences, wherein

he details his own case, asserts also that he had, since this experiment upon himself, treated eighty cases of persons bitten by mad dogs, and succeeded, by the use of vapor baths, in curing or preventing the disease in every case, except that of a child who died during the treatment.

There cannot be a doubt that the vapor bath is the most effectual means of removing poison from the blood. The bath should therefore be early and perseveringly applied, keeping the patient in as long as it can be borne, which, in some instances, will be several hours. The temperature of the bath should be as high as the patient can bear. About the time the patient is to leave the bath, a full dose of the third preparation of lobelia should be given. The bath must be repeated at frequent intervals, say every few hours, as long as it promises any hope of being successful.

SECTION XII.

NEURALGIA—TIC DOULOUREUX.

SYMPTOMS.— This form of disease is characterized by a succession of darting pains, which come on and pass away with the suddenness of an electric shock, shooting along the course of the affected nerve. "It comes on in sudden paroxysms, with longer or shorter intervals of more or less complete freedom from suffering. In general, much pain is experienced throughout the whole course of the paroxysm, with frequent transitory shocks of darting pain, so extremely agonizing as often to cause a temporary loss of reason and consciousness." When the disease is seated about the head or face, the surrounding parts, during the paroxysms of pain, are extremely tender, and usually somewhat swollen; the slightest touch suddenly causing severe darting pain. In other instances there is no swelling of the parts, and the sensibility not increased. "In very violent attacks of the disease, we generally find the neighboring muscles affected with spasms, and occasionally spasmodic twitchings occur in the muscles of parts distant from the place where the pain is located. When the disease occurs in the nerves about the jaws, the saliva is often secreted very copiously, and when the nerves about the eye are affected, the tears usually flow freely.

It frequently happens in recent attacks of the disease, that the paroxysms come on at a particular hour of the day, preceded by

coldness of the extremities, and sometimes chilliness; observing as much regularity with regard to the time of its coming on and passing away by perspiration, as regular intermittent fever or ague; the patient, during the interval between the paroxysms, being quite free from pain.

Of its Location.—Neuralgia is most apt to attack the nerves of the face, head, and jaws; still, any portion of the nervous system is liable to be diseased in this way.

The optic nerve has occasionally been affected with neuralgia, the pain being described by the patient as severe as if a red-hot needle were passed through the centre of the eye.

The nerves of the extremities, but more particularly those about the hips, are liable to be affected with neuralgia, the parts generally remaining free from swelling or inflammation, and the temperature usually lower than the healthy standard. *Sciatica* is a term generally applied to a neuralgic affection of the sciatic nerve, that passes near the head of the thigh-bone, and down the leg. Sometimes the pain darts down the course of the nerve to the knee or even to the foot.

The nerves about the chest are frequently affected with neuralgia, and in these cases there is generally a tender spot in the spine between the shoulders.

The stomach, kidneys, and uterus are also subject to neuralgia.

Causes.—Neuralgia is in the majority of instances occasioned by taking cold, or from other causes by which the stomach and bowels are disordered. Frequently, however, it is produced by local causes, such as decayed teeth, wounds of the scalp, and injury of a nerve.

Case.—Mrs. R——, of Southwark, struck her forehead about the middle of the eyebrow, against the corner of a stove door. Shortly after the accident she was seized with violent pains in the part, and shooting over that side of the head, which became swollen, and evidently larger than the opposite side. On taking cold, or when the system became disordered from any cause, the patient was apt to have violent paroxysms of darting pain in the side of the head, which were generally relieved by a sweat and emetic. The disease continued to return at intervals during a period of two years. A singular circumstance connected with this case, was, that the teeth of the upper jaw of the affected side became entirely encased with tartar, excepting their crowns.

Case.—Miss ——, of New Jersey, had been subject to frequent attacks of neuralgia in one side of her face during a period of eighteen months, accompanied with loss of digestion and continued

painful diarrhœa. This patient experienced scarcely any benefit from medical treatment until she had some decayed teeth extracted from the upper jaw of the affected side, upon which the pains ceased, and her general health was restored.

Treatment.—There are few cases of neuralgia in which the stomach and bowels are not prominently disordered in the first stages of the disease, requiring the employment of emetics to cleanse the stomach, and the use of stimulants and external warmth, to promote perspiration.

Of the Vapor Bath.—Whether the disease be of recent occurrence, or of long continuance, the use of the vapor bath is particularly appropriate. There are probably few physicians who have used the vapor bath extensively in neuralgia that have not sometimes found it to cure the disease after every other remedy had failed. In the treatment of neuralgia, it is of the greatest importance to bring on perspiration, and favor its continuance by the application of external warmth, together with the use of pure stimulants internally.

After a vapor bath, the affected parts should be anointed with the stimulating liniment, or other stimulating preparations applied: No. 6, third preparation of lobelia, or Granville's Lotion.

Emetics are peculiarly beneficial in all recent cases; and whenever the disease is occasioned by constitutional disorder, attended with a feverish state of the system, I have repeatedly observed immediate and complete relief afforded by the operation of an emetic.

Even when tic douloureux is produced by local causes, such as decayed teeth, or injuries of the head, emetics, especially when preceded by the vapor bath, will prove the most effectual, and sometimes the only means of relief, until the decayed teeth are removed.

Injections are beneficial when the disease is fixed about the head, accompanied with a determination of blood to the head, and coldness of the feet. Cases of this kind may, very generally, be relieved by placing the feet in warm water, and employing a stimulating injection to relieve the bowels, followed by one composed of lobelia powder and warm water, and retained with a view to relax the system, and equalize the circulation. In fine, injections are beneficial in all cases of neuralgia, and particularly so where the uterus, kidneys, or bladder are affected.

Stimulants.—When the attack is violent and protracted, besides the use of emetics, and the vapor bath, the patient should take

freely of capsicum or composition, together with broken doses of lobelia.

Compound Lobelia Pills.—When the disease has become deeply seated, requiring a long course of treatment, the above pills may be substituted for other stimulants, and the No. 3 pills may be used as anti-canker medicine.

Salt and Brandy has been used with great benefit in some cases of neuralgia. It appears to be best suited to chronic cases and where the system is in a cold and torpid condition. The dose is a tablespoonful once or twice a day.

Quinine.—After the stomach has been cleaned by an emetic or course of medicine; and in cases unattended by fever, and more especially when the neuralgia comes on periodically, like chill and fever, there is no remedy upon which so much reliance can be placed as quinine. This remedy has been employed with remarkable success, of late, in curing many cases of an obstinate character. It may be given in large doses,—from ten to thirty grains are frequently given at a time—or it may be given in small doses frequently repeated. In cases where the system is in a cold, torpid condition, quinine may be given freely, without any preparatory treatment; if the neuralgia comes on at a certain time of the day, the quinine should be taken an hour or two before the time.

Subcarbonate of Iron, given in from ten to twenty grain doses, twice a day, is highly beneficial in many cases of neuralgia, especially those of long standing, and where the blood is deficient in its proper proportion of red globules, the complexion of the patient being pale or sallow.

For “ague in the face,” which is only another name for neuralgia, Dr. Thomson recommends a portion of cayenne pepper wrapped in gauze or book-muslin wet with No. 6, and applied between the cheek and the jaw of the affected side. This will cause the secretions to flow freely, and relieve the pain. I attended a lady in Southwark, who had a severe attack of neuralgia in the lower jaw, who experienced relief by keeping a portion of the liquid of the third preparation of lobelia in the mouth. The greatest benefit, however, was derived from the use of stimulating injections containing a portion of lobelia, together with the vapor bath, and by the system being kept slightly relaxed by broken doses of lobelia.

When neuralgia is brought on by decayed teeth, they must be removed before a permanent cure can be looked for. It is not a

proper time to extract teeth during a paroxysm of pain, more especially if the gums be swollen and inflamed.

In *sciatica*, (neuralgia in the hip,) besides the "*course of medicine*," and general constitutional treatment already described, benefit may be obtained by the internal use of the *oil of turpentine*. A teaspoonful may be taken three times a day before meals. It may be taken mixed with a small portion of honey, or rubbed up with a teaspoonful of sugar, with a little water added.

Neuralgia of the Stomach is characterized by severe pain at the pit of the stomach, which often darts into the breast and to the spine, and is "rather relieved than aggravated by pressure." The pain is often relieved by taking a full meal, or a draught of stimulating drink. The tongue is covered with a white fur; the appetite variable, sometimes natural, at others craving, and then again extremely indifferent. There is an abundant flow of saliva; absence of thirst; and often repugnance to liquids. The pain which is relieved by eating, is apt to return in a few hours after meals, accompanied with a feeling of weight at the stomach, harassing belchings, and extreme depression of mind. In severe cases "the patient sometimes experiences difficulty of breathing, palpitations of the heart, wandering pains and peculiar sensations of coldness, especially in the arms, loins, and lower extremities. The sleep is sometimes good, sometimes agitated, and sometimes the patient is unable to sleep at all: yet in the morning he gets up refreshed, and feels quite well, till breakfast renews the suffering.

Many of the symptoms attending neuralgia of the stomach, are such as frequently accompany ordinary dyspepsia, so that it may be difficult to determine whether the disease be ordinary dyspepsia, or neuralgia. The same general plan of treatment, however, will be suited to each form of disease, varying the remedies to suit the emergency of the case. When the symptoms are very distressing, a course of medicine will be proper, more especially when the distress comes on after meals. A teaspoonful of the tincture of *lobelia*, taken in a tablespoonful of warm water, or mint tea, will seldom fail of relieving neuralgic pains in the stomach. It may be necessary, however, to repeat the dose. "I have myself," says Dr. Eberle, "suffered much from this complaint, (neuralgia of the stomach,) and have taken opium in large doses; but I have found another remedy, which is less ruinous in its consequences, and far more permanent in its good effects, than this narcotic. This remedy is the saturated tincture of *lobelia inflata*; a few tablespoonfuls of which has never failed to give me speedy relief and to procure me long intervals of exemption from the disease. I have also," says the Doctor, "used it in a case of a gentleman in this

city, with the happiest effect; but further than this my experience in the use of this article does not go."

Stimulating Liniments, and various volatile lotions, may be applied externally with much advantage in cases of neuralgia.

Granville's Lotion was at one time considered almost a certain remedy for neuralgia, applied externally over the part affected.

**Gum Elastic*.—Sheet gum elastic is well adapted to the cure of neuralgia, when the disease is seated in parts that will admit of the sheet gum being applied. It may be applied to joints affected with chronic rheumatism with much benefit.

In sciatica, besides the general constitutional treatment before mentioned, anoint the hip with stimulating ointment, or third preparation of lobelia, and apply the sheet gum elastic.

Sea-bathing and travelling, will sometimes cure neuralgia where medicines have failed to do it.

CHAPTER X.

SECTION I.

DROPSY.

DROPSY is an unnatural accumulation of fluid in one or more of the cavities of the body, or in the cellular tissue.

Dropsy is in all cases an effect of disease which had existed previously to the occurrence of the dropsical effusion.

Different names are given to dropsy, according to its location. Thus, when the effusion takes place in the cavity of the abdomen, it is called *Ascites*. Dropsy in the chest is termed *Hydrothorax*. Water in the brain constitutes *Hydrocephalus*; when there is dropsical effusion in the cellular tissue, it receives the name of *Anasarca*; and when confined to the scrotum, *Hydrocele*. In many instances dropsical effusions take place in various cavities and in the cellular tissue at the same time, constituting *general dropsy*.

General Causes of Dropsy. — These are, “obstructions to the flow of venous blood,” arising from disease of the liver, heart, or lungs; excessive loss of blood; disease of the kidneys; debility, especially after scarlet fever and measles; chronic diarrhœa; disease of the peritoneum; the use of arsenic; purging with drastic cathartics; or the abuse of mercury. In marshy districts of country, dropsy often succeeds imperfectly cured ague. Exposure to wet and cold frequently causes dropsy in those predisposed to this form of disease.

In a great majority of cases, dropsy comes on gradually; yet in some instances the dropsical condition has been experienced very suddenly. Professor Chapman mentions the case of a gentleman from Virginia who, by plunging into a cold bath, the body being at the same time greatly fatigued, and in a free perspiration from severe exercise, brought on a dropsical effusion in a few hours after. Another gentleman from South Carolina went into a very hot water bath, after a fatiguing ride on horseback one very hot day, and dropsy supervened soon after. In another instance, dropsy was suddenly produced by a person lying down on the ice, when much fatigued by skating. He was seized with cold, which was followed in a few days by dropsy.

When dropsy is caused by disease of the kidneys, termed Bright’s disease, the urine, by being heated to the boiling point, becomes clouded and thick like the white of eggs, proving the existence of albumen in the urine, which is never present in a healthy state. It often happens that disease of the heart and kidneys exists at the same time.

The Symptoms of Constitutional Disorder that usually attend Dropsy, are languor and lassitude; paleness of countenance; a dry and husky skin, without any tendency to perspiration; general coldness and torpor of the system; scanty and high-colored urine; constipation of the bowels, or the stools of an unnatural appearance; and the appetite variable, yet generally impaired.

1. ASCITES — DROPSY IN THE BELLY.

Dropsy in the cavity of the abdomen is generally associated with disease of the liver or spleen, occasioned, in most instances, either by intemperance, long-continued agues, or inveterate dyspepsia. Dropsy of the abdomen is usually accompanied with dropsical effusion in the cellular tissue, especially in the legs, except in cases where it is caused by disease of the peritoneum alone.

Pregnancy, and tumors in the cavity of the abdomen, have, in some instances, been mistaken for dropsy. A collection of water in the cavity of the belly, however, may be very readily distinguished from pregnancy. One of the surest means for ascertain-

ing the presence of water, is to place the palm of the hand on one side of the belly, and with the other hand to tap lightly on the opposite side, which will cause a distinct *fluctuation* or *wave* to be felt by the hand placed on the abdomen, provided there be a collection of fluid within. In dropsy the swelling is uniform on both sides of the abdomen, and when the patient lies on the back, the liquids will press out the sides and flatten the middle; whereas, in pregnancy or ovarian tumors, there is usually more swelling in one side, and the form of the swelling is but slightly altered by lying on the back. A collection of water in the cavity of the abdomen will occasion difficulty of breathing, from the pressure of the fluid upon the diaphragm, when the patient lies down with the hips raised higher than the chest. Dropsy is attended with symptoms of constitutional disorder, which are mostly absent in pregnancy.

Ovarian dropsy is not so readily distinguished from other kinds of swellings in the abdomen, for in this form of dropsy the swelling is confined to one side of the belly, and the shape of the tumor will not be modified, to any extent, by changing the position of the patient's body. And in ovarian dropsy, the extent of the tissues between the surface and the fluid, renders it difficult to detect fluctuation by percussion.

2. HYDROTHORAX—DROPSY IN THE CHEST.

Dropsy in the chest, like other forms of dropsy, is the consequence of a disordered condition of the general system, or of organic disease of the liver, heart and kidneys. In this form of dropsy, patients seldom experience much inconvenience from it, until the accumulation of water becomes so great as to interfere with respiration. The dropsy may take place only in one side of the chest, yet, more commonly, the effusion occurs in both sides.

Signs of Dropsy in the Chest.—These are, a dull sound produced by percussion, (tapping on the chest above the diaphragm with the ends of the fingers,) whilst the patient is in a sitting posture; difficulty of breathing produced by pressing firmly upon the abdomen, just below the ribs, which, by forcing up the diaphragm, causes the water to rise in the chest, and thus it interferes with respiration. A sense of suffocation on lying down; "starting during sleep;" great agitation; and an habitual cough.

The symptoms above mentioned, however, may attend other forms of disease, without there being an accumulation of water in the chest. Thus asthma and disease of the heart and cellular dropsy may occasion the same oppression of breathing that occurs in dropsy of the chest. The same difficulty in lying down attends

asthma as dropsy of the chest. Asthma, however, usually comes on by paroxysms, whereas in dropsy of the chest the oppression of breathing and inability to lie with the breast low continue without intermission. If, together with the symptoms before mentioned, characterizing dropsy of the chest, there be a tendency to dropsy in other parts, as in the feet, and beneath the skin covering the chest, sufficient evidence will be afforded to warrant the conclusion that there is water in the chest; and although it may be difficult to determine whether the disease be dropsy, asthma, or disease of the heart, it should occasion no embarrassment to the practitioner in directing the treatment, for the same general plan will be equally appropriate to each case. Thus the vapor bath, which will relieve asthma, will prove beneficial in dropsy, wherever it may be located. Lobelia, which is the most effectual remedy for asthma, is the article chiefly to be relied upon, both in dropsy of the chest, and disease of the heart.

In dropsy of the chest or abdomen, a sudden subsidence of the swelling in the legs and feet, without an increased secretion of urine, is to be viewed as an unfavorable symptom.

3. ANASARCA—DROPSY IN THE CELLULAR TISSUE.

This form of dropsy generally commences in the feet, and the swelling ascends, and in some cases extends over the whole surface of the body. Sometimes the swelling will be confined to the legs and feet; or to the face, hands, and feet.

Pressing a finger firmly against the swelling will leave an indentation or pit, which will remain a considerable length of time after the pressure has been removed. This serves to distinguish cellular dropsy from swellings arising from other causes. Thus milk-swelling, as it is termed, has the appearance of dropsy, but pressing a finger upon it will not leave such indentations as remain after pressure upon dropsical swellings.

General Causes.—Cellular dropsy is peculiarly liable to occur from exposure to cold after *scarlet fever* and *measles*. Females are liable to dropsy of the lower limbs during the later period of pregnancy, in consequence of pressure upon the veins, thus obstructing the circulation. Extreme exhaustion from loss of blood; "exposure to cold when the system is under the influence of mercury; the long-continued use of arsenic;" chronic diarrhœa; repelled cutaneous eruptions; great debility and exhaustion; chronic gout; organic disease of the kidneys, and disease of the heart are the most common causes of this variety of dropsy.

Treatment of Dropsy in General.—The most important indication for the cure of dropsy of every variety, is to correct the dis-

ordered condition that causes it. In many instances, however dropsy is an effect of an incurable organic disease of some important organ.

Of the Course of Medicine.—1st. *The Vapor Bath.*—This fulfils important indications in the treatment of dropsy. It improves the condition of the skin—effects a determination to the surface—excites free perspiration—diffuses a natural warmth through the system, and by augmenting sensibility, causes the emetic to operate more effectually. It is an observation of Dr. Thomson's, that one emetic after steaming will prove as effectual in removing disease, as four emetics given without the bath. A vapor bath in the evening will enable a patient to rest more comfortably through the night. Dropsical swellings of the limbs that occur after scarlet fever and measles, may be effectually removed in many instances by the use of vapor baths, giving also a dose of composition powder three or four times a day.

2d. *The Emetic.*—The most decided benefit is derived from the frequent administration of emetics, more especially in the early period of dropsy. Cases of dropsy have been cured by spontaneous vomiting. Dr. Eberle mentions a case of dropsy of the abdomen cured by spontaneous protracted vomiting. The relaxation produced by the lobelia, together with the retching and straining effort to vomit, will in some instances overcome obstinate obstructions in the liver and other organs.

3d. *Injections.*—If the bowels be costive, an injection should be administered previous to the bath. Stimulating injections, containing a portion of lobelia, exert a beneficial influence by arousing the nervous energy, and thus give an additional impulse to the circulation of the blood, and an increased action to the absorbent vessels. The kidneys may also be stimulated to increased action by injections. To favor the operation of the medicine, the patient must be kept warm, and take freely of capsicum or composition tea.

4th. *A Vapor Bath*, after the emetic, completes the course of medicine. The patient should be allowed to remain in bed after the operation of the emetic, as long as he continues in a perspiration. When perspiration ceases, the second bath may be applied: and the patient showered with cold water, or washed with spirits, rubbed dry, and the surface bathed with some stimulant, such as No. 6, pepper-sauce, or stimulating liniment. After this the patient must be kept warm, either in bed or by being warmly clad and continue the use of stimulating medicines, to "support the internal heat," and maintain a determination to the surface

Where perspiration cannot be continued, or an increase in the secretion of urine be induced, the use of the usual stimulants, capicum or composition tea, will be required. The medicine must be given chiefly in the form of pills, or the powders taken dry, or in a very small quantity of water. The compound lobelia pills answer both as a stimulant and relaxant, and they should be taken in sufficient quantity to occasion a slight and continued nausea.

Compound Lobelia Pills.—There is probably no medicine or compound that will fulfil so many indications for the cure of dropsy in general as these pills. From one to four or five pills may be given every hour or two, regulating the quantity taken by the effect produced. The free use of these pills, and occasionally a course of medicine, are the means most to be relied upon in the treatment of dropsy. If the bowels be very costive, a small portion of bitter root may be added to the pills. Not in sufficient quantity, however, to occasion purging.

The above plan of treatment is adapted to the cure of all forms of dropsy that arise from constitutional disorder, and will be as likely to prove successful as any other. Even in cases that are incurable, an occasional course of medicine will often relieve distressing symptoms more promptly and effectually than any other course of treatment.

Nervines.—Skullcap or valerian tea may be used at night to promote sleep, or they may be taken with other medicine.

Diuretics.—In certain conditions of the system, the use of diuretic medicine will be beneficial, by increasing the secretion of urine, which is among the first symptoms indicating a favorable termination of dropsy. But where the loss of power in the kidneys depends upon constitutional derangement, it will be useless to rely upon diuretics to cure the dropsy. First resort to general constitutional treatment, and as the health improves, diuretics will be beneficial. A great variety of diuretics is employed in the treatment of dropsy. The following, I am informed, was a favorite remedy of the late Dr. Parrish:

Take parsley root, English mustard-seed, horse-radish, and burdock root, bruised or grated, put them into a stone jug with a proper portion of sound cider; to be taken several times a day. If this should increase the flow of urine without occasioning unpleasant feelings in the stomach, it should be continued as long as it is found to be agreeable.

A strong tea of the *sumac*, more especially of the *roots* and *berries*, answers in some instances as a *diuretic*, besides the important indication which it fulfils of cleansing the stomach and bowels of "*canker*."

Haarlæm Oil has been used with surprising effect in some cases of dropsy. The dose for an adult is twenty drops, taken in a tablespoonful of boiled milk, and repeated three or four times a day.

Scabious (*Erigeron Philadelphicum*) may be used in decoction with advantage, in cases accompanied with difficulty of passing urine.

Wild Lettuce (*Pyrola Rotundifolia*) is recommended by Samuel Thomson as a good remedy in mild cases of dropsy. The tops and roots to be pounded or bruised, and steeped in boiling water, and the tea drunk freely. It may be sweetened with honey.

Juniper.—The oil of juniper, or a tea of juniper berries, is used to promote the flow of urine.

It must be borne in mind, however, that diuretics are not to be relied upon for the cure of dropsy, but to be employed as auxiliary remedies.

Tapping.—In many cases of dropsy of the belly, it becomes necessary to drain off the water by tapping. This, though a very easy and safe operation, requires to be done by one acquainted with the operation. I shall, therefore, not attempt to give directions for performing it, but merely observe, that I have found a thumb lancet the best instrument for tapping in dropsy; a canula closed at the end and perforated with holes to admit the escape of the fluid, is to be inserted when the lancet is withdrawn. With a lancet in good order, the operation of tapping does not occasion more pain to the patient than is caused by bleeding in the arm. The *trochar* (the instrument generally employed for tapping) has no advantage whatever over the lancet, and with the latter the operation can be performed with much less difficulty, and with one-tenth of the pain to the patient that would be caused by the introduction of the trochar. In some instances the operation of tapping requires to be several times repeated. There are cases recorded where the operation has been performed more than one hundred times in the same patient. Even in cases where there is no probability of a cure being effected, the operation of tapping will frequently be called for as the only means of relief to the patient.

Puncturing the Legs.—In dropsy of the chest, where the water gravitates to the feet and legs, relief may be afforded by having the patient sit with his legs hanging down, and when the water settles in them, to puncture the skin in many places with the point of a lancet or needle, and thus allow the water to run off. This operation may be repeated as often as required.

Tonics.—When the disease has been of long standing, the stronger kinds of tonics should be used, more especially after a few courses of medicine have been administered. A strong tea of quassia, wormwood, balmony, or golden seal, may be taken once or twice a day.

External Applications.—Bandaging the swollen parts, more especially the legs and abdomen, will be beneficial; and after tapping, the use of a bandage becomes indispensable. Before applying the bandage, the stimulating liniment, No. 6, or pepper sauce must be applied to the skin; or the bandage must be wet with strong salt water, and dried before it be applied. Frictions of the surface with a salted towel or flesh-brush will be of more or less benefit.

Dr. Thomson in his Narrative makes mention of several cases of dropsy, in which he succeeded in effecting a cure, after the regular practice had failed, and the disease had been considered as incurable. He treated them upon his general plan of giving freely of the "*hot medicine to support internal heat*," and to continue perspiration, assisted by external warmth, and occasionally by a course of medicine. And in dropsy of the abdomen, he drew off the water by tapping, in the usual way, after passing the patient through several courses of medicine, in order to restore a more healthy action in the system, and thus lessen the liability to a return of the dropsy.

The character of the fluid drawn off by tapping varies in different cases. Sometimes it will be high-colored like strong coffee, or it may be thick and ropy; more frequently, however, it resembles ordinary urine.

The remedies generally employed in the old school practice in dropsy, such as digitalis and hydrogogue cathartics are worse than useless; for notwithstanding they may lessen the amount of the dropsical fluid, they directly tend to prostrate the digestive functions, and necessarily weaken the restorative powers of the constitution. There is probably no case of dropsy cured under the treatment pursued by the medical profession, but would be more readily and permanently cured under the Thomsonian treatment. *Elaterium*, or the squirting cucumber, is extensively employed in dropsy as a cathartic by the medical profession; but its direct tendency upon the constitution is to prostrate the digestive functions.

4. HYDROCELE — DROPSY OF THE SCROTUM.

When this occurs in infants, as it sometimes does at birth, it is called *congenital hydrocele*. It may be distinguished from hernia,

by the transparency of the parts, and the absence of slight vermicular motions. It is generally readily cured in infants and children, by applying some mild stimulant, the scrotum being kept in a suspensory bag, by which moderate pressure upon the parts is maintained.

Hydrocele in adults, frequently demands the operation of tapping the scrotum. From a tendency to a reaccumulation of the water, the operation will require to be repeated many times, in some cases, before a cure takes place. It has been the practice of many surgeons to inject port-wine or a solution of iodine into the cyst after drawing off the fluid, to excite inflammation, and cause an adhesion between the surfaces of the cavity. The late Dr. Physick relied almost exclusively on tapping for the cure of hydrocele, repeating the operation until the water ceased to accumulate.

Dr. Harvey has for thirty years successively employed the following treatment in hydrocele, obtaining a radical cure without injection; his mode is as follows:—

“First discharge the fluid with a trochar, or pocket lancet, and then apply a warm vinegar poultice all over the scrotum, in order to bring on inflammation, which generally comes on in a few hours, and becomes painful. When sufficient inflammation has been excited, remove the vinegar poultice, and apply a bread and milk poultice. In a short time the pain and inflammation subside, and the cure is complete.”—*Braithwaite's Retrospect*.

5. HYDROCEPHALUS — DROPSY IN THE BRAIN.

Effusion of water in the brain is more liable to occur in children, between two and five years of age, than at any other period of life.

Symptoms.—Pain in the head, especially across the brows, or in the back of the neck; constant motion of one or both hands; sickness and efforts to vomit; a disposition to be in a lying posture; a deranged condition of the bowels; an eruption on the face, resembling very minute drops of water. Stupor, and sometimes convulsions, attend dropsy of the brain.

The above symptoms usually accompany hydrocephalus. Precisely the same group of symptoms occur, however, without there being any effusion of water on the brain. Dr. Chapman recently attended in consultation on a case, where there was every characteristic symptom of dropsy of the brain, but on examination after death, there was no appearance of water in that organ.

Causes.—An originally feeble constitution; exhaustion from disease; exposure to wet and cold; together with the reducing plan of treatment practised by the medical profession, constitute the

principal sources of dropsy of the brain. Severe attacks of diarrhœa or infantile cholera, are frequently attended with effusion of water in the brain; the dropsy being merely a *link* in the chain of effects resulting from loss of vital power. Active purging, when the system is in a state of exhaustion, may occasion symptoms indicative of hydrocephalus.

Dr. Travers, who in reputation is excelled by few in the profession, advances the opinion, that the depletive treatment pursued by the profession occasions, in many instances, those symptoms indicative of dropsy in the brain, so frequently observed in children.

A physician discovers symptoms of inflammation in the head and adopts a depletive course of treatment, under the false impression that the inflammation is the source of danger. A child is taken, for instance, with cholera morbus, and the purging and vomiting continuing for some time, the brain consequently becomes exhausted, and nature sets up her restorative action, occasioning symptoms of inflammation of the brain. This feverish or inflammatory action is the means which nature employs to restore the lost vitality of the brain, and to sustain its functions; and these curative efforts should be aided instead of being prostrated by a depletive course of treatment. When the pulse is strong, and the skin hot, the chances of a cure are much greater than when there is general torpor and a cold skin.

Treatment of Dropsy in the Brain.—The existence of dropsy in the brain cannot be determined to a certainty, as the symptoms which attend collections of water in the brain also accompany an inflammatory action in it. Precisely the same symptoms also arise from determinations of blood to the head from exhaustion of strength. The treatment, however, applicable to one case, will be equally suited to a similar condition of the general system in the others. The treatment must be directed to assist the efforts of nature. The means to be employed are, injections, the vapor bath emetics, the warm foot-bath, volatile stimulants applied to the head, such as whiskey or vinegar; together with frequent doses of stimulants, which may be rendered more efficacious by the addition of small portions of lobelia. In cases of dropsy of the brain in the last stage of disease, such as cholera, dysentery, &c., it will, of course, be of little use to administer medicine with a view of curing the dropsy.

Sometimes an oppressed stomach will occasion symptoms resembling those arising from inflammation of the brain, and be entirely relieved by the operation of an emetic. Even though here should not be foul matter burdening the stomach, still a lobelia emetic may prove beneficial, more especially if there be fever.

Where there is an active determination of blood to the brain, accompanied by fever, the system must be kept under the influence of lobelia in broken doses, taken into the stomach, or administered by injection to the bowels, with a view to relax the capillary vessels, and cause the blood to circulate more equally through the system. Although an inflammatory action be necessary to the lost vitality of the brain, still there may be an undue determination of blood, and concentration of nervous influence to the head, which may require to be regulated by the means above mentioned, together with the use of the vapor bath, foot-bath, pepper poultices or mustard plasters to the feet, and cooling applications to the head. The strength is to be supported by the use of stimulants usually employed, and by a light nourishing diet. In fine, inflammation, dropsy, and all other disorders of the brain, arising from constitutional disease, are to be treated upon the same general principles.

Symptoms denoting a recovery from Dropsy of the Brain. — A heavy sediment in the urine, or if it have a foetid smell, the pulse softening, and a running from the nose. This last, denoting the restoration of the secretions of the nose, is to be depended upon more than any other symptoms, as indicative of a recovery from dropsy of the brain.

Bad Symptoms. — Blindness or deafness, deep stupor, spasms, a copious discharge of pale urine, watery discharge from the bowels, and twitchings of the muscles, are symptoms which indicate an unfavorable termination of the case.

CHAPTER XI.

SECTION I.

SCROFULA.

THE name scrofula is applied to forms of disease differing materially in their general aspect. Thus, a child affected with sore eyes is said to be scrofulous; another has an eruption on the skin which is called scrofula; a third will have a disease in the hip, which receives the name of scrofula; a fourth has swellings in

the glands of the neck, also called scrofula; another, curvature of the spine; another, running from the ears; and another, white swelling; all receive the appellation of scrofula.

Children possessing what is called the scrofulous constitution are usually of small frame, with pale and delicate skin; the muscles imperfectly developed, the flesh being soft and flaccid. The edges of the eye lids are much disposed to become inflamed, and when the scrofulous tendency is strongly developed, the tarsi (under edge of the eye lids) "are constantly red and tender." The digestive powers are feeble, the appetite variable, and the bowels seldom in a healthy condition. The patient is very sensitive to cold, and the temper generally irritable.

In female children of scrofulous constitutions, "a leucorrhœal discharge is apt to occur from time to time; and in very young children, excoriations behind the ears, scabby eruptions about the head and lips," and sore eyes are frequently observed.

That species of consumption called tubercular consumption, of which so many die between the age of 14 and 30, is of the same nature as scrofula, arising from imperfect organization. Scrofulous consumption is a term frequently applied to tubercular consumption. In many instances the mesenteric glands (glands of the intestines) become much enlarged and indurated, and sometimes of a scirrhus or cancerous nature. This is termed inward scrofula. Both children and adults are liable to swelling of the glands of the neck, though entirely free from scrofula.

It very often happens that children exhibit a strong tendency to scrofula, but become healthy without the disease having ever become further developed, except occasionally by slight swellings in the glands about the neck. Sometimes the disease breaks out early in life, and in others it does not appear until after the age of puberty. In some the disease is of short duration, the patient soon becoming entirely healthy; in others the constitution sinks under the ravages of the disease, and the case terminates fatally, not unfrequently by tubercular consumption. Occasionally the disease breaks out in childhood, and continues for years, or even during a long life, the patient enjoying tolerably good health with the exception of swelling of the glands about the neck, and probably more or less discharge of matter from those that have suppurated; or if the disease be located in the hip, the patient may recover, except from the lameness and deformity which almost always follows as a consequence of the hip disease.

Causes.—Scrofula, in all its different forms, consists essentially in debility, and an imperfect condition of the nutritive functions. Although the disease is generally the consequence of original weak constitution, or imperfect organization, still children who have inherited good constitutions, may become scrofulous by bad living,

cruel treatment, confinement in bad air, and such influences as tend to impair the functions of nutrition. Children who work in cotton and woollen factories, are peculiarly liable to scrofula. The disease also prevails among the children of the poor, more especially the colored population, when they are badly clothed, sleep in small close rooms, and live on unwholesome food badly cooked.

Scrofula frequently occurs as a consequence of taking cold after measles, scarlet fever, or whooping cough.

Preventives.—With children who exhibit marks of a constitutional tendency to scrofula, a small frame, pale skin, soft and flaccid condition of the flesh, light, fine and thin hair, long and slender neck, with a weak and irregular appetite, an unhealthy condition of the bowels, and a tendency to eruptions about the head, or to swelling in the glands of the neck, means should be employed to renovate and strengthen the constitution, in order to prevent the development of scrofula. Regular exercise in the open air, warm clothing, sleeping in a large room, wholesome, nourishing food, shower baths, or bathing in cold salt water in the morning, and friction to the surface, are the means chiefly to be relied upon, not only for renovating the constitution and preventing the development of scrofula, but as important auxiliaries in the cure of the disease after it has become manifest. Too close confinement in school rooms, and close application to study are injurious to delicate children.

Constitutional Treatment.—In all the different forms of scrofula, an occasional course of medicine, or simply an emetic, will prove beneficial. It will not, however, be required to give medicine constantly to delicate children; for in most instances, it is more important to attend to the regulation of their diet, dress and bathing, and to let them have healthy exercise, than to give medicine. Medicines, however, are essentially beneficial in many instances of scrofula, more especially when the stomach and bowels are in an unhealthy condition, the patient feverish, and restless at night. The compound lobelia pills may be used with benefit in almost every case; from one to three given at bed-time.

Tonics are proper in every stage of scrofula, when the patient is languid and weak. The spice bitters, gentian, Virginia snake-root, quinine, sub-carbonate of iron, or garden bitters, may be employed, occasionally changing them, as the fancy of the patient, or the judgment of others may determine.

The diet must be nourishing and easy of digestion. Boiled milk and toast, eggs, custards, mutton, the tender part of fresh beef, all kinds of wild game, stale bread and butter, potatoes, and boiled rice

are suitable articles of diet in scrofula. Sugar, for instance rock-candy, affords a kind of nourishment that suits the system remarkably well in cases of long standing.

Fresh air, moderate exercise, cleanliness, salt water baths, frictions to the surface with a flesh-brush, or salted towel, are of as much importance in the cure of scrofula as medical treatment. Close and crowded school-rooms are improper places for children predisposed to scrofula. It is equally important for such children to avoid getting their feet damp. It is not sufficient to wear merely tight shoes, but the soles should be very thick, to prevent dampness from penetrating them. It is of little avail, as a preventive to disease, to clothe the body warm, whilst the feet are unprotected from cold and dampness.

Treatment of scrofulous Swellings.—Scrofulous tumors are more liable to appear on the neck than on any other part. Where the swelling is not inflamed nor tender, rubbing with the warm hand an hour every morning and evening, is the best thing that can be done.

The glands about the neck are liable to become swollen, when the constitution of the patient is altogether clear of any scrofulous tendency, and do not require any attention further than local treatment.

When a scrofulous tumor becomes painful and inflamed, warm emollient poultices must be applied with a view to favor suppuration, and prevent its being converted into an indolent abscess. Elm, pounded cracker, white pond lily and ginger, combined together, and wet with warm water, will form a suitable poultice. The poultice may require to be wet occasionally with warm water, to prevent its being hard and dry. If the disease be accompanied by high fever and severe pain, a course of medicine will be required, together with the use of broken doses of lobelia, and once or twice a day a teacup half-full of strong bayberry tea, or four or five of the No. 3 pills. If the tumor have been inflamed, throbbing, and at the same time the patient affected with chilliness, followed by fever, and after the lapse of some days or probably a week or more, the tumor becomes soft and fluctuates under the fingers, and a blush of red is observed on the skin, then the tumor may be opened and the same stimulating poultice applied as long as the abscess discharges; after which some kind of salve or plaster must be applied to protect the part from the influence of the air. Abscesses along the lower jaw, must always be opened from inside the mouth.

Of the Indolent Abscess.—It sometimes happens that a scrofulous tumor, after being more or less inflamed for a time, becomes

soft, and exhibits positive signs of its containing pus, but with no pain in the part, and the skin over the tumor cool, the patient clear of fever and the system in a torpid condition. This condition of things arises as a consequence of the constitutional strength being too weak to raise or continue the proper degree of inflammation sufficient to carry on healthy suppuration. The efforts of nature subside without accomplishing its design, and the abscess becomes converted into one of an indolent character, which should not be opened, provided it can be avoided, but stimulating liniments or strengthening plasters applied, and the constitutional energies strengthened by the use of tonics, the vapor bath, and shower bath; a course of medicine every few weeks to cleanse the stomach and bowels; and a cold salt water shower bath in the morning, provided the patient does not remain chilly after it. If a glow of warmth comes on in the course of fifteen minutes or half an hour after the bath, it will be certainly beneficial. These means, together with fresh air and wholesome food, may succeed in causing the absorption of the contents of the abscess; or if it should break, or require to be opened, the constitutional efforts will be better able to carry on the healing process. In all cases where a large abscess is either forming, or has discharged its contents, the most nourishing diet must be allowed the patient, to supply the system with strength to carry on her healing operations. In case of cold or indolent abscess, wine whey forms a suitable article of diet, when the stomach is too weak to take much solid food. Under circumstances of this kind, bitters must also be used freely.

A scrofulous Ulcer is to be known by "its occurring after a suppurated scrofulous tumor—the peculiar dull red, or purple color of its edges—its remaining indolent for a length of time, neither increasing nor diminishing in size, and its being attended with that peculiar state of health which invariably prevails in the scrofulous constitution."

Treatment of scrofulous Sores or Ulcers.—Constitutional treatment is sometimes as important as local applications in the cure of this kind of ulcer. The means before mentioned for cleansing the stomach and bowels, and for improving the health, will be especially adapted to this form or stage of scrofula. Stimulating poultices must be applied to the ulcer, containing a large portion of astringent—either white pond lily, or bayberry, and the poultice wet with a strong tea of the same.

Indolent ulcers may be stimulated to a more healthy condition by filling them with dry and finely pulverized marsh rosemary, bayberry, or rhattany root, and then apply a poultice or salve over the whole, repeating it morning and evening.

"We have known a sea voyage to heal scrofulous ulcers of bad character, which had resisted years of medical treatment."—*Marshall Hall*.

When a scrofulous abscess, after being evacuated, continues to discharge more or less for a great length of time, it should be syringed with castile soap and water, and in order to stimulate a more healthy action of the parts, inject into the cavity tincture of myrrh, diluted with water, or bayberry tea, repeating it every day, and apply over the surface a stimulating poultice, or strengthening plaster covered with pepper.

Tincture of myrrh may be used with benefit as a wash, in cases of indolent ulcers.

Sarsaparilla. — A simple syrup of sarsaparilla, when properly prepared, may be used with decided benefit in scrofula, more especially when the disease has been of long continuance, and the patient feeble and emaciated. I have, in some instances, observed a rapid improvement in patients on taking a syrup of sarsaparilla. The cases in which I have known the most benefit derived from using the syrup, have been patients in whom the disease had apparently become exhausted, and the system left in a languid, impoverished condition. It is questionable whether more benefit is not derived from the sugar of which the syrup is composed, than from the sarsaparilla. On many occasions I have become acquainted with cases of scrofula in which patients have taken from twenty to sixty bottles of Swaim's and other preparations of sarsaparilla, without experiencing any benefit from them. Most of the cases of remarkable cures effected by Swaim's Panacea, have been of the character above alluded to — the disease having come to a stop, and the system being in a condition in which a syrup of sugar afforded the most appropriate kind of nourishment to the system, as by its use new blood was made more rapidly, furnishing to the system that nourishment which it required in order to regain strength and flesh. Probably rock-candy or sugar will be found as beneficial as Swaim's Panacea; the patient being allowed to eat of the sugar between meals. It must be recollected, however, that it is only in cases of long standing, that sugar will be likely to prove beneficial. A variety of simple remedies are used in scrofula, such as pipsissewa, sarsaparilla, yellow dock-root, and sassafras bark. A decoction of either of these, or a composition of them sweetened with sugar, will do as well as Swaim's Panacea.

SECTION II.

GOITRE.

THIS form of disease, although resembling scrofulous swellings of the glands, is essentially different from scrofula.

Goitre is an enlargement of the *thyroid* gland, situated low on the front part of the neck, and covering a portion of the windpipe. *Scrofula* is seated in the *lymphatic* glands, which occupy a different position from the former. The *thyroid* gland possesses a low degree of vitality, and its *use* has never been ascertained. The *lymphatic* glands have a higher degree of vitality, and they are known to perform important functions. This difference of character between the *thyroid* and *lymphatic* glands affords an explanation of the cause of the difference between *goitre* and *scrofula*.

In the first stages of *goitre*, the tumor is soft and spongy to the touch. The skin covering it has a natural appearance, "and is moveable over the enlarged gland." As the disease progresses, the tumor becomes harder, and after the lapse of many years, it sometimes becomes very large, and of a gristly or cartilaginous structure. The usual progress of *goitre* is very slow, requiring many years before the tumor acquires much size, and, in many instances, it never becomes so large as to occasion great inconvenience to the patient. In some, however, the tumor occupies almost the whole of one side of the neck, extending from the clavicle (collar-bone) to the ear. *Goitre* is very seldom attended with pain or inflammation, and in these particulars, it differs materially from *scrofula* in general: yet sometimes *goitre* is attended with darting pains, when the tumor is very large and indurated.

The skin and cellular tissue covering the thyroid gland, yielding readily to pressure, admit the gland to become very large without pressing upon the windpipe to such a degree as to interfere with respiration. When the gland becomes greatly enlarged and hard, it generally occasions some embarrassment in breathing, swallowing and speaking.

Goitre prevails to a great extent among the inhabitants of some valleys situated at the base of high mountains. "In no part of the world is the disease so prevalent, and so distressing in its character, as in some of the valleys of the Alps and Apennines. In certain districts of Switzerland and Savoy, almost the whole of the indigenous population are more or less affected with goitrous enlargements. In the valley of the Rhone, at Martigny, St. Maurice, Aigle, Villeneuve, Bourg, Lucerne, and at Dresden, and in the alleys of Piedmont, this disease is extremely common."—*Eberle*.

Some experienced surgeons have mistaken goitre for aneurism of the carotid artery. It has likewise been mistaken for an enlargement of the jugular vein. When only a portion of the gland becomes enlarged and remains soft, it may be difficult for even an experienced surgeon to determine whether the disease be aneurism, enlargement of the jugular vein, or goitre.

Causes.—Great diversity of opinion prevails among medical men in relation to the cause of this singular disease, as it prevails epidemically. Whilst some suppose it to be brought on by drinking water impregnated with lime and other calcareous substances, others have advanced the opinion that the use of snow-water is the cause of the disease. Others have contended that goitre is produced by the use of water entirely devoid of carbonic acid and others again have conceived it to depend upon particular articles of food. A more plausible theory of the origin of the disease, is that which attributes it to *atmospheric influences*—a *humid, dense atmosphere*, and the *absence of electricity in the air*. “In many deep, damp, and woody valleys, goitre is extremely prevalent; but in proportion as we ascend towards the more elevated and dry situations, on the sides and tops of the adjacent mountains, the disease becomes less and less frequent. It is well known, moreover, that when young persons affected with goitre remove from the valley in which the disease was contracted, to high and dry situations, the tumor almost always becomes considerably diminished in size, and in many instances disappears altogether.”—*Edinburg Med. and Surg. Journal*.

Dr. J. K. Mitchell of Philadelphia, states that he frequently finds goitre connected with disease of the heart.

Not dangerous.—Goitre is not a dangerous form of disease, being very rarely known to prove fatal, except in those situations where it prevails as an epidemic.

Treatment.—This disease is evidently an obstruction in the gland, and is to be cured only by removing this obstruction. The means to be employed for restoring the circulation in the obstructed gland, are frictions with flannel, or with the warm hand; and the use of stimulating liniments and warm fomentations. The application of the vapor and shower bath, and occasionally a full course of medicine, are important, more especially in the earlier stages of the disease, whilst the tumor remains soft.

Patients residing in a district where goitre prevails epidemically, will derive more benefit by a removal to a more elevated situation, where the disease does not prevail, than from any medical treatment.

Washing the tumor with *salt water*, and *sea-bathing*, are said

to be beneficial in removing goitre, more especially in its earlier stages, before the tumor becomes of a cartilaginous or gristly texture.

Iodine, in the form of ointment, applied to the tumor externally, is considered by some as an effectual remedy for dispersing such tumors, especially before they become hard.

CHAPTER XII.

SECTION I.

SUSPENSION OF ANIMATION FROM DROWNING.

WHEN a person is taken out of the water soon after drowning, "the face exhibits a turgid and livid appearance; the eyes are open and staring; the limbs somewhat stiff; the tongue thrust a little beyond the teeth; and the epigastrium tense and tumid."

It is questionable with many physicians whether animation can be restored in drowned persons, after the heart has ceased its motions. There is sufficient evidence, however, to establish a belief that, under favorable circumstances, life may possibly be restored, even after the heart has ceased to act. When a person is drowned in very cold water, it will be more difficult to restore animation, in consequence of the heat of the body having been abstracted by the cold.

It is generally believed that in drowning, water is conveyed into the lungs; but as long as life remains the glottis is closed, preventing the admission of water into the wind-pipe. It is the exclusion of air from the lungs that occasions death in drowning.

Treatment.—As soon as the patient is rubbed dry, and covered warm, stimulating injections should be administered. A tablespoonful of the third preparation of lobelia, or even two or three ounces, may be administered at once in lukewarm water. No other means can be employed that are so well calculated to arouse the nervous influence, and excite the action of respiration, as powerful stimulants administered by injection to the bowels, or introduced into the stomach by means of a stomach-pump or gum-elastic catheter. The injection should be frequently repeated, and the surface rubbed with the warm hand. In the place of the third

preparation of lobelia, pepper tea, No. 6, or any kind of spirits may be employed.

Symptoms which accompany returning animation. — Twitchings of the muscles about the mouth, soon followed by efforts to breathe; sudden motions of the limbs; "a small and weak pulse, beating at irregular intervals; and a discharge of frothy fluid from the mouth."

As soon as the patient can swallow, stimulants such as the third preparation of lobelia, or pepper tea, must be given in small doses, and these frequently repeated.

Wine whey and essence of beef should be given as nourishment, and especial care should be taken to keep the patient comfortably warm. *Vomiting* is often induced when animation is being restored, which is always a favorable symptom.

SECTION II.

SUSPENDED ANIMATION FROM CARBONIC ACID GAS.

Carbonic Acid Gas, produced by burning charcoal, when taken into the lungs undiluted with atmospheric air, will very quickly destroy life. The gas not only excludes oxygen from the lungs, which is necessary to life, but it exercises a deadly influence upon the nervous system, speedily destroying its sensibility.

A person in a tight room where there is a furnace of burning charcoal, will soon become affected with giddiness and faintness, followed by stupor and insensibility, and unless carried into fresh air, life soon becomes extinct. Many deaths have been occasioned from sleeping in rooms in which charcoal was burning, and where there were no means for the escape of the gas.

Carbonic acid gas, being heavier than atmospheric air, settles next the floor, and fills the room from below upwards. Hence a person lying on the floor would become affected by it, and sink into a state of insensibility, whilst another person, occupying a position near the ceiling, would be very little, if at all, affected. This affords an explanation why dogs and cats are sooner affected than men in the same room,—the animals inhaling the gas, whilst a man would be above it.

Treatment.—In suspended animation from the inhalation of carbonic acid gas, the patient must be removed immediately into a current of fresh air, and cold water dashed on the face and breast.

If the patient be entirely insensible, the clothing should be stripped from the body, and cold water dashed on the head and breast, or the head raised and a stream of cold water poured upon it. Sometimes the first dash of the cold water will occasion a convulsive effort to breathe.

A stimulating injection should be administered as early as possible, and frequently repeated, with a view to excite the nervous influence to action, for so long as enervation remains, suspended animation cannot be restored. The third preparation of lobelia with lukewarm water, will form the most effectual injection, and in the absence of this, some other stimulant, as composition, or pepper tea, wine, or vinegar and water. The surface of the body and limbs should be rubbed freely, and bathed with whiskey, or vinegar, and if the patient can swallow, stimulants must be given in small doses and frequently repeated.

When breathing becomes fully restored, the patient may be rubbed dry and placed in bed, and should continue to take frequently of stimulants, such as capsicum, composition, or wine whey, with carbonate of ammonia. If the patient has not vomited, the third preparation of lobelia may be given in bayberry tea, and the dose repeated until vomiting takes place.

In some instances, after vitality is restored, vigorous reaction ensues; the heart palpitates vehemently; the pulse is full, strong, and hard; the vessels of the head turgid, and a disposition to heavy sleep ensues. Under these circumstances, the third preparation of lobelia or some other stimulant must be given freely, with a view to give the stomach power to regulate the circulation. The face and breast should be bathed with vinegar or spirits; and warmth applied to the feet and around the body.

SECTION III.

SUSPENDED ANIMATION FROM LIGHTNING.

Persons struck by lightning require the same treatment as in suffocation from gas; to dash buckets full of cold water over the face and breast, and to administer stimulating injections to the bowels with a view to restore the nervous influence, for motion cannot be restored so long as the currents of nervous fluid remain suspended.

Case.—The following case is reported in the fifth volume of the Philadelphia Botanic Sentinel, by Dr. Imri Spruill, of North Caro-

lina: "Mr. Lewis Harrell was called last May to a negro woman who had been struck by lightning, 'and,' said he, 'when I got there I saw about twenty men standing around her; she appeared to be (as it was thought by all) in the agonies of death, and speechless. Knowing the efficacy of the Thomsonian remedies, I gave her a large dose of the third preparation of lobelia, which soon aroused her, and enabled her to speak. On making an examination, I found that the lightning had struck the back part of her head, and passed obliquely to the breast, tearing a new homespun cap up like gun wadding, and taking a strip of skin off in its way two inches wide, and extending over the breast and lower part of the abdomen to the groin, leaving a streak from the groin down to the sole of the foot. Her under garment was split throughout its entire length with as much precision as though it had been done with a knife. Two or three courses of medicine were administered, and she recovered rapidly.'"

During a thunder-shower persons should avoid going under a tree for shelter; it is safer to be in the open field or road. In a house the safest place is on a feather-bed; the bedstead should not be near the wall. A bed in the middle of a room, with a piece of glass or sealing-wax under each bed-post, would afford almost sure protection from any serious injury, even though the house were struck by lightning. Silk is a non-conductor of electricity, so that by placing a chair upon an old silk dress, in the middle of the room, or standing on the silk, protection will also be afforded against lightning.

CHAPTER XIII.

VARIOUS FORMS OF DISEASE OF THE EYES.

SECTION I.

INFLAMMATION OF THE EYES FROM TAKING COLD.

WHEN the eyes become inflamed by taking cold in them, the inflammation is usually in the membrane that covers the white of the eyes, and the inner surface of the eye-lids. The direct effect of cold upon the eye is to weaken and debilitate it; and the inflammation that ensues is an effort of nature to remove the effects produced by the cold.

Symptoms.—These are, a redness more or less extended over the white of the eyes; an appearance of inflammation on the under surface of the eye-lids; a feeling of sand in the eye; a profuse secretion of tears, and sometimes a thick matter in the corners of the eyes and about the eye-lashes, and a strong light is intolerably painful.

Local Treatment.—In inflammation of the eyes proceeding from cold, all kinds of cold applications are to be avoided: for although they may afford temporary relief, they scarcely ever fail of exercising an injurious influence. It is in inflammation of the eyes, arising from wounds or bruises, that cold applications are sometimes found useful. Even physicians of the old school deprecate the use of cold applications in that variety of inflammation of the eyes which they term *catarrhal ophthalmia*.

Moderately stimulating washes and warm poultices may be employed with more advantage than cold applications, in all cases of inflammation of the eyes arising from cold.

Eye Washes.—In the early stages of the inflammation, benefit may be derived by washing the eyes occasionally with warm catnip tea, a weak infusion of lobelia, or even with a weak tea of capsicum. The object of stimulating washes is to increase the secretions from the inflamed mucous membrane. It is in this way that stimulants lessen inflammation of the mucous membrane. The design of the inflammation is to restore the secretions, and hence the application of pure stimulants operates in harmony with the designs of nature.

Astringent washes of every description are improper in the earlier stages of the inflammation, unless there be a stimulus in the wash sufficient to overcome the drying effect of the astringent. Astringent washes are applicable to chronic inflammation of the eyes, where the tissues are in a relaxed condition.

Poultices of elm, flaxseed, or Indian mush, adding a small portion of ginger, applied to the eyes warm, and wet occasionally with warm catnip tea, or warm water, will prove serviceable if not continued too long at a time. The constant application of a poultice for several days, would relax the parts so much that the cure might be retarded thereby. The poultice should be covered with gauze or book-muslin to prevent its adhering to the eye. A piece of lean fresh beef or an oyster bound on the eye, will supply the place of a poultice.

Constitutional Treatment, in inflammation of the eyes, is, in many instances, of greater importance than local applications. Inflammation of the eyes is generally associated with a disordered state

of the system. The eyes being weakened in consequence of general debility of the system, the cure will be greatly facilitated by improving the condition of the general health, either by the use of pure stimulants—composition, capsicum, or simple herb teas, together with the use of the warm foot bath, and a careful avoidance of cold; or by a course of medicine, followed by the use of the stimulants above mentioned, with a view to promote perspiration, and sustain and strengthen the curative efforts of the constitution.

If there be violent pain in the head, injections should be used, containing a portion of lobelia; the feet kept warm, and broken doses of lobelia given in combination with the stimulants.

Inflamed or sore eyes from dust, seldom require any other attention than to wash them with warm milk and water.

SECTION II.

RHEUMATIC INFLAMMATION OF THE EYE.

THE globe of the eye, except the transparent portion in front, containing the pupil, and an opening on the back part, for the passage of the optic nerve, is covered by a membrane of a fibrous structure, similar to the tendons of muscles and ligaments about the joints. It is inflammation of this fibrous structure that constitutes rheumatism. When the fibrous membrane of the eye becomes inflamed, it is attended with pain which resembles rheumatic pains, and hence it is termed *rheumatic ophthalmia*. The difference, therefore, between *catarrhal ophthalmia* and *rheumatic ophthalmia*, is the difference in the location of the disease: in the first, the inflammation is seated in the mucous membrane of the eye—in the latter, the inflammation is seated in a fibrous membrane, beneath the mucous membrane.

Symptoms.—These are, violent pain in the ball of the eye, often extending to the temples, teeth, lower jaw, and internal ear. The pain is continuous, with occasional fits of aggravation, and is almost always much more severe at night than during the day. The white of the eye is of a yellowish-red tinge, terminating abruptly at the cornea—which latter (the transparent part of the centre of the eye-ball) becomes dull, cloudy, and, as the disease advances, more opaque in the centre than at the circumference. The flow of tears is at first diminished, but in the course of the disease, it becomes copious.

Causes.—Rheumatic inflammation of the eye is generally brought on by exposure to cold and dampness. More especially is it apt to occur from exposure to cold when the system is under the influence of mercury.

Treatment.—Constitutional treatment is necessary in most cases of rheumatic inflammation of the eye. The means to be employed are such as will restore the natural warmth of the system, cleanse the stomach and bowels, promote perspiration and restore digestion.

First, give stimulants, composition, or capsicum tea, and if the pain be severe, attended with an undue determination of blood to the head, the feet must be placed occasionally in warm water, containing a portion of mustard; and stimulating injections, containing a portion of lobelia, administered once or twice a day, and the patient kept warmly covered to favor perspiration. If this course of treatment prove insufficient to relieve the pain, a course of medicine must be given and repeated according to the urgency of the symptoms.

The compound lobelia pills, if taken in doses of two or three pills, every hour or two, and continued, will place the system in a condition that will favor the recuperative efforts of the constitution to re-establish a healthy condition, not only in the eye, but in every other diseased part.

When the disease becomes chronic, which means that it becomes protracted and unaccompanied with fever, or other symptoms of reaction, gum guaiacum, and bitter tonics, are to be employed, together with the general course of treatment above recommended.

Local Applications.—In the early stages of the disease, when the secretions of the eye are deficient, and the pain severe, moderately stimulating applications, either in the form of poultices or washes, are required for the purpose of exciting the secretions of the eye. A weak infusion or diluted tincture of lobelia, or weak capsicum tea, may be used for this purpose, and a poultice composed of equal parts of slippery elm, white pond lily powder, and a portion of ginger, applied. The poultice should be wet with a strong tea of raspberry leaves, or of some other of the vegetable astringents.

One of the best eye-washes for this form of inflammation of the eye, is made by dissolving four grains of nitrate of silver in one ounce of water; one drop of this solution is to be dropped in the eye every five or six hours.

The diet should be restricted to light kinds of food, such as gruels, toast and tea, &c., more especially during the earlier stage of the complaint.

SECTION III.

SUPPURATIVE INFLAMMATION OF THE EYES.

(Purulent Ophthalmia.)

SYMPTOMS.—This variety of disease of the eyes is marked by a sudden swelling of the eye-lids, attended with a copious discharge of a thick white or yellowish matter. In severe cases the eye-lids become enormously swollen, more especially the upper lid. There is more or less pain in the eyes, even in the milder form of the disease, and where the swelling is very great, the attending pain is usually violent. The mucous membrane covering the eye-ball becomes also much swollen, rising up like a spongy mass, and sometimes overlapping the pupil. A copious secretion of pus takes place soon after the swelling commences, though sometimes the matter does not escape as it is formed, in consequence of the swelling causing the eye-lids to be firmly closed. The pus, being thus retained, distends the eye-lids in the form of a round fluctuating tumor, the contents of which, sooner or later, escape from between the eye-lids. In the severe form of the disease, there is always considerable constitutional disorder and generally high fever at night.

Under a proper course of treatment the symptoms, even in this severe form of the disease, will generally begin to moderate in the course of a few days, and the eye gradually recover, and become restored to a healthy condition. Occasionally, however, the ball of the eye suppurates, partially or wholly destroying the sight.

Infants are occasionally attacked with sudden swelling and inflammation of the eyes, attended by a free discharge of matter. In them the disease very rarely injures the eyes permanently.

A very destructive form of disease of the eye prevailed epidemically, and to a great extent, in Egypt, "during the British expedition under Sir Ralph Abercrombie." This disease received the name of Egyptian ophthalmia.

Causes.—The Egyptian ophthalmia was supposed to be caused by a suddenly variable temperature—an atmosphere loaded with dampness and humidity—by the prevalence of a "hot wind loaded with fine particles of sand, and a bright and piercing light of the sun." Another and more frequent cause of the disease in this country is the accidental application of certain poisonous substances to the eye, more especially the matter from the venereal disease.

The disease, as it occurs in infants soon after birth, is occasioned by some morbid secretion being introduced into the eye at the time of the infant's birth. On this subject Dr. Eberle observes, "I have never known a single instance of this disease occurring in infants soon after birth, when, upon inquiry, I did not learn that the mother had been affected with leucorrhœa, or some other morbid vaginal secretion."

Of the consequences of this form of disease.—As it occurred epidemically in Egypt at the time above mentioned, the disease proved very destructive to the eyes. The introduction of the matter of the venereal disease into the eye sometimes occasions a loss of its sight, and this form of disease is always difficult to cure. When the disease occurs in young infants it is seldom followed by serious injury of the eye, the matter occasioning the disease being of a less destructive nature than that of gonorrhœal poison. A mild form of suppurative inflammation of the eye is sometimes occasioned by constitutional disorder, and also by ordinary atmospheric influences, but which seldom or never occasion any serious injury to the eye.

Treatment.—In all violent attacks of suppurative inflammation of the eye, a vigorous course of constitutional treatment is imperiously demanded. The patient should have a thorough course of medicine administered early, and the same repeated daily, until the disease begins to decline. If it should be inconvenient to administer a regular course of medicine, the warm foot bath must be used, and composition or cayenne pepper tea given freely; after this an emetic must be given, and if the symptoms continue to be of a violent character, doses of lobelia in composition tea must be continued every hour or two; stimulating injections administered three or four times a day; hot bricks wrapped in damp cloths placed at the feet; and the head kept elevated by pillows. If there be high fever, with violent pain in the head and eyes, benefit will be derived by administering a small teaspoonful of lobelia powder in lukewarm water, by injection, and retained. This will relax the system, and generally cause the patient to vomit.

When the disease is of a mild form, and also when it is on the decline, a less energetic treatment will do—merely giving occasionally composition, ginger, or pennyroyal tea, to favor a determination to the surface, and warm applications to the feet. In all cases, however, when the eyes are very much swollen, the system must be placed under the influence of lobelia, and continued in a state of moderate relaxation, more particularly during the early stages of the disease.

In infants, constitutional treatment is seldom necessary, unless

the disease of the eyes be brought on by a disordered condition of the stomach and bowels.* If the bowels be disordered, injections must be administered. These may be prepared of simple bayberry tea, adding half a teaspoonful of the tincture of lobelia to each injection.

Local Applications.—When the disease occurs in infants, I have found a weak infusion of lobelia, combined with raspberry tea, to be an effectual application—the eyes to be washed occasionally with the above tea, warm. All cold applications are injurious. It may be necessary, in some instances, even in infants, to apply a warm emollient poultice. Slippery elm powder, white pond lily, and crackers rolled fine, with a small portion of ginger, form a suitable compound for a poultice, which should be wrapped in gauze.

The same local applications, viz : lobelia and raspberry tea, and warm poultices, will be proper in the early stages of the same disease, without regard to the age of the patient, or the cause of the disorder. The most effectual way to wash the matter from the eyes is by syringing. The washes above mentioned may be applied by means of a syringe to far greater advantage than by any other means. In a later period of the disease, in adults, when the swelling has subsided, and the eye-lids are in a relaxed condition, Dr. Thomson's eye-water, simple tincture of myrrh, a tincture of myrrh and bayberry, or No. 6, will be suitable applications. When the disease has been produced by the application of venereal poison, the eyes should be frequently syringed with a strong infusion or tincture of lobelia.

A small portion of lard applied along the eye-lids will prevent their sticking together. Various kinds of salves may be used for the same purpose, but sweet lard is probably as good as any preparation of salve.

In all cases where the disease has become protracted, and the patient is in a feeble condition, tonics, such as quassia, wormwood, Peruvian bark, Virginia snake-root, gentian, &c., must be given, together with stimulants and nourishing food, in order to excite and sustain the curative efforts of nature.

SECTION IV.

SCROFULOUS SORE EYES.

IN this variety of disease of the eyes, the inflammation is mostly confined to the margins of the eye-lids, attended with extreme sensibility to light, a profuse secretion of tears, and a thick matter exuding from the edges of the eye-lids and the roots of the eye-lashes, which glues the lids together during sleep.

This form of disease prevails most in childhood, during the period that intervenes between the time of weaning and the eighth year of age, occurring in those of delicate constitution. Sometimes the eyes become diseased from want of cleanliness alone.

In some cases the patient cannot bear the light to come to the eyes; he keeps them constantly closed, places his hands over them, and lies with his face downward.

Scrofulous disease of the eye is generally protracted in duration—in many instances continuing with a greater or less degree of severity many months, or even years, until, by the aid of medicine and other means, or by the natural increase of strength, the constitutional powers are invigorated and the disease thereby removed.

The intolerance of light is a very prominent symptom of this disease, and sometimes it is the only symptom that manifests itself. It is curious that this inability to endure a bright light bears no regular or definite proportion to the intensity of the other symptoms. It is not that the eye is painful when protected from the light; but that the access of the ordinary light of day occasions extreme suffering; the eye-lids being spasmodically closed, and the orbicular muscle so affected with strong and apparently involuntary action, as effectually to resist all attempts at opening them. Children that are affected with this disease carry it legibly written in their physiognomy. Although you cannot tell what is the actual condition of the eye without examining it, you *can* tell, as soon as you look at the patient, what is the *nature* of the inflammation under which he is suffering. The child's brow is knit and contracted, while the sides of his nose and his upper lip are drawn upwards; those muscles of the face (they happen also to be muscles of expression) are instinctively bent in action, which tends to exclude the light, without shutting out the perception of external objects; producing a peculiar and distinctive grin. In the more severe cases the child will skulk all day in dark corners; or if in bed will lie upon his face, or under the clothes; and while the light is thus kept off he does not appear to suffer. If brought towards a window, he holds his head down, and passes his hands or arms over his

eyes. When you attempt to open his eye to examine it, a profuse discharge of scalding tears takes place: these pass partly into the nose, and excite fits of sneezing, and partly over the skin, which they sometimes inflame and excoriate; and then frequently pustules arise, and produce a discharge that crusts over the cheek and extends to the forehead and temples. This is called *crusta lacta*, and is very characteristic of the scrofulous habit; it occasionally spreads over the whole body.

Treatment.—Scrofulous sore eyes, being a constitutional disease depending upon a feeble organization, not only demand *constitutional* treatment, but in the great majority of cases, require a considerable period of time to effect a *permanent* cure. In general, much medicine will not be required. Exercise in the open air, wholesome nourishing food, warm clothing, keeping the feet dry and warm, cleanliness, a cold shower bath or sponging the body with salt water in the morning, and frictions of the surface with the flesh-brush or salted towel, are important means for improving the general health, and strengthening the constitution.

When the appetite is bad, the breath offensive, or the stools exhibit an unhealthy appearance, an emetic will be beneficial: this will operate still more effectually after the administration of a vapor bath. In recent cases the operation of an emetic will generally be followed by a manifest improvement in the condition of the eyes, and sometimes it alone will effect a cure.

The Compound Lobelia Pills may be used with benefit in almost every case of chronic disease, whether it be of a scrofulous character or otherwise. These pills do not affect the bowels in the way that cathartics operate; they stimulate the peristaltic action, and excite the secretions of the mucous membrane of the bowels, without disordering their functions, or weakening the vital powers; whereas cathartics weaken their functions, and disorder the stomach. The continued use of a cathartic,—for instance, a small dose of Epsom or Glauber salts, taken daily, or every few days—by provoking irritation in the bowels, and lessening the determination of blood to the surface, may diminish the inflammation of the eyes; but the constitutional disorder will be increased, because digestion must necessarily be impaired by the action of the salts, which merely change the symptoms of the disease, without restoring the health. Let a child in good health be purged with salts every day, and this continued for a week; the digestive powers at the end of the week will be impaired, the warmth of the system will be reduced, and the bowels will remain enfeebled and inactive for several days after. The absurdity of administering such medicine to one whose constitution is feeble, and general health deranged, must be apparent to every unpre-

judiced mind. To change the symptoms of disease by the use of cathartics, or by administering poisons, is one thing, but to remove disease from the system is quite a different matter.

Tonics.—The best tonic in cases of scrofulous sore eyes, is quinine. It may be given in grain doses, three times a day, at any period of the complaint, but more especially after having the stomach cleansed by an emetic. A very good plan of treatment is to give quinine through the day, and from two to four lobelia pills at night, on going to bed. Other tonics may be substituted for quinine, but there is no other article equally efficacious in strengthening the nervous system. Dr. Mackenzie, who made extensive use of quinine in scrofulous sore eyes, declares that *it acted like a charm*, abating, commonly, in a few days, the excessive intolerance of light and profuse flow of acrid secretions, and promptly improving the condition of the eyes in every particular.

The tonics to be preferred next to quinine are the precipitated carbonate of iron, and extract of gentian.

Purified Charcoal may be used with advantage in cases of costiveness, more particularly when accompanied with an acid condition of the stomach. The dose is a teaspoonful two or three times a day, taken before meals.

Salt and Vinegar.—When patients have an inclination for acids, such as vinegar, or lemon-juice, as they frequently have in scrofulous complaints, where digestion is impaired, a mixture of salt and vinegar will sometimes be found of signal benefit in improving digestion.

Sarsaparilla.—A simple syrup of this article is an admirable medicine for scrofula in certain conditions of the system. I have occasionally observed the most marked benefit from its use in cases where the disease had apparently come to a crisis, the patient remaining in a weak and languid condition. But whether the patient be most benefited by the sarsaparilla or by the syrup of sugar, is not very easy to decide.

Burdock-root tea has been employed with great advantage in cases of scrofulous sore eyes, the tea to be drunk freely, and the eyes wet with it several times a day. The narrow-leaved yellow-dock root may be used for the same purpose.

Local Treatment.—In scrofulous sore eyes, it will in most cases be found on examination that some of the eye-lashes are dead, and thus, operating as foreign bodies to the parts, occasion very disagreeable itching in the eye-lids, and the formation of matter at their roots. The removal of these dead eye-lashes, therefore, is

important in the cure of the disease. A little observation will teach one how to distinguish the living from the dead lashes, and they are very easily removed, without causing much pain, by a pair of tweezers. I have, on several occasions, removed, at one time, over one hundred dead eye-lashes from the eye-lids of a patient affected with sore eyes.

If there be a high degree of inflammation in the parts, apply a piece of fresh lean beef, or a piece of cabbage leaf on the eye, and continue it until the inflammation is diminished, and then apply tincture of myrrh to the eye-lids three or four times a day, by means of a small brush or the end of a feather.

The Diet must be such as is easy of digestion, yet nourishing; fresh beef and mutton, poultry, wild game in season, eggs, boiled rice and milk, boiled milk and toast, toast and cream custard, stale bread and butter, black tea, chocolate, and all wholesome vegetables may be used, provided they be found to agree with the stomach.

When scrofulous sore eyes are accompanied with eruptions on the face, or running sores behind the ears, the treatment should be the same as already described, observing especial care, when the vapor bath is administered, to protect the skin surrounding the affected parts from the irritating secretions which the steam will cause to be discharged from the eruptions. The secretions from scrofulous eruptions are sometimes so acrid that they produce an eruption on the surrounding parts wherever they are touched by them; and in this way the disease will spread over almost the whole of the face, and sometimes extend from behind the ears down to the shoulders, and cover a portion of the back. This may in general be prevented by bathing the parts surrounding the eruption with No. 6, or the tincture of lobelia, immediately after the bath, the parts being also protected at other times when the eruptions are discharging. These eruptions require the same plan of treatment recommended for the cure of scald-head; namely, to prevent the admission of air to the eruption by the application of salve or ointment, together with the use of medicines for correcting the general health.

Case.—A boy seven years old, living in Christian street, was affected with scrofulous sore eyes, attended with eruptions over the face and back of the ears; after the disease had continued more than eighteen months, the patient was placed under Thomsonian treatment, which speedily improved the general health; but the eruptions suppurated freely, causing extensive patches of raw surface, secreting pus. Necessary care was not taken for preventing the discharge from affecting the surrounding parts, and

the eruption consequently commenced spreading considerably, although the eyes were improving. The parents became discouraged, and applied again to the old practice. The treatment next pursued consisted in the continued use of salts, and cooling applications to the surface.—Under this course of treatment the determination of blood to the surface was lessened, the system became cold and inactive, and as the disease left the face, the hip and knee became affected with scrofula, attended with years of suffering, and followed by distortion of the limb. The cooling treatment occasioned the disease to become fixed in the hip, which would probably have been kept on the surface and eventually cured under Thomsonian treatment, and the disease prevented from seating itself in the hip.

Case.—A son of Mr. Laird of Southwark, was under treatment six months for scrofulous sore eyes, and continued to grow worse and waste in flesh under the treatment, which consisted of mild purgatives, and washing the eyes with a solution of nitrate of silver. The child was placed under Thomsonian treatment, consisting of an occasional vapor bath and emetic, broken doses of tincture of lobelia administered daily, a dose of composition two or three times a day, and injections. The eyes were poulticed with a mixture of elm, white pond lily and ginger. In six weeks the patient was well.

SECTION V.

BLINDNESS.

(*Total or Partial.*)

A TOTAL or partial loss of sight may be caused by a variety of forms of disease of the eye; or, more properly, different parts of the eye are liable to become diseased, occasioning loss of vision. Thus blindness may be produced by disease of the optic nerve, which conveys impressions to the brain. This form of disease is called *amaurosis*.

A very common cause of blindness is an opacity of the crystal line lens, or its capsule, designated by the term *cataract*.

Sometimes a total or partial loss of vision depends upon disease of the transparent cornea of the eye, which is liable to become clouded and thickened; and occasionally it becomes very much swollen, bulging out from the centre of the eye-ball, forming a

tumor as large as a cherry. The eye is also liable to dropsy cancer, and to gangrenous ulceration ; which happily, however, are of very rare occurrence.

Symptoms of Amaurosis—Disease of the Nerve of the Eye.—In this form of disease, the eye does not present any particular appearance of disease upon a superficial examination, except that the expression is *vacant* ; but on a closer inspection we find the pupil dilated, and on applying a lighted candle near, the contracting power of the pupil is observed to be either lost, or greatly diminished. “There is frequently the sensation as if a cloud were before the eye,” and the pupil often presents a greenish appearance. The sight is obscure, or the power of seeing is lost.

Causes.—Close and long-continued application of the eyes to minute objects, more especially by candle-light ; paralysis of the optic nerve, occasioned by an unhealthy condition of the brain, at the origin of the optic nerve ; and constitutional disease, are the principal sources of amaurosis.

Treatment.—Almost the only hope in cases of amaurosis, is an early and vigorous course of constitutional treatment, with a view to restore the circulation of nervous fluid in the diseased nerve. Frequently, however, the disease depends upon causes that render all medical means abortive ; still, a trial should be made, as by it the sight may possibly be restored, or at least greatly improved. Many cases have been cured by the use of emetics.

When amaurosis is connected with manifest derangement of the general health, there is strong reason to anticipate benefit from the operation of emetics, but still more from full courses of medicine.

Besides constitutional treatment, stimulating washes should be frequently applied to the eye, such as capsicum tea, or Thomson's eye-water, and the patient continue as much as possible in the light. The frequent application of volatile salts to the nose, and snuffing freely of composition or other stimulating powder, may assist in restoring the function of the optic nerve.

Cases of amaurosis have been cured by the application of electricity and galvanism.

Concerning the Treatment of Cataract little need be said here, as the disease is one, the cure of which requires an operation by the hands of a surgeon. In the incipient stage of cataract, however, a proper course of constitutional treatment may in some cases prevent the further progress of the disease, and even cause the absorption of the cataract. The constitutional treatment for cataract does not differ from that recommended in amaurosis.

There are occasional instances of *congenital opacity of the cornea*,—the eye at birth resembling somewhat the appearance of ordinary cataract as it occurs in adults. The pupil in some instances is entirely covered by the cloud, in others only partially. Usually, in those cases of congenital opacity of the cornea, the cloud gradually disappears by absorption, and the eye becomes perfect. The process of absorption may be promoted by the daily application of some kind of stimulant to the eye, for instance salt water, or tincture of lobelia.

SECTION VI.

IRITIS—INFLAMMATION OF THE IRIS.

THE iris is a membrane stretched across the centre of the eyeball, giving to the eye its color. In the centre of the iris is an opening called the *pupil*. It is the contraction and dilatation of the iris that effects the variations in the size of the pupil. The use of the iris appears to be, to regulate, by its dilatation or contraction, the quantity of rays of light necessary for distinct vision.

The iris is placed in a little cavity filled with a thin fluid like water and lined by a serous membrane. Serous membranes, when inflamed, throw out lymph, and inflammation of the iris has occasionally caused blindness, the effusion of lymph causing adhesions between the iris and the parts around. It is a very rare occurrence, however, for blindness to be produced in this way.

Symptoms.—The symptoms which characterize inflammation of the iris, are change in the color of the iris; for instance, a grey or blue eye becomes yellowish or greenish, and a dark eye presents a reddish tinge; irregularity of the pupil, produced by adhesions of the iris to the neighboring parts; the edge of the pupil, instead of being perfectly smooth, is more or less serrated, small toothlike processes being shot out; the eye becomes dull and tarnished, as it were, and if the inflammation is confined to one eye, the difference in the general appearance of the diseased eye is strikingly different from that of the well one. In some cases, there may be seen on the iris small rusty-looking spots or freckles. These spots are portions of effused lymph. “Sometimes, when the inflammation is very violent, or the disease has been neglected, actual suppuration takes place. A reddish-yellow prominence rises from the surface of the iris, and at length breaks and discharges matter, which sinks down to the bottom of the anterior

chamber, and presents the appearance that has been called *hypopyon*."

"Another very common consequence of the effusion of lymph from and upon the surface of the iris, is its adhesion to the capsule of the crystalline lens, which lies behind the iris, and very near it. And the pupil itself is apt to become blocked up by lymph."

"The motions of the iris are seriously impeded by the mere effusion of lymph into its texture. At first it moves sluggishly under variations of light; gradually the pupil contracts, and becomes fixed and motionless. The adhesion of the iris to the capsule of the lens, still more decidedly restrains the action of the part. When it adheres to one or more points of the margin and remains free elsewhere, the pupil is deformed; loses its circular shape; becomes angular; and this deformity is the most marked when the eye is examined either under a weak light, which allows the pupil to dilate, except at the points where the pupil is tied down to the lens; or under a very strong light, which forces the free portions of the margins, and those only, to approach the centre."

"Acute iritis is attended with pain and intolerance of light. To the latter circumstance is probably owing the contraction of the pupil during the progress of the inflammation; and then the lymph *fixes* the pupil in that state of smallness and contraction. There is pain in the eye-ball itself, and in the parts about the eye, the brow and temple, most severe at night. There is much variety, however, in regard to the pain. Sometimes it is constant and severe, but still more aggravated at night. Sometimes, even when the quantity of mischief that is visible is very great, scarcely any pain at all has been experienced." Generally acute iritis is attended with constitutional disorder, causing headach, fever, loss of appetite, furred tongue, costiveness, &c. In severe cases of iritis, and under unfavorable circumstances, such as a vitiated state of the general health, or where the recuperative powers of the system have been crippled by profuse bloodletting, long-continued purging, or the system poisoned with such articles as nitre, antimony or calomel, the disease is liable to result in blindness, either from suppuration taking place in the iris, or the inflammation extending to the retina.

Constitutional Treatment.—In inflammation of the iris, constitutional treatment should be early and perseveringly applied, with a view to effect a termination of the inflammation, without the occurrence of suppuration of the iris, and to prevent the disease extending to the retina. In severe cases, a vapor bath or the hot air bath, and a lobelia emetic should be administered daily, at least until there be a manifest improvement in the symptoms. Besides these the patient should be kept more or less nauseated by

small doses of lobelia frequently repeated; and stimulating teas given to favor perspiration. In the place of purgative medicines, which always harass the stomach and bowels, employ injections.

The patient should remain in bed with warmth applied to the feet; and the room should be kept darkened, provided the light be painful to the eye.

Local Applications.—Either a soft poultice composed of slippery elm, adding a portion of lobelia powder, or soft muslin cloths wet with cold water, may be laid on the diseased eye, if agreeable to the feelings of the patient.

The course of treatment above described is applicable to the *acute* form of inflammation of the iris, where the attack is sudden and severe. In chronic inflammation of the iris,—the most common form of the disease, and often connected with a syphilitic taint of the system, chronic rheumatism and gouty affections,—variations from the treatment above recommended will be required. For instance, instead of administering a course of medicine daily, once or twice a week will be sufficient, and in the intervals give tonics, as well as broken doses of lobelia.

When iritis is associated with *syphilis*, such remedies must be employed as are best adapted to clear the system of the syphilitic poison. See Treatment for *Secondary Symptoms of Syphilis*. Syphilitic iritis is never attended with abscess of the iris.

If inflammation of the iris occur in combination with rheumatism or gout, the treatment must be regulated to suit the character of the constitutional symptoms. Thus, if there be strong febrile symptoms, hot skin, and a strong, quick pulse, the case must be treated as one of inflammatory rheumatism, or as any other form of acute disease, relying chiefly upon courses of medicine, and a continued repetition of broken doses of lobelia and stimulants. If associated with chronic rheumatism, or long-standing gouty affections, the case must be treated accordingly; the grand object always to be kept in view, being the improvement of the general health. Thus the same constitutional treatment that would cure a case of chronic rheumatism, would be adapted to the cure of rheumatic iritis. And again, where iritis is complicated with gout, the treatment that would be most successful in restoring the general health, would be the kind of treatment for curing disease of the eye, provided the iritis have been occasioned by the same cause as the gouty affection.

In chronic iritis, as well as in chronic rheumatism, and other forms of chronic disease, change of air, especially a residence near the sea, or travelling in a mountainous country, will often effect changes in the constitution that cannot be wrought by medical treatment alone.

Case.—A gentleman came to Philadelphia some weeks since, affected with inflammation of the iris of the right eye. He had been some weeks under the old school practice, and had been purged severely with salts and other cathartics, which, together with cooling applications to the eye, constituted the principal treatment. The continued purging had caused the blood to recede from the external capillaries, the skin being cool, dry, and of a dirty, pale color; the digestive functions were much impaired; and general torpor of the system prevailed. The disease of the eye proceeded from cold, and was unconnected with either syphilis or rheumatism. The pain in the eye was violent, especially during a part of the night. This patient, after having been six weeks under the old school practice, was placed under Thomsonian treatment. The first vapor bath relieved the pain in the eye almost like a charm; and by the use of lobelia, emetics, and vapor baths, which were administered daily for some time, together with injections and broken doses of lobelia, the patient was relieved from pain, and could sleep during the whole of the night. His skin became of a healthy temperature and continued moist; the secretions were restored; the stomach recovered its lost tone; the eye improved in every way, so that in the course of a week from the time this patient came to the city, he was so far improved that he returned to the country, apparently nearly well.

SECTION VII.

STYE.

THE formation of a small abscess on the eye-lid, called a sty, is of very frequent occurrence. It is generally occasioned by a disordered condition of the stomach. Sometimes it is caused by the presence of a dead eye-lash, the abscess being formed at the root of it.

Treatment. — When the sty becomes painful and considerably inflamed, cooling applications should be made to the eye, frequently wetting it with cold water, or applying a poultice of slippery elm, or of flaxseed stewed with Indian meal, until it becomes well softened. If there be a dead eye-lash in the centre of the sty, it should be pulled out, which, when done early, will sometimes check the progress of the abscess. Rubbing the sty, when it first appears, with cold metal, as a silver spoon or knife-blade, will, it is said, in many instances prevent an abscess from being formed.

SECTION VIII.

FISTULA LACHRYMALIS.

(Obstruction of the duct which conveys the tears from the eye into the nostril.)

THE tears and mucus secreted in the eye are conveyed into the nostril through a small duct, which is liable to become obstructed by various causes, and then the tears, instead of passing into the nose, are obliged to flow over the cheeks, proving a source of extreme annoyance.

The obstruction may take place at the inner corner of the eye, where the duct commences, and may be remedied by the careful introduction of a fine silver or gold pin through the duct into the lachrymal sac, which is an enlargement of the duct about a quarter of an inch from its commencement. If the obstruction be seated in the duct below this little sac or bag just alluded to, the tears will pass down into the sac, and being retained there in consequence of the obstruction below, it becomes swollen into a round tumor, as large sometimes as a chestnut. The tumor will be situated a short distance below the eye, near its inner corner. By pressing upon the tumor, the contents will be forced upwards and pass out at the eye; or if the obstruction below the tumor be not complete, the tears contained in the sac may be forced into the nostril. "The complaint sometimes remains in this state for years, with little inconvenience, pressure being occasionally made upon the sac to empty it." Sometimes the tumor suppurates and breaks externally, and the tears will pass out through this opening, and flow over the cheek. The sac is now very liable to frequent attacks of inflammation and suppuration.

Treatment.—In the early stage of this complaint, constitutional treatment, particularly the vapor bath with an emetic, has, in some instances, overcome the obstruction and effected a permanent cure. The disease, however, is seldom curable by constitutional treatment; the only chance of its success is in the early stage, and especially when the obstruction is owing to inflammation and swelling of the duct. When these exist, the use of the vapor bath, together with relaxing the system fully by lobelia, and promoting perspiration and an equal circulation by the use of stimulants, such as capsicum or composition, may prove successful in restoring the duct to a healthy condition.

When the tears flow over the cheek, and the lachrymal sac, just

below the eye, is not swollen, it affords evidence that the obstruction is in the duct, between the eye-lid and the lachrymal sac. This obstruction may be removed by passing a small silver or gold pin down the duct into the sac.

Sometimes the lachrymal sac becomes diseased, and secretes from its surface a thick matter, which does not pass readily through the duct, and the sac becomes distended, requiring to be pressed upon in order to force the thick matter up to the corner of the eye, or down into the nose.

A gentleman not long since told me that he was cured of an obstruction in the duct that leads the tears into the nose, by the operation of a course of medicine. The disease had continued for many months, the tears passing over the cheek. During the operation of the emetic, the tears resumed their natural channel, by the removal of the obstruction in the duct. It is not to be inferred, however, that many cases of this affection can be removed by a course of medicine. It is only under particular circumstances that we can reasonably anticipate a cure by constitutional treatment.

A common practice in this complaint is to introduce a gold or silver tube down the course of the duct, and thus lead the tears into the nostrils. In some cases this tube answers a good purpose—in others it does injury.

CHAPTER XIV.

SECTION I.

INSANITY—MENTAL DERANGEMENT.

INSANITY depends upon a diseased condition of the *brain*, which is the *organ* of the mind.

“The mind consists of a plurality of innate and independent faculties, a congregation of separate and primary powers.”—*Fowler*. Each faculty of the mind has its especial organ, and when only a part of the brain is diseased, those faculties only will be deranged or destroyed which are located in the diseased part. Thus phrenology explains the reason why an individual may be insane on some subjects, and at the same time quite rational on others.

There is a close and intimate sympathy existing between the

mind and the body, so that a change in the condition of the one will vary the condition of the other. Who has ever experienced a flow of good spirits during a fit of ague, or in the commencing stage of small-pox, or in the early stage of any other form of disease, when the brain is deprived of its due supply of blood and nervous energy? In proportion as the nervous energy of the brain is enfeebled, and the supply of arterial blood to it lessened, so in proportion will the mind become enfeebled—it cannot be otherwise—yet still the mind may be free from insanity. Cases occur, however, where the brain receives so small a supply of arterial blood, in consequence probably of long-continued, inveterate dyspepsia, that it does not generate a sufficient quantity of nervous fluid to support the mind, and consequently it sinks into a state of imbecility, and sometimes into insanity. A blow upon the head, producing concussion of the brain, stops at once the operation of the mind until the brain recovers from the shock. And again, sudden impressions made upon the mind exert a powerful influence upon the brain and digestive organs. Too close attention to study immediately after dinner, weakens digestion, by causing an afflux of nervous energy to the brain, and thus, determining it from the stomach, enfeebles digestion.

A sudden shock of the mind soon after a meal, such as sudden fright or some distressing news, will suspend the power of digestion. This intimate connexion existing between the mind and the body leads us to perceive the cause of mental derangement in the diseased condition of the *organs* of the mind.

Causes.—In some families there exists a *predisposition* to insanity, so that several members of the same family will be affected with the disease. *Moral influences*, by disordering the organs of the mind, occasion insanity. Thus, by close, long-continued, and deep study, the blood-vessels of the brain may become diseased, and so far derange the functions of the brain as to occasion insanity. A great variety of moral influences,—disappointed love, religious enthusiasm, fanaticism, excessive joy, jealousy, and long-continued depression of mind, sometimes produce insanity. *The physical causes* are excessive losses of blood, exhaustion from long-continued and inveterate dyspepsia, habitual drunkenness, injuries of the head, abscess in the brain, the inordinate use of mercury, the use of narcotic poisons, and a diseased condition of the stomach and bowels. Some of the early writers on medicine have maintained that mental derangement has its seat generally in the stomach—the diseased condition of the functions of the brain being the consequence of a disordered condition of the stomach.

Chances of cure.—Of the cases of insanity that occur, probably less than one-half are cured. The great majority of cures take

place within the first year from the commencement of the disease. After the disease has continued without intermission over three years, there is little hope of the patient being restored to perfect reason; still, recoveries sometimes take place after the fifth or sixth year from the commencement of the derangement.

It is stated by physicians who have attended in *lunatic asylums* that *partial* insanity and *melancholy* are more difficult to cure than a general derangement of the mental faculties, *unattended* with *melancholy*. It is also ascertained that patients who have a distinct recollection of recent occurrences, "with an oblivion of events long passed," are more easily cured than those who have a recollection of events long past, but who cannot remember occurrences that have recently transpired about them. "In general, acute and furious mania is much more under the control of remedial management than low, torpid, and fatuous insanity. Mental derangement from physical causes, generally yields more readily and permanently than when it arises from moral causes. A recovery of the general health of the system, without a corresponding melioration of the mental disease, is said to be an unfavorable sign."—*Eberle*.

1. MANIA—GENERAL INSANITY.

Symptoms which characterize general Mental Derangement, or Mania.—These are, a rapid succession of incoherent ideas, and violent excitement of the passions, expressed by great agitation, loud vociferation, singing, menaces and fury.

Torpor of the bowels; cold extremities; variable appetite, frequently craving; sudden and frequent variations of temper, the patient often manifesting a vicious disposition; an inability to sleep much, and frightful and distressing dreams, are symptoms which generally precede the occurrence of mania.

"When the disease is once fully developed, the expression of the countenance is wild, and often furious; the eyes are prominent, sparkling, and in constant motion; the patient sings, whistles, vociferates, shouts, walks to and fro with rapidity, or stands still with his hands and eyes often raised towards the heavens; he does not sleep for many nights, sometimes not for several weeks; he often manifests great muscular power; the skin is dry, cool, and occasionally covered with profuse perspiration." It is stated that the exhalation of a peculiar and disagreeable odor from the body and the excretions is peculiar to maniacs.

"In the violent grades of mania, the mind forms erroneous perceptions of the impression of external objects on the senses, or the senses convey erroneous impressions to the mind. In this case the patient does not recognise the persons and objects around him; mistakes friends for strangers, and commonly visitors for his relations: loses the consciousness of his individuality, and is ignorant

of the place he occupies, of his rank and condition in society, and of the lapse of time. The imagination is sometimes so powerfully excited, that its representations prevail over those of the senses. The patient hears voices, and holds conversations with persons whom he imagines are present; and in some cases these *voices* harass him wherever he goes, by day and by night, in public and in private. Sometimes the empire of volition seems to be entirely suspended, and the patient is no longer master of his own determinations. An irresistible impulse leads him to injure himself, or to inflict injury upon others; to tear the clothes from his body, run out naked into the streets, leap out of the windows, and commit other acts of fury."

2. PARTIAL INSANITY.

In this form of mental derangement, a part only of the organs of the faculties, or of a single faculty of the mind, is diseased, so that the patient will be insane upon one subject and entirely rational on others.

"This is by far the most common form of mental derangement, and it is always entirely free from delirium or paroxysmal raving."

In that variety which is usually denominated *hypochondriasis*, the hallucinations relate to the patient's own body, or to the circumstances which he conceives have an especial sinister influence upon his own *system*, fortune, or happiness. The suggestions of his morbid imagination are taken for realities. He believes himself afflicted with some certain incurable and fatal disease, particularly with consumption, cancer, or stone, and, above all, with impotency and the venereal disease. He fancies that some poison has been maliciously introduced into his system; or that he has a living animal, or some other very injurious substance in his stomach or bowels. Some patients believe themselves transformed into inferior animals, and others imagine themselves to be made of glass, wax, butter, &c.

Some patients are insane on the subject of religion; others upon the subject of love, wealth, or ambition. I knew a minister, a member of the society of Friends, who visited England and returned again entirely insane on the subject of religion, but perfectly sane on other subjects.

Treatment of Mental Disease.

The medical profession have almost abandoned the use of medicine in the treatment of insanity, depending almost exclusively upon moral influences. *A removal of the patient from home, and kind treatment*, are the means chiefly relied upon by those who have had long experience in treating mental disease.

From the good success that has attended Thomsonian treatment in several cases of insanity, depending upon a disordered condition of the stomach, or upon a diseased state of the system generally, there is reason to believe that in many instances a cure may be effected by this system of practice. The failure of the old school practice of medicine furnishes no just criterion to judge of the effects of Thomsonian treatment. A patient may have taken emetics of tartarized antimony, without being benefited, and yet be greatly benefited by a Thomsonian course of medicine. Mercurial preparations, cathartics, cupping, leeching, together with the use of all the remedies which are employed by the medical profession for reducing what they call morbid excitement, may fail of doing good, when an opposite and more rational course of treatment may prove successful in removing the disease, by aiding nature.

Case.—During last winter, I attended a patient who had become insane through religious enthusiasm. She had been in feeble health for many years. On my first visit I found her under the bed; and when brought from her hiding-place, she manifested a high degree of mental excitement, frequently bursting forth in a continued and rapid strain of imprecations and curses, until she became exhausted; when she would lie down for a time, and sometimes hide her head under the pillow, or throw her limbs about, as though suffering bodily distress. In this case I found the most signal benefit from giving lobelia emetics. Every time she vomited freely, and the system became relaxed under the influence of the lobelia, she became quiet, and would sleep several hours. This treatment was continued; namely, an emetic given at intervals of one or two days, and broken doses of lobelia given at intervals of every two or three hours, as the patient could be persuaded to take them, not resorting at any time to compulsory means, except when the patient made an attempt to go out of the room. During the operation of the fourth or fifth emetic, a large mass of thick dark-green matter was thrown from the stomach; the muscular system became fully relaxed, the patient continuing many hours very sick and much distressed; after which she became calm and composed, and had no return of insanity, except in a very slight degree.

In another Case of Mental Derangement, occurring in a young man of this city, medicine appeared to have scarcely any appreciable effect on the disease. The derangement had approached in a gradual manner, his family and friends having frequently observed him to be absent-minded, and occasionally disposed to melancholy, secluding himself from the society of his own family; and then again to form some scheme for regenerating the world, or to at-

tempt to engage in some wild speculation. This condition of mind continued several years before he became entirely insane. Although medical treatment appeared to have scarcely any effect, yet, under kind treatment from his family, the mental derangement improved so that he was removed to the family of a friend; and from that time he began to recover more rapidly, until all the symptoms of insanity disappeared.

When the insanity is general, and comes on suddenly, attended with great excitement and even furious delirium, it is in general much more under the control of medical treatment than when it is accompanied with melancholy, and a torpid condition of the system, or when the case is one of partial insanity.

"One of the first measures in the treatment of *mania*, should be to remove the patient from his friends, and to place him in some quiet and secluded situation. Dr. Rush strongly insists upon the importance of separation and proper seclusion; and the most eminent of the English, German, and French writers, advise the adoption of this measure." "Let it be observed, however, that in recommending separation and confinement, it is not intended to object to regular exercise in the open air, and the enjoyment of the society of suitable persons during the patient's intervals of comparative calmness. Whenever the weather is favorable, and the patient's condition will admit of it, free air and ample exercise should be allowed. The mutual association of patients similarly affected, particularly during convalescence, has also a favorable tendency."

Idleness is unfavorable to the recovery of patients affected with *partial* insanity; they should be allowed, and even persuaded, to engage in amusing exercises, "as playing at quoits, the chase, shooting; and even chess, checkers, cards, and push-pin should be preferred to idleness."—*Rush*.

The Medical Treatment generally pursued in the different asylums and hospitals for the insane, is the chief objection to these institutions. Established for the purposes of benevolence and philanthropy, and under the government of persons experienced in the management of the unfortunate insane, and with the advantages which they afford in relation to discipline, exercise, and amusement, these institutions, apart from the medical treatment practised upon the patients, should receive the sanction and support of every member of the community.

"In the furious state, insane patients should never be contradicted, however absurd their opinions and assertions may be, nor should we by our answers deny their requests, when it is proper to grant them. In the second stage of the disease, we should *divert* them from the subjects upon which they are deranged, and intro-

duce, as it were accidentally, subjects of another and of an agreeable nature. When they are upon the recovery, we may *oppose* their opinions and incoherent tales, by reasoning, contradiction and even ridicule."—*Rush*.

When insanity is brought on by the sudden suppression of the catamenia from cold, the treatment must be directed to the removal of this obstruction. The means to be employed are, the warm stimulating foot baths, stimulating enemata, the vapor bath, emetics, and the free use of the compound lobelia pills.

When the patient is in a sunken and depressed condition, a course of medicine will awaken an action in the system, and in recent cases it will be certainly beneficial.

Insanity, which sometimes follows child-birth, is generally curable by medical treatment. The most important means to be employed are stimulating enemata, containing a portion of lobelia; emetics; the continued use of broken doses of lobelia in composition, or pepper tea; warmth applied to the feet, and the vapor bath and shower bath used when practicable.

In many of the cases of insanity, the patients will have a morbidly craving appetite, so that they will eat four times as much as is necessary, and more than the stomach can receive with impunity. In such cases, therefore, it is necessary to allow the patient as much food only as will be requisite for his sustenance, and not permit him to overload and oppress the stomach.

SECTION II.

DELIRIUM TREMENS—MANIA A POTU.

(*Craziness from Drinking.*)

THIS is a species of mental derangement occasioned by *habitual drunkenness*, or by the intemperate use of opium.

Symptoms.—The disease comes on after the excessive drinking of ardent spirits. The digestive powers are prostrated by the poisonous effect of the liquor; there is distress at the pit of the stomach, loss of appetite, nausea, great agitation and distress of mind, and tremulous motions of the limbs.

As the disease continues, the countenance of the patient becomes more expressive of alarm and suspicion; there is continual restlessness, and increased mental agitation. The tremor of the hands increases, and, in some instances, the whole muscular system

is agitated as though the patient were laboring under a fit of ague. "The eyes are cast about with quick and scrutinizing glances, or often fixed, apparently, upon some object that attracts the attention for a moment, and then quickly withdrawn. The patient is unable to sleep, either by day or night. He fancies that he sees snakes, cats, mice, and other animals in his room, and disgusting vermin crawling over the bed and on his clothes; or fancies that various persons have entered his room, for the purpose of robbing, killing, or injuring him. To avoid these and other horrid illusions, he often calls out loudly for assistance; runs to the door to make his escape, or to the window to leap out; is greatly agitated, vociferates, threatens, and sometimes raves violently. Sometimes he fancies that he hears loud and strange noises around him, overhead, in an adjoining apartment, or loud and frequent knocking at the door. His mind and body are in a continued state of action; he calculates, projects, walks hurriedly about the room, thinks he picks up money, runs up to the window, and calls out to some imaginary person in the street, starts with terror and agitation from the presence of frightful and disgusting apparitions, insists that he is well, and confined with some sinister intentions against him, and requests to be suffered to go out in pursuit of his usual occupation. If the patient be flatly contradicted, he usually becomes much exasperated, and insists with vehemence on the correctness of his notions; but when he is soothingly dealt with, he will now and then answer questions mildly and even distinctly; and by judicious management may, in general, be restrained without any violent coercive measures." The skin is cool and generally covered with perspiration.

In some instances the symptoms are slight, and pass off in the course of two or three days: whilst in others the patient becomes furiously crazy, does not recognise any one, shouts, or talks continually, and is controlled with difficulty.

A form of mental derangement closely resembling mania à potu, sometimes occurs from overstraining the nervous system. "Long-continued mental anxiety, that state of mind in which gamblers and great speculators (who are indeed gamblers) are accustomed to live, may cause it; any thing by which the mind is overwrought may produce it."

The Duration of Mania à Potu varies from two days to several weeks, and in some instances it has been observed to continue several months. Under a proper course of treatment, the patient will in general be restored to reason in less than a week from the commencement of the delirium. Much depends, however, upon administering the remedies early in the disease, as, in many instances, when the disease is fully seated, it is with the greatest difficulty that the patient can be persuaded to take sufficient medi-

cine to produce much effect. Mild cases of the disease have frequently been observed to terminate speedily after spontaneous vomiting, or the supervention of diarrhœa without having been induced by a purgative medicine.

Fatality.—Delirium tremens rarely terminates fatally, except when it occurs in patients affected with extensive disease of the liver or some other important organ, or when the constitutional energies are broken down, either by disease or by a long course of intemperance.

Unfavorable Symptoms.—A rapid and very small pulse ; coldness of the limbs, the skin covered with cold sweat ; constant delirium ; the pupil of the eyes contracted, and twitching or working of the muscles of the face, are symptoms indicating danger.

Favorable Symptoms.—One of the most favorable symptoms in mania à potu is an ability to sleep tranquilly, even though it may be of but short duration. The practice of giving opium to produce sleep is often attended with injurious consequences : it prostrates the power of the stomach, and, in many instances, increases the wakefulness and aggravates all the symptoms. At most it does but blunt the sensibility, without removing the cause, or restoring to the system its lost vitality.

Mania à potu essentially consists in a weakened condition of the vital principle. The functions of the stomach are prostrated ; digestion is suspended ; the system is not supplied with nourishment ; the temperature of the body is reduced ; the bowels are torpid, or they may be provoked by the acid state of their contents, occasioning diarrhœa ; the nervous power is enfeebled ; and the brain is deprived of its natural healthy stimulus, the morbid effects of the liquor having previously weakened its functions. Nature, struggling to regain her lost power, occasions the excited condition of the system attending mania à potu.

Treatment.—The remedies and means that have proved most successful in curing mania à potu, are the vapor bath, emetics of lobelia, injections, and pure stimulants, such as cayenne and ginger.

The Vapor Bath relieves the symptoms by equalizing the circulation of the blood and nervous influence ; restores for a time the natural heat of the system, and thus increases the sensibility of the stomach to the impression of medicines, rendering their operation more effective ; throws deleterious substances out of the blood by exciting free perspiration and a determination to the surface : in fine, it aids the efforts of nature, generally, to bring about a crisis, and cast off the disease. After steaming, when the patient has

been rubbed dry, the surface may be bathed with No. 6. or stimulating liniment.

Emetics.—I have invariably observed more benefit derived from the use of emetics than from any other means. Sometimes mania à potu is observed to terminate by spontaneous vomiting. Merely evacuating the stomach is not sufficient, however, except in cases of a very mild character: the mucous membrane is in most instances thickly coated with morbid secretions, which require the continued use of stimulating and anti-canker medicine for two or three days, besides frequent vomiting, before the stomach will become cleansed of morbid secretions, and its power of digestion be restored. The third preparation of lobelia is the best form, yet it may be taken either in powder, infusion, or in tincture, given in sumac or bayberry tea. After the operation of an emetic, if the symptoms be not very much relieved, a teacup half-full of a strong decoction of bayberry or sumac, adding from a teaspoonful to a tablespoonful of the liquid of the third preparation of lobelia, must be given every hour or two, as the patient can be persuaded to take it: this supplies the place of all other medicines. Sometimes it requires considerable management to induce the patient to take medicine. Some will take medicine in the form of pills; and in such cases the compound lobelia pills may be employed, as a general medicine, until the disease is overcome. If given freely—say from three to five pills every hour, they will effect free vomiting and supply the place of the usual form of emetic previously mentioned. A case of delirium tremens occurred not long since, in which brown lobelia powder and cayenne were given, mixed with calves-foot jelly, the patient obstinately refusing to take medicine in the liquid form. The medicine, after having been given at frequent intervals during over forty-eight hours, excited free and copious vomiting; and soon after this, the patient slept three hours, and awoke perfectly rational.

Some writers advocate the use of alcoholic liquors, as a remedy in this disease, whilst others oppose its employment on all occasions. I have in a few instances given patients liquor, but have never as yet observed any good effects resulting from it; on the contrary, the symptoms have been almost invariably aggravated by it, except when given in very small quantities. The disease requires stimulants, but they should be pure stimulants, and not the same poisonous articles that occasioned the disease. Although mania à potu seldom occurs whilst the patient continues to drink, the symptoms first appearing after the drinking is stopped, yet it is the drink that prostrates the vital powers and occasions the derangement which essentially constitutes the disease; and the longer the drinking is continued, the worse it will be for the patient. The long-continued use of opium will cause mania à potu; and the practice of pre-

scribing this article as a remedy in the disease, is almost, if not equally, as absurd as to give a patient brandy to cure a disease brought on by its use. It is very desirable that the patient be able to sleep, not, however, by means of a drug that will deaden the sensibility of the brain, prostrate the powers of the stomach, and probably produce serious congestion in the blood-vessels of the brain, and prolong the disease. In a mild case of the disease, a dose of opium may sometimes cause the patient to sleep, and not be materially injured by it; but in those cases a vapor bath and emetic, followed by broken doses of lobelia, would bring the disease to a crisis much sooner, and the cure be more complete than by the use of opium, or probably by any other means.

During the act of vomiting, if the face be swollen and the vessels turgid with blood, the patient's head should not be allowed to be lower than the level of his body; for the action of the blood-vessels of the brain being weakened, the blood circulates sluggishly through them. This requires that the head be kept somewhat elevated, in order to favor the returning circulation. When the skin and extremities are cold, an injection should be administered, and also a vapor bath, before giving an emetic. If these cannot be accomplished in consequence of the strenuous opposition of the patient, still the lobelia should be given in some form. If injections can be given, the lobelia powder may be administered in this way in lukewarm water, which, if retained, will occasion vomiting, and exert even a more beneficial influence upon the system than when taken into the stomach.

Injections.—Besides the plan just spoken of for placing the system under the influence of lobelia, stimulating injections will prove of especial service to the patient.

Stimulants.—Cayenne tea is probably the most appropriate stimulant in all cases of delirium. It may be given freely in any form and at any stage of the disorder. Composition or ginger may be used in combination with cayenne.

"In hospital practice," observes Dr. Watson, "it sometimes becomes necessary to confine the patient to his bed by straps, or to muffle his limbs in a strait-waistcoat; but this is a most unfortunate necessity. Physical coercion, whether manual or mechanical, should never be resorted to in delirium tremens, when by any means it can be avoided. The angry feeling and mental fret which it produces, and the exhausting bodily struggles to escape or resist the thralldom, are always highly injurious, and full of danger to the patient. A couple of strong and good-tempered attendants will not have much difficulty in persuading and managing the sick man, who is seldom either boisterous or obstinate: and if he be intractable by soft words, he will yield more patiently

to their gentle restraint than to the force of manacles ; while the appearance of coercion need not be continued a moment after his acquiescence."

A case of death from mania à potu occurred in this city some months since. The patient was a strong, robust man, and being hard to control, he was kept tied down on a bed, but he struggled violently and continually, until his strength became exhausted, and he died in twenty hours from the time the coercive means were resorted to.

Diet.—After free vomiting has been effected, essence of beef or milk porridge may be given, provided the patient can be persuaded to take food. This kind of nourishment is more particularly required in cases of extreme prostration of strength, and also when the mental agitation is subsiding.

In many instances of mania à potu, the mental derangement will continue several days, even under the most appropriate and well-directed treatment.

Of the efficacy of Thomsonian treatment in reforming drunkards.

CASE I.—A man employed in the sheriff's office in this city, had indulged in the use of strong drink, until he became so much a slave to it that he was rarely entirely sober. He was sensible that he was on the high road to ruin, and occasionally he would form a resolution to quit the degrading practice ; but the functions of his stomach had become so much impaired, that his system was not furnished with sufficient stimulus from food, to support the energies of his mind, and in moments of extreme mental depression, he would again resort to his accustomed drink : as soon as one glass was taken, his resolution was overcome, and he relapsed back into his former habits. Speaking to a friend one day of his anxiety to abandon drinking, and of his unsuccessful attempts to do so, from the constant hankering for stimulus, his friend advised him to get some of the Thomsonian composition powder, and, whenever he felt the want of a stimulus, to take a dose of the composition. He accordingly obtained the composition, and on taking it as directed, it furnished an agreeable stimulus, without disordering the brain ; overcame the desire for liquor, and at the same time restored the tone of his stomach to a healthy condition ; so that, in the course of a year, he became changed from drunkenness and wretchedness and enjoyed perfect health and a fine glow of spirits. He is now actively engaged in the temperance cause ; and through his example and persuasion others have been induced to resort to the use of the composition powder, with the same happy result.

CASE II.—A merchant of this city, who had formerly resided in

the south, had contracted the habit of excessive drinking, and was occasionally attacked with mania à potu. Having experienced good effects from vomiting, he determined on taking a course of Thomsonian medicine, to have his stomach thoroughly cleansed, and then to refrain from the use of strong drink altogether. He stated to me that he had often resolved to quit the injurious practice, but that his spirits sometimes became so much depressed, and his appetite so bad, that his resolution to refrain from liquor gave way, and he would again take a glass; this was soon succeeded by another; and thus he would go on drinking until his stomach turned against it, when he would be attacked with symptoms of mania à potu. After this patient had placed himself under Thomsonian treatment, he did not relapse again into his former habits, except on two or three occasions; and then a course of medicine was administered, and the general course of treatment adopted that is recommended for mania à potu, which shortened the duration of the disease; and by the daily use of pure stimulants, the digestive powers were finally restored, so that the patient was exempt from that state of mental depression which had so frequently led him to resort to spirituous liquors. This gentleman has continued a sober man during the past two years, and doubtless will continue so.

CASE III.—During the summer of 1838, a man called at my office, and gave me the following history of his case. When about the age of thirty, he became dyspeptic from close attention to business, and experienced at times extreme lowness of spirits, with trembling of his hands. An acquaintance recommended brandy and water, which he took and experienced temporary relief: continuing to take his glass of brandy and water whenever he felt the want of a stimulus, he at length found that the dyspepsia was gaining ground, and that the attacks of nervous weakness were more frequent, requiring a more frequent repetition of the brandy; and finally his nervous energy became so prostrate that he was induced to fly to his accustomed stimulus, the first thing in the morning and to continue under its influence during the whole of the day. It was then sixteen years since he had commenced the use of brandy, “and,” said he, “to speak plainly, I am a confirmed drunkard.” He was willing to submit to any course of treatment that would restore his digestion, so that he could do without the brandy, which he was sensible had gained the upper-hand of him. I told him, if he was anxious to quit the use of brandy, I had no doubt that he could do it, and be restored to health. He placed himself under treatment, which consisted in an occasional *course of medicine* and the free use of cayenne pepper, more especially at meals; and when he felt the want of his accustomed stimulus, a dose of No. 6, or of composition. The result was most happy:

he quitted the use of brandy without much difficulty ; his digestion was restored, and he now enjoys good health, not having taken any kind of intoxicating drink during a period of more than two years.

The above are not the only cases of the kind that have occurred under my own immediate observation : I could mention several others of equal interest and importance, where men addicted to drunkenness have become reformed, partly through the aid of Thomsonian treatment, which affords a pure stimulus, entirely free from intoxicating properties, and at the same time has the effect to correct and strengthen the digestive functions.

CHAPTER XV.

SECTION I.

ORDINARY HEADACH.

PAIN in the head is occasioned, in general, by a disordered condition of the stomach. Sometimes, the only symptom attending a foul stomach and imperfect digestion, is pain in the head, the patient being exempt from feelings of pain or distress in the stomach. Pain in the head is one of the most common symptoms that accompany constitutional disease. Almost every case of fever and catarrh is accompanied with pain in the head ; and under these circumstances it is to be cured by such means as will correct the constitutional disorder.

Neuralgic pain about the head is a common complaint among dyspeptics, and especially in those of a nervous temperament. In ordinary headach, the pain is usually described as dull and heavy ; whereas in neuralgia the pain is sudden and darting, coming on suddenly, like an electric shock, and leaving as suddenly.

Slight attacks of headach may very often be removed by having the head rubbed freely with the hands, which favors the returning circulation from the head. Bathing the forehead with some volatile stimulant, as No. 6, spirits of camphor, or hartshorn, or with simple vinegar or whiskey, will sometimes remove it. When the feet are cold, they should be warmed by the foot bath, or by other means, and the patient take composition or pepper tea. Snuffing

composition, or No. 6, up the nose, by stimulating to excitement the secretions of the mucous glands, will sometimes cure simple headache.

When the pain is violent, and not relieved by the means already mentioned, an emetic, or the repetition of three or four stimulating injections to relieve the bowels and attract the circulation from the head, will seldom fail of curing the pain.

There is a form of headache, of a neuralgic character, occasioned by overstrained mental exertion, in which a free use of quinine and the vapor bath are the best remedies. It is in cases unaccompanied by febrile excitement that quinine constitutes the best remedy.

SECTION II.

SICK HEADACHE.

WHEN there is pain in the head, attended by sickness at the stomach with or without vomiting, it is termed sick headache. It always arises from a disordered condition of the stomach; patients almost always experiencing much relief from the pain in the head after free vomiting.

In many instances sick headach occurs periodically; in some the attacks come on every week, in others at intervals of two or three weeks. Persons predisposed to this form of disease are especially liable to an attack from some change of habit, for instance, missing a regular meal, riding in the cold, or sitting some hours in a crowded assembly. Inaccuracies in diet, fatiguing exercise, exposure to cold, and getting the feet damp, frequently occasion an attack of sick headache.

Treatment.—The best remedy for sick headache is an emetic. This, taken in the commencement of the attack, will not only moderate the symptoms, but, very generally, after the free operation of an emetic, all the distressing symptoms will be speedily removed. If the feet be cold, apply the warm foot bath or vapor bath, and let the patient take a dose of composition or pepper tea before the emetic be given.

Injections.—I have known sick headache speedily cured by the use of injections alone. Prepared in the usual form of composition or pennyroyal tea, adding a teaspoonful of lobelia, the injections

will relieve the pain in the head, and, if applied in the onset of the attack, will never fail of proving beneficial.

In milder cases, and when the stomach is not very materially disordered, it may be sufficient that the patient get to bed, drink some warm tea, and have warm applications to the feet.

Sleep.—When a patient can obtain a few hours' sleep, the headache is generally cured for the time, whether they have or have not taken medicine previously. The practice, however, of taking an emetic in the commencement of sick headache, and repeating it every time that there are symptoms of an approaching attack, will not only prove the most effectual means for relieving the symptoms, but, if the practice be persevered in, and medicine be taken to strengthen digestion, the liability to the attack will be greatly lessened, and in most cases the patient will be freed altogether from it.

Bitter Tonics should be taken once or twice a day, more especially after dinner. Wormwood, centaury, balmony, golden seal, quassia, or almost any combination of bitters may be employed. It is the tonic principle that is needed, and it is not important that any one particular article should be employed in preference to others.

Alkaline Bitters.—Take a handful of wormwood, and a tablespoonful of hickory ashes, pour on a pint of boiling water; a wine-glassful to be taken after meals, cold. This preparation is applicable in cases of heartburn or sour eructations.

Quinine.—There is strong evidence in favor of the use of quinine as a preventive and cure for sick headache. It may be employed in the place of all other tonics, after the stomach has been cleansed by an emetic, and the patient is clear of fever. It has been used recently as a preventive to sick headache with remarkable success. The proper time for taking it as a preventive is a day or two before the attack is expected; or, if the patient be not feverish and the tongue not thickly coated, it may be taken freely in the commencement of the attack. The dose is from 6 to 20 grains. Quinine pills in general contain about one grain each.

Salt and Vinegar.—A disordered condition of the stomach will in some instances be rectified, and digestion restored, by the use of salt and vinegar. In these cases patients have an inclination for acids.

Costiveness almost universally attends sick headache. The majority of patients take some kind of purgative medicine to remove

SICK HEADACHE.

costiveness, which leaves the bowels in a worse and weaker condition than they were before; the costiveness continues, and more physic is taken; and in this way many persons continue for a succession of years, until, finally, the digestive powers become so much weakened, and the functions of the bowels prostrated to such a degree, that, without a most careful attention to diet, a natural passage from the bowels is seldom procured. It is indeed doubtful which has done the most injury to the human constitution, the use of purgative medicine or spirituous liquors. Costiveness is occasioned by a weakened condition of the functions of the bowels; and to assist and strengthen their peristaltic action, and excite the secretions of their mucous membrane, are the essential indications for the cure of habitual costiveness. In many instances this may be effected by the daily use of bread made of unbolted wheat flour or by taking every evening for supper a gruel, or mush made of the same material, and avoiding the use of cathartics. The bread is supposed to act as a mechanical stimulus. Where costiveness is attended by heartburn or sour eructations, finely pulverized charcoal will be found especially beneficial; purified charcoal should be used when it can be obtained. The dose is a large teaspoonful taken in composition or spice bitters tea, or, if preferred, in boiled milk. It should be taken an hour or two before meals.

Capsicum, taken freely at meals or immediately after, will stimulate the action of the bowels, and, in many cases of constipation, will be sufficient to overcome it.

Injections.—Where the use of purgative medicine has been continued for a succession of years, it may be necessary, besides the means above mentioned, to assist the bowels occasionally by the use of the syringe. There is probably not a case of obstinate constipation of the bowels, in which their mucous membrane is not coated with thickened secretions, forming a complete false membrane, which occasionally passes off in long pieces, somewhat resembling an intestine. The removal of this false coating from the mucous membrane of the bowels is essential to the restoration of their natural functions. Purgative medicines operate upon the bowels as a foreign substance,—something not congenial; and provoke an action—an effort to cast off the offending substance, causing the mucous surfaces to throw out a coating of thickened secretions to shield them from the deleterious impression of the cathartic; therefore cathartics, instead of cleansing the bowels of “canker,” as Dr. Thomson expresses it, give the canker a deeper hold, and thus add to the difficulty. That which is required for cleansing the lining membrane of thickened morbid secretions of canker, is to excite the bowels by pure stimulants, capsicum, com

posiaon, and compound lobelia pills, and the use of stimulating and astringent injections.

Patients subject to attacks of sick headache should use the precaution to dress very warmly whenever they ride out in cold or damp weather. With regard to headache being occasioned by getting the feet damp, too few persons in the community are fully sensible of the influence which dampness, applied to the feet, exerts over the digestive functions, and of the extent of derangement which it frequently occasions.

Another Variety of Headache.—Severe pain in the forehead and eye-balls is sometimes occasioned by disease of the frontal sinuses, which are small cavities in the bones of the skull, immediately above the eye-brows. These small cavities are lined with a mucous membrane, which is continuous with the mucous membrane of the nose. The disease is occasioned by taking cold, and prevails during the cold and damp weather of spring and autumn. It is in no wise dangerous, but sometimes continues several days, and occasionally for weeks before the pain is removed. In the first place the mucous membrane is weakened by the influence of cold; inflammation ensues, which terminates in the free secretion of a thick yellow or greenish matter, which is discharged by the nostrils, and then the pain usually subsides.

Treatment.—Besides constitutional treatment, such as taking freely of warm stimulating teas to favor perspiration, benefit will be derived from breathing through the nose the vapor of vinegar and water, and using the composition powder or cayenne pepper as a snuff, which will excite the secretions, and in this way afford relief.

Not unfrequently this form of headache is accompanied with a deranged condition of the system generally, the affection in the head being a mere branch of disease, the root of which is in the stomach and bowels. Hence, in violent cases of headache, accompanied with symptoms indicating a disordered condition of the stomach and bowels,—a furred tongue, loss of appetite, bad taste in the mouth, costive bowels, chilliness, and flashes of heat,—the system must be warmed by the use of stimulants internally, and external warmth, applied either by warm bricks placed around the patient, or a vapor bath administered, followed by an emetic to cleanse the stomach; and if the bowels require assistance, let it be done by enemata. After this the patient may take occasionally of some stimulant—composition, spice bitters, ginger, or simple herb teas, and avoid exposure to the cold or dampness.

I have never known a case of headache that was not either cured or greatly relieved by administering a vapor bath and emetic.

SECTION III.

TOOTHACHE.

THE curableness of toothache by local applications depends upon the condition of the tooth and the cause of the pain. Thus, if the tooth be hollow, and the pain arise from the presence of acrid matter in the decayed part, or from exposure of the nerve to cold, the pain may be greatly relieved by filling the hollow of the tooth with cotton wet with the third preparation of lobelia, oil of cloves, spirits of hartshorn, No. 6, or spirits of camphor, together with warm applications to the cheek, such as bags of hot ashes, salt, or sand, or a towel folded up and applied as hot as can be borne. When a dry heat does not answer the purpose, a small bag of hops or of bitter herbs damped with vinegar, or cloths wrung out of hot water, may be applied.

Toothache may be cured, in many instances, by placing the feet in warm water, and taking freely of composition or pepper tea. In violent cases an emetic should be given, followed by broken doses of lobelia, stimulating teas, and warm applications to the feet. A very intelligent and experienced Thomsonian once told me that he generally prescribed a dose of the third preparation of lobelia for toothache, and said that it seldom failed of removing the pain.

It very often happens that an abscess forms at the extremity of the root of a tooth, which finally swells out the gum, forming what is commonly called a gum-bile. External applications are seldom of permanent benefit in such cases, the only certain cure being the extraction of the tooth. After the abscess discharges, the pain generally vanishes. When a tooth has become diseased at its root, it will most probably be a frequent source of annoyance so long as it remains in the jaw, as plugging will seldom answer any good purpose in such cases.

Whenever teeth begin to decay externally, they should be plugged by a dentist well acquainted with the business. Persons residing in the country are too apt to neglect their teeth when they begin to decay, and do not apply to a dentist until they experience the disadvantage of the loss of some of their teeth and the partial decay of others. A skilful dentist can generally prevent the further decay of a tooth, if timely applied to. Although the teeth may be preserved by plugging them, they are often injured by too much filing. Dentistry, like the Thomsonian system, has been greatly abused by quacks, who have engaged in it without being acquainted with its principles. A dentist properly acquainted with

his profession, will be very cautious how he uses the file, knowing, as he does, the importance of preserving the enamel of teeth, and the liability to a rapid decay of them when a portion of the enamel is destroyed. I have known individuals to condemn dentistry altogether, because they have observed their teeth to decay more rapidly after having had them filed. It is quackery in dentistry that should be condemned, and not the principles of the science. There is scarcely a branch of science, the principles of which can be more plainly demonstrated than that of dentistry.

Having made allusion to *Thomsonian quacks*, I will explain myself,—not meaning to be understood as applying this term to every one who engages in the practice without having had a regular medical education:—indeed, some of the most successful practitioners that I have ever yet known, have been men without a regular medical education, who have established a correct method of reasoning upon things in general, and, possessing good common sense, were able to comprehend the true principles of Thomsonism by reading the works of its founder, and possessed of sufficient moral courage to pursue the treatment thoroughly and perseveringly, as their mature judgment dictated, uninfluenced by the slander of gossips, the opposition of the prejudiced, or the timidity of professed friends. I would apply the term quack to one (whether he have been educated in a college or on a farm) who, announcing himself a *Thomsonian doctor*, and railing against all mineral poisons, employs mandrake and other vegetable poisons, and deleterious compounds, as improvements on the Thomsonian system; and who, instead of being governed in his practice by the general principles of the Thomsonian system, declares his independence of it, and employs inefficient syrups, and worse than useless cathartics, in the place of Thomsonian medicines. Such practitioners may very properly be termed quacks in medicine.

CHAPTER XVI.

DISEASE OF THE EARS.

SECTION I.

EARACHE.

THIS distressing complaint is of frequent occurrence. It prevails most in early life, and in those who have decayed teeth.

Causes.—Pain in the ear is generally a consequence of exposure to cold and dampness. It frequently attends pain in the face and jaws caused by the exposure of the nerve of a partially decayed tooth. Where the nerve of a tooth is exposed, a tender spot will be detected by probing the hollow in the tooth. Those who are predisposed to this form of disease, are extremely liable to an attack by getting their feet damp. Children are peculiarly subject to a discharge of matter from the ear, and they generally suffer more or less pain for several days before the ear begins to discharge, attended with a flushed countenance and some degree of fever.

Treatment.—When earache is caused by cold, it may be relieved by steaming the side of the head and using the warm foot bath. Steam may be applied to the ear through a funnel placed over a vessel containing boiling water. If there should not be sufficient steam, a small hot stone should be put in the water.—After the steaming, a portion of cotton wet with the tincture of lobelia, No. 6, or third preparation, should be kept in the ear, or dry cotton may be employed. The heart of a roasted onion put in the ear will sometimes relieve earache: it should be hot, or as warm as can be borne. If there should be an abscess forming in the ear, the same course of treatment may be pursued; or a warm poultice, cloths wrung out of hot water, or a bladder partly filled with warm water, applied to the ear, with a view to hasten a discharge of the matter. Syringing the ear with warm soap-suds will sometimes relieve the pain.

If the pain in the ear be caused by exposure of the nerve of a tooth, the tooth should be extracted or the nerve destroyed. I have known of persons subject to frequent attacks of earache for years, from the exposed condition of the nerve of a tooth, to be permanently cured of it by having the exposed nerve destroyed.

If the system be much disordered, an emetic will be beneficial, after which, broken doses of lobelia may be given, in order to cause a moderate degree of relaxation of the system, and to equalize the nervous influence.

In violent cases, more especially if accompanied with fever, injections should be resorted to, and the system placed under the influence of lobelia.

The compound lobelia pills may be used in all cases where the patient can take pills readily. Free vomiting may be effected by taking freely of these pills.

How to get a Bug or Fly out of the Ear.—When any kind of an insect gets into the ear, the patient should lay his head down on its side, with the ear that contains the animal uppermost, and have oil poured in the ear. The bug will come to the top of the liquid, and be easily removed.

SECTION II.

RUNNING OF THE EARS.

A DISCHARGE of matter from the ears is by no means uncommon in children. Those of a scrofulous constitution are most liable to it, but it is often observed in children who are not predisposed to scrofula.

This disease occasionally injures the hearing, though, more commonly, it is not attended by any permanent injury to it, even though the discharge continue at intervals during a period of several years.

The running, in many instances, is from the parts immediately around the bottom of the cavity of the ear. In the first place a small abscess is formed near the cavity of the ear, which breaks into it, and is thus discharged. In other instances the disease is confined to the membrane lining the cavity and drum of the ear.

Treatment.—When a child of a weak and delicate constitution is affected with running from the ear, a permanent cure is rarely accomplished until the general health is improved. It is, therefore, of more importance in such cases to use means for improving the constitutional health, than to depend upon applications to the ear.

There are no means so effectual for improving the health as an occasional emetic, or a full course of medicine. If the tongue be

coated, a strong tea of bayberry must be given once or twice a day, or, in place of this, use No. 3 pills.

Whenever the patient is suffering pain, or is feverish, give broken doses of lobelia, either in the form of tincture or pills.

If the running from the ears should stop and the patient complain of pain, or if it be a young child, and become restless and feverish, apply a warm poultice to the ear, cleanse the stomach by giving an emetic, relieve the bowels by injections, and give lobelia in broken doses.

Pipsissawa.—A strong tea or syrup of pipsissawa may be used with benefit in this and other forms of disease in children, more especially in scrofulous constitutions.

Yellow dock, sarsaparilla, and guaiac shavings, combined in equal portions, simmered an hour, and then strained, sufficient sugar added to form a syrup, and then simmered again, forms a useful syrup in all cases of running sores in children, more particularly in cases where the disease has been of long continuance. The dose of the syrup is from a tablespoonful to a wineglassful, according to the age of the patient.

Tonics.—When the discharge is profuse, and the patient debilitated, the spice bitters, or some other form of tonic, must be employed, unless the syrup above mentioned be found sufficient.

When the complaint becomes protracted, the constitutional health should be aided by allowing the child to be much in the open air, and affording healthful exercise. The body should be bathed in salt water, and wholesome, nourishing diet administered.

Local Applications.—Syringing the ear with castile soap and water, or with a strong tea of bayberry, will be beneficial. A strong tea, made by steeping in boiling water a compound of bayberry, aspen, poplar bark, and gum myrrh, will not only serve to cleanse the parts, but will assist the healing efforts of nature. Many persons doubt the propriety of syringing the ear with stimulating teas, supposing that they may be carried into the head. The drum of the ear, which is not more than an inch and a half from the external opening, forms a barrier to the passage of substances beyond it.

When the discharge has been long continued, No. 6 alone, or combined with about an equal quantity of bayberry or poplar bark tea, should be dropped into the ear two or three times a day; or, if this be very painful, a simple tea or tincture of myrrh may be used, either of its usual strength or diluted with water, or bayberry tea

In some instances the matter discharged is so acrid, that it excoriates the ear, causing the surface of it and the parts below the ear to be continually sore and inflamed; the glands back of the ears and on the side of the neck are apt to be more or less swollen; and sometimes an eruption appears over a part of the head and face, which very often continues for weeks, and sometimes for months, before it can be entirely cured. Where the external ear becomes excoriated, or sores break out on the skin, the parts must be kept from the air by the application of tar ointment, or some kind of adhesive salve, in order to protect the raw surface from the atmosphere. Apart from constitutional treatment, there is nothing of more importance, in the cure of eruptions of the character above mentioned, than to protect the parts from the action of the air. It does not make much difference what kind of salve or ointment is used, provided it will effectually exclude the air. In most instances the parts suppurate and discharge freely soon after applying a salve or ointment; but by continuing the application, so as to keep off the air, the parts will soon heal, unless the system be much diseased, and the healing power of the constitution thereby enfeebled. When the parts suppurate freely, the ointment or salve will of course require to be removed daily, in order to cleanse the parts; but the exposure should not be continued longer than is necessary to dress the sores. Such eruptions should never be dried up by the application of lead-water, or driven into the system by the use of salts, or other cooling medicines; for, although they might not be followed by immediately bad effects, yet serious consequences have often resulted from the application of lead-water, or a solution of corrosive sublimate, to eruptions on the face and head, and by drawing the determining powers from the surface by purging. Hence some physicians advise parents to use no means to cure eruptions about their children's heads, considering the eruption as a safeguard against internal disease of far more serious consequence. I have never known any bad effects to arise from curing eruptions about the head upon the Thomsonian plan. The internal remedies used for curing the disease, will also prevent it from seating itself in the system.

In children of scrofulous constitution, the bones about the internal parts of the ear are occasionally diseased, occasioning an extremely offensive watery discharge, and the cavity of the ear sometimes becomes filled up for a time with proud flesh. Such cases generally prove obstinate of cure under even the most judicious treatment, the patient being in most instances subject to frequent spells of violent headache. Nothing will give so much relief in such cases as thorough vomiting, and keeping the patient relaxed with bellua.

It is not difficult to discover wax in the ear, when it exists in a quantity sufficient to injure the hearing, by having the patient to

hold his head in such a position as to allow the rays of the sun to strike upon the drum of the ear, the cavity of the ear being made more straight and open by raising the ear upwards and outwards. A lighted candle in a dark room will answer to examine the ear.

SECTION III.

DEAFNESS AND DULNESS OF HEARING.

DEAFNESS, or dulness of hearing, may depend upon palsy or other diseased condition of the nerve of hearing; thickening of the drum of the ear; or it may proceed from disease of other parts of the internal apparatus of the ear. Hardness of hearing, very frequently, depends upon a collection of hardened wax in the drum of the ear.

Complete deafness is very rarely cured. When hardness of hearing is occasioned by indurated wax in the ear, it is very easily remedied by syringing the ear with warm soap-suds, made of castile or palm soap. A convenient way to syringe the ear, is to have the warm suds in a basin, with one edge of it placed against the neck immediately below the ear, and inject the liquid into the ear, with sufficient force to reach the further extremity of the cavity. The syringing should be continued until the wax softens and is washed out.

Galvanism.—When dulness of hearing is occasioned by obstruction in the nervous circulation, the application of the galvanic battery may prove of utility. A very convenient apparatus has recently been constructed by a Mr. Code, of this city, called Code's Patent Graduated Electro-Galvanic Battery. With this machine the galvanic fluid may be applied to any part of the system with perfect safety.

CHAPTER XVII.

SECTION I.

PALPITATION OF THE HEART.

AN irregular beating, and fluttering motion of the heart, very frequently attends dyspepsia, sick headache, neuralgia, asthma, consumption, hysteria, gout, and constitutional debility; and in persons of nervous temperament, it is frequently occasioned by any slight derangement in the system. The use of strong coffee or tobacco; an oppressed condition of the stomach from food that is hard of digestion; grief, anxiety, or any sudden emotion of the mind, will, in some, occasion irregular throbbing and fluttering motions of the heart.

Of all the cases of irregular palpitations of the heart, there is probably, in nine of every ten of them, no disease of the heart; the irregularity of the motions of the heart being caused by a weakness and derangement in the nervous system. A disordered state of the stomach weakens the nervous power, and the weakened condition of the nervous influence may occasion disorder of the functions of the heart, constituting what is termed a functional disease of the heart. Thus sick headache and palpitation of the heart are often associated; both arising from the same cause, a diseased condition of the stomach.

Treatment. — Palpitation of the heart being in most instances merely a symptom of disease, the original cause of which is a disordered condition of the stomach, it does not demand any especial treatment, apart from that which is required for correcting the disordered condition of the stomach, and restoring digestion. Thus a patient may have an attack of hysteria, accompanied with violent pain in the head, and palpitation of the heart; these being mere symptoms arising from constitutional disease, the seat of which is commonly in the stomach, the same course of treatment will be sufficient to remove all these different symptoms. If ten thousand persons were to become diseased from one general cause, there would probably not be two cases in which all the symptoms of disease would be precisely alike. The membranous sac that envelopes the heart, called the pericardium, is liable to become affected with rheumatism, accompanied with palpitation of the heart; a sense of oppression about the pit of the stomach; a catch

in the breathing; a dry cough; an inability or unwillingness on the part of the patient to lie on the left side; pain in the situation of the heart, increased by full inspiration; and stiffness and pain in and about the left shoulder. This affection seldom occurs in an acute form, except in connection with general acute rheumatism; and wherever it occurs, the treatment should be energetic, and the remedies perseveringly applied, with a view to bring about a favorable crisis in the inflammation before serious mischief result. The same general remedies are to be employed that are recommended in the treatment of acute rheumatism.

Irregular action of the heart often accompanies chlorosis, and the functional derangement of the heart is to be cured only by improving the condition of the general health of the patient. Occurring in connection with hysteria, palpitation of the heart requires the same remedies to effect a cure that are best adapted to the cure of hysteria. Nervous persons are frequently affected with palpitation of the heart, occasioned by a foul stomach, and under these circumstances emetics are required.

Persons of full habit of body, whose digestive powers are enfeebled by a long-continued course of excesses in eating and drinking, and the inordinate use of tobacco, are very liable in advanced life to frequent attacks of strong, irregular throbbing, and tremulous motions of the heart. I knew an instance where a gentleman was confined to the house several months, laboring under symptoms of disease of the heart; yet, by adopting a judicious course of diet and regimen, and making free use of Thomsonian remedies, consisting chiefly of capsicum, a compound of the astringent or anti-canker medicines, and bitters, he recovered perfectly from all symptoms of disease of the heart.

Palpitation of the heart is frequently occasioned by a disordered condition of the spinal nerves. By applying pressure along the course of the spine, a tender spot will generally be detected, either about the nape of the neck or between the shoulder-blades. Here it will be proper to employ the vapor and shower bath, stimulating applications to the spine, together with such constitutional treatment as the condition of the general health may demand; for instance, if the patient experience distress at the pit of the stomach, or be otherwise affected with symptoms of dyspepsia, other means besides those just named may be required, especially emetics; and if there be acidity of the stomach and constipation of the bowels, such remedies must be employed as will prove most effectual in correcting the secretions of the stomach, and giving strength and tone to the bowels.

A young lady of Frankford was affected with palpitation of the heart to such a degree, that for several weeks she could not lie down at night. Her digestive powers were prostrated, and there was extreme tenderness in the spine between the shoulders. A course

of medicine was administered as often as once a week, a pepper poultice applied to the spine, and tincture of lobelia given in small doses, frequently repeated. The patient's general health was restored, and no inconvenience felt from irregular action, or violent throbbings of the heart.

The motions of the heart are regulated by nervous influence; and hence it may be inferred, that, in all cases of functional derangement of the heart, there is a fault in the nervous currents that govern the heart's movements. Thus the use of strong coffee, and also the excessive use of tobacco, will occasion, in some persons, palpitation and fluttering of the heart, in consequence of the morbid impression they make upon the nervous influence.

SECTION II.

STRUCTURAL DISEASE OF THE HEART.

THE preceding section treats of irregularity in the action of the heart, unaccompanied with disease of structure. The heart is also subject to structural disease.

The most frequent forms of structural disease of the heart are,—imperfection in the valve of the foramen ovalie, that sometimes exists at birth; enlargement of the heart, with thickening of its walls, termed *hypertrophy* of the heart; dilatation of the left ventricle, with unnatural thinness of its walls; ossification of the valves of the heart; and dilatation of the auricles.

Symptoms of various forms of Heart Disease.—When a child is born with an imperfection in the septum, or partition between the right and left ventricles of the heart, the venous blood mixes with the arterial, and occasions a blue appearance of the face and extremities, popularly called the blue disease of infants. In some cases this blue appearance is continuous, and in others it appears only when the child cries, or is in some way agitated.

In *hypertrophy* of the heart, the increased development of the muscular fibres renders the contractions of the heart stronger, and consequently the impulse is more perceptible; but it is slow and more heavy. The patient has a *sensation* of beating of his heart which he ought not to have; he feels it and hears it beating as he lies awake in bed, and at other times when he is at rest. If it be a case simply of increase of the substance of the heart, the pulsations will be regular, the breathing will not be affected, neither will there be any tendency to dropsy. In the majority of

cases of hypertrophy of the heart, there is a demand for an increased development of muscular fibres, in consequence of the existence of some mechanical obstruction to the free circulation of the blood ; and under these circumstances the hypertrophy is really an effort of nature to overcome the disease.

In *dilatation* of the heart, if the walls of the ventricles are thin, the contractions take place very abruptly and quickly. The result of this is, that the contraction ceases with the first impulse. There is a smart jerk with the first impulse, but it is a very short one, having nothing of the heaving character of hypertrophy. Those acquainted with the theory of the sounds of the heart, depend most upon this source, for ascertaining the location, extent, and character of structural lesions of the heart.

If the heart beat strong, and the impulse be perceptible over a large space, it will afford evidence of the existence of dilatation and hypertrophy conjoined.

Disease of the Valves of the Heart.—Many of the symptoms which attend disease of the valves of the heart, also accompany other forms of disease ; so that even experienced physicians sometimes find it difficult to distinguish disease of the heart from mere sympathetic derangement or functional disorder of this organ.

Asthma is very frequently attended by palpitation of the heart ; and, again, structural disease of the heart is accompanied by difficult respiration, resembling asthma. Patients affected with certain forms of disease of the heart experience great oppression and difficulty of breathing on using exercise ; the same symptoms attend on asthma and dropsy of the chest ; and even when patients are *extremely feeble*, and without being affected either with asthma, dropsy, or disease of the heart, they are liable to experience great oppression in the chest, difficulty of breathing, and violent palpitation of the heart from over-exertion. The livid hue of the lips observed in cases of heart disease, alike accompanies paroxysms of asthma. The inability to lie down, however, only continues during a paroxysm of asthma ; whereas, in disease of the heart, it is generally continued ; or at least the patient can seldom lie on the right side, with the head on a level with the body ; the same, however, attends hydrothorax. The pulse, which is irregular in structural disease of the heart, is also intermitting in functional disease of the heart, and also in other varieties of disease. Alarming dreams and sudden startings during sleep, with a distressing sense of suffocation, which are mentioned among the symptoms attending disease of the heart, are by no means peculiar to that form of disease alone. When palpitation of the heart occurs as a consequence of functional derangement, the patient is sensible of the irregular action ; whereas, in structural disease of the heart, the irregular action is often unperceived by the patient.

"When we find a patient complain of more or less habitual dyspnœa," (difficulty of breathing,) "greatly aggravated by corporeal exertion; slight œdema" (dropsical swelling) "of the feet: a puffy and anxious appearance of the countenance, with a livid hue of the lips; frequent palpitations or tremulous action of the heart during the paroxysms of dyspnœa; the occasional sudden occurrence of an elastic, puffy swelling of the lower eye-lids and the upper lip; an irascible temper; quick and short inspirations; a deep purple and bloated aspect of the face during the paroxysms of difficult breathing; with an absence of the peculiar wheezing and rattling noise in the lungs; and a free secretion of urine: when these symptoms are noticed, we have strong reasons for presuming that there exists some disease of the heart."—*Eberle*.

One acquainted with the *sound* of the heart's beating in a healthy state, may, by placing the ear to the chest in the region of the heart, detect organic or structural disease.

Difficulty of Cure.—The majority of cases of confirmed structural disease of the heart are incurable; yet such structural changes as a mere thickening of the tissues, such as are occasioned by rheumatism of the heart; slight imperfection in the septum between the ventricles, that sometimes exists at birth; and even unnatural thickness or thinness of the walls of the heart, constituting what is called *hypertrophy*, and dilatation of the heart, are often cured. And even in incurable cases, the patient in some instances may, by a prudent course of living and appropriate treatment, enjoy pretty good health, and live many years.

Treatment.—In the blue disease of infants, the child should be kept lying on the right side, immediately after birth, with the shoulders somewhat elevated. This position will favor the circulation of the blood through the heart.

Thickening of the walls of the heart, particularly of the left ventricle, is not always to be considered as a disease, as, in many instances, it is designed for a good purpose—to enable the heart, by the augmented developement of its muscular fibres, to force the blood through its natural channels, when there is an unnatural impediment to its free circulation.

Dilatation of the heart usually proceeds from debility, and requires such treatment as will increase the strength and tone of the system.

In all cases of disease of the heart, excesses of every kind must be avoided. Quietness of mind and body, a strict attention to diet and to keeping the body comfortably warm, and the use of remedies that tend to sustain a healthy state of the system, are objects of paramount importance in heart disease. The means to be employed are, the warm foot bath, the vapor bath, pure stimulants.

injections, emetics, frictions of the surface, and the continued use of lobelia in broken doses.

Case. — A young man, by the name of Bullock, was laboring under disease of the heart of a severe character, the throbbings being constantly violent and irregular, and his flesh much wasted. The physician who attended him was a man of considerable eminence in the profession, and declared the case to be an incurable disease of the heart. It was proposed to the physician that the patient be taken to the country. He replied that it would be altogether useless, as the disease was of that character which afforded no grounds for hope of recovery. Under these discouraging circumstances, the patient was taken to a Thomsonian infirmary, which was under the superintendence of Frederick Plumer, and there he had a course of medicine administered to him every few days. Under this treatment he improved so much that, after the twentieth course of medicine was given, he was almost free from symptoms of disease of the heart. This gentleman subsequently regained perfect health, engaged in the study of law, and now resides in one of the southern states.

In another instance, a gentleman past his fiftieth year, who had been a *full liver*, was confined to the house several months with well-marked symptoms of disease of the heart. By a careful avoidance of all injurious influences, and the continued daily use of Thomsonian remedies, this patient became entirely free from symptoms of heart disease, his general health being fully restored.

The above are the only cases of disease of the heart (admitting them to have been of that character) in which, to my knowledge, the effects of a persevering and well-applied course of Thomsonian treatment in this disease have been fully tested. The tendency of Thomsonian treatment in equalizing the circulation and improving the general health, and the remarkable influence of lobelia in equalizing nervous energy, even when administered in small doses, affords sufficient ground to warrant confidence in the practice, even though the disease may heretofore have baffled the treatment pursued by the medical profession.

Excesses of every kind to be avoided. — Persons laboring under disease of the heart cannot observe too much caution in avoiding of excesses in eating, drinking, and exercise. If the stomach be oppressed with too much food, or by the food being hard of digestion, it will more or less disturb the equilibrium of the circulation of the blood, and thus increase the disturbance in the regular action of the heart. Much the same effects will be produced by exposing the feet to dampness, which causes the blood to recede from the surface and oppress the heart. Too much exercise is apt to occasion great distress at the heart, with violent palpitations.

Many persons may question the propriety of administering a course of medicine to a patient laboring under disease of the heart. Experience has proved, however, that patients affected with it to such an extent that they cannot use even the exertion of walking a short distance without bringing on distressing sensations of oppression in the breast, and difficulty of breathing, will go through a full course of medicine without occasioning that kind of distress produced by muscular exertion when the system is not under the influence of a course of medicine. During the winter of '38 I was requested to visit a Mr. Kates, who was laboring under a most severe form of disease of the heart. The case was utterly hopeless of cure; his legs were dropsical, requiring to be punctured every few days to drain off the fluid; there was an accumulation of water in the cavity of the abdomen; he was extremely emaciated, and the action of the heart continually laboring and irregular, so that it was with difficulty that he could walk a few steps without support, and he was compelled to continue night and day in a sitting posture. I commenced treating the case with a view only of affording relief; and after applying the steam bath daily, which he bore very well, and having given composition tea occasionally three or four days, I administered a full course of medicine, and did not perceive any unusual excitement or increased difficulty of breathing during the operation; not even immediately after vomiting; the means employed equalized the circulation of the blood, and thus prevented it from crowding upon the heart. Thus a patient laboring under a paroxysm of asthma, who is unable to walk across a room, or scarcely to stand erect, will be materially if not entirely relieved by a thorough emetic, and still more certainly by a full course of medicine.

I attended a patient living in Woodbury, N. J., a man in advanced life, laboring under a most severe form of asthma, attended with well-marked symptoms of organic disease of the heart. It was with difficulty this patient could walk ten feet, and he had not lain down during a period of twelve months. Every extra effort would cause violent throbbing and distress at the heart; still this patient would go through a course of medicine and feel much relieved during the operation. The course of treatment adopted in this case, which consisted chiefly of the free use of the third preparation of lobelia, given in a strong decoction of bayberry and sumac berries, repeating the dose whenever the symptoms of oppression were more distressing, together with the daily application of the vapor bath, warmth to the feet, the use of injections, and stimulating liniment to the surface, not only removed the asthma, but so far restored the natural action of the heart, that the patient, in a few weeks after the commencement of the treatment, was able to walk a mile without experiencing much inconvenience from the exercise.

To bleed and give poisonous sedatives, that will destroy the digestive powers, to lessen the action of the heart, is, to say the least, irrational.

The same course of treatment that is adapted to the cure of asthma, is precisely that which will afford the most relief in disease of the heart or dropsy of the chest; so that, however difficult it may be to decide the precise character, form or location of the disease, the grand object to be attained by treatment, is the promotion of healthy action in the system.

CHAPTER XVIII.

SECTION I.

BLEEDING FROM THE LUNGS.

RAISING blood from the lungs occurs under various conditions of them, and although it generally occasions alarm, it is not always attended with danger. Though generally connected with pulmonary consumption or with a predisposition to that disease, still frequent instances have occurred where persons have been subject to bleeding from the lungs for many years, without much inconvenience; and occasionally persons live to an advanced age who have been subject to frequent discharges of blood in this way.

The opinion so generally prevailing, that bleeding from the lungs is always caused by the rupture of a blood-vessel, is erroneous. Still this does occasionally happen in the advanced stage of consumption, in consequence of ulceration of the vessels. But in the great majority of instances, the blood oozes through the infinitely small vessels which terminate on the lining membrane of the air-passages; these vessels, being in a relaxed, or otherwise diseased condition, are unable to resist the pressure of blood upon them. The same occurs in the lining membrane of the nose: the blood escapes from the mouths of the vessels without their being ruptured. The quantity of blood discharged varies greatly in different individuals; and also, at different periods, in the same patient.

A free discharge of blood from the lungs is usually preceded by coldness of the extremities; a sensation of tightness and oppression at the breast; distress at the pit of the stomach; palpitation of the heart; chilliness; agitation of mind; "alternate paleness

and flushing of the face ; and often a disagreeable salty or sweetish taste in the mouth."

To distinguish bleeding from the lungs from bleeding from the stomach, observe that where blood is *vomited*, it comes from the stomach ; and when raised by hacking or coughing, it is from the lungs. Clots of blood, however, may collect in the posterior nares, and be expelled by the same kind of effort as though it were from the lungs.

Causes.—Bleeding from the lungs may arise from various causes, such as the presence of tubercles in the lungs ; exposure to cold and dampness ; over-exertion ; disordered stomach ; the suppression of habitual evacuations ; and obstructions in the liver or spleen.

Rarely proves fatal.—Patients seldom die of bleeding from the lungs ; for although the bleeding may be profuse, it is seldom so great as to destroy life at the time. Frequent copious bleeding from the lungs, however, may occasion such a degree of debility that dropsy, consumption, or marasmus will ensue.

The Treatment of bleeding from the lungs should be regulated by the circumstances under which the bleeding occurs. For instance, if a young woman have a sudden attack of bleeding from the lungs, in consequence of obstructed menstruation, the warm stimulating foot bath, stimulating injections, and lobelia emetics will constitute the remedies most to be relied upon, and, in fact, will be appropriate remedies in all cases of active hemorrhage from the lungs, attended with a flushed countenance and active pulse. But in cases of deep consumption, attended with extreme emaciation and prostration of strength, the patient should not be subjected to any kind of treatment that calls for much exertion of muscular power, but be allowed to remain perfectly quiet, with the breast elevated by pillows, and warmth applied to the feet and legs, by means of hot bricks wrapped in damp cloths, or by bottles of hot water. One of the best internal remedies is a strong decoction of some vegetable astringent that contains a large portion of gallic acid ; witch hazel leaves, and the leaves and berries of upland sumac, contain gallic acid, and should be preferred to either bayberry or any other of the astringents in such cases.

In cases of slight bleeding, placing the feet in water as hot as can be borne, and drinking freely of hot composition tea, adding small portions of lobelia to excite perspiration and assist in equalizing the circulation, may be sufficient to check the bleeding. But where this is not sufficient, a full course of medicine administered will prove the surest means of equalizing the circulation. I have never witnessed a case in which bleeding from the lungs continued,

after the free operation of an emetic. The lobelia should be given freely, provided the patient be feverish, with a flushed face and hot skin, not only with a view to produce free vomiting, but also to relax the system. When the system becomes relaxed, the blood ceases to determine to the lungs in an undue quantity: obstructions in the capillary vessels are overcome; the nervous influence is equalized, and the force of the heart's contractions is moderated. The straining efforts to vomit will not increase the determination of blood to the lungs except momentarily; and in many instances an equilibrium in the circulation cannot be effected without the use of an emetic, especially in cases where the stomach is foul, and contains a large amount of acid. Stimulating injections containing lobelia are especially beneficial, by the influence which they exert in determining the blood from the lungs. The patient must be kept as quiet as possible, and avoid conversation. After the bleeding is checked, the warm application to the feet should be continued, together with an occasional dose of composition to promote perspiration and maintain an equilibrium in the circulation; and if the patient be feverish or restless, add such a portion of the tincture or powder of lobelia to the composition as will merely occasion slight nausea. Bayberry and sumac berries steeped in boiling water, making a very strong tea, adding a portion of cayenne, sweetened, and drunk freely, will be as effectual a remedy as can be taken, excepting the emetic.

Professor Chapman, in his lectures, relates the circumstance of his being called to attend a young man who was bleeding freely from the lungs; as the doctor entered the room, the patient vomited, in consequence of a large dose of medicine that he had just taken, and the bleeding immediately ceased. The fact of the hemorrhage from the lungs ceasing when the patient vomited, together with the conviction that it admitted an easy explanation, induced the doctor to make a trial of emetics in similar cases. Accordingly, in the next case that came under his care, which was that of a young woman who was bleeding profusely, and the usual means, salt, and acetate of lead, having failed, an emetic of ipecacuanha was given, which produced active vomiting, and the bleeding immediately ceased. The next case of the kind was that of a young woman who had been subject to raising blood, in consequence of suppression of menses. The usual remedies having also failed, the doctor resorted to an emetic, and with entire success: not only did the emetic check the flow of blood from the lungs, but it removed the obstruction which occasioned the bleeding. Dr. Chapman declares that more than thirty years' experience has convinced him that emetics are the most effectual means for checking bleeding from the lungs: rarely failing, and no danger attending the operation, when under the direction of a judicious practitioner.

Persons not in deep consumption, who are liable to attacks of raising blood from the lungs, will in almost every instance prevent bleeding, by taking an emetic or a full course of medicine, as soon as there are symptoms which indicate approaching hemorrhage; and this will not only prevent hemorrhage at the time, but will also prove the most effectual means of restoring the general health, and thus remove the predisposition to raising blood.

Common table salt is a remedy generally resorted to for spitting blood, which, together with placing the feet in warm water, will sometimes be successful in stopping the bleeding.

There is a popular nostrum, extensively used in England for stopping spitting of blood, called *Ruspini's Styptic*. This preparation consists of a solution of gallic acid in alcohol, diluted with rose-water. A strong tea of witch hazel leaves and sumac berries contains the same properties as the above styptic, excepting the alcohol, which is probably of no advantage, further than to preserve the solution from fermentation.

SECTION II.

BLEEDING FROM THE NOSE.

BLEEDING from the nose, as it usually occurs in young and healthy persons, or where it is caused by slight injuries, does not require particular attention. Confirmed into a habit, however, it is liable in weakly constitutions to bring on disease, by draining the system of blood.

Bleeding from the nose often takes place during the active stage of fever, and more especially when it is attended with great fulness in the head.

From the frequent occurrence, also, of bleeding from the nose about the turn of fever, it is considered by many as a crisis symptom, and has been cited as an argument in favor of blood-letting in fever; but it should be recollected that the escape of blood from the nose is the *effect* and not the *cause* of the favorable change in the disease; the vessels of the mucous membrane of the nose, being debilitated by disease, are unable to resist the force of the circulation, when it is restored to these parts by the increase of vital power.

Bleeding from the nose occurs in a condition of the system the opposite to that above mentioned; namely, in the sinking stage of malignant diseases, as typhus and yellow fever: the blood appa-

rently becoming dissolved and deprived of its tenuity, escapes from the vessels, they having lost their power of contraction. This is an unfavorable occurrence, as it tends to reduce the already enfeebled strength of the patient.

Occasionally bleeding from the nose assumes a serious aspect, where it occurs in aged persons, and where there exists extensive derangement in some important organ, as the stomach, liver, spleen, &c., sometimes proving, under such circumstances, extremely difficult of control.

Enormous quantities of blood are sometimes lost from the nose. From five to eighteen, and even thirty pounds have, in some instances, been lost in a few days. The bleeding, it is said, always ceases when the patient faints.

Treatment.—Persons predisposed to bleeding from the nose, should be careful to avoid all exciting causes, as exposure to cold, especially cold, damp feet; heavy lifting, stooping with the head low, hot stove-rooms, &c.

Pressing the sides of the nose together with the thumb and finger, opposite the bleeding vessels, will in common cases prove effectual, provided the pressure be continued a sufficient length of time to allow the blood to coagulate and block up the vessels.

If the pressure be made below the bleeding vessels, the blood will pass down the nostrils into the throat.

Holding the left arm up perpendicularly will often stop bleeding from the nose. The column of blood in the arm pressing upon the aorta, lessens the determination to the head.

In cases of a more obstinate character, depending upon extensive derangement of the general health, or where it has become a confirmed habit, a course of medicine should be repeated at proper intervals, together with proper intermediate treatment, with injections, and the usual means employed by Thomsonians for improving the health.

The compound lobelia pills may be used as a general preventive to habitual bleeding at the nose.

The following is from Dr. Samuel Thomson's narrative.—“While at Exeter, I had a case of a young man, son of Col. N. Gilman, who was in a decline. He was about fourteen years old, and had been troubled with bleeding at the nose. They had made use of such powerful astringents, with corrosive sublimate snuffed up the nose, that the blood-vessels in that part seemed to be shrunk up, and his flesh much wasted away; I carried him through a course of medicine, which caused an equal circulation of blood throughout his body, then raised a natural perspiration, and restored the digestive powers so as to support the body with food instead of medicine. The bleeding from the nose ceased, and in a short time he recovered his health.”

Children, and young persons, are especially liable to bleeding from the nose, even when there is no other derangement of the general health except constipation of the bowels. In such cases, from one to three of the compound lobelia pills, taken after dinner and at bed-time, and a large teaspoonful of pulverized charcoal, taken before breakfast, will, if continued daily, regulate the bowels, and overcome the tendency to bleeding from the nose.

When bleeding from the nose comes on during the early stage of acute disease, when there is a flushed countenance, hot skin, and strong pulse, it will seldom require particular attention, as the loss of a few ounces of blood will be a matter of little account. If, however, the bleeding should occur too frequently, or become too profuse, to be borne without detriment to the patient, the head and face and breast should be bathed with vinegar or whiskey; lobelia given in doses sufficient to occasion nausea, and clear the nostril of the clotted blood, and draw into the nostril some astringent, either bayberry or any astringent tea; or snuff bayberry powder or powdered alum.

Females are occasionally attacked with profuse nose-bleeding, occasioned by obstructed menstruation. Under such circumstances, the treatment must consist in the employment of such means as are adapted to the restoration of the uterine secretion avoiding the application of cold.

The circumstances under which bleeding from the nose becomes most alarming, are when it occurs in patients much debilitated by long-continued disease, and when it comes on as a consequence of an altered condition of the blood, as happens in malignant forms of disease, and in chronic complaints, such as scrofula, chlorosis, scurvy, dropsy, &c. The most appropriate remedies for bleeding from the nose, when it occurs under the circumstances above mentioned, or when it occurs in low forms of fever, are, injections, the internal use of vegetable astringents, and oil or spirits of turpentine; and astringent and stimulating applications to the bleeding vessels, with a view to cause them to contract, and favour the coagulation of the blood in the extremities of the bleeding vessels.

The internal use of the spirits of turpentine is probably the best means of arresting the bleeding. The usual method of preparing it, is to beat up a tablespoonful of the oil or spirits of turpentine with the yolk of an egg, and of this give a teaspoonful every fifteen or twenty minutes, until the bleeding ceases.

Plugging up the nostril with cotton will generally stop nose-bleeding, provided the plug be applied to the part from whence the blood escapes.

SECTION III.

BLEEDING FROM WOUNDS.

WOUNDS made by smooth, sharp-edged instruments, bleed more freely than wounds of equal, or even much greater extent, made by rough-edged instruments. Bruised or lacerated wounds seldom bleed profusely, except when the vessels cut or torn are large.

Nature's method of arresting the flow of Blood.—When a vessel is cut or torn, the inner coat of the vessel at the place of injury commences throwing out a gluey substance, which gradually fills up the cavity of the vessel, and prevents the further escape of blood. In this way the cavity of the vessel becomes gradually filled, so that in the course of half an hour, an artery or vein, the size of a small crow-quill, may entirely cease to bleed. When a vessel is torn or bruised, its cavity becomes closed much sooner than when it is cut with a smooth instrument.

Wounds about the extremities, or in any part where the vessels are not larger than a crow-quill, seldom require the vessels to be taken up and tied, as they will become plugged up in the manner above described, without any serious loss of blood, provided advantage be taken of position, and the dressing be so applied as to make a proper degree of pressure upon the part.

Faintness, from loss of blood or from other causes, always diminishes the flow of blood from a wound or from mucous surfaces, as of the nose, stomach, uterus, &c. Sickness, produced by administering nauseants, has a like tendency, as under either condition the force of the heart's contraction is abated, and the formation of a clot or plug in the cut vessel or vessels is favoured by it.

Position.—In wounds of the extremities, for instance, on the hand or arm, that bleed freely, the parts should be held above the head; or if on the foot or leg, the patient should lie down, and have the limb raised higher than the body.

Pressure.—Much may be done by pressure in arresting bleeding, more especially where the cut vessel is situated in bony parts, for here the pressure will be more effectual. Pressure may be made by a piece of sponge, or a compress of folded cloths, held or bound firmly upon the parts, until the bleeding ceases. Pressing the sides of a wound together firmly, will be sufficient to arrest

the bleeding, except where large vessels are divided; for although the blood may flow freely at first, it will in a short time cease, provided the pressure be properly applied. After operations upon the lip, for instance, cutting out a cancer, all that is required to arrest the bleeding, is to bring the sides of the wound together by means of sutures or stitches. The same means should be employed in accidental cuts on the lip, or in other parts that bleed profusely, and where pressure cannot well be applied.

When several small arteries are cut and bleed freely, for instance, on the hand or foot, the bleeding may be checked very much by placing a piece of cork over the main arteries, above the wound; for instance, if the hand be bleeding, apply the cork on the arteries at the wrist; and if the wound be on the foot, the pressure must be made upon the arteries of the ankle, binding the cork on firmly with a bandage.

Dr. Granville S. Woolman, of Rancocus, informs me he has frequently checked bleeding after extracting a tooth, by placing a little roll of cotton wet with spirits of turpentine in the cavity, and directing the patient to close the jaws; the roll of cotton being sufficiently large to make firm pressure upon the part.

Relaxing the system with lobelia, will lessen the escape of blood from a wound, except in cases of malignant disease, where the blood has become deprived of fibrin, and consequently lost its tenuity.

To distinguish between an Artery and Vein when cut.—When an artery is cut, the blood will be thrown out in jets, and its colour will be red; whereas when a vein is cut, dark blood is discharged.

Even large veins may be checked from bleeding freely, by applying firm pressure on the vein above and below the wound. There is more or less danger to be apprehended from tying a vein; this, therefore, is to be avoided, unless the vein be large, and the bleeding cannot be checked by other means.

Large arteries that are cut require a ligature, unless the bleeding should not be very profuse. A person in full health may lose a large quantity of blood, and soon have this loss restored, if the digestive functions retain their integrity, and the person be supplied with a nutritious diet; whereas in disease where the digestive functions are prostrated, the loss of blood will not be restored for a much greater length of time.

Vessels on the head seldom require tying, as pressure can be effectually made upon them, in consequence of the vessel lying near the bones of the head. Tying the vessels of the scalp is liable to be followed by erysipelas, especially if the parts have been bruised.

An artery that is only partly cut off will bleed much longer than

when it is completely divided. Hence when it is ascertained that a vessel is partly divided, it should be entirely severed, which will enable the ends of the bleeding vessel to contract and retract, and to become filled up by the lymph which exudes from the inner coat of the vessel. If an artery or vein be partly divided only, it will be difficult for the vessel to become filled with lymph, so that even a small artery that is partly severed, may continue to bleed a long time. The only means of ascertaining whether a vessel be partly divided, is by searching at the bottom of the wound by clearing away the clotted blood, and then applying a sponge to cleanse the wound, so as to seize the vessel with a pair of forceps, and if it be found to be partly cut off, let it be entirely divided.

Some surgeons recommend pinching and twisting the ends of bleeding vessels with a pair of forceps or tweezers, as it causes the inner coat of the artery to throw out lymph more rapidly.

Styptics.— Various agents are employed for the purpose of arresting bleeding. Tar-water, Turlington's balsam, tincture of myrrh, Thomson's No. 6, tincture of bayberry, puff ball, spider web, ashes of burned cork, spirits of turpentine, &c. Tar-water, Turlington's balsam, tincture of myrrh, or No. 6, may be used in any case, and often prove effectual in staunching the blood, except when a large vessel is divided or wounded. These articles not only arrest hæmorrhage, but they also favour the healing process, by stimulating the parts, and by preventing putrefaction of the effused blood that may remain in the wound. I have known extensive wounds of the scalp to heal without suppurating, by keeping the parts wet with tincture of myrrh, and the wound well protected from the air. Atmospheric air is highly pernicious to all wounds. In dressing wounds, therefore, especial attention will be required to prevent the admission of air into the wound, at least until a reunion has been effected, or suppuration taken place. A wound that discharges matter, must of course be exposed to the air when the dressings are changed.

SECTION IV.

BLEEDING FROM THE STOMACH.

(Vomiting Blood.)

WHEN blood is thrown up by vomiting, it comes from the stomach; and when it comes from the lungs, it is raised by hawking or by coughing. The quantity of blood discharged by vomiting,

in different cases, varies from half a pint to several quarts. Being mixed with phlegm, and other matters in the stomach, the quantity of blood usually appears much greater than it really is.

Symptoms.—When blood collects in the stomach to any considerable amount, it occasions various distressing symptoms, such as a sense of weight and distress at the pit of the stomach; sour belching and heart-burn; pain and tenderness in the region of the stomach; a feeling of faintness; anxiety; chilliness and flushes of heat; a small, contracted and irritable pulse; palpitation; cold extremities; a pale and contracted countenance; weakness and constriction about the breast; the senses become confused; and there is great sickness of the stomach. These symptoms are followed by copious vomiting of blood, from which the patient experiences much relief, though usually remaining extremely debilitated—requiring the use of the most active diffusible stimulants, such as wine and brandy, in connection with cayenne, composition, &c., together with the use of wine-whey, essence of beef, egg soup, or milk porridge.

A portion of the blood in the stomach passing into the bowels, occasions dark, watery, acrid discharges from the bowels, attended with griping pains.

Causes.—The bleeding does not proceed from a ruptured vessel, in cases of vomiting blood, but escapes through the mucous membrane, as it does in ordinary cases of bleeding from the nose.

The majority of cases of vomiting blood is occasioned by obstructed menstruation. It may proceed from an injury or disease of the stomach; or from obstruction in the liver or spleen; or it may be the consequence of an altered condition of the blood, from malignant disease, such as typhus and yellow fever. Blood is in some instances discharged from the liver into the stomach, and thrown up by vomiting. Cancer of the stomach is one of the rare causes of vomiting blood.

The last case of vomiting blood that I have seen, occurred in a female, forty-three years of age, and who had been suffering for a long time with severe dyspepsia, vomiting her food up every day, for months together. She became healthy.

Treatment.—The same general course of treatment will be required in cases of bleeding from the stomach that is recommended for bleeding from the lungs. The important objects are to evacuate the stomach by emetics, when oppressed by a mass of blood, stimulate the vessels of the mucous membrane to contract, by giving stimulants and astringents, and attract the blood to the surface and to the extremities by warmth applied externally.

To most persons, it may appear an improper practice to give an emetic in cases of bleeding from the stomach; but if the stomach be oppressed with a mass of blood, there is no other means upon which any confidence can be placed but prompt emetics.

Professor Chapman, in his lectures, relates a case of a young woman who was seized with vomiting blood, and when he first saw her she had thrown up three pints of blood. Astringents and various other remedies were employed without effect; she became much exhausted, and continued to throw up blood. An emetic of ipecacuanha was given, and a large mass of black blood was thrown from the stomach, after which she revived, the bleeding ceased, and she did well. But for the emetic, this patient would doubtless have died from the oppressed condition of the stomach. Other cases were related by the Professor, where emetics proved effectual after the usual remedies had failed. In one instance, the bleeding returned after the operation of the first emetic; a second was given, and after its operation there was no return of the bleeding.

Emetics to be employed in bleeding from the stomach, may be prepared in the usual form. The following will do very well in any case:—

Put a teaspoonful of the No. 3 preparation, a teaspoonful of green lobelia, and a teaspoonful of sugar, into a tea-cup; rub these well, and then fill the tea-cup half or two-thirds full of strong bayberry tea. To be stirred well, and taken at once. The dose to be repeated once or twice, at intervals of fifteen or twenty minutes.

Emetics operate more easily and effectually after a vapor bath; and when the patient has strength to sit up and take a bath, it is a good practice to administer one, and also to give an injection before administering an emetic. The circumstances of the case, however, must govern the treatment; for instance, if the patient be very feeble, and suffering great distress and oppression at the stomach, an emetic should be given at once.

I have employed active emetics in two instances of bleeding from the stomach, and in both with good success. In one of these cases, the patient used freely of cayenne tea after the emetic, and continued using it several weeks after, as a general medicine. This patient said that she felt more benefit from pepper tea, than from any other medicine she had taken, excepting the emetics. In another instance, a third case, the patient became extremely weak, and the powers of life depressed to such a degree, after two or three attacks of vomiting blood, that she was thought to be in a dying state, but was sustained by a free use of wine-whey, brandy, and essence of beef.

Wine-whey and essence of beef are often demanded in cases of vomiting blood, in consequence of the debility and prostration of vital energy that attends the complaint. When the functions of the stomach are depressed, or its power weakened, to the extent that it often is in bleeding from this organ, the forces of life sink very low, presenting the appearance of a dying state, demanding the free use of the most potent stimulants.

Injectons should always be employed when the evacuations from the bowels are dark and of an acrid character, as they frequently are in bleeding from the stomach. More especially are injections called for, where there is reason to suspect the cause of the hæmorrhage to be obstructed menstruation. The injections should be stimulating, and contain a portion of lobelia.

SECTION V.

BLOODY URINE.

BLOOD discharged with the urine, may proceed either from the kidneys, ureters, bladder, or urethra. It may be a consequence of debility in the mucous membrane of the urinary passages; or it may be caused by the presence of calculus or gravel, either in the kidney, ureter, bladder, or urethra; or from the use of powerful diuretics, particularly cantharides. Gouty patients are not unfrequently attacked with discharges of blood with the urine. Obstructed menstruation has been known to cause it. Among the most common of the causes of bloody urine, is ulceration of the neck of the bladder.

Treatment.—When bloody urine is occasioned by calculus or gravel, there will be severe pain in the part where the calculus is situated; and such a case should be treated the same as a case of gravel, without any discharge of blood, adapting the remedies to the character of the symptoms. (*See Treatment for Gravel.*)

Attending extreme prostration of the system, a discharge of blood from the urinary passage should be treated as a case of passive hæmorrhage, relying chiefly upon the use of oil of turpentine and astringents, such as the anti-canker pills, and a strong decoction of sumac leaves. A tea of peach-leaves has been used with good success in cases of bloody urine.

When the complaint is occasioned by the use of powerful diuretics, demulcent drinks, such as elm gruel and flaxseed tea, should be given freely.

When gouty patients are attacked with bloody urine, the constitutional treatment should be adapted to improve the condition of the general health; and in these kinds of cases, the use of oil of turpentine will often prove beneficial in other ways besides arresting the bleeding.

Ulceration of the neck of the bladder is usually attended with some discharge of blood; and in these cases, the blood will appear at the commencement of the passing of water, and will not stain the urine regularly, as when it proceeds from the kidneys, ureters, or mucous membrane of the bladder.

Occurring as a consequence of obstructed menstruation, bloody urine requires no treatment apart from that best adapted to the restoration of the menstrual secretion.

The mere discharge of blood with urine, is in itself of but little account; the reason why it occasions alarm in those acquainted with the matter, is that it indicates disease which sometimes is incurable.

When blood is collected in the urethra, or neck of the bladder, and not mixed with urine, the urethra may become plugged up with clotted blood, so as to occasion obstruction to the passage of urine, requiring the introduction of the catheter, or the washing out of the urethra, by means of warm water injections.

CHAPTER XIX.

SECTION I.

C A N C E R .

CANCER is a malignant disease, generally seated in the glands, though no portion or tissue of the body is altogether exempt from the liability to become diseased in this way. Thus the lips, tongue, skin, stomach, ovaries, uterus, and even the bones, are subject to cancerous growths.

Different Species.—The simplest classification is that which recognizes but two species; namely, scirrhus or hard cancer; and soft cancer. Of the latter species, there are two varieties—the *encephaloid* or brain-like cancer, and the *colloid* or gum-like cancer.

Besides cancerous growths, there are others of comparatively harmless character. Such are certain fatty tumours, fibrous

tumours, and osseous or bony tumours. Cancer doctors and doctresses apply the term cancer to various kinds of sores and tumours, probably from inability to distinguish between true cancer and diseases of a different character. No well informed physician will profess to cure genuine cancer, except under very favorable circumstances, and in the early period of the disease, before the system becomes contaminated with the cancerous poison.

CANCER OF THE FEMALE BREAST.

Symptoms.—When first discovered, a cancerous tumour is usually about the size of a marble, and is extremely hard and moveable. The disease progresses very slowly, attended now and then with a sense of uneasiness in the part, but without inflammation of the skin. “Sometimes the attention is first attracted to the bosom by a drop of bloody serum having stained the linen opposite the nipple, it having flowed from one of the lactiferous tubes. Sometimes a distinct and sharp pricking pain leads to the discovery of the swelling.”

There is rarely much pain felt in the part in the early stage of cancer, but after a time the patient experiences turns of excessive darting, or burning pains in the tumour, which are apt to occur at intervals of about two weeks. As the tumour becomes painful, it is observed to enlarge; but true cancer rarely ever becomes larger than two or three inches in diameter, except when the disease invades the whole gland.

As the disease advances, the paroxysms of pain become more frequent, and are often intensely severe, as though “the parts were pierced with a knife, or the nerves of the breast torn out.” Prior to menstruation (about four days), the breast feels fuller, heavier, and much more painful.

After the tumour has attained a considerable size, which in some instances requires many months or even years, the nipple is observed to become shorter, being drawn in by the milk ducts, which are pushed out of their course by the tumour; “frequently, also, the nipple becomes red, inflamed, excoriated, and sometimes ulcerated.” A change is also produced in the appearance of the skin; it is puckered so as to resemble a cicatrix, and this arises from its adhesion to the surface of the cancer. At this stage of the disease the parts around the cancer become more firm and harder than natural, and little tumours are generally perceptible in the parts surrounding the cancer. During the progress of cancer, the glands under the arms almost always become more or less swollen and hard.

Exists for years without destroying Life.—Months, and sometimes years roll on, and the disease continues in its adhesive

stage: and it may even destroy life without ever suppurating; but frequently it proceeds to a suppurative inflammation; then the skin appears of a livid redness; the pain becomes even more severe; a slight sense of fluctuation, or rather of yielding, is perceived in the part, which gradually ulcerates and discharges only a bloody serum; for true pus is not generated. Pus is attempted to be produced; but it is not formed on a truly malignant surface, but only upon the surrounding parts, if they be ulcerated.—*Cooper.*

“Character of the Sore after the Cancer opens.”—The surface of the sore feels hard, like the original tumor, and is remarkably insensible to pressure; and you therefore will observe the patient wipe it, and handle it with a degree of roughness and want of gentleness, which surprises those who are unaware of its little sensibility.”—*Cooper.*

Cancerous ulcers are apt to bleed frequently. The bleeding may be checked by a compress of carded cotton, lint, or soft muslin cloths, applied to the part, and confined by a bandage, so as to make moderately firm pressure upon the bleeding vessels. As the ulceration proceeds, a deep cavity is formed, sometimes extending to the breast-bone.

Patients affected with cancer are apt to complain of rheumatic pains in various parts of the body, more particularly in the loins and thighs.

As the disease extends, the arm upon the diseased side becomes swollen; there is frequently much difficulty in breathing, the patient being unable to lie down; a sense of stricture and spasms at the pit of the stomach is often experienced, and sometimes attended by vomiting. Finally, the constitutional energies become exhausted, and the patient sinks under the disease.

It should be recollected, however, that it is not every case of cancer that destroys life, even when the tumor is not removed. Sometimes the disease remains stationary for many years.

The female breast is very liable to tumors that do not partake of the cancerous nature. A cancerous tumor in the breast is rarely ever observed in females under thirty years of age.

Treatment.—The constitutional treatment for cancer should consist in the employment of such means as are best adapted to improve the condition of the general health. There are no specific remedies for the cure of cancer. An occasional hot air bath and an emetic; the use of the No. 3 pills, to prevent the mucous membranes from coating with unhealthy secretions, taking as many as 6 or 8 of the pills about the middle of the forenoon and afternoon; and occasionally from one to three or four of the compound lobelia pills, constitute the remedies best suited for regulating the constitutional health.

If there be acidity of the stomach, and the bowels costive, pulverised charcoal will be beneficial. It may be taken prepared in water, composition, or spice bitters tea. The dose of the charcoal is a large teaspoonful; to be repeated two or three times a day, before meals.

When a violent paroxysm of pain comes on, it may be mitigated by the use of the warm foot bath, or of the vapor bath, and the use of enemata composed of some mild stimulant, such as composition or pennyroyal tea, with the addition of from a half to a teaspoonful of lobelia, either the powder, tincture or third preparation.

Whatever tends to equalize the circulation of the blood, and of the nervous power, will relieve pain, no matter where it be situated. The free use of pure stimulants, cayenne and composition, containing small portions of lobelia, will also be useful in relieving paroxysms of pain.

Difficulty of breathing will be relieved by the treatment above described. The same remedies are also indicated for the relief of the dry and harassing cough which often attends cancer, more especially in its more advanced stages.

Tonics will be proper with a view to strengthen digestion—such as spice bitters, balmony, &c.

Diet.—The diet should be nourishing, and easy of digestion. Some patients feel more comfortable upon an exclusive vegetable diet, while others require animal food.

Change of Climate.—Every means that strengthens and improves the system, tends to prevent the progress of cancer; and a change of atmosphere will often do more towards improving health in chronic diseases, than medicine.

Applications to the Tumour before the Skin is broken.—During the early periods of cancerous tumours, they should be kept warm, and the skin in a perspiration, by the application of some simple kind of salve spread on silk oil-cloth, or by wearing a piece of rabbit skin with the fur side to the breast.

Poultices are to be applied when the tumor softens, and the skin becomes inflamed. The poultice may be made of elm, ginger, and cracker, or any soft emollient substance, adding a portion of lobelia powder, say a tablespoonful to each poultice.

LOCAL TREATMENT FOR OPEN CANCER.

Cancer.—Many *reputed* cures for cancer have been introduced into use in form of salves, plasters, and balsams, but which, upon

the whole, have doubtless been of far more injury than benefit. Powerful caustics and corroding poisons, as preparations of arsenic, are applied by some cancer doctors to almost every kind of indolent ulcer they meet with, and if it should heal, it is announced as a case of *cancer cured*; whereas in true cancer such applications would probably have little effect, other than to irritate the parts and aggravate the sufferings of the patient, without accomplishing a cure.

Extract of Sheep Sorrel.—The use of this article appears to have operated very favorably in some cases of cancer. The extract is obtained by evaporating the juice of the sorrel, in tin or pewter plates set in the sun, until it acquires the consistency of tar. This is spread on thin leather or silk oil-cloth, and applied to the cancer, renewing it daily. Or apply the extract to the surface of the cancer with the point of a knife, and as the parts become deadened and soft, incisions should be made in various directions, for the purpose of introducing the extract deeper into the cancerous tumor. The effect of the sorrel extract is to destroy the vitality of cancer, and as the surface becomes dead and softens, it may be scraped off without causing the least pain to the patient.

Extract of Red Clover Blossoms.—This preparation is recommended by Dr. Thomson as a valuable application in cases of open cancer. I cannot speak from personal knowledge of the efficacy of this remedy.

The extract of clover or sorrel will destroy and dissolve cancer, when it will not injure the healthy flesh, not even causing inflammation.

The following compound may be used to cover the surface of open cancer, two or three hours after the application of the extract of clover or sorrel:—

R. Powdered Marsh rosemary	1 oz.
“ Cranesbill (<i>geranium maculatum</i>)	1 “
“ Rosin	1 “
“ Blood-root	1 “
“ Gunpowder	1 “

These to be combined, and applied dry to the surface of the cancer, and then cover the parts with a plaster of Castile soap, or of some simple salve, and keep the parts warm. On the following day, the powder, with the portion of cancer deadened and softened by the previous dressing, is to be removed by scraping it off with a knife-blade, and then put on the extract, and in a few hours apply the powders, &c.; and continue this treatment until the cancer is

entirely removed; and, at the same time, let every means be employed to improve the patient's general health.

Removal of Cancer by Excision.—This operation, if performed, should be done in the early stage of the cancer, before the system becomes contaminated with the cancerous poison.

To Open a Cancer.—The dread of an operation by the knife is so great with many individuals, that they will not submit to the operation, but choose rather to suffer more pain, and have the cancer removed by escharotics, or cancer plasters.

"The proper plan is first to remove the cuticle over the surface of the tumor by the vesication of a common fly blister, or a strong solution of lunar caustic, and afterwards to protect the skin around by the application of an adhesive plaster, spread upon a circular piece of leather. A paste or ointment of some slowly acting but efficient caustic is then applied over the excoriated surface, and maintained there for several hours by a compress, bound down by a large adhesive plaster and bandage. Sometimes the application has to be repeated from time to time, for the purpose of ensuring a thorough impression, but in superficial growths one full trial of this kind will prove sufficient. The subsequent and frequently repeated applications of emollient poultices, combined with narcotics, will mitigate the pain, and promote suppuration around the tumor, and a final detachment of it by ulceration. Sometimes even large tumors will slough away entirely in this way, and leave a clean, healthy ulcer, which will afterwards close by a sound cicatrization. The favorite caustics at present employed by our" (Allopathian) "practitioners, are the chloride of zinc, mixed in equal proportions with flour of calcined gypsum." — *M'Clellan's Surgery.*

CANCER OF THE LIP.

A blackish, hard lump or tumour, the size of a duck-shot or pepper grain, situated in the lip, and attended with a twinging pain, should be regarded as a cancer, and should be removed by the knife; and a course of treatment instituted to improve the general health of the patient.

The Open Cancer of the Lip, or malignant ulcer, which occasionally is observed in persons long habituated to the excessive use of the tobacco-pipe, are sometimes cured by the application of caustic, excluding the air from the ulcer by means of salve and suitable dressing.

CANCER OF THE TONGUE.

The tongue is liable to lumps, or tumors, excrescences, and ulcers, arising either from bad digestion or decaying teeth, which often resemble cancer of the tongue, and occasion unnecessary alarm.

Cancer of the tongue sometimes appears in the form of a rough, hard excrescence or wart, situated about the middle of the tongue, towards the tip, and attended with a lancinating, piercing pain; and sometimes it commences in the form of a ragged ulcer, filled with fungus or proud flesh, which bleeds from the slightest irritation. The pain attending, is of the same deep-seated, lancinating character, extending to the throat and to the base of the brain.

Ulcers upon the side of the tongue, occasioned by carious teeth, may be converted into a very troublesome sore by allowing the teeth or tooth to remain, and thus keep the sore irritated for a length of time.

Treatment of Cancer of the Tongue.—For true cancer of the tongue there is but one remedy, and that is to remove it by means of a ligature. This is of course to be done by a surgeon, or by one acquainted with the proper method of performing the operation.

LUPUS. — CANCER OF THE SKIN.

There is a variety of cancer usually termed lupus, which appears in the form of a small indurated tubercle, or wart-like excrescence, mostly situated on the face near the corner of the eye, or by the nose, attended with a twinging or prickling pain. "Sometimes the first appearance is in the form of a discolored spot or point, or of a hard, dusky, or warty scale, which repeatedly falls off, or rather is pulled off, and leaves an elevated raw surface exposed, in which cancerous ulceration finally supervenes. Occasionally, ragged warts appear with an induration beneath, which eventually run into the same malignant ulceration."

Treatment.—The local treatment should consist of the application of the clover or sorrel extract, until the cancer is destroyed, and cover the surface once or twice daily with the powder recommended in a preceding section, and cover the part with an adhesive plaster.

Garden Celandine.—The juice of this herb is a favorite remedy with some practitioners as a cure for lupus. The juice is to be applied to the cancer two or three times daily, and the parts protected from the air by some kind of adhesive plaster or salve.

Cleanliness of person, moderate exercise in the open air, a well-regulated diet, protection from cold and dampness, warm clothing, and cheerful society, are of much importance in all cases of cancerous disease.

Constitutional Treatment.— Besides the remedies previously recommended under the head of constitutional treatment, there are others which may be employed; and the same remedies may be prepared in different ways, to suit the fancy of the patient;—the syrup of bayberry, for instance, be substituted for the No. 3 pills, and the tincture or syrup of lobelia in the place of the compound lobelia pills.

A strong decoction or syrup of the following compound is recommended as a general constitutional medicine in cases of cancerous diseases:—

<p>R. Yellow dock-root, Sarsaparilla, Guia. shavings, Mountain ditany, Pipsissawa, Elecampane,</p>	}	Of each an equal weight.
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These to be mixed together, and to about one ounce of this compound pour a pint of boiling water; let it steep an hour in an earthen vessel. This quantity to be taken daily; made fresh every morning, and taken either cold or warm, or with or without sugar, as the patient may prefer.

The above may be taken in connection with the remedies before mentioned.

CHAPTER XX.

SECTION I.

SPRAINS.

SPRAINS are caused by a sudden wrench or twisting of a joint, by which the tendons or ligaments are either torn or violently stretched. The wrist and ankle joints are those most liable to sprains.

Sprains are extremely painful at the time of the injury, and sometimes continue for hours. Soon after the accident, the parts

begin to swell, in consequence of the blood stagnating in the injured vessels, or from its being effused into the cellular tissue from the torn vessels.

Immediately after a sprain, the joint can be readily moved; whereas in dislocations the joint is stiff and rigid. This fact furnishes a means for distinguishing between a sprain and a dislocation.

When inflammation takes place, as becomes necessary, in order to repair the injury, the parts swell, and there will be extreme tenderness, so that the slightest motion of the joint will cause pain.

Treatment.—In sprains, the first thing to be attended to is to prevent blood being effused into the tissues from the ruptured vessels. This may in a great measure be prevented by pouring a stream of cold water upon the part soon after the accident, and keeping the part in an elevated position. The stream of cold water drives the blood from the parts and contracts the vessels. It may be continued fifteen or twenty minutes at a time, and repeated two or three times in the course of the first three or four hours after the injury. By this time, the torn vessels will have become closed, and the parts then require to be kept warm and bathed frequently with salt and vinegar, No. 6, or stimulating liniment.

When inflammation occurs, evaporating lotions, as alcohol, or whiskey, diluted with water, and warm fomentations, as worm-wood stewed in vinegar, must be used. Steaming the part occasionally, will prove especially beneficial. If it be the wrist joint that is sprained, the arm must be carried in a sling; or if it be the ankle joint, it should be placed on a chair whilst the patient is sitting up, and avoid producing motion in the injured joint.

Application of Splints.—To secure the joint from motion in cases of severe sprains, splints should be applied. This is more particularly necessary in injuries of the wrist joint. If motion in the joint be not prevented whilst the broken tendons or ligaments are uniting, by means of inflammation, it may break up the new adhesions, and thus greatly retard the cure. It is not until after the inflammation has entirely disappeared that motion in the parts should be allowed.

After the inflammation and extreme soreness have subsided, should the part remain swollen, the action of the absorbent vessels must be promoted by rubbing the parts occasionally with the warm hand, or dry flannel, and then applying stimulating liniments or embrocations, and bandage the joint as tightly as can be borne comfortably, always commencing the bandage at the end of the limb. Steaming will also promote the action of the absorbents.

A joint that has been once badly sprained, will in general

remain weak a considerable length of time, and be more easily sprained than before.

The extreme pain often experienced after a bad sprain, may be much relieved by nauseating the stomach by lobelia, given in broken doses.

SECTION II.

BRUISES.

THE best kind of dressing for a bruise, is soft muslin folded several times, wet in cold or lukewarm water, and bound upon the part bruised. The dressing to be taken off and wet before it becomes dry, or when it becomes uncomfortably warm.

If the bruise be situated on a part where the circulation is feeble—for instance, upon the shin of an aged person—oiled silk should be applied over the wet dressing, with a view to keep the parts warm. The wet dressing having been kept on two or three days, the next dressing should be some kind of salve, spread upon oiled silk and bound on, with a view to keeping the parts warm, and favoring the process of absorption.

Bathing a bruised part with a stimulant, either tincture of myrrh, spirits of camphor, salt and vinegar, brandy, or No. 6, is always beneficial, and may be done any time the dressing is removed.

Constitutional Treatment.—Slight bruises seldom require constitutional treatment; but in more severe cases, the hot air or steam bath should be applied, and warm drinks given to promote perspiration.

SECTION III.

SEVERE SHOCKS FROM VIOLENT BLOWS OR FALLS.

IN all cases of severe blows or falls, the vital powers of the system will be more or less prostrated. A man receives an injury, for instance, a severe blow upon the head, falls from a height, or is thrown from a horse with such violence as to cause concussion of the brain—he will lay senseless and pale; the pulse weak; the breathing feeble, and in some instances scarcely perceptible. The patient may recover his sensibility in the course of a few minutes.

If, however, reaction should not take place, and consciousness in a measure be not restored, in a few minutes after a severe injury, means should be taken to bring on reaction. These are, rubbing the surface with the warm hand or warm flannel, keeping the head on a level with the body, administering stimulants and the application of external warmth, either in the form of steam or by the application of warm bricks; and bathing the surface and extremities with stimulants.

Injections. — Stimulating injections constitute the most efficient means of restoring animation in persons that are seriously stunned by an injury. Two or three teaspoonsful of the third preparation of lobelia should be administered in half a pint of lukewarm water; if this medicine be not at hand, almost any stimulant may be employed, such as capsicum or composition tea, No. 6, or even vinegar and water, or brandy and water.

Emetics. — The operation of a stimulating emetic is decidedly beneficial in cases of great prostration after severe injuries. If the system sustain a severe shock, within an hour or two after the individual has taken a hearty meal, free vomiting will be highly necessary. A severe shock to the system, suspends at once the power of digestion, and if there be undigested food in the stomach, it will oppress the powers of life, and may prevent or greatly retard the occurrence of reaction. The best form of emetic is the third preparation of lobelia, given in bayberry tea; or the lobelia powder may be given, adding a portion of No. 6, or capsicum. When a person is severely stunned soon after a full meal, rendering it necessary to produce free vomiting, the usual emetic (lobelia) not being at hand, a tablespoonful of ground mustard given in warm water, or the patient made to swallow warm salt water freely, may answer as an emetic. Forcing the feathered end of a quill far down the throat, is sometimes resorted to, in order to produce vomiting.

Animation being restored, the use of pure stimulants must be continued, in small doses, aided by the application of external warmth, with a view to sustain the circulation, and excite moderate perspiration.

Steaming is of great service to patients who have been badly injured. It is always safe to apply the vapor or hot-air bath, the patient being placed on a couch or mattress, when he is too feeble to sit up. When there is fever, and the patient restless, it will not do to apply dry heat externally; and even when a moist heat is applied during fever, it may be necessary to bathe the face and surface of the body with cold whiskey and water, or vinegar and water.

External Treatment.—In those instances where the system has received a severe shock, the injured part should be bathed with No. 6 or salt and vinegar, and warm fomentations, poultices, or the warm water dressing, applied.

When the flesh is both torn and bruised, a poultice must be applied, and renewed daily until the parts suppurate and cease to discharge matter freely, when a simple dressing of salve will answer a better purpose than a poultice. Whatever emollient substance the poultice be made of, a portion of ginger must be added, to render it moderately stimulating.

When there is an undue determination of blood to an injured part, occasioning much swelling and hardness, attended with a sense of great heat and pain, the parts should be kept wet with evaporating lotions, as camphor and water, alcohol and water, or vinegar and water; the patient should be taken through a course of medicine, if the severity of the symptoms demand it, together with the continued use of stimulants and broken doses of lobelia, with a view to promote perspiration, and excite the secretions of the stomach and bowels, aided by the application of external warmth.

Severe injuries are in general followed by more or less fever, in the course of a few days after the injury: the tongue will become dry and furred, the skin hot and dry, and the pulse increase in hardness and quickness. In this condition of the system, stimulants—capsicum, ginger, composition or simple herb tea, must be given, together with small doses of lobelia, bathing the surface, when needed, with alcohol and water, or vinegar and water, and occasionally the administration of a vapor bath, followed by an emetic, if the system be much disordered, or the injury assume an unfavorable appearance.

Case.—A young man, engaged in a manufactory, had his arm caught between two large cog-wheels, which tore the flesh from one-half of the arm, from a few inches above the elbow up to the shoulder, and split off a portion of the arm bone, which caught in between the cogs, and stopped the machinery. The shoulder and part of the back were bruised into a jelly. The physicians of the village were called, who decided that the arm must be taken off at the shoulder, and appointed the time for performing the operation. The patient, however, requested that his step-father, a Thomsonian physician, who resided some miles distant, should be sent for. On his arrival, he applied a poultice over the whole of the injured parts, carried him through a course of medicine; occasionally repeated it, and gave freely of stimulants to promote the curative action of the system, and in six weeks the wounds were perfectly healed. If the great vessels and veins of the arm had been broken off, no treatment could have saved the patient's arm;

but when these are not destroyed, however severe the injury may be, there is a probability of saving the limb.

Case.—Mr. R—— was thrown violently upon the pavement by the overturning of a sulkey, which left him for some time senseless, and bruised him internally, so that breathing was painful, and he raised small quantities of blood. After his sensibility was restored and he conveyed home, two physicians that had seen him shortly after the injury, called to ascertain how he was, and on being apprised of the fact that Mr. R. was a Thomsonian, they requested to know what medicine he was taking; and when some composition tea was handed them, and they were informed that this was the medicine the patient was taking, they manifested great surprise, and gave it as their judgment that such medicine would throw the patient into a fever, and endanger his life. Mr. R., however, took freely of hot medicine, was steamed every day, was taken through one course of medicine, and recovered rapidly without the occurrence of a bad symptom. Physicians employ bleeding and purging to prevent inflammation, and although they may relieve pain at the time, yet it enfeebles the curative efforts of nature, increasing the liability to unhealthy inflammation, and doubtless in many instances destroys the life of the patient. The practice of bleeding in injuries is so generally adopted by physicians of the old school, that it is thought by the community to be necessary, and when a person receives a severe injury, every one is recommending bleeding as the first and most important remedy, so that sometimes it requires no small amount of courage to withstand this popular *mania* for bleeding.

SECTION IV.

WOUNDS OF THE SCALP.

WOUNDS of the scalp, more especially when the parts are bruised and lacerated, require strict attention, such wounds being often observed to be followed by serious consequences. A simple cut through the scalp with a sharp instrument, heals in general without difficulty, except in persons of depraved habits, or in bad health from other causes. Wounds of the scalp, under the old school treatment, are particularly liable to be attended with erysipelas, which sometimes affects the brain so as to endanger life.

Treatment.—In severe injuries of the head, the edges of the wound must be properly adjusted, the hair shaved off closely around the edges of the wound, the parts washed with whiskey

and water, or with warm water. Tincture of myrrh or No. 6 poured in the wound, to prevent putrefaction of the disorganized blood, and to stimulate the injured vessels to carry on the healing process; then apply dry lint over the wound, to absorb the effused blood and serum, and bandage it as tightly as the patient can bear without inconvenience. If the lips of the wound cannot be kept closed by bandaging, the hair must be shaved off, and strips of adhesive plaster applied before applying the lint. In bandaging the head, especial care must be observed to have the hair combed smooth into its natural position, for if a lock of hair be turned the wrong way and bound down, it will occasion soreness of the scalp. Wounds of the scalp must never be stitched.

Removing the Dressing.—It is generally recommended to avoid removing the first dressing until four or five days have elapsed, with a view to prevent the admission of air into the wound; but if the tincture of myrrh be poured into a wound, the dressing may be taken off in the course of twenty-four hours after, and the lint containing the effused blood removed, without any risk of air getting into the wound, for by this time the wound will be filled with coagulable lymph. Before removing the lint, have it well saturated with spirits, tincture of myrrh, or No. 6, that it may be removed without disturbing the wound; and after its removal, apply some simple cerate or salve, put on dry lint. The second dressing may either remain on four or five days, or be removed daily. If the injured part become painful and very hot, the head must be dampened with whiskey or vinegar, and be kept elevated. Wetting the dressing over the place of injury with No. 6 occasionally, so as to fully saturate the dressing with it, will lessen the tendency to erysipelas, or unhealthy inflammation. Adhesive inflammation is necessary—injuries cannot be repaired without it; and there is probably no article so well adapted to promote the healing process of a wound, as the tincture of myrrh, or Thomson's No. 6.

Constitutional treatment should always be employed in wounds of the scalp. Soon after the wound is inflicted, the patient should be carried through a course of medicine, more especially if the wound be severe, and repeated as often as the condition of the system may require it. If the bowels be costive, they must be evacuated by the use of the syringe.

Perspiration.—It is important to promote the secretions and exhalations of the skin by the use of stimulants that neither disorder the brain, nor aggravate inflammation. Capsicum, composition, or ginger tea, may be used freely and with safety. Simple herb teas may be employed for the same purpose. The feet must

be kept warm. When a patient is feverish, a small portion of lobelia should be added to the stimulants given, and the surface bathed occasionally with some alcoholic preparation.

Should symptoms occur denoting inflammation of the brain—pain in the head, flushed countenance, intolerance of light and sound, and delirium, the system must be placed under the influence of lobelia, taken in the usual way, and also administered by injection. A teaspoonful of brown or green lobelia may be administered by injection in lukewarm water, and retained; and occasionally a *stimulating* one also may be administered—a teaspoonful of the third preparation of lobelia in bayberry tea. I have frequently given the third preparation of lobelia to patients laboring under symptoms of inflammation of the brain in low forms of fever, and have invariably observed good effects to result from it; in many instances after vomiting, the delirium has very materially moderated, and in some instances disappeared entirely for a time.

In inflammation of the brain from injury of the scalp, it will be proper to relax the system by the lobelia enemas, and the application of vapor to the body before giving an emetic of the third preparation of lobelia. This treatment must be perseveringly employed, for inflammation of the brain often proves fatal under any mode of treatment. The hair must be cut short, and the head raised upon pillows, and cloths applied wet with alcohol, or vinegar, or if there be erysipelatous inflammation of the scalp, No. 6, or the third preparation of lobelia, must be used on the inflamed part, whilst on other parts of the head the first mentioned articles may be used.

When there is evidence of the existence of matter under the scalp, an opening should be made with a lancet, to allow the pus to escape; after which, especial care must be observed to shield the parts from the air by a stimulating poultice, or plaster, spread upon oiled silk; and if a poultice be employed, it must be kept moist with warm water, containing about one-fourth of its quantity of No. 6. Equal quantities of composition powder and slippery elm, mixed with lard, form a suitable poultice in erysipelas, attended with the formation of matter in the parts.

The practice advocated by some physicians and denounced by others, of prescribing bark and wine to patients laboring under erysipelas of the scalp, is not much less objectionable, in certain conditions of the system, as when the secretions are in a great measure suspended, than the absurd practice of bleeding patients "*almost to death*," in inflammation of the brain. In the earlier stages of erysipelas, the medicines employed should be such as excite the secretions, both of the skin and of the mucous membrane of the stomach and bowels. Hence, when the tongue is dry, as a general plan of treatment, use pepper tea, either alone or com-

bined with simple herb tea, such as pennyroyal, balm, &c., and broken doses of lobelia, and apply a moist heat to the surface of the body and feet. A case of erysipelas that would be aggravated by the use of bark and wine, would be relieved and benefited by the treatment as above described. In any case of fever in which the secretions are suspended, bark and wine would prove more or less deleterious; whereas the treatment above mentioned would relieve the symptoms and assist nature.

Inflammation of the brain is always attended with danger; and therefore in injuries of the scalp, or concussion of the brain, treatment should be early applied to cleanse the stomach, promote the secretions, and sustain the equilibrium of the circulation, as the surest means of preventing disorganization of the brain. Even slight injuries of the scalp should not be neglected, as very small wounds of the head have frequently been observed to occasion dangerous symptoms, through neglect or exposure. Wherever the scalp is the least torn or cut, it must be protected from the air, otherwise erysipelatous inflammation may be the consequence.

Case.—W. B. S. received a severe blow upon the side of the head from some machinery in an iron foundry, which left him senseless a considerable length of time; the scalp was cut to the bone, the wound being about two inches in length, and lacerated at the edges. The wound was dressed with strips of adhesive plaster, (the hair having been previously shaven from the edges of the sore,) dry lint applied, and the head carefully bandaged. This patient was placed under a course of Thomsonian treatment, the vapor bath administered every day, and means used for promoting perspiration, and also other secretions, such as composition, or pepper tea, and warm bricks to the feet; and the bowels regulated by the use of enemata. On removing the dressing from the head, on the seventh or eighth day, I found the wound healed, by "*first intention*," as it is termed, a circumstance rarely occurring in wounds of this kind. A physician residing near the place where this accident happened, was sent for immediately after the accident, who observed to some of the patient's friends, that if he (the patient) was not bled, his life would be endangered. The patient, however, was neither bled nor purged; and although the shock was very severe, he recovered without the occurrence of an unfavorable symptom.

Diet.—In all cases of severe injuries the diet should be light. Gum Arabic mucilage, elm gruel, milk porridge, toast and tea, custard, and oat meal and Indian gruel, form suitable articles of diet when the digestive powers are in a prostrated condition. In a later period, when the injured parts are secreting matter freely, or the patient is free from any considerable degree of fever, the

tongue moist, and the patient is disposed to perspiration, then a more nourishing diet will be required, as chicken soup, beef steak mutton, eggs, stale wheat bread, &c.

Tonics.—When an injured part or an abscess discharges matter freely, and the system is in a relaxed condition, bitters must be taken to strengthen digestion.

SECTION V.

WOUNDS PRODUCED BY SHARP INSTRUMENTS.

SIMPLE cuts made by sharp instruments heal more readily than any other kind of wound of the same extent.

In treating a simple wound, the first thing to be attended to is to arrest the bleeding. If an *artery* be cut, the blood will be of a bright red color, and come in jets; dark blood comes from veins.

When a blood-vessel is cut or torn, a gluey substance is secreted by the coats of the injured vessel, which gradually plugs it up and entirely stops the escape of blood. Arteries the size of a crow-quill, though they may bleed rapidly at first, will soon become plugged up by this admirable process of nature.

An intelligent person once related to me the following circumstance, to prove that some persons possessed the power of stopping the flow of blood without seeing the patient. A young man who was cut badly continued to bleed profusely, until the family became alarmed, and sent a messenger off post haste to a Dutchman, who lived twenty miles distant, who it was thought possessed the power to stop bleeding. On the messenger arriving at the residence of the Dutch doctor, and making known his mission, he was asked the name and age of the patient; on being informed in these particulars, he told the messenger to go home now, that the bleeding would be stopped before he got back; and sure enough the bleeding had ceased, because nature had been all this time filling up the vessels, until they had finally become closed. The Dutchman, however, received the credit of stopping the blood, and of saving the young man's life.

Pressure.—Unless when a large artery be cut the bleeding may be arrested in a short time by pressing upon the parts with a sponge, or a compress of folded linen or muslin.

Position.—Bleeding from a cut upon the extremity of a limb,

may be partly arrested by holding the limb above the level of the body; aided by pressure upon the part.

Dr. Bellvil, who was a very eccentric, but most distinguished physician, of Trenton, N. J., was sent for in great haste to assist another doctor to take up an artery that was bleeding. The messenger informed the Dr. that the cut was in the ball of the thumb, and that the doctor who was there had been searching two hours for the artery, without being able to find it. The doctor was surprised that a physician should be probing the parts, and keeping the blood running, by searching for an artery in a part where the vessel would soon stop bleeding if bound up and left alone, refused to attend the summons, and told the messenger to go home and bind up the wound, and cut the doctor's head off.

Cleansing the Parts.—After the bleeding is stopped, or so nearly so as to admit of the wound being dressed, the parts should be cleared of all extraneous substances, and the clotted blood removed from the surface and edges of the wound.

Placing the injured parts in their proper position is the next step, and this is one of some importance. In a simple, straight incision, there is seldom any difficulty in keeping the sides of the wound in a proper position, unless when the wound is extensive, and cut across a muscle,—for when a muscle is cut across, the contraction of the muscular fibres will separate the sides of the wound, and break up the new adhesions as they are formed by the healing process.

When a portion of flesh is badly cut, stitches may be required; the stitches should be made with a fine sewing needle, threaded with cotton or silk, and should not penetrate beneath the skin.

Adhesive Plaster.—Never cover the whole of a wound with adhesive plaster, but put it on in strips, leaving sufficient interspaces to allow the escape of blood and serum from the wound. Lint is to be applied over the strips, and the part properly bound up.

Bandaging a Limb.—In cases where muscles are cut across, for instance, a deep cut across the calf of the leg, or across the thigh, or the fleshy part of the arm, the limb should be bandaged from its extremity up to the next joint above the injury. Thus if on the calf of the leg, the limb should be properly bandaged up to the knee, and kept in a flexed position, and all motion of the limb avoided until complete union has taken place.

Evaporating Lotions.—When a wound becomes hot and painful, evaporating lotions, alcohol, or camphor and water, must be applied, or the dressings wet occasionally with cold water; still

the dressing must not be removed, except so far as to loosen it if it becomes too tight. A bandage should always be wet before it is applied, otherwise it will shrink and become too tight.

In large wounds, stitches are generally preferable to adhesive plaster alone, for the parts require the application of evaporating lotions, which will render adhesive plaster of but little use. Where, however, the sides of the wound can be kept in perfect apposition by bandaging, both the adhesive plaster and stitches may be dispensed with.

Removing the dressing too soon, may very materially retard the cure; this should therefore be avoided until two or three days have elapsed after the occurrence of the injury, unless it becomes painful or offensive, from the putrefaction of the blood and secretions confined under the dressing.

Constitutional Treatment.—A simple cut seldom requires constitutional treatment; still slight wounds are sometimes observed to become converted into very troublesome sores through neglect, and exposure to cold and dampness. In large cuts, constitutional treatment will be necessary when the patient is in bad health, or the wound becomes very painful, or assumes an unhealthy appearance. The constitutional treatment indicated will not differ from that already recommended in injuries of the scalp. A single course of medicine will sometimes cause a wound that presents an unhealthy appearance to become greatly improved in its general aspect in the course of a few hours.

SECTION VI.

LACERATED WOUNDS.

LACERATED wounds are those made by rough instruments, which tear the fibres of the flesh.

Lacerated wounds rarely bleed to any considerable extent; even large arteries may be torn asunder without occasioning much loss of blood.

Lacerated wounds are more difficult to heal than a smooth cut; they seldom unite without the formation of pus. They are also much more liable to be attended with unhealthy inflammation, and constitutional disorder, than wounds made by a sharp and smooth-edged instrument.

The Treatment, both local and constitutional, is the same as

described in the preceding section for wounds produced by *sharp* instruments, except that lacerated wounds demand more attention, both in relation to evaporating lotions to the parts, and constitutional treatment.

Tincture of myrrh is probably the best application that can be made to a fresh lacerated wound, as it tends effectually to prevent putrefaction of the effused blood contained in the wound, and at the same time it promotes the healing actions.

Even extensively lacerated wounds have healed by the first intention, by filling the wound with tincture of myrrh before dressing it.

The warm or cold water dressing is to be applied, except when the injury requires the use of adhesive straps, or is so situated that the wet dressings cannot be applied. In cases of extensive wounds, more especially when on the hands or feet, where the circulation is feebly performed, attention must be paid to keeping the wet dressings from becoming cold. This is to be prevented by wrapping several thicknesses of dry flannel over the wet dressing, and if this be not sufficient, apply oiled silk over the dressing, and the dry flannel over it.

SECTION VII.

PUNCTURED WOUNDS.

WOUNDS made by pointed instruments, — dirks, hooks, scissors, nails, &c., are much more liable to be followed by serious consequences, than cuts made by sharp-edged instruments.

Punctured wounds in tendinous parts, as the palm of the hand and ball of the foot, are far more dangerous than when they happen in fleshy parts. The mere wounding or puncturing a nerve, is much more likely to produce serious consequences, than when even many nerves are completely divided.

Punctured wounds in the palm of the hand, or in the bottom of the foot, are apt to close up without the occurrence of adhesive inflammation, or the discharge of matter. Such wounds, if a nerve happens to have been punctured, are followed frequently by much constitutional disorder, and sometimes by locked-jaw.

Treatment. — In punctured wounds, means should be employed to excite adhesive inflammation, by pouring in the wound No. 6, or spirits of turpentine, and then applying a stimulating poultice to the part. The poultice should contain a portion of cayenne pepper, so as to attract blood to the part, and establish adhesive

inflammation and suppuration. It is the deficiency of blood in tendonous parts, as in the palm of the hand and sole of the foot, that occasions punctured wounds in these parts to close without the occurrence of inflammation, or the formation of pus.

If the hand or foot be pierced by a rusty nail, the wound should be cleaned out by a probe, or syringe with soap suds, or simple warm water, and then pour into the wound No. 6, or spirits of turpentine, and apply the stimulating poultice.

If the stimulating poultice, after continuing on several hours, should become painful, causing an unnecessary afflux of blood to the parts, it may be removed and one less stimulating applied.

Constitutional Treatment is highly necessary in cases of severe punctured wounds, more especially if the wound be about a large joint, or in the palm of the hand, or ball of the foot. A course of medicine should be first given, after which the patient should take sufficient of composition, pepper tea, or other stimulants, to promote a healthy action throughout the system; and broken doses of lobelia, to promote the secretions, which is highly important as a preventive to locked-jaw, or other unfavorable effects from wounds.

Exposure to cold and dampness, and excesses of every kind, should be avoided by those who have received a punctured wound.

To remove points of Needles.—Points of needles are sometimes broken off in the flesh, and particularly in the hands and feet; and when there is any difficulty in finding a needle point, the best way is to apply a warm poultice, and keep the part at rest a few days, or until matter is formed around the needle; and then if it is not very deeply imbedded, a black speck will be seen, and by cutting down to it, the needle point can be easily removed by a pair of small forceps or tweezers.

SECTION VIII.

WOUNDS OF JOINTS.

A wound of a large joint, for instance, of the knee, where the cavity of the joint is cut into so as to allow of the admission of air, and the escape of the joint-water, is an accident of the most serious character. When such a wound occurs in an aged person, or in one of an unhealthy constitution, the patient very rarely recovers the use of the joint, and it not unfrequently terminates

fatally. Young persons, of vigorous constitution, may in general recover from such injuries; still there is great danger attending wounds of the large joints.

Treatment.—In wounds of a joint, the first and by far the most important point in the treatment, is the closing of the wound immediately, in order to exclude the air from the cavity of the joint. When air is admitted into the cavity of a joint, it operates as a powerfully deleterious agent upon the serous membrane lining the cavity of the joint, and requires a high degree of inflammatory action and much constitutional energy to repair the injury. Dry dressing must be put on, and as soon as the parts are well secured from the air, the limb, if it be the knee joint, must be bandaged, commencing at the foot and carrying it up to the knee; the wound should be covered with lint, and the knee well bandaged. The object of applying a dry dressing is to favor the healing of the parts without the formation of matter, and of excluding the air from the joint. A poultice must never be applied where joints are cut into, until after the lapse of several days, and the parts exhibit marks of suppuration, or the formation of matter—then it will be proper to apply either a poultice or the warm water dressing.

When the joint is dressed, a splint must be applied, in order to prevent the possibility of motion in the parts; for if motion be allowed in the joint, the new adhesions will be broken up, and a union by the first intention thereby prevented. As the parts swell, the dressing must be loosened.

Constitutional Treatment must be early applied, unless the system be comparatively clear of disorder. Injuries of large joints, however, are necessarily attended with much constitutional disorder, and more especially if the wound does not heal without suppuration occurring. The bowels are to be regulated by the use of injections; the secretions promoted by giving stimulants, such as capsicum, composition, or simple herb teas; and when there is fever, give small doses of lobelia in combination with the stimulants.

The diet must be light at first, avoiding every thing that is unwholesome, or hard of digestion.

If the wound suppurate, tonics must be given, unless the tongue be dry and the patient feverish, and even under these circumstances the spice bitters may be used. Wounds of the large joints require great exertion on the part of the constitution to repair the injury, creating the necessity for all the support that can be afforded by stimulants, tonics, and a nutritious diet.

SECTION IX.

BURNS AND SCALDS.

In the treatment of scalds and burns, this one point should always be considered, *namely*, to secure the part from the action of the atmosphere.

For slight burns and scalds, when the skin is not destroyed, the best application is cold water, either holding the part in a basin of cold water, or applying linen or muslin cloths or carded cotton on the parts, kept wet with cold water, or whiskey and water. This is to be continued until the smarting ceases; then cover the parts with an ointment prepared of sweet oil and lime water, or a salve made by melting together beeswax and mutton suet, or sweet lard, or bind dry cotton on, or cover the parts with oiled silk.

When blisters are formed, the best way to open them is to pierce them in several places with a needle, and then cover the parts with a thick layer of carded cotton, or soft muslin cloths, kept damp with alcohol and water, or whiskey and water, and this continued until the parts cease to be painful; or apply either the salve or ointment above mentioned.

Avoid removing the dressing until several hours, or even a day or more, has elapsed. Removing the dressing too soon, breaks the tender skin that nature forms on the surface of the burn, and thus greatly retards the cure. Whatever dressing be applied to a burn, which is found to relieve the pain, whether it be dry cotton, cloths wet with evaporating lotions, sweet oil and lime water; or a poultice of scraped potatoes or carrots, or flour and water, it should be allowed to remain on at least for several hours, or even much longer, unless there be a necessity for its being removed.

When the outer skin is removed at the time of a burn or scald, I mean the skin that raises up where a blister is formed, the parts should be covered as speedily as possible with an ointment of lime water and oil, simple cerate, or some other mild ointment or salve. Whilst the ointment or salve is being prepared, the part should be covered with sweet oil, or lamp oil, or sweet lard, or flour and water, or with something to exclude the air. Wet cloths should also be applied, provided it does not chill the patient. The ointment must be spread on linen or muslin, and when applied, cloths or cotton may be laid on this dressing, kept damp or wet with cold water, or whiskey and water, to relieve the pain. The under dressing must not be removed for two or three days; indeed, it is better to let the first dressing remain on until a new skin be formed

on the burned parts, unless the dressing disagree with the sore, and occasion pain.

When a part is seared, so as to destroy the skin, from live coals or a red-hot iron, a *poultice or plaster* must be applied; for when the under layer or true skin is disorganized, suppuration will take place, and instead of a new skin being formed, as there will be, when only the outer layer of the skin is removed, the parts will heal by drawing together, and thus form a scar or seam in the skin. The poultice recommended by Dr. Thomson, which consists of a compound of slippery elm, white pond lily root, cracker, and a small portion of ginger, all finely pulverized and wet with a strong tea made of raspberry leaves, form as good a preparation probably as can be devised. The poultice will require to be wet occasionally; and when the parts are suppurating freely, a fresh one must be applied daily, until the suppuration is completed, when a salve must be applied to shield the parts from the air, until they are healed. When granulations shoot up, forming what is termed proud flesh, they should be covered with burned alum, or finely powdered marsh rosemary, at each time the dressing is removed.

When there is but little discharge of matter, and in some cases when there is a free discharge of pus, some simple salve will be better than a poultice.

Constitutional Treatment.—Severe burns or scalds generally occasion great prostration of the powers of life, manifested by chilliness, coldness of the surface, extreme prostration of strength, a weak pulse, and sometimes stupor or delirium. Under these circumstances, stimulants and emetics must be given. If an individual receive a severe burn or scald soon after taking a hearty meal, the food will not be digested, and if not thrown off by vomiting, it will oppress the vital powers. It is always safe, and generally highly necessary, to give an emetic after a severe burn or scald.

Stimulants.—Stimulants, such as here recommended, given internally, will not aggravate a burn or scald on the surface. By giving stimulants, we aid the constitution in maintaining the natural equilibrium of nervous power between the great centres of the system and the surface of the body, which is an important point in the treatment of all forms of disease, whether general or local. The stimulants to be employed, are capsicum, composition, or ginger tea. These stimulants may be given at all times; and when there is fever, broken doses of lobelia should be added to them, or taken separately; and if the skin be very hot and dry, bathe it with vinegar and water, or spirits and water, to reduce its temperature down to the sweating point.

Vapor Bath.—There is no objection to the use of the vapor or hot air bath in cases of scalds and burns, the parts being kept covered by a wet dressing during the steaming. When the patient remains in a torpid or sunken condition, or the burn or scald becomes very painful after the lapse of a day or two, or at any subsequent period after the first pain from the injury has subsided, the vapor bath will prove especially beneficial, not only in relieving the pain in the parts, but it will aid the healing efforts of the constitution. I recently attended an old lady who had her foot badly scalded, and not being treated properly in the first place—the dressing being frequently removed, the lymph which was thrown out by the raw surface, designed to form a new skin, was taken off by the frequent changing of the dressings, and the scalded surface assumed an unhealthy appearance; the foot was extremely painful, which continued for weeks with but little intermission, except when the parts were wrapt in wet cloths, and cold water applied. All the applications that were made to the foot, failed of exciting the healing power, or to make any favorable change in the part, until the vapor bath was resorted to; the foot was steamed from a half to three quarters of an hour at a time without any dressing on, and this repeated daily, until a new skin was formed over the foot. This patient experienced more benefit from a general steaming than when it was merely applied to the foot.

To prevent Deformity.—Great deformities are apt to take place after severe burns, when the true skin is destroyed. If, for instance, the palm of the hand and between the fingers be badly burned, the natural tendency in the parts will be to contract: the hand to be clenched and the fingers to unite together. This is to be prevented by binding a splint on the back of the hand, the splint being sawed at the extremity, so as to furnish a separate splint for each finger. The parts must be first dressed, and then the splint applied. Especial care must be observed to interpose dressing between the fingers, to prevent their uniting together. I once witnessed a very painful and bloody operation on a man, whose arm had grown fast to his side, in consequence of a severe burn, the proper care not having been taken to prevent the burned surfaces from coming together when healing. Severe burns on the neck are almost necessarily followed by more or less deformity. I have seen cases where the chin was drawn down to the collar bone, the patients being unable to raise the chin from the breast. A severe burn on the inside of the arm at the elbow, would, whilst healing, naturally tend to bend the arm; and if allowed to heal in this position, the patient will be unable to straighten the arm. This deformity is to be prevented by applying a splint to the back of the arm, so as to keep the limb straight.

SECTION X.

CHILBLAINS.

CHILBLAINS are most liable to occur on the heel, the toes, and sides of the foot. The parts affected are somewhat swollen, red, and at particular seasons of the year, or on warming the feet by the fire, they itch very much and are sometimes painful.

Causes. — Chilblains are produced by severe coldness in a part, and being too suddenly warmed by the fire.

Preventive Measures. — When the feet or hands are benumbed by cold, and great pain is occasioned as they begin to warm, they should be placed in cold water, and kept there until the parts cease to be painful, when they are removed from the cold water; or the parts may be bathed or rubbed with alcohol, whiskey, opodeldoc, or spirits of camphor, and kept away from the fire, or from a warm room, as long as there is pain experienced.

Treatment. — Chilblains, unless properly treated, may continue to be occasionally swollen, and prove a source of great annoyance for years, unless proper means be taken to overcome the debility of the vessels of the parts. A very good plan of treating chilblains is to bind on the parts a poultice composed of wheat bran, soft soap, and fine salt; the poultice to be continued on an hour or two at a time, and then the parts to be bound up with oiled silk, and not allowed to be near the fire. The oiled silk to remain on several days. Another plan of treatment is to rub the parts with oil of turpentine, and then rub on stimulating ointment on a piece of bladder, or silk oil-cloth, and bind it on the parts. This application to be repeated every night, until the parts are restored to their natural condition.

SECTION XI.

TREATMENT OF FROZEN LIMBS.

WHEN a part is benumbed or frozen, the most important part of the treatment is to regulate the temperature around the frozen part, carefully guarding against warmth until the vessels recover

sufficient strength to carry on the circulation. A frozen part should never be thawed by the application of external warmth, or it will be followed by violent inflammation, if not by mortification. It would seem that the application of warmth to a frozen part, destroys the natural equilibrium of nervous energy between the great centres of the system and the surface of the body. In such cases, the blood which is attracted to the surface by the warmth is not circulated or returned back, as it should be, a tendency to putrefaction or disorganization occurs, attended with violent inflammation, followed perhaps by mortification.

A part that is frozen must be kept in cold water, even adding snow or ice to it, and this continued until the parts are completely thawed, and then the temperature around the part should be increased *very gradually*, not allowing a sudden change from cold to warmth. Covering the frozen parts with snow, is a good practice.

If a person, besides having his limbs frozen, should be greatly benumbed and chilled throughout the body—nearly frozen to death—he should not be taken into a warm room, but be laid in a room without fire. It would be even better that the patient remain in a barn, than to be placed in a temperature much above that of the external air. I have heard a case related of a man frozen severely and stiff, who was restored by being placed in a cask of pickled cabbage, commonly called sour-cROUT.

Stimulants must be given to support the living powers. Cayenne pepper, composition, ginger tea, carbonate of ammonia, warm brandy toddy, and No. 6, in warm water, may be employed as stimulants; and wine-whey, essence of beef, or chicken tea, may be given as nourishment, until the powers of digestion are restored, so that other kinds of food can be digested. Stimulating injections will aid in restoring animation.

When a part of a limb is frozen, without the body being very much benumbed with cold, the patient may remain in a comfortably warm room, observing the precaution to keep the frozen part in cold water, or enveloped in snow, until it be thawed; and then the parts may be wrapt in cloths kept damp with whiskey, alcohol, spirits of camphor, or vinegar. A most important point in the treatment of frozen parts, is to “keep down the outward heat” of the injured parts, or a stagnation of the blood in the parts will be the consequence. When, through improper management in the first place, or from other causes, a part that has been frozen becomes inflamed, threatening mortification, a poultice must be applied, composed of elm, white pond lily, cracker and ginger; the poultice to be kept wet with cold water, and the limb elevated. The yeast poultice mentioned in the *materia medica* may be employed. The patient should also be placed under active constitu-

tional treatment, in order to aid the efforts of nature. A full course of medicine should be administered, and frequently repeated, in all cases where mortification is threatened, and stimulants given freely, to excite the secretions, and increase the power of action in the enfeebled vessels, thus lessening the tendency to congestion of blood in the parts. It is common in the old practice to prescribe bark and wine in cases of mortification; such remedies, however, when the secretions are suspended, the tongue being dry and the skin dry and harsh, will necessarily prove injurious. But if a patient, in the condition above described, be carried through a course of medicine, and followed by a free use of cayenne or composition tea, adding small doses of lobelia, the symptoms will generally assume a more favorable aspect, and certainly never be aggravated by it.

Tonics.— There is a condition of the system when barks and wine will prove of great benefit in cases of mortification, or in cases of recovery from the effects of freezing. When the tongue is cleaning and moist, and the surfaces of the body inclined to moisture, tonics may be given freely. Peruvian bark, quassia, columbo root, Virginia snake root, balmony, golden seal, quinine, poplar bark, or spice bitters, may be employed either separately or combined.

Diet.—The diet in mortification should be of the most nourishing kind, provided the digestive powers be not too far prostrated. When the tongue is dry and parched, and the patient feverish, gum Arabic or slippery elm mucilage, essence of beef, barley-water, &c., will be the most suitable. But when the tongue is moist and cleaning, the skin warm and relaxed, the patient may take eggs, beef-steak, mutton, chicken, wild game, custards, milk boiled, milk porridge, &c. In some cases of extreme debility, wine-whey and even wine may be given. No. 6, taken in warm water sweetened, is an excellent tonic and stimulant.

SECTION XII.

BILES.

Treatment.— In the earlier stages of biles, warm fomentations and poultices are required to soften and relax the parts, and to favor suppuration. The poultice should consist of powdered slippery elm, two parts, and green obelia powder, one part. To be

wet with warm water; renewing or wetting the poultice every three or four hours.

The core of a bile consists of dead cellular tissue, and inflammation is necessary to bring on suppuration or the absorption of the parts surrounding the dead cellular tissue, in order to separate it from the living parts. It is therefore better to avoid opening a bile too soon, as that may interfere with the operations of nature, and retard rather than hasten the cure. There is a time, however, when a bile should be opened, and not allowed to break spontaneously, or it may destroy so much of the skin as to leave a large scar.

After a bile has broken, or has been opened, the poulticing must be continued until suppuration has nearly ceased, and the swelling and inflammation subsided. In all running sores, it is better to have a poultice spread on oiled silk, or something that will prevent evaporation. As a general rule, poultices should be made more stimulating after an abscess or bile is opened than before, and if the parts be much relaxed and colder than natural, equal portions of composition powder and slippery elm will form a very good poultice.

Washing or syringing the cavity of biles that are slow to heal with a strong tea of bayberry or sumac, adding a portion of No. 6, is very useful; it promotes granulation and assists the healing action.

When the matter is discharged, and the swelling in a great degree disappeared, poultices may be laid aside and salve spread on soft muslin or linen substituted, and wash the sore occasionally with the tea above mentioned.

Constitutional Treatment is not required in common cases of biles, except it may be to lessen pain by relaxing the system, or with a view to prevent other biles. Biles very often occur after scarlet fever, measles and small-pox.

SECTION XIII.

CARBUNCLE.

THE carbuncle never occurs in a healthy constitution. It may arise from the same cause that produces biles; but instead of healthy inflammation observed in case of a bile, terminating in the formation of what is called healthy or laudable pus, the inflammation in carbuncle is of an unhealthy character, and attended with a burning pain in the part. The swelling does not assume

the conical shape of a tile, but is flat, and the colour is of a dark red or livid hue. "The core or slough being broad, it generally happens that several orifices are formed over it to discharge the matter, instead of one; and a long and tedious period of ulceration has to be endured, before the parts can granulate." At first, the tumor is hard, but in general it becomes soft and feels spongy, and small vesicles or belbes are formed on the skin, as in erysipelas, and an acrid fluid is discharged from numerous openings or small ulcers on the parts. The fluid which escapes, resembles a mixture of flour and water; the small ulcers run together, and form openings sufficient to allow portions of the dead cellular tissue to escape, resembling shreds of tow or cotton.

The cheek, neck, and back, are the parts most liable to carbuncle.

Carbuncle is not in general dangerous, yet it is slow in its progress, and difficult of cure.

Treatment.—The local treatment, in the first place, should consist of warm fomentations, stimulating and astringent poultices, and the application of stimulating lotions to the surface, when the dressings are changed. Experienced surgeons advise the opening the carbuncle, by making a deep incision entirely across the tumor, and applying a poultice made of port wine and ground flax-seed. A poultice of composition and elm, or of yeast and ginger, may be used in the place of the port wine poultice. Syringing the cavity with strong bayberry tea, and then pouring in a portion of No. 6, will be of especial benefit in exciting a more healthy action in the parts. Local steamings will also aid the living parts to cast off the dead cellular tissue.

Constitutional Treatment will be required in all cases of carbuncle, employing means to correct the diseased condition of the general health, and to strengthen and support the constitution. In the first place, the patient must be carried through a full course of medicine every few days, and during the intervals use freely of composition, pepper or spice bitters. As the constitutional symptoms wear a more favorable aspect, cleaning of the tongue, a general warmth through the body, with a moist skin, then tonics, such as bark and wine, quinine, gentian, columbo, and Virginia snake-root, must be given freely, and the patient allowed a nourishing diet,—eggs, milk porridge, custards, beef steak, mutton chops, boiled chicken, wild game, stale bread, cream toast, &c.

Fresh Air.—When the state of the weather and the condition of the patient will admit of it, he should ride or walk out, to receive the benefit of fresh air and exercise, observing especial care, however, to keep warm.

SECTION XIV.

ABSCESS OF THE FEMALE BREAST.

GATHERED breast, as it is commonly termed, is most liable to take place during confinement, after childbirth. It is generally caused by too great an accumulation of milk, exposure to cold, or from sore nipples. The frequent exposure of the breast to the air, more especially when the skin is covered with perspiration, is a common cause of gathered breast.

Treatment.—As soon as the breast begins to feel hard or painful, from too great a flow of milk, it should be drawn and bathed frequently with some evaporating lotion, whiskey, brandy, warm vinegar or spirits of camphor and water, or cloths applied, and kept moist with some one of the above articles. Dr. Dewees recommends the application of cloths wet with warm vinegar, as being the most effectual means of relief in the early stage of swelled breast. Bathing the breast with the oil of pennyroyal, has proved highly beneficial in some cases. The desired object to be attained by the above application, is the lessening the secretion of milk by evaporation. But if the breast cakes and becomes painful, and cannot be eased by the means above mentioned, together with frequently drawing the breast, it should be steamed, and covered with a plaster or poultice, to keep the skin soft and moist. A hole must be cut in the centre of the plaster to admit the nipple. When a lump is formed in the breast, from taking cold in the part or from irritation of the nipple, steaming the breast frequently and applying a plaster of salve, or a poultice composed of equal parts of green lobelia and elm, if early applied, will generally prevent suppuration, easing the pain and scattering the swelling.

If the system be much disordered, an emetic or a course of medicine will prove beneficial in removing obstructions in the breast, and lessening the pain. Placing the patient under the influence of lobelia, given in broken doses so as to occasion slight nausea, will also be useful in moderating pain in the breast; and by the relaxation thus produced, will aid in removing the obstructions.

If the use of the above means fail of diminishing the swelling, and the breast continues to be very painful and throbbing, warm poultices must be applied, with a view to favor suppuration and to bring the matter as speedily as possible to the surface. When suppuration is about to take place, there is usually a severe throbbing pain in the part, and the patient experiences chilliness, and

a blush appears on the skin covering the swelling; which is an evidence of the existence of pus, or matter.

It is better to delay opening a gathered breast until the matter approaches near the surface. After the abscess is opened or breaks spontaneously, a poultice composed of composition and elm or flax-seed, or of elm, white pond lily, and ginger, must be applied, and the poulticing continued until the discharge of matter has nearly ceased, when the parts may be covered with some kind of salve, and moderate pressure applied to favor the union of the sides of the cavity.

SECTION XV.

WHITLOW OR FELON.

WHITLOW or felon is an extremely painful swelling, mostly confined to the fingers, and particularly to the middle or last joint. Sometimes it is seated under the nail.

This painful affection often becomes protracted in duration, in consequence of pus or matter being formed beneath the tendons, or under the membrane that covers the bone, requiring a tedious and painful process of suppuration to bring the pus to the surface.

Causes.—Felon or whitlow is sometimes caused by a bruise; in other instances, it is occasioned by a slight wound on the skin: even the scratch of a pin, if frequently irritated or not protected from the air, may affect the parts near the bone, and produce a felon. Occasionally it comes on without any appreciable cause.

Treatment.—In the outset of a felon, wrapping the finger in cotton, kept wet with spirits of camphor, alcohol, or vinegar, will sometimes prevent the formation of matter. And even though it should fail of preventing suppuration, it will mitigate the pain. A plaster composed of lime and soft soap, is a favorite remedy with some for whitlow or felon.

If the swelling continue to increase, attended with severe throbbing pain, the above or some other form of poultice must be kept on the parts, wetting it occasionally as it becomes too dry; and when there is evidence of the existence of matter in the part, it should be opened either with a lancet, or in the way Dr. Thomson recommends, which is, to burn pieces of spunk, about the size of a large pea, on the part, until the flesh becomes deadened down to the matter, and then to open it. When this method is employed,

the hand and the diseased finger, except the part on which the spunk is to be burned, should be held in cold water during the operation. A pair of forceps, or tweezers, may be used in setting fire to the spunk, and placing it on the finger. Dr. Thomson does not advise burning spunk upon the part, until there is a purple appearance in the part, indicating the approach of matter towards the skin.

Another plan recommended by Dr. Thomson to facilitate the approach of the matter to the surface, is to slack a small piece of lime on the finger. In doing this, the hand should be placed on wet cloths, and a small roll of wet cloths placed at each side of the finger, to prevent the lime from falling off. A piece of unslacked lime, about the size of a shellbark nut, is to be laid on, then wet, and allowed to remain as long as the patient can bear it, or until it becomes cold. This may be repeated, occasionally, until there is some appearance of matter, when an opening should be made.

Before an opening be made, any kind of emollient poultice may be applied to favor suppuration; but after pus begins to be discharged, a stimulating poultice must be employed. Equal portions of slippery elm, white pond lily, and ginger, form a suitable compound for the poultice. Indian mush, flax-seed stewed in milk, or any other soft substance, may be employed, adding a portion of cayenne pepper, or ginger.

When the swelling and inflammation has in a great degree disappeared, poulticing may be omitted, and salve applied.

When matter is discovered under the nail, a portion of the nail must be cut away, to allow the pus to escape.

When an opening is made by a lancet in the earlier stages of a felon, the matter being deeply seated, care must be observed to avoid cutting open a joint. A lancet may be safely introduced down to the bone, except immediately at the joint.

Constitutional Treatment.—The pain attending a whitlow, or felon, may be mitigated by using means to excite perspiration, and by placing the system under the influence of lobelia, given in broken doses, to the extent of producing slight nausea.

If the system be much disordered, an emetic, or a full course of medicine, will be especially beneficial. Patients may sometimes procure sleep by having the hand raised upon pillows, and taking tincture or syrup of lobelia in sufficient quantities to cause slight sickness.

SECTION XVI.

HIP DISEASE.

DISEASE of the hip joint is of very common occurrence; and although it prevails most among children, still the disease not unfrequently attacks adult persons.

Causes.—Although the hip disease be occasioned in many instances by a fall, yet it rarely happens, even from severe bruises, in persons of sound and vigorous constitution. A bruise upon the hip that occasions scarcely any inconvenience to one of a healthy constitution, would be liable to cause the hip disease in one of feeble organization, or who has inherited the scrofulous diathesis.

Symptoms.—In the majority of instances of hip disease, the first thing of which a patient complains, is a pain in the knee. The pain is, in some cases, slight at first, in other instances it is severe from the commencement, preventing the patient from sleeping at night, except at short intervals. The patient is observed to limp, and the knee becomes bent. As the disease advances, the patient complains of severe pain about the hip, or groin, yet in some cases the pain is almost exclusively confined to the knee during the whole progress of the disease.

Duration of the Disease.—The hip disease is usually slow in its progress, seldom terminating its course in less than a year. Occasionally, under favorable circumstances, and a proper course of treatment, the diseased parts resume a healthy condition in the course of a few months, or even in two or three weeks; but, unfortunately, in the great majority of cases, the disease continues for years, though seldom attended with severe pain, except at intervals, and more especially in the early stage, and when supuration is about to take place.

Termination.—Few patients recover from the hip disease, without more or less distortion of the limb of the affected side. Sometimes the inflammation of the joint terminates in resolution; still this is of very rare occurrence, for the parts possess so low a degree of vitality, that the restorative efforts of nature are insufficient to prevent disorganization of the diseased parts in unhealthy constitutions. A part of the body that is well supplied with red blood, will recover from disease much more readily than parts which receive but a small supply of arterial blood. Hence the

tissues about the joints receiving very little red blood are slow to recover from disease; most commonly, the inflammation terminates in suppuration about the joint, the matter taking different directions, sometimes pointing to the surface in the region of the joint; in other instances, the matter travels down into the groin, forming a fluctuating tumor; or it may pass down the thigh, sometimes almost to the knee. In most instances, the parts finally heal, but the joint remains stiff, and the limb shortened. The head of the thigh bone is sometimes entirely destroyed, leaving the limb several inches shorter than the sound one. In very feeble constitutions, the disease sometimes terminates fatally, the powers of the constitution being worn out by disease.

Treatment of Hip Disease in its early stage.— In the outset of this disease, the means chiefly to be relied upon, are the vapor bath, rest, stimulating applications, wet dressings, covered with oiled silk; occasionally an emetic; broken doses of lobelia, and warm teas to promote perspiration.

The Vapor Bath may be administered daily during the early period of the disease. When the patient has been steamed twenty minutes or half an hour, he may be showered with moderately cold water, rubbed dry, and bathed with vinegar or spirits. After the bath, the hip must be bathed with a volatile stimulant; the third preparation of lobelia, tincture of capsicum, oil of pennyroyal, or granville lotions; or with salve, to which a portion of pepper has been added. The parts should then be covered with a wet dressing, and over this apply oiled silk, to promote perspiration and keep the parts warm.

Rest is very important in the early period of the disease. A splint, carved or moulded to fit the limb in a straight position, or nearly so, may be applied with benefit in the early stage of the disease. It will not only favor the cure by keeping the joint at rest, but may prevent deformity of the limb, provided the disease terminate without the occurrence of suppuration. After the disease becomes permanently fixed, then to confine the patient with a splint will be useless, or even injurious; he should be allowed to use crutches, and, when the weather will permit, to have the benefit of the open air.

Emetics must be given whenever the condition of the patient demands their employment. It is in the early period of the disease, however, that they are more particularly beneficial. The proper time for giving an emetic, is shortly after a vapor bath has been administered. If the patient be very feeble and pale, the emetic of lobelia should be combined with stimulants, as compo-

sition, pepper and bayberry, or with No. 6 and bayberry. There is no period of the disease when an emetic will not prove of benefit, if the stomach be foul, or when the patient is suffering severe pain.

In a more advanced period of the hip disease, it will be useless, as before mentioned, to keep the parts at perfect rest, or to confine the patient by the use of a splint. Neither will it be necessary to give much medicine, except occasionally, as the condition of the patient demands it. Cleanliness, fresh air, nourishing diet, salt water bath, or sponging the body with salt water, and friction of the surface, are chiefly to be relied upon when the disease has become permanently fixed. When the parts are painful, however, or the general health disordered, medicine must be employed.

When suppuration takes place, an abscess may be formed at the hip, or the pus may pass down into the thigh, forming a fluctuating tumor there. All experienced surgeons now agree that abscesses about the hip should not be opened until at a late period, or when the matter comes so near the surface as to threaten the destruction of a considerable portion of the skin, when it is better to make a small opening with a sharp lancet, drawing off only a part of the matter at a time, and then closing the opening with a piece of adhesive plaster.

Abscesses in the thigh often contain from half a pint to a quart of pus, which being secreted at the hip joint, passes down between the muscles, and thus collects in the thigh. Where an abscess is formed in a part thus remote from the joint, it may be opened with safety.

When pus is discharged, either spontaneously or by opening the abscess, every means should be employed for sustaining the patient's strength; and the use of tonics, nourishing food, exercise in the open air, salt water bathing; a change of residence, for instance, from a city to the country, to the seaboard, or to a mountainous or pine country, should be resorted to.

Sick children are apt to be indulged in eating sweet cakes and various kinds of dainties between meals, which impair digestion and destroy the natural appetite. And although the patient may have the gratification of eating a sweet cake, he loses not only the enjoyment but the benefit of a meal. When patients who are recovering from sickness, and more especially children, require food between meals, it should consist of such articles as milk porridge, toast and milk, crackers, stale bread, custards, or crusts of bread.

Pepper Poultice. — In the earlier stages of the hip disease, and also after an abscess has formed, and where matter has been discharged, and the parts remain in a pale and flaccid condition, a

poultice, composed of equal portions of cayenne pepper and slippery elm powder, may be employed occasionally with decided advantage.

Warm Fomentations.—In the earlier stage of hip disease, when the parts are painful, besides administering vapor baths, bags of hops, or of bitter herbs, wet with hot vinegar, may be applied to the hip, and kept warm by hot bricks, or bottles of hot water.

Pressure.—Whenever the hip will bear pressure without occasioning pain, it must be applied, with a view to support the enfeebled and relaxed vessels. This may be done by a bandage of flannel or of muslin, put around the hip. After pus has formed and discharged, or the parts are still secreting matter, pressure should always be applied, in a degree suited to the condition of the parts.

Children who inherit scrofulous constitutions, are, in general, favored with superior intelligence, so that although they may be physically weak, yet superiority of mental power enables them to pursue professions which require intellectual rather than muscular strength. It must be borne in mind, however, that children of scrofulous constitution will not bear close confinement in crowded school-rooms, without materially injuring their health. It is better, in such a case, that their education be neglected in early life, and that they receive the benefit of the open air, which will prove the most effectual means of improving the constitutional health.

SECTION XVII.

WHITE SWELLING.

THE knee joint is observed to be more frequently affected with white swelling than any other of the joints. It seldom happens in others than in those of feeble constitution, and more especially in the scrofulous. The hip disease, so prevalent among children of bad constitutions, is a disease of the same character as white swelling. The hip disease prevails mostly in children under twelve years of age; whereas, white swelling is most prevalent in adults.

Causes.—The most frequently exciting cause of white swelling is exposure to cold. A person of a sound constitution may bea

an exposure to cold, without that inconvenience which would occasion such a degree of debility in one of scrofulous constitution as to cause white swelling.

When the vitality of a part is reduced below a certain point, the constitution establishes inflammatory action, with the design of sustaining the vitality of the part. Thus the membrane that lines the cavity of the knee joint by the influence of cold, may be so far deprived of its vitality, as to call upon the constitution for an increased supply of blood, in order to prevent the death of the parts, and to repair the injury already sustained in the affected parts. A new supply of blood is sent to the knee, an inflammatory action is established, which, under favorable circumstances, may terminate in resolution—the parts being restored to a healthy action. Under circumstances less favorable, the inflammation may terminate in adhesion—the joint being stiffened, but without any destruction of the parts. Under circumstances still less favorable, for instance, where the constitutional health is very bad, or the vitality of the diseased parts reduced beyond the power of reparation, then suppuration of the parts will take place, matter will be discharged, and the disease necessarily become of long continuance, and extremely painful. Portions of bone are destroyed in many instances by the process of absorption.

Treatment.—The indications for the cure of white swelling, are to correct and support the general health, and to employ such local means as will aid in bringing the inflammatory action in the diseased parts to a favorable termination—either in resolution, or ankylosis (stiffening of the joint), or if suppuration occur to favor the occurrence of adhesive inflammation and stiffening of the joint, which will be the only “safeguard of the patient,” after suppuration has taken place.

An occasional course of medicine should be administered in the earlier stage of the disease, or at any period when the patient is suffering severe pain.

Besides the course of medicine, the spice bitters should be taken two or three times a day, and a dose of composition, or of bayberry and pepper, at night. These remedies, however, may be given in a different form, to suit the fancy of the patient. Thus the No. 3 pills will supply the place of the bayberry and pepper, and when the tongue is dry, the compound lobelia pills will be appropriate.

Injectiōns, moderately stimulating and containing a portion of lobelia, will be useful not only to assist the action of the bowels, but by the influence which they exert over the circulation of the lower extremities. An injection of composition tea, adding a portion of lobelia powder, retained fifteen or twenty minutes, or

allowed to remain in the bowels, will seldom fail of mitigating pain in the diseased limb, and it will also in many instances cause free vomiting.

Tonics.—In a later period of the disease, and more particularly where suppuration has taken place, and the parts are discharging matter, bitters may be employed, with a view to strengthen the digestive powers, so as to allow the patient to take nourishing food, to support the constitution in her curative efforts. In the earlier stages of the disease, composition, pepper, spice bitters, and lobelia, are generally required; whereas, in its more advanced stages, tonics, syrups, generous diet, fresh air, and gentle exercise, are called for.

Local Treatment.—In the earlier stages of white swelling, and all affections of this character, steaming and fomentations will be found beneficial. The steam may be applied for half an hour, or even an hour, at a time, and after this the stimulating liniment may be applied to the parts, and then bind them up in oiled silk or flannel. The limb must be kept warm, and at rest.

Bandages.—Even in the earlier stages of white swelling, moderate pressure will be beneficial, provided it can be applied without occasioning too much pain. If the disease be in the knee joint, the limb must be bandaged from the end of the foot to the knee, first applying stimulating ointment, No. 6, or pepper sauce.

Dr. Thomson's Poultice for White Swelling.—Take fresh comfrey root and scrape or grate it fine, until you obtain half a pint. To this add the white of two or three eggs, well beaten, and a gill of brandy, or sufficient to make it of a proper consistence for a poultice; spread this and bind it on the affected parts as firmly as can be borne, renewing it, or wetting it with brandy, as often as it becomes dry.

When the parts suppurate, the disease becomes extremely painful and protracted—in some cases, to several years' duration. In severe cases, the constitution may become exhausted, the patient sinking under the effects of the disease.

In treating this, and every other disease attended by inflammation, it should be borne in mind that inflammation is not the first change in the parts from a healthy condition. Coldness and loss of vitality in the part is the first change from a healthy state, and inflammation follows as an effort of the constitution to preserve the vitality of the parts, and protect the joint from destruction; and although these efforts are frequently baffled, from want of constitutional energy, or from great debility of the parts diseased,

still the design of the inflammation is the same, and the treatment should be directed to correct and support the general health, and to promote the circulation in the diseased joint by the various means already mentioned.

SECTION XVIII.

ULCERS.

SOME medical writers divide ulcers into three classes, namely, *healthy, unhealthy, and specific* ulcers. An ulcer is generally of a healthy character where it occurs in one of a healthy constitution, and more especially in the young and robust; whereas the aged and feeble, and especially those of intemperate and dissolute habits, are subject to ulcers of an unhealthy character, and very difficult of cure. Syphilitic, cancerous, and scrofulous ulcers, are generally considered as being of a *specific* character.

1st. SIMPLE OR HEALTHY ULCER.

Causes.—Simple ulcer arises from some local injury, a bruise, cut, or burn; or it may follow abscesses or piles.

Characteristic marks of the healthy Ulcer.—The surface of this ulcer has a florid appearance, raised above the edges, discharges a cream-like pus, that has no odour; “and the edges of the sore are whitish, and nicely adapted to the surface.”

Treatment.—The simple healthy ulcer seldom requires any thing more than to be protected from the air, by the application of some simple salve.

A healthy ulcer may become converted into one of an unhealthy character by frequent exposure to the air, or to other injurious influences. If proud flesh rise up in the sore, finely powdered marsh rosemary, bayberry, or alum, must be sprinkled upon the parts, and salve applied; or instead of the powder, apply dry lint to the proud flesh, cover the edges of the sore with salve, and apply moderate pressure to the sore.

Carrots boiled and mashed fine, adding a little lard, constitute a favorite poultice, in cases of sores and ulcers.

A great variety of salves and plasters are employed as a cure for sore. It is not of much consequence what a salve is made of for common sores, as the great object is to preserve the sore from the air.

Cold Water Dressing.—Cloths wet with cold water applied to sores, promotes the healing action. This kind of dressing is more particularly applicable to cases attended with heat and inflammation. Where the cold water dressing causes unpleasant feelings in the part, warm water may be substituted.

2d. UNHEALTHY ULCERS.—SORES OF LONG STANDING.

An unhealthy ulcer may be extremely irritable, inflamed, and painful; or it may be indolent, and almost devoid of sensibility. In aged persons, a bruise upon the shin is apt to occasion an unhealthy ulcer, "the parts being too weak to carry on the actions necessary to its recovery."

A great diversity of appearances is presented by unhealthy ulcers.

"*The Irritable Ulcer* is generally characterized," observes Dr. Gibson, "by the following appearances:—The edges of the sore are ragged, undermined, and sometimes almost serrated. The parts for some distance beyond the ulcer are red and inflamed, and often œdematous. Irregular hollows occupy the bottom of the ulcer, and contain a thick greenish or reddish matter, which is so extremely acrid as to excoriate the adjoining skin. In place of granulations, may be found a white or dark red spongy mass, extremely painful, and shedding blood upon the slightest touch."

"*Inflamed Ulcers.*—Here you have a serous discharge from the sore; a bloody ichor, composed of serum and the red particles of blood; a disposition in many cases to slough; the surface covered with a brown incrustation; and the skin and surrounding parts highly inflamed."—*Castle's Manual of Surgery.*

"*Gangrenous Ulcers.*—In ulcers of this kind, the surface is perfectly free from any discharge; the surrounding edges of a livid appearance, with small vesicles or blistered spots on them; and the patient suffers much from irritative fever."

Indolent Ulcer.—This is the most common kind of ulcer. The edges of the sore are raised, and rounded, giving the appearance of a deep cavity to the ulcer. The surface of the sore is covered to a greater or less extent with a slight colored crust, and is extremely insensible to the touch. In general, there is a free discharge of a tenacious matter from the sore, differing essentially from the healthy pus. This kind of ulcer is in almost every instance seated on the leg, and the nearer it is to the ankle the more difficult it is of cure.

Treatment of Unhealthy Ulcers, or Sores of long-standing.

Constitutional Treatment is, in general, necessary in the cure of unhealthy ulcers, besides its influence in exciting a healthy action in the vessels of the diseased part; a proper course of constitutional treatment secures the constitution from the bad consequences that might otherwise ensue from the healing of long-standing ulcers. I have known ulcers, of many years' standing, to be entirely healed in a short time, under Thomsonian treatment, and the general health of the patient still continue to improve.

Unhealthy ulcers will in many instances be observed to assume a more healthy appearance, after the patient has been carried through a course of medicine. In cases of long-standing, the vapor bath and emetic, or a full course of medicine, will be required to be administered as often as every week or two, and repeated several times, together with the daily use of stimulants, capsicum, composition, and tonics, and a proper course of local treatment, before the sore will assume a healthy condition, and secrete the cream-like pus, observed in healthy ulcers.

In confirmed drunkards, ulcers are often very difficult to heal; constitutional and local treatment proving ineffectual, so long as the habit of excessive drinking is continued.

Besides an occasional course of medicine, the following plan of giving the medicines (first proposed to me by Dr. A. C. Logan,) I have found well adapted to almost every case of chronic disease, namely:—A dose of Thomson's anti-canker medicine in the morning before breakfast, a dose of the No. 4 bitters before dinner, and composition at night. If the bowels be costive, from three to six of the compound lobelia pills should also be taken at bedtime.

Dr. Logan's Alterative Syrup.—This syrup is made by combining equal portions of tincture of lobelia, No. 6, and simple syrup of sugar. To be taken in doses of from one to two or three teaspoonsful, repeating the dose several times a day, but particularly shortly after, or within an hour or two after meals. The use of this syrup fulfils many important indications for improving the general health.

Sarsaparilla Syrup.—In mercurial syphilitic, or scrofulous ulcers, the simple syrup of sarsaparilla, or a syrup made of a compound of sarsaparilla, guaiac shavings, and yellow dock-root, will be found useful. Pipsissawa, bruised and steeped two or three hours, to make a strong decoction, and this drank freely, will supply the place of the above syrups.

Local Treatment in Unhealthy Ulcers.—In the first place, stimulating and astringent poultices must be employed to stimulate and give tone to the enfeebled vessels; and when the ulcer has begun to secrete thick yellow or cream-like matter, and healthy granulations are formed upon the surface of the ulcer, then fresh salve may be applied. If the ulcer be on the leg, the limb should be bandaged, commencing at the end of the foot, and extending the bandage above the ulcer, so as to apply moderate and equable pressure to the limb. This will, in general, enable the patient to walk out, or to pursue his daily avocation, the bandage furnishing support to the blood-vessels, aiding them to carry on the circulation.

Indolent ulcers may require actively stimulating poultices, such as a compound of cayenne pepper, bayberry and elm, or of composition powder. Dr. Samuel Thomson informed me that he had cured indolent ulcers by applying the dry powder of cayenne pepper, brown lobelia and bayberry, and then administering a course of medicine.

Another plan of treating unhealthy ulcers, is to fill the ulcer with beeswax and Burgundy pitch melted together, and applied as warm as the patient can bear. This is to be bound on, and renewed as often as may be required.

Change of Remedies.—Every one who has treated ulcers of long standing, must have observed the utility of occasionally changing the local treatment. An application that will answer well at one time may prove useless, or even worse than useless, at another.

The bark of the root of wild indigo mashed to a pulp, and combined with slippery elm so as to form a soft poultice, is a valuable application in cases of indolent ulcers.

Prepared chalk and linseed oil rubbed together to the consistency of putty, and applied to old sores, will often effect a cure where all other general remedies had failed. As the putty becomes too dry, more oil may be applied or fresh putty put on.

Loaf Sugar, finely powdered, is an admirable remedy in cases of ulcers.

The *extract of red clover*, (Thomson's cancer balsam,) has been highly recommended by some practitioners of the old school, as a valuable remedy in indolent ulcers. The extract of sheep sorrel may be used for the same purposes.

It must be borne in mind, however, that in cases of long standing sores, a course of medicine should be administered, and repeated, if necessary, in order to prevent any bad effects that might otherwise arise from the healing up of ulcers.

To prevent a return of Ulcers.—When an old sore has healed, the part should be bound in flannel, wetting it every day with No. 6. The flannel will not require changing, as the myrrh will prevent its becoming in the least degree offensive. Benjamin Thomson, formerly of Boston, showed me a flannel bandage that he had worn around his shin two years; and by having it wet occasionally with No. 6, it was entirely devoid of offensiveness, and afforded a protection against ulcers, to which he had been many years subject.

Gangrenous Ulcers.—"In ulcers of this kind, the surface is perfectly free from any discharge; the surrounding edges of a livid appearance, with small vesicles or blistered spots on them; and the patient suffers much from irritative fever."

Treatment.—When a part is threatened with gangrene or mortification, the yeast, sassafras, or charcoal poultice, should be applied, and be kept wet with cold sassafras tea or whiskey, and the patient carried through a course of medicine, followed by the free use of cayenne pepper tea, third preparation of lobelia in bayberry tea; the compound lobelia pills, ginger or composition tea. For nourishment, give wine whey, essence of beef, or any other nutritious food that may suit the condition of the stomach.

If the parts be excessively hot and inflamed, the poultice may be kept wet with the tincture of lobelia, simple water, or with wild indigo root tea.

VARICOSE ULCERS.

Ulcers arising from diseases of the Veins.—The veins of the leg are more liable to disease than veins in any other part of the system, giving rise to the formation of ulcers along the course of the larger veins. The circulation of the blood being impeded or obstructed by the diseased condition of the vein, adhesive inflammation is established, forming a small tumor under the skin; the skin over the tumor is observed first to roughen and peel off, and then a crust is formed, and finally an ulcer breaks out. These ulcers may, in most instances, be healed without great difficulty; but the vein continuing diseased, new ulcers are formed, and in this way they continue to break out until, by frequent ulceration, the vein becomes obliterated, when the ulcers will cease to return.

Treatment.—Besides adopting the usual means for restoring the general health, when it is disordered, the limb upon which the ulcer or ulcers exist must be accurately bandaged from the foot to the knee, or a laced stocking worn, for the purpose of supporting the debilitated veins of the leg, and to assist them in carrying

on the circulation, by which the tendency to obstruction will be lessened.

In the selection of a local application for the ulcer, we must be governed by the circumstances of the case. If the parts around the ulcer are swollen and inflamed, poultices, or cold water dressing must be applied; or if the ulcer emits an offensive odor, keep cloths wet with whiskey on until the inflammation subside, when fresh salve may be substituted, or apply a paste made of prepared chalk and linseed oil. This hardens and maintains an equable pressure to the ulcer, supporting the weakened vessels, and preventing proud flesh. The dressing to be changed daily.

Old ulcers are apt to become spongy, or filled with proud flesh, and continue to keep sloughing. In such cases, pressure must be applied, to support the vessels and prevent proud flesh. A mixture of prepared chalk and linseed oil, formed into the consistence of dough, may be put in the cavity of the ulcer, and changed as often as the circumstances of the case may require.

Friction.—Rubbing the limb briskly every morning and evening may prevent the formation of new ulcers, by removing obstructions to the circulation of the blood in the veins.

Rest and Position.—When the ulcer is in an irritable condition, and the parts surrounding it swollen and inflamed, the patient should refrain from walking much, but keep at rest, with the affected limb elevated on a chair while sitting up.

Pressure.—In cases of old sores, and in all cases where an ulcer is spongy, or contains proud flesh, it is important to apply pressure, with a view to support the capillary vessels of the part. If this is not done, the ulcer will not heal in many instances for years. We often see ulcers fill up with spongy flesh, but the vessels being too weak to carry on the circulation in the part, the blood stagnates and the parts that are spongy slough away; and in this way many ulcers continue to fill up, and then slough off in regular succession for even years, which might be cured by applying the mixture of prepared chalk and linseed oil, formed to the consistency of soft paste. This paste is to be spread on linen or muslin, and bound on, and the dressing changed once a day. This mixture hardens, and will make the ulcer feel very sore. If the ulcer becomes more inflamed, or is very offensive, fill it with lint, apply a bandage, and keep the sore wet with whiskey several hours, and then apply the paste. This will generally cure the worst cases of ulcers.

ULCERS UNDER A NAIL.

Ulcers sometimes form at the root of the nail, which may continue to prove a source of annoyance for months, or even years, unless the dead portion of the nail be removed. Sometimes it becomes necessary to remove the whole of the nail before the parts will heal soundly. If the root of the nail become separated from the surrounding parts by ulceration, or by an injury, the nail will operate as a foreign body, keeping up a continual irritation and ulceration of the parts until it is removed.

CHAPTER XXI.

SECTION I.

VENEREAL DISEASE.

THE term venereal disease is applied to two forms of disease, differing essentially in their general aspect. The one, in the male, consisting of an inflammation in the urethra, attended by a discharge of thick matter; whilst the other is an ulcer, called chancre, situated externally.

GONORRHŒA.

Symptoms.—The first symptoms are a burning sensation on passing water, accompanied with inflammation, and a discharge of thick matter from the urethra. In the course of a few days, the burning sensation on passing urine subsides, but the inflammation and discharge of matter seldom disappear under eight or ten days, and very frequently continue for weeks, and sometimes even months will elapse before the complaint will be permanently cured.

In the *female*, the symptoms are much more obscure, and so closely resemble diseases arising from other causes than venereal poison, that in many instances it is difficult to form an opinion as to the true character of the disease.

It should also be borne in mind, that men are liable to disease of the urethra, resembling gonorrhœa in many particulars, but arising from causes wholly distinct from that of gonorrhœal poison. The peace of families has in some instances been destroyed, by a

wife or husband being affected with symptoms resembling those attending the venereal disease, at the same time the accused party being entirely innocent. Instances have occurred in which symptoms of gonorrhœa have occurred in men, in consequence of the wife being affected with a severe form of fluor albus, or whites, each party accusing the other of infidelity.

"Women are not so liable to gonorrhœa as men, nor do they suffer as much from it—owing to the insensibility of the vagina, compared with that of the urethra. It is not easy, indeed, in every instance to determine the existence of the disease in a female, so slight is the pain, and so equivocal the discharge; though I have met with several cases in which the inflammation ran so high, and produced such intolerable anguish, that the patients were unable to leave their beds. Gonorrhœa has often been confounded with fluor albus; but close attention to the symptoms peculiar to each complaint will be sufficient, in general, to distinguish them."

Of the general course of the disease in the male.—Under proper treatment, and with great care and attention on the part of the patient in relation to medicine, diet, rest, &c., the disease will in many instances disappear in the course of a week or two, or even in less than a week. It often happens, however, that the disease is neglected in its first stage, the patient being unwilling to make his disease known; or he will not lie by without some plausible excuse for so doing, in order to evade suspicion, by which course the disease is often aggravated, and becomes protracted to many weeks, or even months' duration.

Where the general health is much disordered, and the patient of a scrofulous constitution, want of proper care and treatment, the use of improper remedies, or when the venereal poison has been of the more malignant character, the disease is very liable to become extremely difficult of cure, and may continue even six months, or longer. The most malignant form of the disease, however, will generally run itself out in six months.

"The most observing practitioners have repeatedly decided that the disease naturally tends to the development of a certain course or period, during the progress of which nothing can be done, except in the way of palliating or mitigating the symptoms."—*M'Clellan.*

Swelling of the testicle, and swelling of the glands of the groin, often attend severe cases of gonorrhœa.

Where the disease has been of long continuance, the patient is in most instances left with what is termed *gleet*, consisting of a slight discharge from the urethra of a transparent mucus, resembling the white of an egg, which is the effect of a weakened condition of the mucous membrane.

In the female, the disease is much less troublesome; in many

instances causing little inconvenience, and is also much more readily cured.

Treatment in the early stages.—In the first stage of gonorrhœa, and more especially if there be much inflammation in the urethra, the stomach should be kept nauseated with lobelia, taken either in the form of tincture, syrup, pill, or in powder, and the patient avoid using much exercise. His diet should be restricted to the lightest kinds of food, such as gruels, stale bread, toast and tea, &c. A gruel made of elm, or of unbolted wheat flour, is well suited to the early stage of gonorrhœa. The digestive powers are, in general, more or less weakened during the early stage of the disease, and if food be taken that is hard of digestion, it will retard the cure. And again, if strong food, such as butter and meat, be used, the urine will be more acrid and irritating to the inflamed urethra.

When the disease is of a mild character, it will not be necessary that the patient confine himself to the house.

Cubebs and Balsam Copaiva.—These are the remedies chiefly relied upon for the cure of gonorrhœa. These remedies, taken in the very onset of the disease, will, under favorable circumstances, cut short the disease—the cure being effected in the course of a week, or even in less time.

The dose of the cubebs is a teaspoonful, mixed in sweetened water. To be taken three times a day before meals.

The balsam to be taken three times a day, in doses of from twenty to thirty drops; or take from four to six of the copaiva capsules daily.

If these remedies, but more especially the copaiva, when taken in the early stage of the disease, do not mitigate the symptoms in the course of three or four days, their use should be discontinued, at least for some days, until the condition of the system is changed, and the inflammatory symptoms are abated.

When the general health is in a bad condition, or the patient feverish, or the skin dry and harsh, a course of medicine will be particularly serviceable; after which, the patient should take every hour or two a small dose of lobelia, either in the form of tincture, syrup, powder, or in pills; drink freely of elm gruel, flax-seed tea, barley or gum Arabic water; and morning and evening take a teacupful of a strong decoction of sumac or bayberry. The teas should be taken warm, with the view to promote perspiration, which is of much importance in the early stage of the disease, provided the patient remain in the house.

After the inflammatory symptoms have abated, which will usually be in the course of ten days or two weeks from the first appearance of the disease, the cubebs and balsam copaiva should

be used, as before directed, and the compound lobelia pills, or lobelia in some form, taken in broken doses through the day, and a quantity taken at bed-time, sufficient to cause nausea.

When the tongue is furred, the skin hot and dry, and the patient feverish; or when the digestive functions are much weakened by previous disease, the balsam of copaiva is almost sure to disagree with the stomach; and when found to disagree, it must be laid aside, at least for a few days, and general constitutional treatment instituted — such as the hot air bath and an emetic, and the free use of No. 3 and compound lobelia pills.

If the bowels be costive, they must be relieved by injections, composed of composition, bayberry, or pennyroyal tea, adding a teaspoonful of the tincture or powder of lobelia.

When it is impracticable to have a course of medicine, the compound lobelia pills may be used as a substitute: from one to three pills may be taken every hour or two, and these continued during the whole course of the disease. These pills will be useful in all cases, and in the great majority of instances, if used freely, will supply the place of all other medicines, during the inflammatory stage of the disease, with taking demulcent drinks, such as elm gruel, gum Arabic water, or flax-seed tea.

External Treatment—Wet Dressings. — From the first appearance of the disease, the cold water dressings should be kept applied, and changed as often as twice in twenty-four hours.

Oiled silk may be bound on over the wet dressings, as this will assist in keeping the parts warm, and will prevent the wet dressings becoming dry too soon. A bag made of oiled silk, worn over the wet dressing, will secure the clothing from the discharge.

If the oiled silk should cause the dressing to become uncomfortably warm, it should be taken off, and dry muslin or flannel substituted to bind on the wet dressing.

The wet dressing should be kept in its place by means of a strip of muslin or tape, fastened to the dressing, and tied around the hips or waist.

Injecting the urethra with astringents, such as preparations of lead-water, with a view to checking the discharge of matter during the early period of the disease, will be liable to do injury.

In a more advanced stage of the disease. — After the passing of urine ceases to cause burning sensations, then astringent and stimulating injections into the urethra will be useful; commencing with a simple tea of bayberry or sumac, adding a small portion of the tincture of lobelia. In a still later period of the disease, the discharge having been for some time profuse, a portion of No. 6 or pepper must be added to the tea, in sufficient quantity to make

a sensible impression on the urethra. Undiluted No. 6 has been used in some chronic cases for injections.

A weak solution of the nitrate of silver may be used for injecting the urethra with perfect safety, and in many instances with more benefit than any other form of injection; commencing with one grain of the nitrate of silver to the ounce of rose water, and increasing the strength of the solution to three or four grains to the ounce of water. A glass syringe must be used for this preparation.

Chordee, as it is termed, depends upon the deposition or extravasation of lymph in the parts along the course of the urethra, which feels hard like a cord. This condition occasions severe pain at times, more especially at night, compelling the patient to apply cold water to the parts to ease the pain. The local treatment for *chordee* consists in the use of fomentations and wet dressings. In the commencement of *chordee*, it may often be cured by steaming the parts an hour or two, by placing a hot brick in a basin containing a small portion of water, and sitting over the steam, or wrap a hot brick in damp cloths, and place it as near the parts as can be borne, in bed. This steaming operation may be repeated as often as it proves beneficial, in any stage of the disease. It is beneficial in any stage of gonorrhœa.

Gum camphor is prescribed as a preventive to *chordee*. A piece as large as a large pea, or grain of corn, to be taken at bed-time.

Another application for *chordee* is a strip of oiled silk, covered with salve, placed along the course of the urethra, and bound on with a wet or dry dressing.

In some instances, there is swelling of the testicle, generally the left one; and occasionally the prepuce swells up like a blister, occasioning unnecessary alarm. Both of these ailments require the same kind of treatment—to wit, warm fomentations, and wet dressings covered with oiled silk, and bathing occasionally with a volatile stimulant.

Gleet, as it is usually called, consists of a discharge of a thick, and almost transparent mucus from the urethra, caused by the weakness resulting from gonorrhœa. This is sometimes a troublesome affair to get rid of, as it often continues for months, under any kind of treatment. It is not, however, of much consequence, as it does not prove particularly injurious to the system. Stimulating astringent injections, and the use of balsam copaiva and cubebs, are the chief remedies. Combining powdered cubebs with powdered prickly ash bark, in equal quantities, is a good form of medicine. A teaspoonful of this powder to be taken either before, or an hour or so after, meals.

SYPHILITIC SORE, OR CHANCER.

"*Chancre*, or the true syphilitic sore, usually begins with a slight redness or inflammation on some part of the genital organs, attended with pruritis or itching. This itching is soon converted into pain, and a pimple is in a short time formed, filled with pus, which upon bursting leaves an excavated ulcer of a circular shape, with hard and abrupt edges, and a surface covered with a grey tenacious matter. The base of the ulcer is thickened and indurated, and the parts surrounding it for some distance converted into a tumor, so distinct and circumscribed, that it may be elevated by the fingers, and feels like a hard and movable body beneath the skin. This description will particularly apply to chancre when seated on the glans penis; some variation is observable, however, when the prepuce or frænum is affected. In such cases, the inflammation is generally higher, the pain more considerable, and instead of a regular pimple filled with matter, the chancre often follows a slight excoriation or abrasion of the surface. When seated on the common skin of the penis or scrotum, the matter discharged from the sore soon dries up and forms a scale, which quickly drops off, and is succeeded by another of a larger size. Wherever seated, chancre commonly preserves certain general features that seem to distinguish it from common sores, the edges of which are usually smooth and shelving—while those of chancre are jagged and vertical. But, perhaps, the most characteristic sign of genuine primary syphilitic ulceration, is the *indurated* base; and so long as this continues, even though the sore may be healed, little doubt will remain of the presence of the disease."—*Gibson*.

"Among females, the parts commonly attacked are the labia, the nymphæ, and the entrance of the vagina; though not unfrequently very large and virulent chancres appear on the perineum, the outside of the labia, near the anus, or on the hip. Sometimes the lips, eyelids, or edges of the nostrils, are covered with chancres—from the inadvertent application of syphilitic matter by the fingers. The fingers themselves, if their extremities be pricked or sore, may suffer from handling chancres, or from delivering infected women."

"The period at which a chancre appears, after the application of the venereal virus, is very uncertain. Sometimes the disease follows in twelve or fifteen hours; at other times, several days elapse; and in a few instances, no ulceration takes place for two or three months."

When the disease is contracted by persons of intemperate or depraved habits, and under other unfavorable circumstances, as where mercury and other poisonous drugs are taken, the syphilitic

sore sometimes assumes a highly malignant character, occasioning extensive sloughings. And if not correctly treated, the system is liable to become affected with the poison, producing various symptoms termed secondary symptoms of syphilis. Swelling of the glands of the groin, termed bubo, is a very common attendant upon chancre.

Treatment.—The new plan of treating chancre, called the abortive treatment, consists in destroying the syphilitic virus by cauterizing the pimple or sore with solid lunar caustic in the onset of the disease; or where the sore is situated on the loose skin, to cut it away with a pair of sharp scissors. Either of these methods, if adopted early in the disease, will destroy the syphilitic poison, and convert the venereal sore into one of a simple character, that will heal in a few days.

“Whatever form a chancre may assume in its commencement, it ought to be treated by the abortive method; for there is no authenticated instance of ulcers, destroyed within five days after infection, having afterwards given rise to secondary symptoms, if these ulcers existed alone, and without other actual complications.”

“If, however, it be acknowledged that chancres ought to be destroyed as quickly as possible, it is equally clear that the same means will not be proper in every case; and the indication for those which have been proposed, as excision, direct and indirect cauterization, deserves a moment’s consideration.”

“Hunter, who was of opinion that chancres ought promptly to be destroyed, says, without regard to the forms they may at first assume, that cauterization is preferable to *extirpation*, when they are situated on the glans, whose less acute sensibility excites less pain, and exposes less to hæmorrhage; whilst excision is better calculated for those cases where the skin is affected, and where the whole extent of the disease could hardly be reached by the caustic.”

Mode of applying Caustic.—Whenever, after a suspicious connection, a sore appears on the parts exposed to the contagion, take a piece of lunar caustic, the end pointed, and apply it to every part of the sore, so as to effectually destroy every particle of the syphilitic virus. If there be a pustule formed, it must be cut open, and the whole of the base of the pustule effectually cauterized.

After the caustic has been applied, wet a small pledget of lint with tincture of bayberry, or tincture of myrrh and bayberry, place it upon the sore, cover it with a piece of oiled silk or adhesive plaster, and apply the wet dressing, as recommended in the

treatment of gonorrhœa. These dressings to be renewed two or three times daily.

When the sore is situated upon the loose skin externally, or upon the inner surface of the prepuce, it may be clipped off with a pair of curved scissors, and the same kind of dressing applied as above recommended.

Not unfrequently, after either of the above operations, the parts swell considerably. Wet dressings, covered with oiled silk, by promoting absorption, will disperse the swelling.

When the chancre has existed too long to be destroyed by either of the above methods, it should be dressed every four or five hours with lint, wet with a wash made by adding about half an ounce of bayberry, sumac, or marsh rosemary, to a gill of the third preparation of lobelia, tincture of myrrh, or No. 6, covering the lint with a small piece of oiled silk or plaster, and over this the wet dressing. Before removing the lint, it should be wet, to avoid irritating the sore.

Duration.—When not destroyed in its early stage, chancre is seldom cured in less than two or three weeks, and frequently from four to six weeks will elapse before the disease is cured.

Formerly, it was believed that mercury was a specific for syphilis, not because it proved to be a specific, but because high authority had pronounced it *to be* such. More recently, however, this doctrine has been exploded by the highest authority in the profession, and the use of mercury is not only declared unnecessary in the cure of syphilis, but pernicious in the extreme, unless given with the greatest caution. Professor Gibson, of this city, in his work on surgery, recommends the use of mercury in cases of chancre, but he now honestly declares mercury to be altogether improper, tending to convert a simple chancre into one of a malignant or corroding character. P. Ricord, surgeon to the Venereal Hospital of Paris, in a recent *Treatise on Venereal Disorders* in the course of his observations on the employment of mercury in chancre, observes: "By one party it is declared, that no cure can take place, no repose be enjoyed, no future health anticipated, unless mercury be used; and by the other, future disease and death are predicted, if this remedy be employed." "Again," observes the same writer, "Prejudice attaches us to the principles in which we are educated, and renders them objects of affection; and hence the obstinacy with which men cling to ideas with which they are familiar. The experience of the world has shown that partisans are sternly adhesive; that truth is more frequently imagined than perceived; that the value of a reason is too seldom accurately measured; and that minds satisfied with partial knowledge, far out-number the warm conscientious lovers

of philosophy. We can readily perceive the reason why men spurned the great principle promulgated by Rose and Thomson. It was a heavy blow aimed at a favorite and long-cherished opinion; but the truth will stand fast, despite the efforts of the boisterous declaimer, or the insidious endeavors of the smiling sophist. Rose and Thomson demonstrated an important truth; they incontrovertibly proved that mercury is not necessary to the cure of chancre, as chancre; and this the intelligent ingenuous mind will acknowledge, however much it may dissent from their method of applying it."

The ulcer is sometimes so situated that it cannot be reached, except by injections; for instance, when its seat is on a part where the skin is drawn over, and swollen to such a degree that it cannot be drawn back. Under circumstances of this kind, local steaming and warm fomentations must be employed, and the sore syringed often with a tincture of myrrh and bayberry; or with a preparation made by adding a tablespoonful of bayberry powder to a gill of No. 6.

Constitutional Treatment.—When chancre is destroyed by the abortive method, internal medicines will not be needed, provided the system be in a healthy condition, and the sore heals readily. But where the syphilitic sore has been permitted to take root, so as to be out of the reach of a speedy cure by caustic or excision, then it becomes highly necessary to employ means to protect the system from contamination with the venereal poison. The best remedies for this, and also to promote the curative process, are the hot air bath, lobelia, vegetable stimulants and astringents.

Lobelia, in some form, should be taken every two or three hours; and if the tongue be furred, the No. 3 pills, or bayberry syrup, should be taken daily until the tongue cleans.

The hot air bath, by warming the blood and inducing free perspiration, proves beneficial in all cases and in all stages of syphilis. It may be administered daily, if practicable. The most suitable time for the bath, is just before going to bed.

When the patient is so circumstanced that the hot air bath cannot be employed, he must keep his person clean by daily washing the surface, and he should avoid excesses of every kind.

The Diet should be light, and easy of digestion, avoiding, as a general rule, salted meats and acids.

Bubo.—Swelling of the glands in the groin, often attends both gonorrhœa and chancre. In the former complaint, bubo is seldom very painful, and rarely suppurates; but when produced, by the absorption of a venereal poison, from chancre, the inflamed gland becomes painful, and unless judiciously treated in the early stage

of the swelling, suppuration is apt to take place, confining the patient to his bed, probably for weeks.

Treatment.—Slight swelling in the groin, in cases of simple gonorrhœa or clap, demands, in general, no particular attention, further than keeping the parts well protected from cold, and avoiding fatiguing exercise.

If the swelling increase, and becomes painful, the patient should keep as quiet as possible, apply a poultice, composed of bitter herbs stewed in vinegar, and thickened with elm or Indian meal; or apply wet cloths, and bind them on with dry dressings; and every time the poultice or wet dressing is removed, bathe the swelling with opodeldoc or No. 6.

When bubo occurs in one who has a syphilitic ulcer, the poultice or wet dressing must be applied, using either alcohol and water, or vinegar and water, to wet the cloths, instead of simple water; the patient keeping warm in bed, and a hot brick or bottle of hot water should be kept near the groin, to keep the dressing or poultice warm.

The patient should also be placed under constitutional treatment, taking sufficient of lobelia to keep his stomach slightly nauseated, with warm teas to favor perspiration, and occasionally a course of medicine, and the frequent application of the hot air bath.

If the above treatment fails of dispersing the swelling, and the bubo become more painful and throbbing, then apply a poultice, composed of ground slippery elm and green lobelia, wet with warm water; and continue the poulticing until the bubo either disappears or suppurates, and the contents discharged either by a spontaneous or artificial opening. As soon as the pus has escaped, the cavity of the bubo should be syringed with tincture of bayberry or with No. 6, to stimulate the surface to granulation; and when suppuration has nearly or entirely ceased, the place must be kept covered with some kind of salve or plaster.

If the bubo assume an indolent character, showing no tendency to heal, the cavity should be syringed with a weak solution of the nitrate of silver, beginning with a solution of the strength of two grains to the ounce of water, and increasing its strength to four or six grains to the ounce of water. This will change the condition of the surface of the cavity, so that granulations will be formed, and the cavity heal. A portion of lint, wet with tincture of myrrh, introduced into the cavity every day, will favor the healing process.

Secondary Symptoms.—*Venereal taint of the System.*—Under a correct course of treatment of chancre, there is not much danger of the system becoming contaminated from absorption of venereal

poison, for Nature, to protect the system, forms a hard base around the chancre, which prevents the absorption of the syphilitic poison; but physicians apply mercurial ointment, with a view to soften this hardened base, and in effecting this object, they expose the patient's system to the hazard of contamination with the poison; for when the base of the chancre is softened, the absorbent vessels will take up the virus, and carry it into the circulation.

When the disease attacks the roof of the mouth, an ulcer is formed; and if it be not checked, the bone is made bare and exfoliates, forming an opening between the mouth and the cavity of the nose, changing the sound of the voice.

If the disease be seated in the tonsil, an ulcer is formed, presenting the character of chancre. When the mucous membrane of the nose becomes diseased by the syphilitic poison, the patient is very liable to lose some portion of the bones of the nose.

Sometimes the *secondary* symptoms of syphilis appear in the form of copper-colored eruptions on the skin. These eruptions are slightly raised, scarcely ever painful, but are apt to itch, especially in the after part of the day. "There is a greater variety of character in these venereal eruptions than in any other symptoms of the complaint; not only in appearance, but also in size. In some, you will find the eruptions of considerable magnitude, appearing as if a portion of copper-colored skin laid upon the surface, but unattended with ulceration. In others, you will observe deep ulcerations, with a ragged edge; in a third, there will be scaly eruptions, covering very large surfaces in various parts of the body."

When the disease attacks the periosteum of the bones, "the patient experiences in the evening a sensation of pain in the bone, which afterwards becomes the seat of the *node*. The pain does not immediately produce a swelling; but in the course of a few days a painful swelling appears in the evening, which disappears again on the following morning, and leaves no pain. At this time the periosteum (membrane that covers the bone) only becomes affected with inflammation; in a short time a deposit takes place between it and the surface of the bone; this deposit is, in the first instance, only a serous fluid, but a cartilaginous substance is soon secreted, which is gradually converted into bone, and is technically called a *node*."

In some instances, the bone itself becomes extremely painful, more especially at night, when the patient is warm in bed. The pain is felt, as it were, in the marrow of the bone.

Treatment of Venereal taint of the System. — In whatever form secondary symptoms appear, constitutional treatment will be called for. The frequent application of the hot air bath, an emetic occasionally, and the daily use of lobelia in broken doses, with astrin-

gents, and a decoction or syrup of sarsaparilla, or of a compound of sarsaparilla, pipsissawa, yellow dock-roots, and burdock-roots, are the constitutional remedies adapted to aid the efforts of nature to get rid of the syphilitic taint.

Local Treatment.—If an ulcer be formed either in the throat or on the roof of the mouth, it should be touched with the solid nitrate of silver, to destroy the poison, the same as in primary ulcer, and the sore wet several times daily with a tincture of myrrh and bayberry.

The nitrate of silver should be applied to the ulcer every two or three days, whilst the surface continues white and the ulceration is going on, observing especial care to avoid touching any part except where the surface is covered with a white, thick matter.

Where the nose is diseased, the patient should frequently resort to the breathing of steam through the nostrils, and the parts should be syringed occasionally with bayberry or sumac tea, adding a portion of No. 6, or the simple tincture of myrrh. Finely powdered bayberry and green lobelia, combined in equal portions, should be snuffed up the nostrils often, in all cases where the nose is affected.

Syphilitic eruptions are, in general, very readily cured by the use of the vapor bath, a course or two of medicine, bathing the eruptions with a preparation made by adding sumac berries to No. 6, or with the third preparation of lobelia, and then apply the stimulating ointment, or some kind of salve, to protect the parts from the air; this last is more particularly needed in case of ulceration.

Where the membrane that covers the bone becomes diseased, and there is evidence of the existence of fluid between it and the bone, attended with throbbing pain and a blush upon the skin, it should be opened, and the part poulticed until the swelling and inflammation subside, when a strengthening plaster must be applied, and if the parts be slow in healing, syringe the cavity with tincture of myrrh. In many cases the swelling will fluctuate, proving the existence of a fluid, but unaccompanied with pain, and without inflammation or a blush of red upon the skin; here it will be improper to make an opening into the swelling, but steam the limb daily, apply stimulating embrocations, keep the parts warm and bandaged, and employ constitutional remedies.

CHAPTER XXII.

SECTION I.

OBSTRUCTED MENSTRUATION.

DERANGEMENT in the function of menstruation may be occasioned by a variety of causes, the most prominent of which is exposure to cold and wet during the menstrual period, or immediately preceding the time of its occurrence.

This function may be either partially or completely suspended. Some females, during this period, experience pain almost as severe as labor pains, and which continue in some instances several days, in others only a few hours.

When menstruation does not come on at the period of life at which it usually does, it is termed suppressed menstruation. The symptoms usually attending the complaint, and the treatment indicated, will be found under the head of chlorosis or green sickness.

An excessive flow of the menses depends upon constitutional debility or disordered condition of the system, and the same course of treatment that regulates the secretion when too profuse, may be found equally applicable when this function is partially or wholly obstructed.

Various derangements of the system are observed to follow as a consequence of obstructed menstruation, such as violent pain in the head, bleeding from the nose, violent fever, delirium, bleeding from the lungs, violent pain in the side, back or loins, and sometimes convulsions. The uterus is liable to have its internal surface coated with a false membrane, obstructing the menstrual secretion.

Treatment.—Whether the obstruction be partial or complete, the case will require to be treated upon the same general principles. When the patient is dyspeptic, and the general health much impaired, the treatment should consist in the employment of such remedies as are adapted to restore the natural warmth of the body, excite and sustain the capillary circulation, and correct the disordered condition of the stomach and bowels. The remedies and means to be employed to fulfil these important purposes, are, stimulants, the vapor bath, emetics, vegetable astringents, and injections to the bowels. These remedies to be applied according to the circumstance of the case; when the symptoms are violent, the remedies must be applied more liberally than in slight derangements.

There are no other means so effectual in restoring the function of menstruation as regular courses of medicine, and the free use of injections to the bowels, containing stimulants and lobelia. Half a pint of strong pennyroyal tea, adding a teaspoonful of No. 6 and as much green lobelia; or of bayberry or sumac tea, adding a teaspoonful of the third preparation of lobelia; or composition tea, adding a teaspoonful of green lobelia, may be employed.

The Thomsonian course of medicine is well adapted to the cure of every derangement of the menstrual function occasioned by cold or other constitutional derangement. The same treatment will be proper where there is obstruction as where there is an excess of the catamenia.

In some instances, it is only necessary to soak the feet two or three times a day, to use a few injections, drink freely of warm pennyroyal tea, and keep covered warmly in bed, with a warm brick placed at the feet.

In other instances, the case will demand the frequent repetition of a course of medicine, together with a liberal use of the other means already mentioned, more particularly the injections. The functions of the kidneys, bladder and uterus, may be more immediately and effectually influenced by means of injections than by medicine taken into the stomach.

When the derangement has become seated, and depends upon constitutional debility, the patient should seek the fresh air, use moderate exercise, sponge the body with cold water in the morning, repeating it daily twice or three times a week, apply friction to the surface with a flesh-brush or salted towel, and take such medicine as the circumstances of the case may demand, observing especial care to keep the feet dry.

The use of tonics are indicated when the derangement has been of long standing, and the patient weak and relaxed. The ladies' spice bitters, which contain a portion of gum myrrh and unicorn root, may be employed as a general tonic and stimulant. Tincture of guiacum is a good tonic in such cases.

In nine cases out of every ten of the cases of obstructed menstruation, the derangement is occasioned by exposure of the feet to cold and dampness. Standing upon a damp pavement or upon wet ground, in thin-soled shoes, is very apt to occasion obstructions in the system, not always to be removed without considerable difficulty.

When convulsions come on, the treatment must be thorough, depending chiefly upon the use of the third preparation of lobelia; or if the patient have been in good health a short time previously to the fits, and the circulation is active, the face red and swollen, the brown lobelia powder may be given in lukewarm water, in teaspoonful doses, and these repeated frequently until the symptoms

abate, or the spasms disappear: there is no objection to the use of the third preparation of lobelia in any case, the lobelia powder being more easily taken, would of course be preferred where it will do as well. Injections should always be employed, if practicable, in cases of convulsions arising from obstructed menstruation.

Case.—A robust Irish girl was seized with violent convulsions, occasioned by obstructed menstruation. An ounce of brown lobelia was given in teaspoonful doses, before the spasms abated. When the patient complained of distress at the stomach from the medicine, and free vomiting occurred, the spasms ceased.

Case.—Miss A——, aged 16, was in violent spasms during the whole of one night, occurring at intervals of every ten or fifteen minutes. She had been bled, and had taken freely of assafœtida, and such remedies as are used in the old-school practice, without any appreciable good effect. The treatment was changed, and an ounce of brown lobelia powder was given in the space of an hour, and a stimulating injection. Sensibility was aroused in the stomach, the patient complaining of pain at the pit of the stomach, vomited freely, and the spasms ceased. Saleratus water was given to cause the lobelia to operate.

SECTION II.

TREATMENT OF FLUOR ALBUS, OR WHITES.

WHEN this complaint is attended by general debility, which is its most common cause, a permanent cure cannot be anticipated without an improvement in the general health being effected. To accomplish this, a course or two of medicine will be required, in most instances, to cleanse the stomach and bowels; after which, the ladies' spice bitters, or some other form of bitters, should be taken; and from sixteen to twenty of the No. 3 pills taken daily; or a teacup two-thirds full of bayberry or sumac tea, adding a teaspoonful of composition powder or half a teaspoonful of cayenne pepper to the tea, every night or morning, to keep the stomach from becoming foul. This dose will sometimes vomit, but never unless the stomach be disordered, and then it will always be beneficial. Half a pint of a strong decoction of equal portions of sumac, or witch hazel leaves, and poplar bark, administered by injection to the bowels every night at bed-time, and retained until morning, will not only improve the condition of the bowels, but it

will also strengthen the uterine organs. Injections with a female syringe must also be employed. In the early stage of the complaint, or when the parts are irritable, a simple decoction of bayberry, cranesbill, witch hazel or sumac, may be employed; the decoction to be made very strong, in order to have the desired effect. An ounce of bayberry tea to a pint of boiling water, will form a decoction of the proper strength. When the disorder has become protracted in duration, the astringent injections must have stimulants added, such as tincture of myrrh, No. 6, or tincture of guaiacum.

Tar Water has become a favorite remedy for fluor albus, used by injection. It may be used either alone, or in combination with some astringent.

Sponging the body with salt water in the morning, friction to the surface, wholesome and nourishing diet, are important means to improve the general health.

CHAPTER XXIII.

MISCELLANEOUS.

BEE-STINGS.

WHEN a person is stung by a honey-bee, wasp, hornet, yellow-jacket, or humble-bee, a severe pain is felt in the part, soon followed by inflammation and swelling. It is the poison injected into the wound that causes the pain and inflammation. The design of the inflammation is to block up the cellular tissue, and prevent the poison from spreading. Hence inflammation is necessary, to secure the system from injury by the poison, unless the poison be neutralized, by applying spirits of hartshorn or salt water. The early application of either of the above articles to a sting, will ease the pain, and, by neutralizing the poison, will prevent inflammation.

NERVOUSNESS. — WEAK NERVES.

THIS question is often put to physicians: What shall I do to strengthen my nerves? It is not at all times that the proper remedy can be pointed out, without some inquiry into the patient's

habits, occupation, &c. Thus one of a nervous temperament may by the free use of tobacco, either by chewing, smoking, or snuffing, become extremely nervous from its effects. The use of any of the narcotic poisons debilitates the nervous system. Hence opium-eaters are apt to have their nervous system shattered, and consequently they suffer extreme depression of mind, except when the brain is under the immediate influence of the narcotic, which produces a kind of hallucination of mind, bordering, sometimes, upon mania. Administering laudanum, and the various preparations (called anodynes) containing opium, to infants and children, often does irreparable injury to the nervous system. There are medicines so poisonous, that, administered in the most minute doses, they will often do irreparable injury to the nervous system. The intemperate use of alcoholic drinks also weakens the nerves, occasioning tremulous motions of the hands, and sometimes of the whole muscular system. Depressing passions, venereal excesses, too close application to study, more especially in confined and unwholesome air; dyspepsia, and, in fine, whatever weakens the system generally, will weaken the nerves; and in persons of nervous temperament, a disordered state of the nerves frequently forms a most prominent symptom, and then the patient is said to be nervous. Attending in a family not long since, a female in middle life inquired of me if we had not a medicine that would strengthen the nerves. I perceived that her nerves were extremely weak, and having ascertained that she was a great smoker, I told her what I believed to be the chief cause of the nervous weakness, which, it appeared, had never occurred to her as having such a tendency. Protracted illness, more especially when poisonous drugs are used as medicine, is apt to leave the nervous system in a weak condition, sometimes continuing for many years. An unhealthy condition of the uterine organs, and derangement of their functions, is a very common cause of derangement of the nervous system in females.

Treatment.—The same means that will restore the general health, strengthen digestion, and increase the relative amount of the red globules of blood, will strengthen the nervous system. If the nerves are weak, in consequence of a disordered condition of the stomach, the original cause must be removed before the nerves can be strengthened.

Whenever nervous weakness arises from the use of tobacco, or from any other bad habit or excesses that over-tax the system, a restoration cannot be effected whilst the cause of the weakness is allowed to continue to operate.

The use of the cold shower bath, or sponging the body every morning with cold salt water; frictions to the surface with the flesh-brush, salted towel, or horse-hair mits, together with exercise

in the open air, are important means for invigorating the nervous system.

The continued use of the No. 3 pills, by improving the condition of the mucous membrane of the stomach and bowels, will improve the condition of the nervous system. From six to eight of the pills to be taken at a time, and the dose repeated two or three times daily. These pills may be used with safety in all cases, and they have in many instances proved more beneficial than any other form of medicine that had been employed.

Nervines. — *Cypripedium humile* (Thomson's nerve powder), *scutellaria laterifolia* (scull-cap), are chiefly employed as nervines in the Thomsonian practice. These may be used on many occasions with much benefit, as a means of promoting sleep, and of quieting nervous agitation. A collection of acid in the stomach frequently occasions wakefulness, and an excited condition of the nervous system, in which case a dose of sal æratus, or bi-carbonate of soda, in lukewarm water, is a good remedy.

Lobelia, though not a narcotic, exerts a marked influence in calming nervous excitement. There is no remedy of equal value in quieting fretfulness and wakefulness in infants and children, as lobelia, given in small doses. Although it may not produce sleep with as much certainty as laudanum, or other preparations of opium, yet the fact of lobelia being free from any deleterious quality, gives it the preference to narcotics.

POLYPUS OF THE NOSE.

Polypus of the nose is seldom observed in others than those of scrofulous constitution. It is generally brought on in consequence of repeated catarrh or cold.

During the first stage of catarrh, the mucous membrane of the nose becomes dry, then a free secretion of thin fluid is produced, terminating finally in a thick pus-like secretion. This is the natural course of catarrh, as it passes to a favorable termination. Whereas, in scrofulous constitutions the mucous membrane, when diseased by repeated colds, may be too far debilitated to establish that kind of inflammatory action necessary to the formation of those salutary secretions above mentioned, and instead of there being a thick yellowish secretion, which terminates the disease, leaving the parts in a natural condition, a tough, semi-transparent substance is formed on some portion of the lining membrane of the nostril, which adheres to the parts and increases in size, until in some instances it fills one side of the nostril, and frequently becomes extended down the posterior nares, so as to be seen and

felt in the throat, behind the palate. Polypus is composed of albumen, and in time becomes in some degree organized, blood-vessels being shot through it from the mucous membrane.

A substance similar to polypus of the nose is sometimes formed on the uvula of the palate, resembling the soft part of an oyster, arising from the same cause, though not so generally confined to those of scrofulous constitutions as the former disorder.

Treatment.—Polypus of the nose, in its early stage, may in many instances be dispersed by black pepper, composition powder or finely pulverized blood-root, combined with an equal quantity of green lobelia powder, snuffed freely up the nostril. If the polypus be so large as to obstruct the passage of air through the nostril, the powder should be blown upon the polypus through a quill.

When the uvula becomes affected in the manner above mentioned, having the appearance of the soft part of an oyster, or of a blister; gargling the throat frequently with a mixture of black pepper and whiskey, pepper sauce, or strong bayberry or sumac tea and pepper, will in general effect a cure in the course of a few days. Still more effectual than gargling the throat is the application of dry bayberry powder, composition, or black pepper and salt, or powdered alum. The powder may be applied by putting it in a teaspoon, and then carry the spoon under the uvula.

Polypus of the nose cannot in every instance be removed by the means above mentioned, as in many cases nothing short of a surgical operation will effect its removal.

Constitutional Treatment.—When the general health is deranged, constitutional treatment must be instituted, to restore healthy action in the mucous membrane.

CRAMP IN THE LEGS AND FEET.

Cramp in the feet and calves of the legs may sometimes be prevented by the patient rubbing the feet and legs up to the knees with the stimulating liniment, and wearing woollen or worsted stockings at night. A bottle of hot water, or a hot brick, placed at the feet on going to bed, will also prove a preventive to cramp.

Most persons who are attacked with cramp at night, are forced to jump out of bed before the muscular spasm can be overcome.

In general, cramp is attended with constipation of the bowels. In such cases, the No. 3 pills, taken to the extent of from fifteen to thirty pills daily, and the use of unbolted flour gruel at supper, will, by improving the condition of the bowels, lessen the tendency to cramps at night.

PROLAPSUS ANI—PROTRUSION OF THE BOWEL.

In this complaint, a portion of the intestines protrudes from the anus.

Children of feeble constitutions, and more especially those who have been injured by purgative medicines, are often affected with prolapsus ani.

Causes.—Constitutional weakness of the parts: the use of purgative medicine, especially aloes, and the violent straining at stool, when the bowels are obstinately constipated, are the principal causes of the complaint.

Treatment.—The first point to be attended to, when prolapsus takes place, is to return the protruded intestine. This is generally easily accomplished, early after the protrusion of the bowel takes place, by simply pressing upon the parts. In some cases it is best to introduce the finger, previously oiled, into the intestine, and pressing gently upon the parts until the bowel is returned into its proper place.

If the parts become swollen and inflamed, so that the intestine cannot be replaced, cloths wrung out of cold water must be applied to the parts; or, if this does not relieve the swelling, aided by pressure upon the parts, warm fomentations, or soft cloths wrung out of warm water, should be substituted, and the patient be kept nauseated with lobelia until the swelling subsides.

The means to be employed for strengthening the bowel are, injections of a strong decoction of sumac or witch hazel leaves, and retained in the bowels several hours, and this repeated daily. An injection of the kind above mentioned, administered at bed-time, may in general be retained until morning.

In many cases the intestine does not protrude, except when the bowels are moved. If the prolapsus be liable to occur at other times, a tight bandage, or a truss made expressly for this complaint, must be worn until the parts become strengthened.

If the general health be deranged, constitutional treatment will be required. Washing the body in cold salt water in the morning, will prove beneficial in invigorating the system.

“In infants, a fresh protrusion of the rectum may sometimes be prevented by making them sit on a high, close stool, with their feet hanging freely down. Every thing tending to produce either diarrhœa or costiveness should be avoided.”—*Castles' Manual of Surgery.*

HERNIA, OR RUPTURE.

Hernia, in the great majority of instances, commences about the groin, forming at first a small tumor, but, if neglected, the protruded intestine is apt to descend gradually along the course of the spermatic chord, and sometimes forms a large tumor in the scrotum.

Causes.—The usual exciting causes of hernia are, violent sneezing, heavy lifting, and hard straining.

In most instances, the protruded intestine forming the tumor is readily returned into the cavity of the abdomen by slight pressure upon it. This is called *reducible* hernia.

In some cases, *adhesions* take place, preventing the return of the tumor into the abdomen, forming *irreducible* hernia.

Occasionally the protruded intestine becomes strangulated, in consequence of a stricture at the upper part, or neck of the tumor, constituting a most formidable and dangerous form of disease. From estimates that have been made, it would appear that one of every ten or twelve of aged persons in the community, are affected with hernia, or rupture, and still *strangulated* hernia is of rare occurrence. The strangulation may be either partial or complete; and a patient may experience severe pain in the part without there being any stricture. It is asserted by experienced surgeons, that strangulation is most liable to occur where the hernia is very small.

Treatment.—In the treatment of reducible hernia, the first point is to return the protruded intestine into the cavity of the abdomen, and then apply an appropriate truss. By attending to the rupture when first discovered, and applying a truss, a permanent cure will in many instances be effected. The truss must be worn constantly, except when the person is in bed, and always be put on again before rising from it. During an effort to laugh or sneeze, the hand should be pressed against the parts, unless supported by a truss.

In *simple irreducible* hernia, the tumor should be supported by a bag, to prevent its further enlargement.

STRANGULATED HERNIA.

When hernia becomes *strangulated*, violent pain is experienced in the part and throughout the belly, attended with sickness and vomiting, and more or less fever. "If the stricture continue without being relieved, the most distressing symptoms ensue. The patient continues to retch and vomit, and the contents of the

bowels, down to the stricture, are sometimes thrown up; the extremities are cold; the pulse small, quick, and hard." "After a time, hiccough comes on, the pulse is hardly perceptible, respiration weak, and the whole body covered with a cold clammy sweat. Mortification now takes place, beginning in the protruded viscera, and extending to the neighboring parts. The patient suddenly becomes easy, the swelling of the belly subsides, and the tumor of the part diminishes, and the skin covering it sometimes changes its natural color for a livid hue." By pressing the tumor with the fingers, a crackling or crepitus will be perceived, as though bubbles of air were bursting under the pressure of the fingers. "This crepitus is the sure indication of gangrenous mischief within. In this state it goes up spontaneously, or is returned with the smallest degree of pressure; a discharge is made by stool, and the patient fancies himself better. This feeling, however, is of short duration, hiccough and cold sweats increase, convulsive symptoms come on, and the patient soon expires." It will be perceived that the symptoms attending mortification may be mistaken for a favorable crisis. The cold sweats, hiccough, and unnatural expression of countenance, continuing after the pain is gone, are always to be considered alarming.

Treatment of Strangulated Hernia.—The use of the vapor or warm water bath, and relaxing the system fully by giving the patient freely of lobelia, and administering it also by injection, and retained, constitutes the treatment most likely to overcome the stricture.

After the patient has been in a vapor or warm water bath, he should be wrapped in a blanket, and kept warm in bed, provided perspiration continue. If the skin become dry, and the patient be oppressed with heat, the surface may be bathed with spirits or vinegar.

The most important means for the cure of strangulated hernia, is the use of lobelia injections. They may be prepared by adding lobelia powder to simple warm water. The brown lobelia is to be preferred, a teaspoonful or even a tablespoonful of which may be administered at a time, and retained. When the system becomes relaxed, an attempt should be made to return the protruded gut into the cavity of the abdomen, not by simple pressure upon the tumor, but by placing a hand at each side of the tumor, and as gentle pressure is made by the palms of the hands, the tumor should be drawn backwards, by which the contents of the intestine will be more likely to return into the cavity of the abdomen. Another method is to grasp the tumor with one hand, making moderate pressure, and with the finger of the other hand, endeavor to push small portions of the intestine through the stricture.

This should not be attempted, however, until the system has become more or less relaxed by the use of lobelia given freely, and administered by injections; together with the application of the steam or warm water bath.

In severe cases, it will be proper to give from a teaspoonful to a tablespoonful of the third preparation of lobelia, in bayberry tea, every fifteen or twenty minutes, and give injections of brown lobelia, in warm water, as often as every hour. The third preparation will be necessary to be given to support the power of the internal nervous energy, as well as to answer other important objects.

A patient who has a strangulated hernia should keep the body bent forwards, and the knees drawn towards the belly. The position generally to be preferred, is on the back, with the hips and shoulders raised, and the thighs drawn up.

When the above treatment fails of removing the stricture, after being perseveringly employed, the last resort is an operation. This, however, will require a surgeon. Although few recover after an operation, still it may save life in some cases. The operation itself is not severe, nor dangerous; but it is rarely performed until mortification is about to take place, which affords an explanation why the operation is not more generally attended with success.

Case.—A lady fell upon a pointed piece of wood, causing a rupture, about three inches below the umbilicus, without, however, breaking the external skin. A portion of the omentum or intestine protruded, inflammation ensued, and the tumor became extremely painful. The physician who was called, knowing the patient to be a Thomsonian, cautioned her against taking any thing that would be likely to cause sickness or vomiting. Finding no relief from the remedies used, she determined on using an injection, containing a portion of lobelia. The injection was retained in the bowels, occasioning extreme sickness, relaxation and vomiting, and during a straining effort to vomit, the protruded omentum or intestine returned into its proper place; the pain was at once relieved, and the rupture healed in the course of a few days.

CHAPTER XXIV.

EPIDEMIC CHOLERA. — ASIATIC CHOLERA.

WHERE cholera prevails as an epidemic, there will be a general predisposition to diarrhœa, with other symptoms of impaired digestion, among the residents of the infected town or district; proving the existence of a general cause, or combination of influences, operating deleteriously upon the system—weakening the digestive functions—effecting changes in the constitution of the blood, and of the secretions of the mucous membrane of the alimentary canal, so that articles of food not suited to the condition of the stomach become a source of oppression to the stomach, and even prove poisonous, and if not rejected, may occasion death.

In all the cases of recoveries from cholera which have come under the immediate notice of the writer, where an opportunity has been afforded of examining the matters ejected from the stomach, under the operation of the emetics employed, there have been, invariably, flakes of a membranous appearance mixed with thickened greyish or brown tenacious secretions, to be observed floating upon the fluids thrown up.

The existence of a coating of consolidated albuminous secretions upon the mucous membrane of the stomach, and of the whole alimentary canal, would necessarily impair the digestive functions; and whether the presence of such secretions on the mucous surface constitutes a secondary cause of the loss of power in the stomach, predisposing the system to cholera, is a question important in its bearing upon the treatment of cholera.

The immediate or exciting cause.—The general exciting cause of cholera, as it prevailed in Philadelphia in 1832 and '49, was undigested food in the stomach. The enfeebled condition of the digestive powers, rendered the stomach extremely liable to become oppressed, and even paralyzed, by improper articles of diet. In most instances, where the attack was sudden and violent, it was after food had been taken that proved indigestible, operating as a violent poison to the vital functions. The straining efforts to vomit, attending the disease, were the struggles of Nature to rid the stomach of the offending cause; but frequently these efforts were ineffectual, when not assisted by appropriate remedies.

Even in cases of cholera, where the prominent symptoms were watery diarrhœa, unattended with vomiting or sickness at the stomach, the administration of the hot air bath, followed by a stimu-

lating lobelia emetic, proved the most effectual plan of treatment; evacuating the stomach of masses of undigested food and acrid secretions, which had remained in the stomach, but for want of a proper degree of sensibility in that organ, their presence excited neither sickness nor vomiting. The late Dr. George McClellan, in a lecture, stated, that during the prevalence of cholera in 1832, finding by post-mortem examinations masses of undigestible crudities in the stomach, where persons had died of the disease, he adopted the practice of administering active mustard emetics; and stated that in some instances undigestible crudities were thrown from the stomach, such as pieces of boiled beets, cabbage, corned beef, &c., which evidently, in some instances, had lain a week or more in the stomach — as the persons had eaten nothing of the kind during that period of time. The lecturer informed the class, that the practice was invariably successful, when the mustard emetic effected a free evacuation of the stomach, before the patient had sunk deep into a state of collapse.

Symptoms.—A late writer (Watson), in treating of cholera, observes:—“The *epidemic* cholera so far resembled the *sporadic* (common cholera morbus), that it was attended by profuse vomiting and purging, by extreme prostration of strength, and by cramps. But it differed remarkably in these respects: in the circumstances that the matters ejected from the stomach and bowels contained no bile, (and this alone is a good reason against calling the disease cholera); in the early supervention of the symptoms of collapse; and in the great mortality of the disorder.

“The amount of fluid matters thrown up from the stomach, and discharged by the bowels, was really in many cases wonderful. At first, perhaps, the patient would have so copious a stool—a consistent dejection, it might be, but so large in quantity—as to lead him to conclude that the whole contents of the bowels had been evacuated at once. Yet soon afterwards a turbid whitish liquid would again and again pour from his bowels in streams; and be spouted from his mouth, as if from a pump: not, in general, with much effort, but easily and abundantly. The matters thus discharged were thin, and for the most part of a whitish color, like water in which rice had been boiled; without fecal smell; and containing white albuminous flakes. There were some varieties in the evacuations; but the kind I have mentioned, resembling rice-water, was the most common, and the most characteristic: and however *else* their sensible qualities might vary, this circumstance was universal, that they contained no bile.

“With all this, there was early sinking, and collapse, as it was called. This term, *collapse*, expressed a general condition, made up, in the most exquisite cases, of the following particulars:—A remarkable change took place in the circulation, and a striking

alteration in the appearance of the patient. The pulse became frequent, *very* small and feeble, and at last even for hours sometimes extinct at the wrists. The surface grew cold; and in most, or in many instances, blue as well as cold. The lips were purple; the tongue was the color of lead, and sensibly and unpleasantly cold, like a frog's belly; and the breath could be felt to be cold. With this coldness and blueness, there were a manifest shrinking and diminution of the bulk of the body. The eyes appeared sunk deep in their sockets; the cheek fallen: in short, the countenance became as withered and ghastly as a corpse. The cadaverous aspect that sometimes precedes death in long-standing diseases, would come on in the course of an hour or two in this complaint. If the physician left his patient for half an hour, he found him visibly thinner on his return. The finger-nails became blue; the hands and fingers shrivelled, white, corrugated, and sodden, like those of a washerwoman, after a long day's work. The skin was bathed in a cold sweat. The voice became husky and faint. So peculiar was this change, that the sound was spoken of as the *vox cholericæ*. These were the symptoms which the single word *collapse* was meant to express.

"Another very striking feature of this disorder, was the muscular cramp; affecting the muscles of the thighs and calves of the legs, rendering them as hard and rigid as wood; and drawing up into knots the muscles of the abdomen. These spasmodic contractions were attended with severe pain, and constituted the greater part of the patient's suffering. During the continuance of the symptoms that I have been endeavoring to describe, not a drop of urine was passed or secreted. One man, who was under my own observation and care, and who recovered, did not void a drop of water from Sunday morning till the afternoon of the following Wednesday.

"Even in the extreme state of collapse, the intellect remained quite clear; the patients would continue to talk rationally to the last moments of their lives; and, for the most part, singularly indifferent and apathetic about their condition.

"In the fatal cases—and a very fearful proportion of the whole number *were* fatal—death took place sometimes in the course of two or three hours; and it was seldom delayed beyond twelve or fifteen. In those that recovered, the favorable symptoms were a cessation of the vomiting, purging, and cramp; the return of the pulse, and of warmth to the surface; the disappearance of the blueness of the skin, and of the hippocratic countenance; the re-appearance of bile in the alvine evacuations, and the restoration of the secretion of urine.

"The course of the symptoms varied a good deal in different persons. Sometimes the vomiting and purging soon ceased, and sometimes there was neither sickness nor diarrhœa at all, but

rapid collapse and sinking. These were thought the most formidable cases. However, the peculiar secretions were *poured forth* in some, at least, of the instances in which none of them were *ejected from the body*. A patient died of cholera in the Middlesex Hospital without any vomiting or purging; but on examining the dead body, the intestines were quite full of the rice-water serous fluid. Sometimes the cramps were not very troublesome. The cutaneous blueness was not a universal phenomenon. The patients were in general tormented with thirst; and when attempts were made to bleed them, the blood was found dark and thick, like treacle, and scarcely moving, if moving at all, in the veins; in some cases it could not be made to flow out. Considerable hurry, and anxiety of breathing, were also symptoms that I omitted to mention before."

The symptoms attending cholera, as above given, are descriptive of the disease in its severest forms. It will be noticed, that the *most fatal* cases were those where there was neither vomiting nor purging; yet it would seem that physicians generally regarded the vomiting and purging as the principal sources of danger, as their prescriptions have been, in general, designed to check the vomiting and purging. There would be neither vomiting nor purging, if there were no enemy to life in the stomach and bowels; and to put to rest, by means of opiates, the efforts of the organization to cast out the offending agents, is to operate against Nature.

In ordinary cases of cholera morbus, the stomach is in most instances relieved of the offending substances causing the disease, by *spontaneous* vomiting; but in epidemic cholera, the powers of the stomach are too feeble to expel undigested food, and other offending materials, from its cavity; for although liquids may be poured out from the stomach in large quantities by spontaneous vomiting, still there are, in most instances, remaining behind, masses of undigested food, and other offending materials, demanding for their dislodgement the aid of a stimulating lobelia emetic.

Fatality.—Epidemic cholera has proved an alarmingly fatal disease, under the various methods of treatment adopted by the medical profession generally. The results, however, that have attended a prompt and energetic course of Thomsonian treatment in this disease, have been such as to warrant the assertion, that even *epidemic cholera* is readily cured.

Treatment.—To warm the system, empty the stomach, cleanse the mucous membrane of the stomach and bowels of morbid secretions, and sustain the circulation, are the grand objects to be kept in view in the treatment of all cases of cholera. The means requisite to obtain these desired results, are the hot air bath, or

steam bath, stimulating lobelia emetics, vegetable astringents, active stimulants, and external warmth.

When cholera comes on suddenly, and the temperature of the body is not reduced much below the healthy standard, an emetic should be given at once, and the dose repeated until the stomach is thoroughly evacuated. External warmth must always be applied, by means of bottles of hot water, or hot bricks wrapped up in cloths, placed at the feet and around the patient.

When the attack is more gradual, the circulation feeble, the surface and extremities cold, the hot air or steam bath must be administered promptly, to warm the blood, restore capillary circulation, and relieve internal congestions; and immediately after the bath give the emetic in full doses.

The Emetic. — The most efficient emetic for cholera is lobelia, combined with stimulants and an astringent. Either of the following preparations may be employed. The doses to be repeated two or three times, or oftener, if necessary, at intervals of from ten to twenty minutes.

Take of the third preparation of lobelia, two large teaspoonsful; mix it with a gill or more of bayberry tea, made by steeping an ounce of the bayberry in a pint of boiling water. Sweeten well, and give at once.

Or, — To the above add one teaspoonful of the green lobelia powder.

Or, — Take of green lobelia powder one large teaspoonful, cayenne half a teaspoonful, No. 6 two teaspoonsful, sugar a large teaspoonful. Rub these well together, and then add bayberry tea, prepared as above directed.

The above emetic doses are adapted to the treatment of violent cases of cholera. In cases where the disease is of a milder character, the doses will not be required to be so large.

Repeating the Emetic. — To evacuate the stomach of its foul contents, is not the *only important* object to be accomplished by the emetic doses; for they are well adapted to sustain the circulation, and effect a determination to the surface.

In some instances, in cholera, it will be necessary to continue the doses of the third preparation of lobelia in bayberry tea, at intervals of from one to two hours, for a day or two, before the system can be brought into a condition to allow of its discontinuance.

The writer has had cases of cholera under treatment, when the stomach rejected at once every thing in the way of drinks or medicine, excepting teaspoonful doses of the liquid part of the

third preparation of lobelia, combined with bayberry or sumac tea; and when the patient did vomit after these doses, the matters ejected were such as the stomach had not the power to throw off previously, although the retching and straining efforts had in some instances continued, at frequent intervals, for hours or even days.

Finally, the only effectual way to relieve the retching and vomiting attendant upon cholera, is to warm the system, cleanse the stomach, and effect a determination to the surface.

Full doses of the emetic preparation may occasion pain in the stomach; but the pain soon subsides, and the patient feels at once that he has been benefited by the medicine. Hot applications to the pit of the stomach will tend to relieve pain.

The *hot air or steam bath* is indispensable, in many instances, to the cure of cholera. When the patient has sunk into a state of collapse, or is affected with cramps; or when the surface and extremities are cold, nothing can be done that will afford so much relief to the patient, and at the same time prove of so much benefit, as the application of the hot air bath.

The writer has not known of an instance where the application of the bath has failed of relieving cramps, when the patient was able to sit in the chair a sufficient length of time to allow the system to become warmed by the hot air or steam. In many instances, a remarkable change in the condition of the patient has been effected by the hot air bath, in the course of twenty or thirty minutes. Imparting warmth and animation to the whole system, the cramps soon cease, the circulation is attracted to the surface, the external capillary circulation is restored, internal congestions relieved, the pulse rises, the lungs expand more fully and freely, enabling them to perform their function of decarbonizing and vitalizing the blood in a more perfect manner; and with all these good results, the system is placed in a condition more favorable for the effectual operation of an emetic, and other internal remedies employed in the treatment.

Directions for administering the hot air and steam bath will be found in a subsequent part of this book. When the patient needs support to enable him to sit up, a chair, with the back towards him, should be placed before him, with a pillow on the back of the chair to rest the head upon. The head should be wet with spirits or vinegar, and the face be wet frequently with the same, or with Cologne and water, or with simple water, as may prove most agreeable to the patient. When the heat of the bath becomes oppressive, the surface must be bathed with water; or take a sponge or towel filled with water, and press about the neck, so that the water will pass down over the body.

The application of the bath must be repeated as often as the circumstances of the case demand it; and when the patient feels

comfortable in the bath, it may be continued half an hour or longer at a time.

Internal medicine must be given during the operation of the bath; either composition tea, with tincture of ginger or No. 6 added; cayenne tea, with a teaspoonful of spirits of camphor or spirits of ammonia added; or a tea-cup of bayberry tea, adding a teaspoonful of cayenne.

When the patient has been in the bath a sufficient length of time, the surface must be bathed, or showered with cold water, rubbed dry, and then bathed with some kind of stimulant, such as whiskey, brandy, tincture of myrrh, vinegar, or No. 6; then cover the patient warmly in bed, and apply bottles of hot water to the feet and to the abdomen; or if the patient lies on his back, place the bottles to his sides.

Of other remedies to be employed.—In the early stage of cholera, and when the symptoms are of a mild character; and also when the disorder has been checked by the treatment as above recommended, one or more of the following remedial agents should be taken, at intervals of from one to two hours—namely:

Composition powder, No. 6, and sugar, of each a teaspoonful; rub these together in a tea-cup, and then fill the cup half full of lukewarm or cold water; stir it well, and take before it settles. Or a teaspoonful of the liquid of the third preparation of lobelia, mixed with a tea-cup half full of bayberry tea, or with a tablespoonful of bayberry syrup. Or a teaspoonful of cayenne, mixed with a tea-cup half full of bayberry tea. Or from eight to ten of the No. 3 pills.

Poulticing.—Equal portions of composition powder, cayenne, and elm powder, wet with hot water, to a proper consistence for a poultice, applied over the abdomen, will be found highly advantageous in the treatment of cholera, and in all analogous complaints. The poultice to be wet occasionally, and renewed as often as once in every twenty-four hours.

Injections.—Stimulating and astringent injections are beneficial in all cases of cholera; and though not indispensable to the cure of the disease, still they cannot be employed too frequently, to answer a good purpose. One of the best preparations for injections, is half a pint of bayberry or sumac tea, with from one to two teaspoonsful of the third preparation of lobelia added.

Drinks.—Cold water may be allowed the patient, provided it be found to agree with the stomach. If the thirst be urgent, weak

cayenne tea, or ginger tea, or any kind of herb tea that the patient may fancy, may be taken freely, even though they be rejected by the stomach.

Diet.— Essence of beef, egg-soup, chicken-water, wine-whey, and milk porridge, constitute the kinds of food best adapted to the enfeebled condition of the digestive functions in cholera.

The following letter from R. M. Pancoast, M. D., who was called to Winslow, N. J., in the summer of 1849, to treat cholera, which prevailed in that place to an alarming extent, affords ample proof of the superior efficacy of thorough Thomsonian treatment in that disease.

WINSLOW, N. J., JULY 30, 1849.

DEAR DOCTOR:—I embrace this, my earliest convenience, to give you a hasty sketch of what I have witnessed since coming to this place. The cholera in its most malignant form has visited this town. For the last two weeks my time has been almost constantly occupied, night and day, ministering to the sufferers from this disease.

Nearly all of this sickness has occurred in a place little, if any, over a mile square, and containing only about four hundred inhabitants. There is scarcely a person in the town whose system has not been palpably affected by the cause of this disease. What this cause is, I of course cannot pretend to say, but will give you a hurried glance at its effects, with which I am now sufficiently familiar.

Owing to some abnormal, atmospheric, or geological condition, I know not which, but most probably a concurrence of both; the mucous lining of the stomach, and in fact of the whole alimentary canal, becomes more or less weakened, and its secretions correspondingly deranged; as is manifested by the appearance of a peculiar yellowish coating upon the tongue, and by the individual experiencing a clammy feverish taste in the mouth, with rather an unusual desire for drinks.

This furred condition of the tongue, thirst, &c., at first slight, continues to increase for a period of from one day, to a week; when looseness of the bowels commences, and progresses with greater or less rapidity, until the evacuations become either of a light or yellow color, and watery consistence; which condition may obtain for a period of from one hour to several days. All this time the man eats well, sleeps well, and may tell you that he feels well—having little or no pain with his diarrhœa (the less pain the greater the danger always); and although, in many instances, you cannot persuade him he is in the least danger, yet, in

reality, he is now almost upon the very verge of the grave; for he is now liable to be seized at any moment with vomiting and cramps, when, unless promptly and judiciously attended to, death will ensue in from one to twelve hours.

So much for this disease when not interfered with. Now for the treatment. I came here possessed of no great confidence in the power of any remedial agency to counteract the cause of cholera; particularly in severe cases. My success, however, has not only exceeded my expectations, but has been beyond even my most sanguine hopes. Every case—without one single exception—that has come under my care previous to the supervention of collapse, and in which the course recommended has been strictly adhered to, has recovered, or is now rapidly recovering. And quite a number have recovered to whom I was called subsequent to the stage of cramp and collapse, when the extremities were cold and shrivelled, the surface bluish, and the whole capillary circulation apparently suspended.

My plan is this. If consulted during the first or second stage of the disease, I direct a heaping teaspoonful of composition powder (or bayberry and cayenne) to be rubbed up with as much sugar, and taken in a teacup half-full of cold water, —or what is better, strong bayberry tea,—immediately after every evacuation from the bowels, until there is but one in the twenty-four hours. After this, the same dose may be taken about an hour before each meal, with from four to ten of the No. 3 pills every hour, whilst awake, until the tongue becomes clean. But this will only answer in the first and second stages of the disease, when we have plenty of time. If there be cramp and coldness of the extremities, the most prompt measures must be had recourse to at once — for in these cases time is all important — even half an hour's delay may prove fatal; for with the discharges in cholera, as Prof. Meigs says of hemorrhage, it is not the first quart, but the last ounce that kills.

The indications are, first, to relieve the tension upon the mucocapillary system, by attracting the blood from thence to the surface and extremities. Secondly, if, as usually occurs, the stomach be over-distended and oppressed, either by indigestible food, or by the serous exhalations from its weakened mucous surface, to evacuate it as speedily as possible. And lastly, to stimulate or arouse the latter to the proper performance of its function.

The most prompt and efficient means of accomplishing the first is, the hot-air bath; in which I place the patient as quickly as possible, and then administer a teaspoonful of capsicum with one or two teaspoonfuls of 3d preparation, in about two-thirds of a teacupful of strong bayberry tea. This is a tremendous charge, and usually decides the contest. The patient, if not too far gone,

soon becomes warm, his pulse returns at the wrist, and he perspires freely. If this be the case, he is safe — the cramps and discharges being almost immediately arrested. I now have hot bricks placed in the bed, and the patient removed from the bath to the bed; direct the above dose to be repeated every fifteen minutes, until retained on the stomach that length of time; then every thirty minutes, until retained that length of time; then every hour, &c., gradually decreasing the quantity and frequency of the dose. The most important point is to keep the patient warm. So long as one perspires he is safe; and anything that will excite perspiration, and restore the action of the mucous lining of the stomach and bowels, and consequently the power of generating animal heat, will cure the cholera. But a distinction must be made between perspiration and the oozing from paralyzed and relaxed cuticular capillaries.

The greatest apprehension that I have on leaving a patient, is that the attendants will allow him to become cold. For I have noticed that in every instance, and to the same extent that they are allowed to become cold, do they cease to improve, and grow worse.

The observation of Cartwright, that "the fluids cannot run in opposite directions," is gainsayed by facts elicited in every fatal case of this disease. For in every instance of death from cholera, is there both internal and external exhalation progressing at the same time, previous to dissolution.

The functions of the liver and kidneys, in common with those of the mucous surfaces, are more or less suspended, and by the same means are they just as certainly restored. The liver secretes no bile, and the bowels secrete no fæces; in fact, all action is lost in the muco-capillary system; and the disease, or rather the cause of death, is one of inaction — of debility. The weakened vessels relax and allow their contents to flow out, and unless proper means be taken to restore their wonted contractility, the system is drained of "the pabulum of life," and death must and will ensue.

Respectfully yours,

R MONTGOMERY PAIN

THOMSONIAN COURSE OF MEDICINE.

THE following process constitutes a *Thomsonian course of medicine*.

1st. *A hot-air or vapour bath.*

2d. *An emetic, prepared and administered according to the directions hereafter given.*

3d. *An injection to evacuate the bowels.* In some cases it is better to administer an injection at the commencement, before the vapour bath, and repeat it after the emetic operates.

4th. After the operation of the emetic, *the vapour bath* is again applied, to restore a natural warmth to the system, or, as Dr. Thomson expresses it, "*to set the wheels of life in proper action.*"

5th. Light nourishment is to be given after the emetic operates, either before or after the last bath, as the inclination of the patient may dictate. Milk porridge is generally given as nourishment after a course of medicine, and when the patient inclines to take it during the operation, it may be given, as it will assist the operation of the emetic. In sudden attacks of disease, however, as in fevers, pleurisy, &c., crust coffee, elm, gruel, barley-water, or gum arabic water, will be more suitable than milk in any form.

The above process, termed *a course of medicine*, first instituted by Samuel Thomson, is the most effectual, consistent and philosophical plan of treatment ever devised for assisting nature in her curative efforts, when the system is invaded by disease. By courses of medicine, together with the usual intermediate treatment, disease may be cured that has resisted every other plan of treatment; and even though it fail of effecting a cure, still the treatment will not injure the constitution—the declarations of medical men to the contrary notwithstanding. The medical profession manifest a degree of prejudice against the Thomsonian practice that is wholly inexcusable. As guardians of the health and lives of the community, they should know better than to make the ridiculous, false and absurd assertions which many of them do in relation to the Thomsonian practice.

GENERAL DIRECTIONS FOR ADMINISTERING A
COURSE OF MEDICINE.

1st. *The Hot-air Bath and the Steam Bath.*—The hot-air or alcoholic bath may be employed in all cases in place of the steam bath, as it will effect the same important objects that can be attained by the steam bath; and as the former requires much less labour, and may be administered so much more readily than the steam bath, it must be regarded as an improvement upon the usual plan of imparting warmth to the body by the steam bath.

The articles required in the application of the hot-air bath are: a small-sized teacup, about three inches and three-quarters across the top (the cheapest kind of ware is always to be preferred); a tin wash-basin or common quart bowl; a chair with a solid wooden seat; a flannel skirt or small blanket, to put on the seat of the chair; two blankets, or a blanket and quilt, to cover the patient; and alcohol.

Having the above articles at hand, fill the teacup two-thirds full of alcohol; place it in the middle of the basin or bowl; pour cold water into this vessel, but not so much as to float the teacup, and place these upon the floor, under the centre of the chair. Upon the seat of the chair place the flannel skirt, allowing it to extend half-way to the floor, in front of the chair, to protect the thighs from the heat,—but not to extend over the sides of the chair.

The patient takes his seat upon the chair; then the blankets are to be thrown loosely over him and the chair, leaving the head uncovered. First spread a blanket over the back of the chair, and pin it under the patient's chin; then a blanket or quilt is to be placed in front, and pinned at the back of the neck. Now raise the blanket a foot from the floor at the back of the chair, and apply a match or lighter to the alcohol.

The patient's feet to rest upon a stool, or upon the round of the chair upon which he sits.

Observe always to use woollen materials for placing on the chair and covering the patient; as cotton might take fire by accidentally coming in contact with the blaze from the burning alcohol. If the blankets covering the patient be not sufficient to retain the heat, a cotton sheet or light quilt may be spread over the blankets.

During the operation, the face and head should be wet frequently with cold water, vinegar, or alcohol and water; and when the heat becomes oppressive, take a sponge or soft towel, filled with cold water, and press against the side of the patient's neck, pulling the cover from the neck, so that the water will run down over the

patient; this is reviving, and may be repeated often, as the shocks from the cold water are beneficial.

If the teacup in which the alcohol is burned be over three inches and three-quarters in diameter at the top, there will be too much heat, probably, for the patient to bear. When the heat is too high to be borne, the blanket must be raised from the floor a few inches, at the back of the chair, to admit cold air. It is always best to admit fresh air into the room, to the patient, when in the bath.

A dose of composition tea, with a teaspoonful of No. 6 added, should be taken after the patient has been in the bath a few minutes.

In applying the hot-air bath, when a patient has fever, or when the skin is unusually dry and harsh, the surface should be kept wet with lukewarm water until perspiration comes on. This the patient can generally do himself, with a wet sponge or towel.

The Steam or Vapour Bath.—Various methods are employed in the application of the vapour or steam bath; the usual plan, however, is to place the patient upon a tight-bottomed chair, throwing a quilt over him, leaving the head uncovered; a flat-bottomed basin or dripping-pan is to be placed under the chair; a quart of hot water poured in, and put into it a red-hot brick or stone. Bricks that have been kept in a dry place are much the best; the fire-brick are the kind to be preferred, if obtainable. If the brick be entirely red or white hot, it should be set in sidewise at first, or the steam may be too warm for the patient to bear; in a few minutes the brick may be placed with the flat side down. Three and sometimes two bricks will be sufficient, provided they are thoroughly dry, and red-hot on one side. If the steam be too hot, the quilt may be raised from the floor so as to admit the cold air; and when the patient feels oppressed with the heat, the face and head must be frequently wet with cold water, vinegar and water, or whiskey, and occasionally the body of the patient should be washed or sponged with cold or tepid water. During the latter part, or at the close of the steaming, a shower bath must be used, or the patient washed in cold water, rubbed dry, and bathed with vinegar, or with some kind of alcoholic liquor.

The *feet* may be effectually steamed by placing a stool upon the chair, the patient sitting upon the stool and resting the heels upon the edge of the seat of the chair.

A small tin boiler and pipe, for conveying steam either into a steam closet, or under a chair, is more convenient than hot bricks, and the steam can be more easily regulated than when bricks are used.

The patient having got into bed immediately after the bath, and

a bottle of hot water, or a hot brick, placed at the feet, should take the emetic, whilst the system is in a glow of warmth.

THE EMETIC.

Lobelia Emetics may be prepared in many different ways. The plan adopted by Dr. S. Thomson, of combining with lobelia, stimulants and astringents, for cleansing the stomach, renders the emetic more efficacious, and, at the same time, easier in its operation.

For ordinary cases of disease, the following constitutes an efficient emetic :

A teaspoonful of the third preparation of lobelia,
A teaspoonful of green or brown lobelia,
And a large teaspoonful of sugar ;

Rub these well together in a teacup, and then pour on a teacup two-thirds full of strong bayberry or No. 3 tea, lukewarm. To be stirred well, and taken before it settles.

A similar dose is to be repeated in the course of twenty minutes or half an hour. It is seldom necessary to take more than two doses ; still, more may be given if required. I have on many occasions given two and three ounces of lobelia in administering a course of medicine.

In violent fever, severe attacks of inflammation,—as in inflammation of the lungs, pleura, or of the brain ; convulsions, accompanied with a hot skin and swollen face ; and in all cases where it is important to relax the system, the emetic should contain a less proportion of the stimulants ; for instance,—

Take a teaspoonful of brown lobelia, pulverized, and half a teaspoonful of cayenne pepper, and mix them with strong berry tea, sweeten, and take immediately after being stirred.

Or,—Take a teaspoonful of brown lobelia, and the same quantity of vinegar, and pour on scalding hot bayberry or composition tea. Then, after standing a few minutes, stirring it frequently, strain, sweeten well, and add as much cayenne as will lie upon a ten-cent piece.

Or,—Simply mix the lobelia powder in composition tea.

Or,—Give from four to six of the compound lobelia pills every half hour, until four or five doses are taken, or until they occasion sickness. They will do no harm, taken in any quantity.

When a sufficient quantity of lobelia has been given, the patient should be allowed to remain quiet, without taking any thing to force the operation, until an hour or two has elapsed. In some instances, however, the patient will vomit soon after taking the emetic; but in very many cases the emetic will remain from two to four hours before it will operate, provided no means be taken to force its operation. It is better that the emetic remain on the stomach at least an hour, as it generally renders the operation more easy and effectual.

A teaspoonful of the supercarbonate of soda, or half a teaspoonful of saleratus, taken, dissolved in a tumbler half or two-thirds full of lukewarm water, will seldom fail of causing the emetic to operate in a short time. If this should occasion pain in the stomach, it will do no harm, and generally subsides very soon after the patient vomits. A bottle of hot water, or a hot brick placed over the seat of the pain, will tend to relieve the distress.

In cases of seated disease, where the patient is weak, and the system relaxed, as in low, protracted fevers, long-standing dyspepsia, chronic diarrhœa, &c., where the condition of the stomach requires active stimulants and astringents, there can be no better form of emetic than teaspoonful doses of the third preparation of lobelia, in a very strong tea of either bayberry or sumac; or taken in bayberry syrup. The dose to be repeated as often as may be deemed requisite. The third preparation of lobelia, to be employed, should be freshly made, or such as has been kept well corked.

Half a teaspoonful of green lobelia powder, added to each dose of the third preparation, will insure a more effectual operation.

As a substitute for the third preparation, mix two teaspoonsful of No. 6 with a teaspoonful of green lobelia powder, and half a teaspoonful of nerve powder.

3d. *The Injection.* — In some cases it is better that an injection be administered in the commencement of the course, before the vapour bath, and another after the operation of the emetic.

The kinds of cases where this course is more particularly needed, are such as are attended with a determination of blood to the head, and coldness of the feet; for instance, in erysipelas on the head or face; severe neuralgia of the head or face; violent pain in the head, from any cause; apoplexy, stupor, &c.

A very common form for injections is half a pint of composition tea, adding a teaspoonful of nerve powder to the tea whilst hot, and when lukewarm, a teaspoonful of lobelia powder and as much No. 6. This answers for common cases. Where there is canker in the bowels, and in case of dysentery, cholera morbus, &c., the bayberry or No. 3 tea should be used, adding the liquid

of the third preparation of lobelia, or two or three teaspoonsful of No. 6, and a teaspoonful of green lobelia.

If the bowels be much disordered, injections will in general occasion more or less pain and distress for a short time; the patient, nevertheless, experiences much relief from the operation. An injection containing lobelia, if retained in the bowels, will often cause sickness at the stomach and vomiting, and effectually relax the system. Recent attacks of disease have in many instances been broken up by such an operation. As a general rule, patients experience the most benefit from injections that occasion the most distress and pain. Lobelia possesses a property of arousing the sensibility of the stomach and bowels, so that if they are diseased, it causes the patient to feel the disease.

4th. *The Second Bath.*—The proper time for administering the last bath in a course of medicine, as a general rule, is, when the patient ceases to sweat, or becomes restless after the operation of the emetic. If the patient continue to retch and vomit a long time, there is nothing so effectual in settling the stomach as a steaming. When the bath has been continued long enough, the patient must be showered or washed with cold water, rubbed dry, then bathed with alcohol, whiskey, or vinegar, and kept warm. It is beneficial in many cases to bathe the surface with No. 6, pepper sauce, or stimulating liniment, after the last bath, and when the patient is rubbed dry. This is more especially needed where the skin is in a relaxed condition, as in chronic rheumatism, bronchitis, asthma, consumption, &c. Sometimes the skin is extremely sensitive to stimulants, and if applied too freely, will occasion a severe burning sensation in the skin, which may continue several hours.

Drinks.—When patients are thirsty during the course, they should be allowed to drink as much of warm teas, or even of cold water, as may be desirable to them.

Food.—Some persons, on reading Dr. Thomson's work, understand him to say that patients, after a course of medicine, may take almost any kind of food. It is those cases where the appetite and digestion are restored that Dr. Thomson alludes to, when he speaks of allowing almost any kind of food that the appetite may crave. In most cases of disease, the digestive powers are too feeble to digest any but the lightest kinds of food, such as barley water, crust coffee, arrowroot gruel, egg soup, essence of beef, toast and tea, and panada. Even milk porridge, which is generally given after a course of medicine, is not adapted to the condition of the stomach in cases of fevers, severe pleurisy, inflammation of the lungs, and during the early stages of sudden

attacks of disease accompanied by fever. It is far better that a patient, in the early stage of a severe attack of disease, abstain from food altogether, than to take such as will oppress the stomach.

From three to six hours is in general required for a full course of medicine; and except in urgent cases, it is better, as before stated, to allow the emetic to remain on the stomach an hour or two, or at least avoid forcing the patient to drink largely of teas soon after the emetic has been taken.

A Partial Course of Medicine.—In very many instances of disease, a full course of medicine is not required; all that is necessary is to restore the natural warmth of the body, by means of the hot-air or vapour bath, and then to give an emetic; dispensing with the injection and the second bath.

Emetics without Steaming.—In sudden and violent attacks of disease, as in croup, fits, colic, sick headach, cholera morbus, and in fine, all sudden attacks of disease, emetics may be given without the previous administration of a bath.

Hot bricks wrapped in damp cloths, placed around a patient, may take, in many cases, the place of the vapour bath. Thus, in cases of low fevers, as they are termed, it often becomes necessary to vomit a patient every day when he is too weak to sit up. In rheumatism, when the patient cannot be moved without occasioning severe pain, it may be better, especially in cold weather, to give emetics, without moving the patient from the bed.

Preparing the Patient for a Course of Medicine.—In sudden attacks, and in all cases of acute disease, a course of medicine may be given, as before stated, without any preparatory medicine; whereas, in chronic complaints, as in consumption, deep-seated dyspepsia, and in cases where the system is in a cold and torpid condition, a course of medicine will prove more effectual by the patient taking composition several times a day, or from twenty to thirty of the No. 3 pills, and three or four compound lobelia pills at night, and continuing the use of these medicines several days before the course is administered.

Repeating the Course of Medicine.—In the first stages of disease, and more especially if the attack be violent, the course of medicine, or at least a partial course, may be repeated daily until the symptoms abate. In small-pox, measles, and scarlet fever, the disease will run its course, and all that we can anticipate from the operation of medicine in these cases, is to relieve the symptoms, and aid the constitution to work off the disease in the way which nature or the God of nature has established. In chronic com-

plaints, as in long-standing dyspepsia, consumption, chronic gout, and rheumatism, and whenever there is absence of fever, a course of medicine will seldom become necessary oftener than once in two or three weeks. In fine, there are many cases of seated disease in which more reliance is to be placed upon fresh air, a change of residence, travelling, sea bathing, and a strict attention to diet and regimen, than upon medicine.

Emetics for Children and Infants.—A teaspoonful of green lobelia powder, and a teaspoonful of brown sugar, wet with composition tea, and rubbed with a spoon, to soften the lobelia powder, and then adding from half a gill to a gill of bayberry tea or composition tea, will form a suitable emetic for children. To be stirred well, and given before settling.

A child that will swallow pills may be as effectually vomited by taking from six to ten of the compound lobelia pills, fresh made, as by any other form of emetic.

For Infants, half a teaspoonful of green lobelia powder, prepared as above directed, will generally prove sufficient for evacuating the stomach. Or, from half to a teaspoonful of the syrup or tincture of lobelia, mixed with a tablespoonful of bayberry tea, sweetened.

No fears need be entertained of giving too much lobelia, even to infants; although it may cause distress for a time, the result from the operation will prove beneficial.

The hot-air or steam bath may be administered to children in the same way as for grown persons, by placing the child in a small chair, and placing this upon the seat of such a chair as is used for administering the bath to adults.

Remarks concerning various symptoms that attend the operation of a Course of Medicine.

Some persons have declared that they never felt better than when going through a course of medicine, excepting during the sickness and vomiting; and then again, under a different condition of the system, patients will experience severe pain and distress. The tendency of the course of medicine is to awaken sensibility, and to excite the efforts of nature to action to overcome obstructions, cast off morbid matter from the stomach, and to restore a natural circulation throughout the system; and hence, the more the system is diseased, the more distressed the patient will be when he is made to feel his real condition.

At one time a patient may vomit by merely taking a dose of composition tea; whilst at another, when the stomach is in a dif-

ferent condition, half a dozen doses of composition will not occasion the slightest sickness. A patient with a very foul stomach may become sick from taking a dose of composition, or of bayberry and pepper, during the first steaming in a course of medicine; and after the operation of an emetic, and the stomach becomes settled, a pint of composition may be taken without causing the slightest sickness. It often happens, however, that the stomach will not be settled until after the last bath, the patient vomiting freely on having his system warmed by the steam, and by taking stimulants; after which, the stomach will not be disturbed by these medicines, even though they be taken freely.

A vapour bath, when administered previously to an emetic, or when the emetic has not operated effectually, may occasion sickness at the stomach, and cause the patient to feel weak and faint for a time; but is often observed to increase the strength when the stomach is not foul. I have on many occasions observed a patient, on taking a course of medicine, to be much stronger after the last bath, who had felt weak and relaxed from the first, in consequence of the disordered state of the stomach. Patients sometimes become sick and feel oppressed soon after they are placed in the bath, and feel as though they cannot sit up, or bear it any longer; but by throwing cold water in the face, and allowing fresh air to come to the patient, the sickness will, in general, pass off in a short time; and when perspiration becomes free, the patient will experience no difficulty in sitting in the bath the usual time required for the operation.

When the stomach is cold and contains acid, a dose of pepper or composition tea is apt to cause pain in the stomach, more especially during the *first* bath in a course of medicine. In such cases, the pain is relieved when the patient belches wind or gas from the stomach. Some No. 6, or tincture of ginger, in hot water, taken as hot as the patient can bear it, will relieve these unpleasant feelings. Essence of peppermint, lavender, or any thing that is good to expel wind from the stomach, may be employed.

Of peculiar symptoms, sometimes observed during the operation of a Course of Medicine.

Lobelia, especially the brown lobelia (the seed), taken in emetic doses, will sometimes, and more particularly in persons of nervous temperament, and in cases of deeply-seated disease, occasion symptoms which have been called *alarming symptoms*; whereas the term *crisis symptoms* would be more appropriate; for it has been universally observed that the occurrence of these symptoms is in most instances followed by a manifest improvement in the condition of the health of the patient;—effecting cures where all

other means had failed. Seemingly, almost miraculous cures have been brought about by such operations, in long-standing cases of disease, where probably nothing short of placing the system fully under the active influence of the hot-air or steam bath, and brown lobelia, would have answered the purpose.

The following symptoms will sometimes be observed during the operation of a course of medicine, where the brown lobelia powder is employed as an emetic, or administered by injection, to wit: soon after the emetic is taken, the patient complains of pain or distress in the stomach, which soon extends to the bowels; he is continually changing his position; rubs his stomach and bowels, and complains very much of distressing feelings. The breathing becomes irregular, respiration being sudden, somewhat like the sobbing of a child. The distressing feelings in the bowels subside, but the patient remains relaxed, the skin sometimes colder than natural, and contracted; the mucous membrane of the nose is dry, inducing the patient to pick or rub his nose frequently; the tongue and mouth are dry, attended with more or less thirst. The patient makes efforts to get out of bed; frequently feels like having a motion from his bowels; talks in an unconnected manner, and sometimes lies completely relaxed, apparently too weak to raise his hands, and the countenance is pale and contracted. During the continuance of the symptoms above described, the stomach and bowels appear to be in a state of unusual agitation, as though the vital energies were concentrated in these organs, (generally the seat of disease,) and carrying on a revolutionary, health-restoring action; which, after continuing an indefinite period of time, varying from one to four or six hours, and occasionally a still longer period, free vomiting again ensues, after which the patient goes to sleep, and sleeps calmly and naturally; the skin becomes moist and warm, and often profuse perspiration ensues. On awaking, the patient expresses gratification at feeling so well; appears unconscious of having suffered to any extent during the operation; has probably a good appetite, and, after taking light, nourishing food; and then having the course of medicine completed by the administration of a bath, showered with cold water, rubbed dry, and bathed with alcohol or vinegar, realizes a remarkable improvement in his general feeling.

Dr. Thomson, in treating upon the subject of the operation of lobelia, says, as follows:—

“When this medicine (lobelia) is given to patients that are in a decline, or are labouring under a disease of long standing, the symptoms indicating a crisis will not take place until they have been carried through from three to eight courses of medicine; and the lower they have been, the more alarming will be the symptoms. I have seen some who would lay and sob for two hours like a child that had been famished; not able to speak or to

raise their hand to their head; and the next day be about, and soon get well. In cases where patients have taken considerable opium, and a course of medicine is administered, it will, during the operation, produce the same appearances and symptoms that are produced by opium when first given; the opium having lain dormant, is roused into action by the enlivening effects of the course of medicine, and they will be thrown into a senseless state; the whole system will be one complete mass of confusion; the patient tumbling in every direction, will require two or three persons to hold him in bed; they grow cold, as though dying; remaining in this way from two to eight hours, and then awake like one from sleep, after a good night's rest, and become entirely calm and sensible, as though nothing had ailed them. It is seldom that they have more than one of these turns, as it is the last struggle of the disease, and they generally begin to recover from that time. I have been more particular in describing these effects of lobelia in particular cases, where disease is deeply seated, as they are very alarming to those unacquainted with them, in order to show that there is no danger to be apprehended, as it is certain evidence of a favourable turn of the disease."

Thomsonians are frequently applied to in desperate cases, where it is impossible to determine whether the disease is curable or not; and notwithstanding the grave charges so frequently against the Thomsonian practice when it fails of removing disease, still a trial should be made, so long as the circumstances of the case furnish grounds for a reasonable hope of success. Courses of medicine are sometimes administered with the view only of affording relief to the patient, the disease being evidently incurable; and yet it would seem that a portion of the community, and some who ought to know better, attribute every death that occurs, where Thomsonian treatment is employed, to the treatment, or to want of *skill* in those who have charge of the case. Among the great mass of desperate cases that come under Thomsonian treatment, deaths will, in the very nature of things, occasionally happen unexpectedly and under unfavourable circumstances. In the early period of my practice I was called to attend the wife of Samuel Wheeler, of Wilmington, Del., and found Mrs. W., as I then thought, in a condition to be benefited by a course of medicine, and had determined on having one administered. A dose of composition was prepared, but before it was sufficiently cool to be taken, she expired. Had I arrived two hours earlier than I did, doubtless Mrs. W. would have died whilst under the operation of a course of medicine; and although the medicine might have prolonged the life of the patient a short period, still she could not have survived many hours longer than she did, as mortification of the bowels had taken place. Courses of medicine doubtless have been, and will again be administered to patients on the very

verge of dissolution; creating not only an unfavourable impression in the neighbourhood where it happens, but a highly-coloured and distorted account of the case is carried by the press to various parts of the country. The general good success, however, attending the Thomsonian practice, affords sufficient evidence to establish the belief that it is based upon correct principles, and that this system furnishes the means which the constitution requires to overcome disease; for although it does, and must necessarily fail sometimes of effecting cures, yet what evidence have we that it will not prove successful, when properly applied, in all cases that are curable by means of medicine?

Most patients experience an unusual degree of weakness and general distressed feeling about the time a disease is being removed; the patient feeling discouraged, under the impression that the course of medicine, or other treatment, is too hard for his constitution. In many cases of deeply-seated disease, that I have treated, and a cure has been effected, the patients were discouraged about the time that the disease was giving way: the system being relaxed, attended with loss of appetite, disgust for medicine and frequent pain and distress in the bowels.

BLOOD-LETTING.

THE abstraction of blood from the system does not remove the cause of disease, but, on the contrary, its direct tendency is to prostrate the curative action of the constitution; and although patients may experience relief from pain, by the abstraction of blood, still the cure may be very much retarded by it, and it may cause the death of the patient. A person in health may lose a large quantity of blood without experiencing other inconvenience than debility; for when digestion is carried on with considerable vigour, the blood is soon replaced. But in disease, where the digestive powers are greatly impaired or suspended, the loss of blood cannot be readily supplied; and if the bleeding be carried to a great extent, the patient will be very apt to remain a long time in feeble health, and very probably be left with some deeply-seated chronic disease, dyspepsia, liver complaint, consumption, or dropsy.

The blood furnishes the organs with power to carry on their functions, and to resist the causes of disease; and in proportion to the quantity of blood taken from the body, will the system lose its power of resisting disease. An undue accumulation of blood in a part is always attended by a deficiency of it in other parts;

and we have sufficient evidence to warrant the assertion, that the Thomsonian practice, if properly applied, will prove more effectual in equalizing the circulation of the blood than any other plan of treatment that has ever been pursued.

A patient having a good constitution may, in the early stage of disease, be bled profusely, and recover his health: not in consequence of the loss of blood, however, but in spite of the bleeding; whereas, in a later period of disease, where the vital powers of the patient are much enfeebled, or in very young or very aged persons, the loss of even a few ounces of blood would be very liable to be followed by extreme prostration, and probably cause the death of the patient. That blood-letting removes pain, lessens fever, and relieves the head, is no evidence that it cures disease; for these very symptoms, pain and fever, are, in general, the consequence of the vital powers resisting disease: and what can be more absurd than to break down the living power, in order to relieve pain? But blood-letting will not always relieve pain, except the patient be brought so low by it as to destroy his sensibility; and very often, in cases where pain is relieved by a copious bleeding, it will return again in a more aggravated form; the constitution having to struggle not only against the cause of disease, but also against the effects of the loss of blood.

Patients are sometimes bled profusely during the eruptive fever of small-pox; the physician supposing the disease to be bilious fever. The consequence of this treatment has been, in some instances, to sink the vital powers so low, that the eruption has never been fully developed, and the patient's life made a sacrifice to legalized quackery.

Formerly, it was the universal opinion that blood-letting was necessary in cases of severe bruises, to prevent the occurrence of inflammation. Experience and observation, however, do not confirm the propriety or necessity of this practice. Look, on the other hand, and we will find that the most experienced surgeons admit the danger of drawing blood in cases of severe injuries, especially immediately after an injury, before the system reacts. Dr. McClellan, in lecturing upon the subject of severe injuries, and the prevailing practice of bleeding patients immediately after their occurrence, said: "By far the greater portion of deaths which occur in these cases, are occasioned by too frequent and continued bleedings before the system has had time to recover from the shock. Thousands and tens of thousands of lives have been destroyed by this practice."

A physician of the old school told me not long since, that formerly he thought he must bleed whenever he saw evidences of inflammation, but that within the last few years he had almost abandoned this practice of bleeding, and found that his patients now recovered more speedily and effectually, even from inflam-

matory diseases, than when he resorted to its use. The fact is, in the regular practice there are no general established principles for treating disease; almost every physician having his favourite hobby. Thus, one will prescribe anodynes under the same circumstances that another would employ bleeding; while a third would administer some favourite cathartic, and a fourth depend exclusively upon counter-irritation, such as cupping, blisters, &c.

A patient is taken with pleurisy, for instance, and his physician bleeds him and the pain is relieved; on the following day the pain returns, and the doctor resorts to the same means which relieved the pain before; and in this way the bleeding is often repeated until the vital powers are sunk too low to react, and the patient sinks from loss of blood; or if he recovers, it is generally by very slow degrees.

Dr. Marshall Hall, in his work on the morbid and curative effects of the loss of blood, has given a number of cases proving the fact, that though a blood-letting may relieve pain, it may cause the death of the patient.

In cases of a severe bruise, the old school doctrine is to bleed and purge with a view to prevent inflammation. When a patient is injured, inflammation is necessary, in order to repair the injury. This is *nature's method*. — Injuries cannot be repaired without inflammation; and the more vigorous the general health of the patient is, the sooner will the injury be repaired, and the less liability will there be of the inflammation assuming an unhealthy character.

An ordinary bilious or remitting fever is often converted into a disease of a malignant character, by blood-letting. In like manner, healthy inflammation may assume an unhealthy character, by reducing the vital principle — the restorative power — by taking blood.

That a patient may experience relief from losing blood, is not proof that his condition is improved or his situation rendered less dangerous by it. Taking away blood to relieve pain is as unphilosophical as to give arsenic or any other violent poison for the same purpose. The cause of disease is not removed by either plan. There are poisons which, when administered even in homœopathic doses, will relieve pain and change the form of disease, but will not remove the cause; for although patients get well under such treatment, it is through the efforts of nature in defiance of the poisonous medicines. Physicians prescribe arsenic in intermitting fever, which will change the symptoms; — there may be no more ague, but a disease will remain, more difficult to get clear of than ague.

Pain that would be relieved by an ordinary blood-letting, would be more effectually removed by a Thomsonian course of medicine, or even by a vapour bath. Under the bleeding practice, pain is

relieved by prostrating the power of reaction; whereas, under Thomsonian treatment the circulation is equalized, and the obstructions removed that cause the pain.

The fact of the matter is just this: under favourable circumstances a patient may lose a large quantity of blood without endangering his life; but under other circumstances, the loss of a few ounces would cause the death of the patient. Physicians learn under what circumstances blood-letting can be best borne without endangering the life of the patient; but the principle of this practice is wrong under all circumstances. It will relieve pain, lessen fever, and reduce inflammation; but an invariable effect is to impair the digestive and nutritive functions, and to weaken the power of resisting disease. In all cases of severe attacks of disease, where blood-letting is deemed a proper practice by physicians of the old school, the Thomsonian remedies, well applied, will not only prove more effectual in relieving pain and curing the disease, but it is a safe practice.

THE HOT-AIR OR VAPOUR BATH.

ALTHOUGH the use of the vapour bath as a means of curing disease, was employed many centuries back, still the principle upon which it operates in removing disease was not fully explained, nor its utility in aiding the operation of medicine appreciated before the time of Samuel Thomson.

This bath constitutes an important part of the Thomsonian system of practice, fulfilling several important indications in the cure of disease. It diffuses warmth through the system, equalizes the circulation, imparts electricity to the blood, and increases the sensibilities of the system to the impression of medicine. Warmth imparted to the body by means of the hot-air or vapour bath, is as congenial to the human system as light and heat from the sun is congenial to the vegetable kingdom.

"I had but little knowledge of medicine," says Samuel Thomson, "when through necessity I discovered the use of steaming, to add heat or life to the decaying spark; and with it I was enabled, by administering such vegetable medicines as I then had a knowledge of, to effect a cure in cases where the regular practitioners had given them over."

"In all cases where the heat of the body is so far exhausted as not to be rekindled by using the medicine, and being shielded from the surrounding air by a blanket, or being in bed, and chills

or stupor attend the patient, then applied heat by steaming becomes indispensably necessary."

We often hear persons say that when they were bled the blood was almost black, and so thick that it would scarcely run; and they conceive that their blood is bad and had better be taken away. The blood becomes thick and dark in consequence of its slow and torpid circulation, for want of heat and nervous energy. Place a patient, whose blood is in the condition just mentioned, in a vapour bath at a proper temperature, and in less than twenty minutes the character of his blood will be changed; so that, instead of being almost as thick and dark as molasses, as it was before the steaming, it will be of a more natural colour and consistency, in consequence of the warmth and electricity imparted to it, and by giving an increased impetus to its circulation through the lungs.

There is scarcely a form of disease or a condition of the system in which the vapour bath may not be employed, not only with safety but benefit. One of the most important objects gained by the application of the vapour bath, is adding warmth and electricity to the blood. It has been ascertained that in disease even of the most inflammatory character, the blood contains less electricity than it does when in a healthy condition; and the application of the vapour or hot-air bath in the early stage of pleurisy and acute rheumatism, will in some instances arrest the farther progress of the disease.

Disease of an inflammatory character generally proceeds from cold; and the buffy coat which appears on blood drawn from one labouring under an inflammatory disease, may be attributed to the want of a sufficient amount of heat and electricity in the blood. Dr. Marshall Hall, in his *Practice of Medicine*, p. 340, observes: "Some practitioners continue to let blood in most cases of acute rheumatism; thinking themselves justified in their mode of practice by the sizzly appearance of the blood. The same principle might lead them to empty the whole sanguiferous system; for, every time blood-letting is repeated, the blood becomes more and more dense, or sizzly. I have further observed," says he, "that by bleeding repeatedly, the pains, swelling, and febrile symptoms, were not only aggravated at the time, but often protracted infinitely; at least, I have seen them continue, under such a mode of practice, upwards of two months."

The vapour bath may be employed with immense benefit in disease of the urinary organs; as stranguary, gravel, retention of urine, inflammation of the lungs, &c.

In croup, where the disease has continued several hours, the vapour bath is almost indispensable, in order to restore the natural warmth of the blood, and assist the operation of the medicine. Professor Chapman, in a lecture, said that he had recently been

called, in consultation, to a case of croup, where the application of the vapour bath proved effectual in curing the disease, after various other means had been employed three successive days, without effecting any change for the better. The patient continued in the bath three hours at a time. In croup, the blood is sometimes in a condition which occasions the formation of a false membrane in the windpipe; which, if not arrested, finally fills up the cavity of the windpipe to such an extent as to cause suffocation. In such cases, besides the free use of lobelia and stimulants, the bath must be perseveringly applied, with a view to restore the natural warmth of the blood, and thus overcome its *plastic* condition.

In asthma, when the system is in a cold and torpid condition, medicine will often fail of affording much relief, without the previous use of a bath. In this form of disease, the *hot-air* bath will in general prove more effectual than the steam or vapour bath.

Ordinary headach is speedily cured by an application of the bath.

In dysentery, and bowel complaints in general, the use of the bath is attended by the most signal benefit.

In eruptive diseases, nettle-rash, small-pox, scarlet fever, varioloid, and measles, the vapour bath may be used with benefit at any stage of the disease. If the eruption be slow to appear, applying a vapour bath will bring it out to the surface; or if there be a tendency to a retrocession or striking in of the eruption, the vapour bath should be applied; or at least a moist heat should be applied around the patient, and powerful stimulants given,—as the third preparation of lobelia, and stimulating injections. In every stage of small-pox the vapour bath is grateful to the patient, and aids the constitution in working off the disease. In the later period of small-pox, when scabs are forming and the patient much distressed, the steam bath will afford more relief than any other means that can be employed; and when the scabs are dry and falling off, there can be no better means employed for restoring the natural healthy condition of the skin than steaming. Scarlet fever and measles are very liable to be followed by dropsy, running of the ears, swelling of the glands, &c., arising in part from an unhealthy condition of the skin, which may be remedied by steaming the patient two or three times, about the termination of the eruptive disease.

The duration of erysipelas may be shortened, and the symptoms mitigated, by the hot-air or steam bath; and in severe cases it should not be neglected.

The bath may be employed with especial benefit in all cases of dropsy, except when the disease is incurable.

In violent colds and catarrh, where the breathing is greatly oppressed, or the skin dry and husky, or cold and clammy, and the

patient much distressed, the use of the bath becomes highly necessary, not only to relieve the distressing symptoms, but to facilitate the operation of medicine. Thousands of patients die annually of consumption, that in its early stage is curable under Thomsonian treatment.

"In all cases of falls or bruises, steaming is almost infallible; and is much better than bleeding, as in the common practice, which only tends to destroy life, instead of promoting it. If the person is not able to stand over the steam, it must be done in bed, as has been described. Give the hottest medicine inside that you have, and keep the perspiration free until the pain and soreness abate, and the strength will soon be restored. If the advantages of this mode of treatment were generally known, bleeding in such cases, or in any other, to remove disease, would never be resorted to by the wise and prudent."—*Samuel Thomson*.

In *peritonitis*, which is a very fatal form of disease, the bath should be promptly and perseveringly applied, besides giving largely of lobelia and pure stimulants.

In inflammation of the lungs, liver, stomach, bowels, or any other of the internal organs, the use of the vapour bath will be found to relieve pain, assist the operation of medicine, and shorten the course of the disease.

In *cholera*, the application of the hot-air or steam bath is almost indispensable to the cure of the disease; more especially when the surface and extremities are cold, or the patient affected with cramps. The warmth imparted to the system attracts the blood to the surface, restores the external capillary circulation, relieves internal congestion, the nervous energy is increased, the lungs expand more fully, and the blood consequently becomes more highly vitalized, and sensibility awakened; so that medicine will act more promptly and efficiently.

In "*low fevers*," as they are called, where the heat and strength of the patient are far reduced, I have observed marked benefit to result from the application of steam to the patient. A patient who is too weak to sit up or even to raise his head, will bear steaming on a couch or mattress in many instances over an hour, without being debilitated by it,—provided proper attention be paid to bathing the face and surface of the body occasionally with spirits or vinegar, and giving stimulants. The most remarkable recoveries from "*low, malignant fevers*," as they are termed, that I have known, have been where the vapour bath has been administered frequently, and the third preparation of lobelia administered freely, both by injection and to the stomach. In these cases, the steam was of course applied to the patient in bed or on a settee.

The hot-air or vapour bath forms an important auxiliary in the treatment of rheumatism, gout, lumbago, palsy, hysteria, chlorosis, neuralgia, consumption, fevers of every variety, scrofula, &c. — Finally, the application of warmth to the body, in this way, aids the efforts of nature to overcome disease of every variety, that is curable by the aid of medical treatment.

“Some who practise according to my system,” observes Dr. Thomson, “boast of carrying their patients through a course of medicine in a shorter time, without the trouble of steaming: this is easily accounted for; steaming is the most laborious part of the practice for those who attend upon the sick, but the most useful to the patient; as one full course of medicine, in which the patient is steamed both before the emetic is given, and after it operates, will in general be more effectual in removing disease than four emetics without the steaming.”

The bath affords a protection to the system against sickness; and when applied in the early stage of many forms of disease, will effectually prevent it from becoming seated, by restoring the lost heat, promoting the secretions, and removing obstructions.

If the efficacy and safety of the hot-air or steam bath in *midwifery* were generally known, the practice of bleeding would become abolished; for no sensible woman would willingly submit to be bled, who had a knowledge of the utility of steaming, and more especially of courses of medicine. By means of the bath and lobelia, the muscles may be more effectually relaxed than by bleeding, and at the same time the secretions are promoted and nature assisted, without the least possible degree of danger to the patient, from the treatment.

For pain in the back and loins during pregnancy, the bath may be used with much benefit.

False labour pains may be removed by the application of the bath; whereas true labour pains will be increased by it. This fact I have seen tested on many occasions. Not long since, I received a message to attend Mrs. C——g, in Currant alley, who, it was supposed, was in labour. The patient had regular pains about every fifteen minutes, which had continued over twenty hours. I directed a dose of composition to be given, and an injection of composition tea, with a teaspoonful of green lobelia, to be administered. These had the effect to diminish the frequency and intensity of the pains. A vapour bath was then applied, which dispersed the pains entirely, and Mrs. C——g had no more return of pains until the lapse of two weeks, when they returned, and the same means were employed as on the previous occasion, above spoken of; and the pains being true labour pains, they were strengthened and aided by the same treatment that expelled the false pains.

The above is only one of many instances in which I have known false labour pains entirely to disappear under the use of the bath, lobelia and stimulants; and I have never yet seen this treatment fail to increase and assist true labour pains. If Mrs. C——g had been under the treatment of the old school practice, and ergot had been administered, as it very often is under the same circumstances that attended this case, the uterus would have been thrown into violent spasmodic contractions, and it is not easy to say what the consequence might have been. It cannot be questioned but that in thousands of instances ergot has been given, and then the forceps resorted to, in cases of premature or false pains, that would have been dispersed by the use of the vapour bath, lobelia, and pure stimulants.

Opinion of various writers concerning the Vapour Bath.

"The vapour bath is attended by the very best effects, particularly in chronic ailments; and there can be no question that its action is chiefly on the skin, and through that medium on the nervous system. As a means of determining to the surface, promoting cutaneous exhalation, and equalizing the circulation, it is second to no remedy now in use; and, consequently, in a variety of affections which this process is calculated to relieve, it may be employed with every prospect of advantage." — *Combe's Physiology*.

"To the wars between Napoleon and Russia is western Europe indebted, if for nothing else, to the introduction of vapour baths. Prussian soldiers having constructed them in the north of Prussia, some of the Prussian physicians were induced to observe the effects of this new fashion of bathing. They soon found that it cured various diseases, such as rheumatism and cutaneous affections, and were not slow in giving notoriety throughout Germany, by means of various publications. The king of Prussia caused a bath to be constructed at his palace; and in 1818, the Princess Marianne, sister-in-law of this sovereign, was present at the opening of the first public vapour bath at Berlin, and allowed it to receive her name." — *Eclectic Journal of Medicine*.

"Of all Turkish remedies, the vapour bath is the first and most efficacious in rheumatism and cutaneous diseases. I have seen them removed in one fourth part of the time in which they are commonly cured with us." — *Dr. Madden*.

"If life be nothing but a brief succession of ideas, the rapidity with which they now pass through the mind would induce one to believe, that in the few short minutes which he has spent in the bath, he has lived a number of years." — *Sir John Sinclair*.

"The vapour bath may be used with decided advantage in all

seasons, as it is in Prussia and in Asiatic countries. It is a vulgar error, contradicted by general experience, to suppose that vapour, or warm bathing, is contra-indicated in winter, as disposing those who bathe to contract colds." — *Dr. Schmidt*.

"Major Long, who made an expedition to the Rocky Mountains subsequent to the time of Lewis and Clark, informs us, also, that the Indian *sweating baths*, as he terms them, are in high repute for the cure of many disorders. He remarks, that they are generally constructed near the edge of a water-course, and formed of pliant branches of trees, stuck into the ground in a circle, bent over at the top, and covered in every part with bison robes. Some of them contain only one person, and others four or five. The invalid enters with a kettle of water and some heated stones, on which the water is sprinkled, until the requisite degree of steam is produced. When it is thought that the perspiration is sufficiently profuse, the patient is taken out and plunged into the water — previously breaking the ice, if the stream is frozen. He is not subjected a second time to the action of the steam, but covers himself with his robe and returns home." — *Mattson's American Vegetable Practice*.

"Lewis and Clark mention a remarkable cure which was performed with the vapour bath, during their expedition. One of their men had so great a weakness in his loins, that he could not walk, nor even sit upright without extreme pain. They exhausted the resources of their art upon him in vain; and, at length, at the suggestion of an Indian hunter, and at the request of the patient himself, they placed him in a vapour bath, with the steam as hot as it could be borne. In twenty minutes he was taken out, plunged twice in rapid succession into cold water, and returned to the bath. During this time he drank freely of horse-mint tea. At the end of three-quarters of an hour he was again withdrawn, carefully wrapped, and suffered to cool gradually. The morning after the operation, he was able to walk, and nearly free from pain." — *Ibid*.

"The prevalent fear of catching cold, which deters many from using the vapour bath, even more than from warm bathing, is founded on a false analogy between its effects and those of profuse perspiration from exercise or illness. The latter weakens the body, and by diminishing the power of reaction, renders it susceptible of injury from sudden changes of temperature. But the effects of the vapour bath, properly administered, are very different. When not too warm, or too long continued, it increases, instead of exhausting the strength, and, by exciting the vital action of the skin, gives rise to a power of reaction, which enables it to resist cold better than before." — *Combe's Physiology*.

PARTIAL STEAMING.

THE plan of applying steam to the lower half of the body was first introduced by Dr. A. C. Logan. To administer the hip vapour bath, the cover must be fastened around the waist, instead of the neck. It is particularly applicable to cases of palsy of the lower extremities, hip disease, white swelling, indolent ulcers on the limbs, obstructed menstruation, strangulated hernia, swelled testicles, and dropsy of the legs. Applied in this way to the lower half of the body, it may be borne without inconvenience for an hour, or even several hours together; and much credit is due Dr. Logan for this method of steaming in certain cases.

Toothach, pain in the face, swollen and painful breast, may be relieved by the application of steam to the affected part.

In cankered sore throat, scarlet fever, quinsy, and in severe colds, attended with dryness of the throat and oppressed breathing, benefit may be derived by inhaling the vapour from hot vinegar and water.

The following is from Constable's Miscellany, as given by the celebrated Urban Chevreau, Secretary to Christine of Sweden.

Cure of Fevers in Sweden.

"One thing which I saw in Sweden surprised me. The peasants who have fever, take a quantity of beer, into which they put ginger, cloves, cinnamon; and having heated it as much as their mouth and stomach will bear, they drink it off. The practice is successful.

"They have also another remedy which would appear a startling one to inhabitants of our climate. They have dry stoves, which they call *bastou*, into which they enter naked; and when the perspiration is profusely produced on all the body by the heat of the stove, they immediately come out and lie down among the snow; or, if they can swim, throw themselves into the water. Our physicians may judge how far their aphorisms agree with the experience of these peasants." This was published during the life of the author, who died in 1701, and may serve to show to the incredulous *faculty*, that steaming is no new doctrine; and it also exhibits a striking analogy to the practice of our North American tribes, in cases of fever.

WARM WATER FOOT-BATH.

THE right way of proceeding in the application of the warm foot-bath, is to have the water at first of an agreeable temperature — not too hot to be disagreeable to the patient; and then, about every two minutes, add as much hot water as the patient can bear, for the space of ten or twelve minutes. Then rub the feet dry, and bathe them with whiskey.

OF THE UTILITY OF LOBELIA EMETICS IN THE CURE OF DISEASE IN GENERAL.

THOMSONIAN emetics constitute the most effectual remedy employed in the treatment of disease occasioned by a foul stomach. There is scarcely a form or variety of disease in which the use of emetics will not prove beneficial; and in many instances they are indispensably necessary to the recovery of the patient.

Previous to the discovery of the medical properties of lobelia, by Samuel Thomson, poisonous articles were employed almost exclusively as emetics. Even now, the medical profession continue to prescribe the same deleterious articles, notwithstanding the evidence afforded of the efficacy of lobelia emetics in cleansing the stomach; and likewise knowing—as they might know if they would—that it possesses no deleterious qualities.

Sudden attacks of disease,—such as colic, violent headache, and various distressing symptoms, occasioned by a foul stomach,—may, in many instances, be cured at once by an emetic. And when disease has become more deeply seated, other important objects beside cleansing the stomach, are obtained by the operation of emetics. They relax the system, and in this way overcome obstructions; equalize the circulation of the blood, and of the nervous influence; invigorate the energies of the stomach, and remove morbid secretions from its mucous surface; restore the secretions; and, in fine, assist the constitution in resisting disease, and thus aid her efforts in restoring health.

Whenever there is a general *fever* pervading the body, it is evidence of a diseased condition of the stomach; and hence, in fever, the use of emetics is particularly indicated. Whether a fever arise from undigested food in the stomach, worms in the intestines,—its energies sunken, or its functions prostrated by the poisonous influence of marsh effluvia, or from previous exposure to cold,—Thomsonian emetics may be given with benefit.

In measles, scarlet fever, and small-pox, the disease will be rendered more mild in its character, less dangerous, and sometimes of shorter duration, by the early administration of a Thomsonian emetic.

In diseases of children, emetics constitute by far the most efficient remedy. *Vomiting* is nature's method of relieving the stomach in infancy. We can scarcely do wrong in giving emetics to sick children, more especially at an early stage of disease.—In cases of sudden attacks of fever, croup, convulsions, &c., lobelia should be given freely; either the powder in warm teas, or in simple warm water, the tincture, or the third preparation.—The latter is particularly adapted to cases of spasms, and in cases where the heat of the system is very low, and in the advanced stages of disease. No danger need be apprehended from vomiting a child too much in croup, nor in any other violent attack of disease; nor of relaxing the system too much with lobelia.

In protracted chills, where the patient is in a stupor, the third preparation of lobelia should be given freely, with the application of external warmth and friction to the surface, with a view to bring on reaction.

"Emetics," observes Professor Chapman, "however beneficial they may operate as mere evacuants, produce effects not less salutary in another way. Whatever may be the cause, fever, as has already been shown, is a result of sympathy; having, for the most part, the primary link of its ultimately lengthened and complex chain, in the stomach. To expel, therefore, the offending cause, or to subvert the nascent impression which may be created, before it becomes invigorated, diffused and fixed, vomiting is obviously the remedy.

"Erysipelas of the face, I have benefited, or entirely removed, by vomiting—and in several instances, have derived scarcely less advantage from the same remedy, when the brain becoming affected, stupor has supervened."

Emetics administered in the early period of scarlet fever will sometimes exert a most signal influence in moderating the violence, and in shortening the duration of the disease.

In case of bleeding from the lungs, the effect of the operation of emetics is to attract blood from the lungs and diffuse it through the system, by which the bleeding will be checked.—Warm foot-baths, or the vapour bath, should be employed, to aid in restoring the natural equilibrium of the circulation of the blood. "In support of this practice, it may be proper to mention, that it appears on good authority, that the late Dr. Willis, so celebrated for his skill in the treatment of mania, and especially the cure of George III. of England, resorted to emetics in all cases of hæmoptysis, (bleeding from the lungs,) and declared that the lengthened experience of nearly half a century had taught him to confide in them

above all other means, as well on account of their safety as efficacy."—*Chapman's Therapeutics*.

In bleeding from the stomach, in which case blood will be raised by vomiting, the employment of active emetics is indicated; not only for dislodging accumulations of blood in the stomach, which may have oppressed its energies, but to cause a distribution of blood throughout the system, and to strengthen the weakened capillary vessels of the mucous membrane of the stomach. I have found the third preparation of lobelia, given freely, together with the application of the vapour bath, to be successful on several occasions of bleeding from the stomach; and have never known it to fail in checking the hemorrhage.

In uterine hemorrhage, the flow of blood may in general be controlled by active emetics, aided by the use of stimulating enemata to the bowels.

In severe colds and sore throat, either from inflammation or the existence of ulcers, emetics are of great utility.

Emetics are more effectual than any other remedy in the cure of consumption, bronchitis, and other forms of disease of the chest.

The most severe paroxysms of asthma may be overcome by a thorough emetic; more especially when the emetic is preceded by the application of a vapour bath, rendering the system more sensitive to the impression of medicine.

In pleurisy and inflammation of the lungs, emetics may be employed with great advantage; more especially in the early period of the disease. I have never observed the act of vomiting to be attended with much pain or difficulty in the most violent cases of pleurisy and inflammation of the lungs. As a patient sickens, the system becomes relaxed; which affords an explanation why a patient may vomit with so little pain or difficulty when there is active inflammation in the pleura or lungs.

"In their wide and pervading operation, they (emetics) subdue or have a tendency to subdue vascular action, to remove cutaneous constriction, promote absorption from the lungs, facilitate expectoration, lessen dyspnoea, cough and sanguineous discharge, to calm the system by equalizing excitement, and thus re-establishing that just balance in the distribution of the blood, on which the restoration and maintenance of health so materially depends."

In whooping cough, more benefit may be derived from the use of emetics than from any other remedy. In violent cases, an emetic should be given daily, or even two or three times a day. In those cases when violent paroxysms of coughing are observed to come on at certain periods, it is a good practice to place the patient under the influence of lobelia, given even to the amount necessary to cause free vomiting previously to the time at which the paroxysm of coughing usually comes on.

Emetics form an important part of the treatment for rheumatism, lumbago, gout, neuralgia, &c. No remedy under my observation has produced so much relief in these forms of disease as active emetics; their efficacy will be greatly enhanced by the previous application of a vapour bath.

Of the various remedies that have been employed in the treatment of dyspepsia, emetics have proved the most successful. — Even in cases where there is extreme tenderness at the pit of the stomach, an emetic after a vapour bath will afford more relief in general than any other remedy. In the early stage of dyspepsia, digestion, in most instances, may be restored by one or two active emetics, followed by the free use of cayenne pepper at meals.

Sick-headach, depending upon a disordered condition of the stomach, may be more speedily relieved by a prompt emetic than by any other remedy. Besides the speedy relief which the operation of emetics affords, they sometimes, if taken in the early period of every attack, will break up the disease altogether; the patient being freed from subsequent attacks.

Emetics are well adapted to the cure of every variety of colic, or cramp in the stomach. “To induce general relaxation, and to excite the biliary secretions, a deficiency or suspension of which, he considers as an accessory cause of some of the cases of obstinate constipation in colic, Professor Hosack has given emetics, as he states, with great success.” — *Chapman*.

In diarrhœa, dysentery, and cholera morbus, digestion is lost, and the stomach contains more or less foul matter, and its mucous surface is coated with thickened secretions, oppressing its functions. Hence, the use of emetics, combined with active stimulants and astringents, to cleanse the mucous surface, are especially demanded in the treatment of such disorders. Besides relieving the stomach of foul matters, Thomsonian emetics exert a beneficial influence upon the secretions, cause a determination to the surface, restore capillary circulation, and aid the efforts of nature to restore healthy action in the mucous membrane of the bowels. Many have doubtless died of these complaints, that might have been cured by prompt emetics.

Epilepsy, or falling sickness, is in many instances occasioned by an oppressed or otherwise disordered state of the stomach, demanding the use of emetics. “By exhibiting them just before the accession of the paroxysm, they will often prevent it, and even if they fail in this respect, they render it milder and of shorter duration. Nor is this all which they accomplish. By the strong and direct impression made on the stomach, the commencement in that organ of the wrong association constituting the disease, is broken, and afterwards it yields more readily to tonics.

“Nearly the same views, I think, may be taken of hysteria. Even admitting that the disease is mostly radiated in the uterus,

it does unquestionably often proceed from gastric irritation, and demands to be treated accordingly. Whatever may have been the immediate cause of the paroxysm, I have found, when exceedingly vehement, no remedy half so effectual as vomiting. It promptly allays the convulsive agitations of the nervous system, and produces a state of mental composure which invites to sleep."
— *Chapman.*

Apoplexy, brought on, as it often is, by a mass of undigested food in the stomach, calls for the free exhibition of emetics, of which the third preparation of lobelia is the most appropriate. Lobelia should also be administered by injection, and allowed to be retained in the bowels, to assist in exciting vomiting; to relax the system, and equalize the nervous influence. Even if the seat of apoplexy be in the brain, and incurable, as it often proves to be, still the treatment can do no harm.

Mania is generally associated with, and not unfrequently dependent upon, a disordered condition of the stomach. Many cases have been cured by free vomiting with stimulating lobelia emetics.

In long-continued dyspepsia, as in other forms of seated disease, the mucous membrane of the stomach becomes more or less coated with a false membrane; a general torpor then pervades the system, the nervous energy is prostrated, and the energies of the mind often greatly depressed. In such cases there is no plan of medical treatment which promises equal success with that of the frequent use of the hot-air or steam bath and stimulating emetics. These means will prove the most effectual in restoring the secretions, and causing the detachment and removal of the false membrane lining the stomach. Without effecting this, the functions of the stomach cannot be restored. I have on many occasions observed that patients who had been long affected with dyspepsia, are very liable to experience severe pain under the operation of an emetic, and often complain of feeling worse about the time the disease is breaking and a more healthy action taking place.

Affections of the head, in general, proceed from derangement of the stomach; so that not only in sick-headach are emetics indicated, but the most violent neuralgic pains in the head, accompanied with extreme tenderness of the scalp, will sometimes be promptly relieved by free vomiting. "Early adopting the notion," says Dr. Chapman, "that this complaint proceeds from a morbid condition of the stomach, the only two cases of it which have come under my care, I have managed by emetics, and had reason to be entirely pleased with the result. Even genuine tic-doloureux, the neuralgia of some writers, has been cured in several instances, by this same practice, and with such facility as to place it, in my

opinion, decidedly above all other modes of treating this most painful, and hitherto nearly unmanageable affection."

Diseases of the eye, as amaurosis, and acute inflammation of this organ, have been more successfully treated by active emetics than by any other plan. It is only in the early stage of amaurosis, however, that so much reliance is to be placed upon emetics.

The operation of emetics in connection with the use of the vapour bath, is applicable to cases of *dropsy*. Besides cleansing the stomach, placing the system under the relaxing influence of lobelia promotes the action of the absorbent vessels, and consequently the use of this remedy is particularly well adapted to cases of dropsy.

Emetics form an important part of the treatment for the cure of jaundice. I know a case of this form of disease which was cured by the administration of a vapour bath and an emetic; the patient having taken freely of composition and compound lobelia pills a few days preceding the bath and emetic. Cases that are more deeply seated, however, will require, as do other forms of seated disease, a repetition of courses of medicine, together with the appropriate intermediate treatment.

An occasional emetic will be serviceable in every variety of scrofula.

Persons labouring under the poisonous effects of mercury will experience benefit from the use of the vapour baths and emetics.

It is asserted by some medical writers that diabetes has been cured by the operation of emetics. This disease, however, is often incurable; as in many instances it is the consequence of the wearing out of the constitution.

Torpor of the Liver, which attends jaundice and bilious fever, has frequently been removed, and the functions of this important organ restored, through the influence of vapour baths and active emetics. To restore the natural temperature of the blood and impart electricity to it, by the steam bath; to relax the system with lobelia; together with the influence of straining efforts to vomit, constitute the most effectual means of relieving congestion of the liver, and of restoring its functions. Lobelia administered by injection, and retained, exerts the same beneficial influence upon the system as when taken into the stomach.

Whenever the system experiences a severe shock, as by falling from a height, a violent blow, or by a severe burn or scald, digestion will be suspended; and if the accident should happen soon after, or within an hour or two after the patient has taken a hearty meal, the stomach should be evacuated by an active emetic. This may save the patient a great deal of suffering, and materially lessen the danger of the injury.

Thomsonian emetics may be employed with perfect safety dur-

ing every stage of pregnancy; and most of the derangements of the system consequent upon that state, — such as a feeling of fullness, dizziness, or violent pain in the head; pain and distress in the back and loins; extreme sickness; water brash; and distress at the stomach, may be relieved, and frequently entirely removed, for a time at least, by an active lobelia emetic, preceded by the use of an enema and a vapour bath. I have known females to be carried through from three to nine Thomsonian courses of medicine during the last two weeks preceding their confinement, invariably deriving benefit, and generally complete relief from distress, by their operation. A full course of medicine, administered just before confinement, is incomparably the best plan of treatment that has ever been adopted for insuring an easy and safe labour.

Child-bed fever, convulsions, and other forms of disease, which sometimes come on after confinement, doubtless, in the great majority of instances may be prevented, or, at least, the system be placed in a far better condition to resist the influence of the usual exciting causes of disease, by a course of medicine administered in the last stage of pregnancy.

The condition of the stomach excites a controlling influence over local diseases; such as painful swelling in every part of the body, swelled breast, and swellings in the groin, neuralgia, local inflammation, gout, disease of the kidneys, carbuncle, affections of the spine, abscesses, &c. In the early stage, painful swellings in the groin and in other glands may, in many instances, be brought to a crisis, and dispersed without suppuration taking place, by administering vapour baths and emetics, together with a proper use of injections, to assist the action of the bowels.

Just so much as the stomach is disordered will local diseases become generally more difficult of cure. I have known indolent ulcers, of several years' standing, to be healed in a few weeks, — chiefly by improving the condition of the system generally, and, more particularly, that of the stomach, by Thomsonian courses of medicine, — of which the emetic constitutes, undoubtedly, the most important part of the treatment.

Even when the seat of disease is located principally in the brain, emetics may be given, with great advantage, in many cases.

If a person be injured on the head, or on any part of the body, and the accident occur soon after the patient has taken a hearty meal, a prompt emetic should be given, or the patient be made to vomit freely by some means. If this be neglected, the stomach will be oppressed by a mass of undigested food, aggravating the symptoms, and causing the patient much suffering.

When any poisonous substance has been swallowed, an emetic should be given promptly. The third preparation of lobelia is the most effectual form of emetic in such cases.

When any substance is lodged in the throat, means should at once be taken to cause vomiting. Where this cannot be effected by running a finger into the throat, an emetic of lobelia should be given. If the patient cannot swallow an emetic, vomiting may be effected by administering one or two teaspoonsful of lobelia powder in warm water, by injection, and retained in the bowels. Besides producing vomiting, this treatment will relax the system, and thus tend to overcome the rigidity of the parts in which the foreign substance is lodged, and lessening the difficulty of its being removed.

Finally, in disease, the stomach is more or less coated with thickened tenacious secretions, for the removal of which there is no remedy so effectual as a lobelia emetic, given in combination with capsicum and a strong decoction of bayberry, or sumac.

The stomach possesses a very low degree of sensibility, so that its functions may be greatly depressed, or disordered, without the patient experiencing any symptoms of disease, except in parts remote from the stomach. One who is subject to a weakness in any part of the spine, will experience an increase of the disease by the stomach becoming more disordered than usual. In many instances, disease of the spine has been cured by the use of the vapour bath and emetics.

Eruptions of the skin, such as scald head, nettle-rash, and tetter, are occasioned, in general, by derangement of the digestive functions; and these eruptions may frequently be more effectually cured by emetics than by any external applications.

The operation of an emetic, and more especially of a full course of medicine, is of especial benefit as a means of preparing the system for surgical operations.

ON THE USE OF CATHARTICS, OR PURGATIVE MEDICINE.

EVERY substance which operates upon the bowels as an active cathartic, whether it be mineral or vegetable, is injurious.—There is a wide difference between restoring the natural action of the bowels by aiding nature, and that of provoking an unnatural action in them by means of cathartics. The intestines possess very little sensibility, excepting that portion called the rectum, which comprises only a few inches of their lower extremity; and it is not until the contents of the bowels pass down within a few inches of the anus, that the inclination to evacuate the bowels is felt. It

is only the lower end of the intestinal canal that is supplied with true nerves of sensibility. A substance, to be felt in any other portion of the bowels, must be of an irritating acrid nature. If there be a superabundance of acid in the bowels, and the person take freely of cayenne pepper, it will be very likely to occasion purging, by awakening, in some degree, the sensibility of the bowels to the impression of the acid. Substances thrown into the rectum, will stimulate the bowels to evacuate their contents, when the same substance, taken by the mouth, will never occasion purging.

We can judge of the injurious tendency of cathartics in a diseased state of the system, by ascertaining their effect upon the system when in a healthy condition. Every physician will at once admit that the use of cathartics is injurious to persons in health—directly tending to disorder the stomach, impair digestion, lessen the determination to the surface, weaken the power of generating heat, diminish the nervous influence, and ultimately prostrate the functions of the bowels. If a person in health take daily a dose of purgative medicine, sufficient to produce a free operation, and continue the practice a few days, it will disorder the stomach and weaken the functions of the bowels, so that they will be left either relaxed and irritated, or constipated.

“In disease, the excretions existing in the alimentary canal are a matter of little importance, the object being to promote those actions by which the excretions are formed; which being restored, the bowels will be enabled to relieve themselves.” — *Jackson*.

Costiveness is the consequence of the peristaltic action of the bowels being in a weakened condition. Hence, costiveness is the effect and not the cause of disease; or, at least, it is merely one link in the chain of effects arising from loss of vital power, or a weakened condition of the principle of life. A patient applies to a physician for advice. He tells the doctor that he has pain in the head; feels very drowsy and heavy; and has no appetite. The doctor inquires about the condition of the patient's bowels, and ascertaining that they are in a constipated condition, discovers a cause for the headach and drowsiness, and he directs a cathartic, in order to remove the difficulty. But the inquiry should always be extended further, to ascertain the cause of the costiveness, and “apply the axe to the root of the tree,” instead of employing means which merely change the symptoms, and interfere with the curative operations of nature. By tracing disease to its primary source, we find it to arise from loss of vital power; and this should always be kept in view in the treatment of disease. Medicines often get the credit of curing disease, even where they may have had the effect to increase the distress of the patient, and lengthen the duration of disorder.

It is no easy matter to determine the effects of some medicines

in slight attacks of disease, or in acute disease in general.—Thus a person, by some inaccuracy in diet, or from exposure to cold and dampness, feels indisposed to-day, takes a dose of salts, eats nothing, or at least only something very light, keeps himself warm, the physic operates, and to-morrow he will be almost well again,—except that he will be constipated a few days, in consequence of the salts he had taken. The patient attributes the restoration of his health to the dose of salts; yet doubtless his health would have been as speedily and more perfectly restored by the abstinence which he had observed, and being kept warm, without the purging.

Purging, like blood-letting, will modify the symptoms without removing the cause of disease; ultimately tending to disorder the system, and prostrate the vital forces. It will be admitted by every physician, that in a sunken state of the system, or in very aged persons, the use of purgative medicine is not only hazardous, but, in many cases, if given to the extent of exciting free purging, would cause the death of the patient.

It is by the efforts of nature that disease is cured. Medicines are only serviceable when they aid the efforts of nature. When the bowels are too inactive, or in any way disordered, the great object is to aid in restoring the power of heat, and of nervous influence; the only way by which the functions of the bowels can be restored to a healthy condition. The direct tendency of cathartics is to lessen the internal heat, and weaken the nervous power.

Cathartics are agents which do not harmonize with the laws of life; and when taken into the stomach, the constitution makes an effort to remove the offending substance by purging. The deleterious influence of cathartics provokes the bowels to action, upon the same principle that a portion of tainted meat will produce looseness of the bowels and violent purging.

It is urged by some, that many diseases pass off with a looseness of the bowels, and that nature sanctions the propriety of purging.—But it should be borne in mind, that the forced action from a cathartic is different from the action which results as a consequence of the bowels *recovering* their functions at the crisis of disease. In the first case, the bowels are aggravated and provoked to action; whereas, in the latter, it is the recovery of their lost functions.

Some have endeavoured to prove the advantage of using cathartics, by selecting a few isolated cases, where especial benefit appeared to result from their employment, the medicine having been given at a favourable period of the disease. Thus, a patient may have several courses of medicine administered, which may bring the disease almost to a crisis, and just at this time take a dose of cathartic medicine, and the next day the disease be broken

up;—not in consequence of having taken a purge, but because the disease was forming a crisis when the cathartic was taken; and although it does more harm than good, still, the disorder being just at its termination, the patient would improve more rapidly, and very erroneously suppose that he had received more benefit from the cathartic than from courses of medicine.

I have known patients relieved of rheumatic pains by being freely purged with powerful cathartics; but I have never yet seen a patient really benefited, or the cause of disease removed by such treatment.

A physician may obtain a large practice, whose course of treatment may in every instance be detrimental to the recovery of his patient;—*nature* still struggling against the disease and the treatment, health becomes restored, and the doctor receives much credit for his *skill*! more especially where a patient recovers who has been nearly killed by the treatment.

There are thousands of persons in the community who continue in bad health year after year, in consequence of the habitual use of purgative medicines. After commencing the use of purgatives, the bowels being weakened by them, they become more costive: to overcome this, more physic is taken, which may relieve, but it weakens digestion, and is followed by increased torpor of the bowels.—I have frequently conversed with persons who had been in the habit of taking a dose of purgative medicine regularly once a week or oftener, and had continued in this practice from five to fifteen years; the bowels finally becoming so torpid as scarcely ever to be moved, except provoked by the irritating effects of a cathartic; whereas, if no purgatives had been used, many of these patients might have enjoyed good health.

The exclusion of cathartics constitutes one of the distinguishing features of the Thomsonian practice of medicine; and no one can justly claim the title of Thomsonian who is in the habit of prescribing either *mineral* or *vegetable* cathartics. It is inconsistent to denounce all *mineral* poisons, and at the same time administer vegetable poisons, such as *mandrake*, an article which has been laid aside by the medical profession generally as too irritating to be used with safety; and yet many who claim to be Thomsonian doctors employ mandrake to a great extent in their practice. Castor oil, which is one of the mildest cathartics, occasions purging, because it is indigestible and offensive to the stomach and bowels.

Dr. Samuel Thomson used to say, that the practice of taking physic (purgatives) was like borrowing from Peter to pay Paul—which may afford some relief, but does not diminish the debt. In like manner, a dose of purgative medicine may afford relief, but it does not remove the cause of disease.

In disease that comes on suddenly, — more especially when at-

tended by fever, frequent changes in the symptoms and aspects of the disease take place, which are apt to be attributed to medicine that has had no other effect than to retard the curative efforts of the constitution. A professor in Jefferson college being called out into the country, in consultation, was told by the country physician that he found his patients, who had remitting fever, to bear purging so badly this season (1842), that he had ceased to employ cathartics altogether, and that some of his patients had gone fourteen days without a passage from the bowels. Laying aside cathartics was certainly correct, but why the doctor did not recommend enemas, appears somewhat singular.

In treating cases of constipation of the bowels, even of long standing, I have in many instances been agreeably disappointed by finding the natural action of the bowels to be in a great measure restored in the course of from two to four weeks, under a course of treatment in which no purgatives were used.

In certain conditions of the stomach and bowels, for instance, when they contain a portion of acrid secretions, the use of medicine that possesses no cathartic properties may be followed by purging. — Thus, cayenne pepper or composition powder, taken freely when the bowels contain a superabundance of acids, will increase the sensibilities of the mucous membrane, and may cause the acid or acrid secretions to operate as a purgative. By continuing the use of the same medicines until the acid is removed, then it may be taken in increased quantities and no cathartic effect will be produced. In like manner, a dose of purgative medicine may be made to operate, by giving stimulants to increase the sensibility of the bowels to the morbid impression of the cathartic, and stimulating the restorative efforts of nature to cast off the deleterious substance. — Cayenne does not therefore possess cathartic properties; its use is never followed by purging, except there be acrid secretions, or some deleterious substance in the bowels.

A deficiency of bile, in consequence of want of action in the liver, is a very common cause of costiveness; and under these circumstances, cathartics are decidedly injurious.

The object to be kept in view in the treatment of disease is to aid the efforts of nature; “to husband the resources of the constitution,” in order that lost action may be restored. Nature has established certain methods for removing disease, and for regaining her lost power; and the use of medicine, or other employment of means that do not harmonize with these curative actions, though they may change the symptoms and procure relief, still the designs of *nature* will be frustrated and her energies crippled. In illustration of what I have here asserted, I will suppose a patient who is sick of what is termed bilious fever, to be left entirely in the hands of nature, except so far as to take simple warm teas

and be protected from all injurious influences.—Watching the progress of the case, we find the fever continuing without any abatement, except at short intervals in the morning; the tongue becomes even more thickly coated, the bowels remain costive, and all the symptoms continue, without any perceptible change, for several days; but finally the tongue begins to clean along the edges, the fever abates, perspiration ensues, the appetite returns, and the function of the bowels is restored. Now, under such circumstances, by what method is disease removed? It is by the constitution “husbanding her resources”—retaining the heat by which these actions are sustained, which resist the influence of the causes of disease, and by which the secretions and all other functions are fully restored. Now, suppose such a case be placed under the treatment of a physician of the old school practice, and active cathartics given, causing a free operation upon the bowels: would this restore the lost function of the bowels? No: it would aggravate the bowels and drain the system of a portion of its strength. In this way, by frequent purgation and blood-letting, disease is in many instances prolonged to four or five weeks’ duration, which, if left in the hands of nature alone, would have found a crisis in less than two weeks, and the patient subjected to much less suffering.

There are means, however, by which *nature* may be assisted, the duration of disease shortened, pain relieved, and life prolonged. To Dr. Samuel Thomson are we indebted for the detection and exposition of the errors of the regular practice of medicine; the discovery of the true principles of medical science; and the introduction of a system of practice which does not clash with *nature’s efforts*, but operates in harmony with life; and when properly applied, will prove a safe and effectual means of restoring lost health.

It has been urged as an objection to the Thomsonian practice, that all diseases are treated alike, or that the same remedies are used in all cases. The fact that Thomsonians treat disease upon general principles, without regard to the name of disease, is in reality a strong point in favour of its correctness. A thousand different forms of disease may be produced by one general cause; and a course of treatment that will *assist nature* in one form of disease will do it in another. Thus, the same form of emetic that will cleanse the stomach when it has become disordered by exposure to cold, will also do the same when disordered through inaccuracies in diet, dissipation, loss of rest, exposure to foul air, &c.

ENEMAS. — INJECTIONS.

MANY important objects may be accomplished by the use of injections in cases of sickness; and in many instances they constitute the most important means for the cure of disease.

In disease, the bowels are generally either constipated or affected with diarrhœa; and in either case, the use of injections, though not always necessary, may nevertheless be employed with advantage. The mere evacuation of the fecal contents of the bowels, is not of so much importance in the cure of disease as is generally supposed. To restore healthy action in the bowels is the great object to be kept in view; and it is better that a patient submit to some unpleasant feelings from costiveness, than to harass his stomach and bowels by taking cathartics.

When aliments leave the stomach, they pass quickly through the small intestines, a distance of about thirty feet, in a liquid state, and when received into the large intestine are there retained to undergo a kind of second digestion. Hence, the seat of costiveness, in almost every instance, is in the lower bowels, and within the reach of the influence of injections.

“Whatever is good to cure disease, when taken into the stomach, is likewise good for the same purpose given by injection; as the grand object is to warm the bowels and remove canker. In all cases of dysentery, cold, piles, and other complaints, where the bowels are badly affected, injections should not be neglected. They are perfectly safe in all cases; and better that they be used ten times when not needed, than once neglected when they are. In many violent cases, particularly where there is danger of mortification, patients may be relieved by administering medicine in this way, when all other means would fail.” — *Dr. Samuel Thomson.*

Lobelia, administered by injection and retained, operates upon the general system as effectually as when taken into the stomach. Indeed, a greater degree of relaxation may be effected by the same quantity of lobelia administered by enemas, than when taken into the stomach. Often I have observed a most striking change for the better produced in violent attacks of disease, by a lobelia injection retained. Obstruction in the system, wherever situated, appears to be more effectually removed by relaxing the system with lobelia, than by any other means. Not that we are to depend, however, upon this treatment, to the exclusion of the use of stimulants, the vapour bath and emetics. There is probably no medicine so effectual in arousing the sensibility of the bowels as lobelia—causing the patient to feel his diseased condition; and by

exciting the disease-expelling power into action, distress in the bowels will be experienced; followed, however, in all curable cases, by a manifest and frequently remarkable change for the better.

Of the various methods of preparing Injections; together with further remarks in relation to their practical application.

Half a pint of warm composition tea, adding a teaspoonful of green lobelia powder, forms a suitable injection for ordinary cases of disease, where the symptoms are not of a dangerous or violent character, nor the bowels badly disordered.

Where there is reason to believe that the bowels are "cankered," or coated with thickened tenacious secretions or a false membrane, as they are in dysentery, diarrhœa, and in obstinate cases of disease of every description, the following form of injection will prove more effectual than the one before mentioned, namely:

Half a pint of bayberry or No. 3 tea, made very strong, and after it is strained or settled and poured off, add a large teaspoonful of the liquid of the third preparation of lobelia, or a teaspoonful of No. 6, and a teaspoonful of either brown or green lobelia powder.

In violent cases, the quantity of third preparation, or of the pepper and lobelia, must be increased to double or treble, or even to ten times the quantity above mentioned. Thus, in malignant forms of disease, as in what are termed typhus or congestive fevers, I have generally found it necessary to administer a large tablespoonful of the third preparation of lobelia at a time by injection, and have it repeated every two or three hours for several days in succession, in order to sustain vital action and prevent mortification. I have known patients to recover from malignant forms of disease chiefly, I believe, through the influence of actively stimulating injections, administered every hour or two, and in this way continued from one to four or five days. In some of these cases, the sensibility of the bowels was so low, that from four to six injections would be retained before an operation was effected, or the bowels made sensible to their impression.

The daily use of stimulating injections during "*confinement*," after child-birth, will prove an effective preventive against puerperal or child-bed fever, as it promotes the contractile power of the uterus and prevents stagnation of blood in the uterine vessels—a frequent cause of puerperal fever. It may be asked, will not lobelia injections relax the uterus? If there should be spasmodic contraction of the uterus, the use of lobelia will overcome the spasmodic contraction, but at the same time will promote the power of healthy contraction; just as in a case of spasm of the

neck of the bladder, lobelia injections, while they relax the spasm, increase the expelling power of the bladder.

By observing the character of the evacuations from the bowels during the course of disease, we perceive that about the time that a favourable crisis takes place, there will be more or less of a skinny-like substance escaping from the bowels, and which had previously coated their mucous membrane. To remove this substance from the lower bowels, (where it is chiefly situated,) the use of injections is particularly demanded. Thus, long-standing cases of dyspepsia are cured by the removal of a false membrane from the stomach and bowels, by means of courses of medicine and taking freely of composition powder, or of bayberry and pepper, together with the daily use of an enema. Powerful purgative medicines, though they may sometimes bring away false membrane, when not too firmly adherent, yet as they neither restore the lost functions of the bowels, nor tend to improve the condition of the blood, nor of the secretions, the patient, instead of being benefited, will be left in a worse condition, from the effects of the medicine; whereas, under the Thomsonian practice, the course of treatment that cleanses the mucous membranes restores their functions.

In cases of obstinate costiveness, and where the chief object is merely the evacuation of the bowels, the following will be found sometimes to answer a better purpose than those already mentioned.

A tablespoonful of salt,
Do. do. molasses,
And a pint of warm water.

This may be rendered more effectual by the addition of a teaspoonful of the third preparation of lobelia, or of the lobelia powder.

Simple Astringent Injections. — In bad cases of piles, the powerful stimulating injections should not be employed except under some peculiar circumstances, for instance, in paralysis of the lower extremities, or of the bladder, or rectum, suspended animation, or in cases of extreme prostration, from illness. When a patient is affected with piles, and ordinary injections are found to make the piles worse, I have never found any plan of treatment more effectual than a strong tea of witch-hazel, sumac berries, bayberry, and poplar bark, used by injection at bed-time, and retained until morning. This diminishes the piles, relieves the soreness of the parts, and generally procures a motion from the bowels in the morning.

Simple Lobelia Injections. — Immense benefit may very often be derived by placing the system under the influence of lobelia,

administered by injection, and retained ten or fifteen minutes; and indeed, no harm will arise from it, even though it should remain in the bowels many hours. In all violent attacks of disease, one of the most important indications is to relax the system by lobelia, either taken into the stomach, or administered by injection, in lukewarm water. If stimulants are employed in the injection, the lobelia will pass off before the system will be effectually influenced by it. In violent cases of croup, besides giving lobelia by the mouth, half a teaspoonful of the powder in a tea-cup of lukewarm water should be administered by injection, and this repeated if the case prove obstinate of cure. In severe cases of scarlet fever, attended with an undue determination of blood to the head, and, in fine, whenever there is vehement fever, attended by a hard and tense pulse, injections of lobelia powder in lukewarm water, by relaxing the system, will very greatly assist the efforts of the constitution to overcome obstructions, and restore the functions of the bowels.

In administering lobelia to infants and children, by injection, the quantity used must vary, to suit the age of the patient and the violence of the disease. Thus, for children under one year old, as much lobelia powder as will lay on a five-cent piece; or even less than this will be sufficient in ordinary cases. But when the symptoms are violent, as in severe croup, fits, &c., a much larger quantity may be required.

The practice of placing the system under the influence of lobelia, administered by injection and retained, is not to be confined exclusively to cases in which there is a high fever. Disease that has become seated, whether accompanied with fever or not, has often been removed by means of lobelia injections.

Case. — Some months since, a little girl was attacked with a very severe form of canker sore mouth; and various kinds of remedies, together with the use of the steam bath, and the usual stimulating injections, having failed to effect a favourable change in the symptoms, and the disease having continued nearly two weeks, a lobelia injection was administered and retained, which relaxed the system very much, aroused a new action in the bowels, occasioning considerable pain and distress for a time; but the symptoms of the sore mouth at once assumed a more favourable aspect, and in a short time it was well.

Case. — A young lady of nervous temperament was thrown into convulsions by being hit upon the neck with a nut-shell. Dr. Harris, of Newtown, Bucks county, was sent for, who prescribed the third preparation of lobelia. Ascertaining, however, that she could not swallow, and appeared insensible to the impression of the medicine when put in her mouth, and the spasms continuing,

the doctor desired the females present to administer an injection, consisting of a tablespoonful of the third preparation of lobelia, in some warm water. This was accomplished with considerable difficulty. The injection was retained; and appearing to lessen the violence of the convulsions, a second injection, similar to the first, was given; and this soon occasioned free vomiting, followed by a cessation of the convulsions, and a return of consciousness. After the lapse of a few hours, however, symptoms of returning convulsions came on; but the patient being then able to swallow the third preparation, it was given every time that the symptoms became manifest, and convulsions prevented.

Lobelia, retained in the bowels, will always produce for a time more or less pain and distress, by greatly increasing the sensibility of the parts, and, as it were, attracting the nervous influence to the bowels, removing obstructions, and restoring the internal capillary circulation necessary to carry on the functions of the bowels in a healthy manner. Patients may be effectually vomited by lobelia, administered in the manner just described; the vomiting and relaxation of the system even continuing longer than when an emetic is taken in the usual way.

In all cases of obstinate obstructions in a part, attended with violent pain and strong pulse,—as in severe pleurisy, inflammation of the brain, inflammation of the lungs, croup, &c.,—lobelia should be used freely: either given by the mouth, or administered by injection and retained. In some instances it will be necessary to repeat the injections at intervals of every four or five hours, with a view to overcome obstructions, if there be seated inflammation; to equalize the circulation of the blood and of nervous power. In this way we obtain all the benefits that can possibly result from relaxing the system by blood-letting, and without any danger of the serious consequences which not unfrequently result from the loss of blood.

Lobelia, administered by injection, exerts a more prompt and effective influence upon the kidneys, bladder, and uterus, than when taken into the stomach. Hence, in all cases of disease of any of these organs, or in parts within the vicinity of the lower bowels, the use of injections will constitute a very essential part of the treatment. Flooding after child-birth can be more effectually and promptly checked by stimulating injections, containing lobelia, administered to the bowels, than by any other means.

Violent inflammation of the kidneys, strangulated hernia, inflammation of the neck of the bladder, retention of urine, painful stricture of the urethra, and inflammation of the uterus, demand the prompt employment of lobelia injections, besides the usual constitutional treatment proper to be employed in such cases.

Habitual costiveness is rarely cured by the use of ordinary in-

jections alone; other means must be employed, as the circumstances of the case require. (*See article on Constipation.*) Sometimes a free use of cayenne pepper at meals will restore the natural action of the bowels.

In administering a course of medicine in deeply-seated disease, no matter by what name it may be called, it is a good practice to administer a stimulating injection previously to the steaming, and after the bath, repeat the injection, — composed simply of half a teaspoonful of lobelia powder in warm water, so that it may be retained, — and then give the emetic of the third preparation of lobelia, or some other preparation of lobelia, combined with stimulants, in bayberry tea.

It would appear that most persons, and even physicians, regard constipation of the bowels as more injurious to the system than the frequent use of purgative medicines. This is one of the popular errors, — introduced and established by false theory. The homœopathic physicians use neither purgatives nor injections; allowing their patients to continue eight, ten, and even twenty days, without a motion from the bowels; and their success in the treatment of disease is equal, if not more than equal to that of the allopathic practice.

A lady at Moorestown, N. J., continued nine days without any motion from the bowels, notwithstanding injections were administered daily. She experienced no apparent inconvenience from the constipation of the bowels; and being in a state of extreme prostration, this patient would probably not have recovered, if her stomach and bowels had been aggravated by cathartics, or even by laxatives; the mere stimulus of distention, arising from the presence of fecal matter in the bowels, assisting in supporting the strength of the patient.

Turpentine, administered by injections, has frequently proved successful in removing pain in cases of bilious colic. Take a tablespoonful of oil, or spirits of turpentine, and the yolks of two eggs; beat them well together, and then add a pint of warm water. This may be all administered at a time, and repeated if necessary.

Tonic Injections. — A decoction of Peruvian bark, rose willow, poplar, or of any of the vegetable tonics, administered by injection and retained, will exert the same influence upon the system as when taken into the stomach. Tonics may be administered in this way in cases where the stomach is too irritable to retain tonic medicines.

THOMSONIAN MATERIA MEDICA:

CONTAINING

A GENERAL DESCRIPTION

OF THE

MEDICAL PROPERTIES AND USES

OF THE

VARIOUS MEDICINES AND COMPOUNDS

EMPLOYED IN THE

THOMSONIAN PRACTICE.

LOBELIA INFLATA — EMETIC HERB.

THERE are several species of lobelia; none of which, however, except the *inflata*, appear to possess medical properties of sufficient importance to entitle them to a place in the materia medica. The *lobelia inflata* presents several peculiarities by which it may very readily be distinguished from every other plant. It grows in every kind of soil, but is to be found most plentifully in old pasture fields, and in fields that have been in grass a year or longer. Lobelia does not come to maturity the first year of its growth. It is a *biennial* plant; rising but very little above the surface of the ground during the first summer, and on the following one it blossoms and seeds. "The young plant may be seen in the latter part of summer, and during the autumn, with its leaves flat upon the ground, spreading out in the form of a star; and it remains in this situation through the winter, resisting the effects of the frost and snow, and arrives at maturity the ensuing year. By cultivation, however, lobelia becomes an annual; that is, if the seeds be deposited in the ground early in the spring, and the season is favourable, they will sprout and shoot up stems; and by the expiration of the autumn, the plant will have passed through the various stages of its growth." Lobelia does not grow in England, nor is it probable that the climate of that country would

admit of its cultivation, excepting in gardens or hot-houses. Europe, according to botanical works, affords only three species of lobelia, neither of which is the "*inflata*."

No one, except Dr. Samuel Thomson, has any just claims to the discovery of the medical virtues of lobelia. This, like many of the most useful discoveries that have been made, was the result of accident. Thomson, during a period of twenty years, commencing with early boyhood, had often observed the singular effect of lobelia upon persons, by chewing a small portion of the plant, before it occurred to him that it possessed any valuable medical properties. The small quantity taken, and the probable healthy condition of those who were induced to take it, affords an explanation, why the knowledge of its peculiarly valuable medical qualities so long escaped the discriminating mind of Thomson.

The idea of lobelia being useful as medicine, originated with Thomson from observing its powerful and beneficial effects upon a man in bad health, who had swallowed some, through motives of mere curiosity. The man became very much relaxed, vomited freely, sweat profusely, and in a short time after ate a hearty dinner, and declared that he never had any thing to do him so much good. — This circumstance induced Thomson to make a trial of it for cleansing the stomach, which resulted in the conviction that it possessed important medical properties — that it was powerful in removing disease, and harmless to the system.

"In giving a description of this valuable herb," says Dr. Thomson, "I shall be more particular, because it is the most important article made use of in my system of practice;—without which it would be incomplete, and the medical virtues of which, and the administering of it in cases of disease, I claim as my own discovery. The first knowledge I ever had of it was obtained by accident, more than forty years ago; and I never had any information whatever concerning it, except what I have gained by my own experience. A great deal has been said of late about this plant, both in favour and against its utility as a medicine; but all that the *Faculty* have said or published concerning it, only shows their ignorance on the subject; for there is very little truth in what they have stated concerning its medical properties, except wherein they have admitted it to be a cure for the asthma."

The extraordinary influence exerted upon the system by lobelia, has doubtless induced many to believe that it is poisonous. The assertion, however, that lobelia is a poison, is not true; "but, on the contrary," as Dr. Thomson observes, "there is no vegetable that the earth produces more harmless in its effects on the human system, and none more powerful in removing disease and promoting health."

The great majority of medical men have set their faces against

lobelia, and the Thomsonian practice, in general, with a degree of prejudice and stubbornness, which reflects no credit upon the profession. At the trial of Dr. Frost, of New York, and on other occasions, where regular physicians have given testimony before "courts of justice," in relation to the properties of lobelia inflata, their evidence has been based upon the information they had obtained from medical authors who knew as little as themselves of its properties from experimental observation.

Some of the regular profession, who have written upon the subject of the medical qualities of lobelia, have ventured to speak favourably of the article. The following extracts are selected from different authors.

"I am confident," observes Professor Tully, of Yale College, "the old women's stories in the books to the contrary notwithstanding, that lobelia is a valuable, a safe, and a sufficiently gentle article of medicine; and I think the time will come when it will be much better appreciated. Little, however, of its value can be specified within the compass of a single sheet of paper."

Dr. Eberle, in his Practice of Medicine, says: "The lobelia inflata has proved an excellent remedy in my hands in whooping cough. It not only mitigates the violence of the cough, but it has appeared to me unequivocally to shorten the course of the disease in several cases." The same author, in his Materia Medica, observes: "I have had several striking examples of the good effects of lobelia in asthma. Its operation is, indeed, often surprisingly prompt and effectual. I have known the most frightful paroxysms completely allayed in less than fifteen minutes. Even where the disease depended on organic affections of the heart, it has speedily as a general rule, mitigated the distressing difficulty of breathing. As an emetic, I have employed it in several cases of croup, with very great benefit."

"It has been my misfortune," observes Dr. Cutler, "to be an asthmatic for about ten years. I have made trial of a great variety of the usual remedies, with very little benefit. The last summer, I had the severest attack I had ever experienced. It commenced early in August, and continued eight weeks. Dr. Drury, of Marblehead, also an asthmatic, made use of the tincture by the advice of a friend, in a severe paroxysm, early in the spring. It gave him immediate relief, and he has been entirely free from the complaint since that time. In a paroxysm which, perhaps, was as severe as any I ever experienced, and the difficulty of breathing extreme, I took a tablespoonful of the tincture made of the fresh plant. In three or four minutes, my breathing was as free as it ever was, but I felt no nausea at the stomach. In ten minutes, I took another spoonful, which occasioned sickness. After ten minutes, I took the third, which produced sensible effects upon the coats of the stomach, and a very little vomiting,

with a kind of prickly sensation through the whole system, even to the extremities of the fingers and toes. The urinary passage was perceptibly affected, by producing a smarting sensation in passing urine; but all these symptoms very soon subsided, and a vigour seemed to be restored to the constitution, which I had not experienced for years. Besides the violent attacks, I had scarcely passed a night without more or less of it; and often so as not to be able to lie in bed. Since that time, I have enjoyed as good health as, perhaps, before the first attack."

Dr. Waterhouse, for many years a professor* in the medical department of Harvard University, observes: "I have had ample proof of the efficacy and safety of lobelia in a number of cases, and have reason to value it as equal to any article in our materia medica. I not only give it to my patients, but take it myself, whenever I have any occasion for an emetic."

Medical Properties. — The result of experiments made by Mr. William Proctor, a chemist of Philadelphia, proves the active principle of lobelia to be a volatile alkaline substance. It has been named *lobelina*. Mr. Proctor having obtained some lobelina, administered a large dose of it to a cat. The animal became sick, very much relaxed, and remained so several hours. After the influence of the medicine passed off, the animal was well, and ate as usual.

The medical virtues of lobelia are destroyed by boiling, unless a portion of acid be present.

Uses. — Combined with astringents and stimulants, lobelia may be regarded as the best emetic known.

The accumulated experience of thousands of observing and intelligent persons, for half a century, fully sustains the views of Dr. S. Thomson, in relation to the medical virtues of lobelia. Taken in emetic doses, it awakens sensibility in the stomach; the patient feels his diseased condition; an internal reaction is established; "the disease-expelling power of the organization is stimulated to action," and more benefit realized, in many instances, from one full operation of this kind, than can be obtained from any other course of treatment.

The general complaints that prevail during infancy and childhood frequently depend upon a foul stomach, and the facility with which the stomach may be evacuated by a lobelia emetic, and the relief almost sure to follow the operation, places within the reach of parents a safe and effectual means of relieving the distress accompanying the diseases of children.

Taken in broken doses, lobelia is probably superior in efficacy to any other article, as an *expectorant*, in cases of asthma, catarrh, recent cough, pleurisy, inflammation of the lungs, &c.

Pills, composed of equal quantities of brown lobelia and cayenne, may be used as a general medicine in all cases of disease, with almost certain benefit in curable cases, and without injury in any case.

The *green lobelia*, used as snuff, either alone or mixed with bayberry powder, has cured cases of polypus of the nose. It may be used in this way for catarrh in the head, and all complaints affecting the mucous membrane of the nose.

Lobelia powder, with an equal quantity of slippery elm, wet with warm water, constitutes the most efficient form of poultice that can be applied in local inflammation, such as attends biles, felons, &c.

Preparations of Lobelia.

Green Lobelia Powder. — To prepare green lobelia powder, the herb should be gathered when in blossom; dry it in the shade, and as soon as it is thoroughly dried, strip or beat off the leaves and pods, reduce it to a fine powder, and keep it secluded from the air, dampness, and from light. This forms the *green lobelia powder*. This preparation of lobelia is generally employed as an emetic in ordinary cases of disease, and for children in general. It is usually given in strong composition tea, or in a strong decoction of bayberry or sumac, adding a portion of cayenne or of No. 6.

Tincture of Lobelia. — To prepare a tincture of lobelia, take the freshly-dried herb in any stage of its growth, before the leaves become yellow, and put it in diluted alcohol, whiskey, or in madeira or sherry wine. — Tinctured in *vinegar* it is a worthless preparation. The tincture is a convenient form of administering lobelia to children, as an expectorant in whooping cough, and affections of the breast in general. Ordinary attacks of croup may be cured by giving promptly and freely of the tincture of lobelia. As an emetic, the lobelia powder or the third preparation is to be preferred to the tincture; but when it is desired to place the system under the influence of lobelia in a moderate way, as in cases of tight cough, disease of the chest in general, dyspepsia, palpitation of the heart, scrofula, and, in fine, in a great variety of cases of disease, the use of the tincture of lobelia forms a very convenient and useful preparation, given to an extent to produce a slight degree of nausea. I have observed the use of the tincture of lobelia, taken in doses of from half to a teaspoonful every hour or two, to be attended with very great benefit in very many cases of dyspepsia, consumption, and in diseases of the breast in general.

Tincture of lobelia forms a substitute for the various kinds of anodynes in general use, such as Godfrey's Cordial, paregoric, and other preparations containing opium. Given to infants and children in small doses, varying from five to twenty drops, it quiets restlessness, and disposes to sleep. Administered in this way, lobelia has a soothing influence upon the system. Lobelia is not narcotic — it possesses no such properties.

Taken in small doses, by those who are attending upon the sick, the tincture of lobelia will be useful in protecting the system from disease.

Syrup of Lobelia.

To make a Syrup of Lobelia. — Take half a pound of either the brown or green lobelia, a gallon of water, and half a pint of vinegar; boil or steep half an hour, and pass it through a displacer; then add eight pounds of sugar, and steep it another half hour; and when it cools, add a quart of the alcoholic tincture of lobelia.

This may be used as a substitute for the tincture of lobelia in all cases.

Lobelia Seed. — To obtain lobelia seed, the herb should be collected when the pods have turned yellow. If left until the capsules are fully ripe and dried, the pods being open at the top, the seed will fall out, unless great care be taken in gathering. — To prepare the seed for use, they must be finely pulverized in a mortar or by grinding.

The lobelia seed exerts a much more powerful influence upon the system than the green powder, or the tincture. The *alarming symptoms*, as they are called, are seldom produced by the use of any other preparation of lobelia than the seed. The brown lobelia, administered in full doses, will rarely fail of relaxing the system; and this is a point of great importance in the cure of disease attended with high fever or violent pain; for instance, cases of strangulated hernia, peritoneal inflammation, strangury, inflammatory rheumatism, and violent fevers, such as often attend scarlet fever and small-pox; — the brown lobelia will prove more efficient in such cases, and should be employed in preference to the green.

Third Preparation of Lobelia.

Directions for Preparing. — Take an ounce of lobelia seed pulverized; an ounce of cayenne pepper; and an even tablespoonful of nerve powder. Mix them together, and add between half a pint and a pint of No. 6. To be kept in vials or bottles tightly

corked, and not allowed to remain in a hot place. This preparation, given in strong bayberry or No. 3 tea, forms an efficient emetic. It is a powerful agent for assisting nature to overcome disease, and may be used with perfect safety. The dose is from a teaspoonful to a tablespoonful; to be repeated as the circumstances of the case may demand. I knew an instance where a child, but nine months old, took three ounces of the third preparation of lobelia during one afternoon. It was a case of croup, which had continued two or three days, before this thorough treatment was adopted. The patient recovered through the agency of the treatment.

The third preparation of lobelia is particularly adapted to violent attacks of disease, as in fits, bilious colic, cholera morbus, epidemic cholera, locked jaw, poisons taken into the stomach, suspended animation from drowning, lightning, or from inhaling carbonic acid gas; difficult cases of croup and asthma; gout, palsy, and in all cases of violent pain.

In preparing emetics for adults, I generally combine the third preparation and lobelia powder. In all cases where the strength of the system is in a sunken condition, in protracted fevers, malignant small-pox, measles and scarlet fever, where the eruption is slow in appearing, for want of vital action; or where there is a tendency to a retrocession or striking in of the eruption, the use of the third preparation of lobelia is particularly called for.

In many cases, for instance, in fevers, where the patient is very low, the third preparation of lobelia may be taken in teaspoonful doses, repeated every hour or two, and continued a day or even longer, without occasioning vomiting. If it should not cause vomiting, however, it need not occasion the least degree of anxiety, as it can do no harm under any circumstances.

To sustain vital action, and prevent mortification in malignant forms of disease, — for instance, in the advanced stages of what are called fevers, — there are no means more effectual than the free use of the third preparation of lobelia in the stomach and administered by injection. The quantity to be used must be regulated by the effect produced. In some instances I have found it necessary to use a tablespoonful or more in an injection; and this repeated every two or three hours, and continued several days and nights in succession, and with the most happy effects, especially in low forms of fever.

In treating of the third preparation of lobelia, Dr. Thomson observes: — “This preparation is for the most violent attacks of disease, such as locked jaw, bite of a mad dog, drowning, fits, spasms, and in all cases of suspended animation, where the vital spark is nearly extinct. It will go through the system like electricity, giving heat and life to every part. In cases where the spasms are so violent that the patient is stiff, and the jaws become

set, by pouring some of this liquid into the mouth, between the cheek and teeth, as soon as it reaches the glands at the root of the tongue, the spasms will relax, and the jaws will become loosened, so that they will open; then give a dose of it, and as soon as the spasms abate repeat it, and afterwards give a tea of No. 3, as prepared for canker.—This course I never knew to fail of giving relief. It is good in less violent cases, to bring out the measles and small-pox. * * * * * I have cured three dogs with this preparation, who were under the most violent symptoms of hydrophobia; and one of my agents cured a man with it who had been bitten by a mad dog; and I have not the least doubt of its being a specific for that disease.” — *Dr. S. Thomson.*

I have never known of a patient being suffocated by having the third preparation of lobelia poured into the mouth, even where the patient was in a state of unconsciousness at the time.

In giving the third preparation as an emetic, and on ordinary occasions, it should be given in bayberry or No. 3 tea, made very strong.

Externally applied, the third preparation of lobelia will prove beneficial in cases of rheumatism, lumbago, palsy, erysipelas, asthma, weakness of the spine, pain in the side, dropsical swellings, chronic pleurisy, chilblains, some species of tetter, and in tic-doloureux.

Compound Lobelia Pills.

Directions for making. — Mix equal portions of pulverized lobelia seed and cayenne pepper, and add sufficient mucilage of gum arabic, or liquorice dissolved in water to the consistence of molasses, to render the mass of a proper texture for working into pills.

The compound lobelia pills may be used as a general medicine, where patients prefer taking medicine in the form of pills. They are particularly adapted to cases of dropsy; as the desired impression may be made by medicine, without the use of liquids. Where a disease has become seated, as in dyspepsia, rheumatism, gout, asthma, tetter, scald-head, consumption, costiveness, jaundice, St. Vitus's dance, piles, palsy, neuralgia, scrofula, &c., these pills may be employed in the place of the stimulating teas; and as intermediate medicine, where courses of medicine are given. The use of these pills will in many instances occasion more or less uneasiness and pain in the bowels, until, by their use, a more natural warmth and action are restored to the bowels; and then they will cease to produce pain, unless taken in large quantities.

The use of these pills promotes the NATURAL action of the bowels. They possess no cathartic properties. If there be an accumulation of acid in the bowels, a free use of these pills may cause the acid to be more sensibly felt, and in this way occasion purging. But when the acid is removed from the bowels, the pills will not occasion purging.

Finally, the compound lobelia pills may be employed as a general medicine in all kinds of complaints, until the disease forms a crisis, and the condition of the patient requires the use of tonics. They occasionally excite free vomiting;—more especially when the patient's stomach is very foul. They can do no injury under any circumstances.

Children, subject to what are usually called worm symptoms,—such as irregular appetite, costiveness, distention of the belly, itching of the nose, restlessness at night, &c., may often be cured by giving them two compound lobelia pills after each meal, and at bed-time, and continuing their use for some days.

Dose.—In case of rheumatism, dropsy, &c., when it is proper to place the system under the continued influence of medicine, from two to four pills may be taken about every hour or two. In ordinary cases of dyspepsia and costiveness, where the patient is not confined to the house, from two to four or five of the pills may be taken at bed-time. Emetics of lobelia may be administered in the form of pills; the patient taking freely of bayberry tea when sickness comes on.

Emetic Doses.—From three to five of the lobelia pills, taken at intervals of from twenty to thirty minutes, until four or five doses are taken, will in general prove an effectual emetic, provided the patient be in a condition favourable to their operating:—covered warmly in bed, and composition tea taken to aid their operation.

STIMULANTS

Which raise and sustain vital action, and assist the efforts of nature to remove disease.

CAPSICUM—CAYENNE PEPPER.

“NUMEROUS species of capsicum, inhabiting the East Indies and tropical America, are enumerated by botanists, the fruit of which, differing simply in the degree of pungency, may be indiscriminately employed. The capsicum *baccatum* or bird pepper, and the capsicum *frutescens*, are said to yield most of the cayenne pepper brought from the West Indies and South America; and Ainslie informs us that the latter is chiefly used in the East Indies. The species most extensively cultivated in Europe and this country, is that recognised as officinal by the pharmacopœiæ, namely: the capsicum *annuum*. The first two are shrubby plants; the last is annual and herbaceous.” — *U. S. Dispensatory*.

Capsicum is a pure and permanent stimulant; its direct effect upon the system, when taken, is to raise and support vital action; it restores a natural warmth to the system, increases the power of generating nervous influence, by which the secretions are increased, a determination to the surface is produced, and the circulation of the blood equalized. Cayenne pepper, therefore, is an important agent in the treatment of disease; always assisting nature and operating against disease, whether it be attended by chilliness or fever. It is congenial to the living principle in man as certainly as that the sun is congenial to the life of the vegetable kingdom.

The greater part of the cayenne pepper sold by grocers and apothecaries, contains very little strength, and therefore should not be used as medicine.

The American pepper, though inferior in strength to the imported, will answer in ordinary cases of disease, provided it be properly dried and prepared. The African pepper, however, is always to be preferred, when it can be obtained pure.

Large quantities of damaged capsicum are landed in our sea-port towns, so that the greatest degree of circumspection is necessary in purchasing the article. Those who deal largely in Thomsonian medicines should either purchase the article in the

pod, so that they may know its qualities, and have it ground under their own inspection, or purchase it of those who are judges of the article, and have it ground in mills where no poisonous drugs are allowed to enter.

"I shall not," says Dr. Thomson, "undertake to dispute but that *cayenne* had been used for medical purposes long before I had any knowledge of it; but it is equally true that the medical faculty never considered it of much value, and the people had no knowledge of it as a medicine, till I introduced it, by making use of it in my practice. That this is one of the safest and best articles ever discovered for the removal of disease, I know to be a fact from long experience. Mention is made of *cayenne*, in the Edinburgh Dispensatory, as chiefly employed for culinary purposes, but that of late it has been employed in the practice of medicine. The author says, 'There can be little doubt that it furnishes one of the purest and strongest stimulants which can be introduced into the stomach; while at the same time it has nothing of the narcotic effects of ardent spirits. It is said to have been used with success in curing some cases of disease that had resisted all other remedies.' All this," continues Thomson, "I am satisfied is true; for if given as a medicine, it will always be found useful; but all the knowledge they had of it seems to have been derived from a few experiments that had been made, without fixing upon any particular manner of preparing or administering it. * * * * * When I first began to use this article, it caused much talk among the people of Portsmouth and the adjoining towns; the doctors tried to frighten them, by telling them that I made use of *cayenne* pepper as a medicine, and that it would burn up the stomach and lungs as bad as vitriol. The people generally, however, became convinced, by using it, that all that the doctors said about it was false; and thus proved their ignorance of its medical virtues, and that in making these assertions they were influenced by a feeling of malice toward *me*. It soon came into general use, and the knowledge of its being useful in curing disease was spread all through the country. I have made use of *cayenne* in all kinds of disease, and have given it to patients of all ages and under every circumstance that has come under my practice; and can assure the public that it is perfectly harmless, — never having known it to produce any bad effects whatever. It is doubtless the most powerful stimulant known; it is congenial with nature, having a direct tendency to raise and maintain the natural heat of the system, upon which life and health so materially depend. It is extremely pungent, and when taken, sets the mouth, as it were, on fire; this lasts, however, but a few minutes, and I consider it essentially a benefit, in many cases, as it causes a free flow of saliva from the glands of the mouth and throat."

To one not fully acquainted with the effects of cayenne pepper upon the system, it may appear a strange practice to give the article in cases of fever. Singular as it may seem, it is nevertheless true, that excepting lobelia there is no other article of equal value with cayenne pepper in the cure of fevers in general. As to the declarations of physicians, that the use of cayenne internally will aggravate fever, or that it will increase inflammation in the stomach and bowels, given even in large quantities, this is contradicted by the experience and observation of thousands of persons, possessed of as much common sense, and as capable of appreciating the effects of medicine as the medical profession.

Experience has proved that cayenne pepper is one of the best remedies known for inflammation of the throat; and where is the proof that it has not the same curative effect in inflammation of the stomach and bowels? Cayenne relieves inflammation of the stomach and bowels by exciting the secretions.

In ordinary cases of colds, catarrh, mild cases of fever, recent attacks of dyspepsia, or almost any kind of ailment, not too deeply seated, the free use of cayenne pepper tea, together with particular attention to diet, and avoiding exposure, will prove effectual in restoring a healthy state of the system.

The efficacy of a free use of cayenne pepper in promoting digestion no one will pretend to deny. Its use will be found beneficial even in those cases of indigestion or dyspepsia attended by extreme tenderness at the pit of the stomach. The best time to take cayenne, in cases of dyspepsia, is with food, or shortly after meals.

In dysentery, where most medical men, influenced by the doctrines of the schools, consider the use of active stimulants very improper, yet, even in the most inflammatory form of the disease, cayenne pepper may be used not only with safety, but with especial benefit. The use of cayenne pepper is particularly indicated in cases of dropsy, jaundice, long-standing cases of tetter, costiveness, flatulency, rheumatism, and gout. In fine, it may be used with perfect safety in all cases of disease.

The utility of cayenne for the cure of scarlet fever and malignant sore throat, is admitted even by the medical profession; and would they but try its efficacy in all other forms of fever, they would find it as beneficial as in scarlet fever, notwithstanding its use is contra-indicated by the popular, though false doctrines propagated in the schools of medicine. I once heard Professor Revere, of Jefferson college, observe, that almost every one knew cayenne pepper to be one of the best remedies for an inflamed throat; "and it is impossible," said he, "for us to explain why it is not equally beneficial in inflammation of the stomach or bowels."

Cayenne pepper, applied to the skin, will produce redness, in-

crease the heat of the part, and aggravate acute inflammation on the surface of the body; but when applied to a secreting surface, as the mucous membrane of the stomach or bowels, it promotes the secretions from these surfaces, and in this way relieves inflammation, and assists in bringing about a favourable termination to disease. Cases of chronic diarrhœa of long standing have been cured by using freely of cayenne pepper.

The usual dose of cayenne is from a half to a teaspoonful. It is usually taken in the form of tea, made by pouring boiling water upon the powder, and then sweetening. Another way to take pepper, is to mix the powder in lukewarm or cold water. Thus prepared, it is less pungent, and it is equally as efficacious as the tea.

In certain conditions of the stomach, and more especially when it is empty, taking a dose of cayenne will occasion pain for a few minutes. The pain appears to rise in consequence of a sudden development or generation of gas or wind in the stomach,—the pain subsiding as soon as wind is expelled. No harm is to be apprehended, however, from pain occasioned in this way; but, on the contrary, we often find that patients experience a remarkable change for the better, immediately after experiencing a severe spell of pain from taking a dose of cayenne pepper. About four years ago, I prescribed medicine to a man who had been dyspeptic, and otherwise in feeble health for twenty years; and on taking the first dose of Thomsonian medicine, which consisted of a teacup half full of strong bayberry tea, and a large teaspoonful of cayenne pepper, (instead of half a teaspoonful, as I had directed,) he was suddenly seized with violent pain in the stomach, a cold sweat broke out, and for some time he was helpless. After the pain had subsided, he fell asleep, slept several hours, and when he awoke declared that he had not felt so well at any time for many years. The patient continued the use of the medicine, and his health was soon restored.

When patients experience severe pain in the stomach, after taking a dose of pepper, warm applications—a hot brick, or flannel wrung out of hot water—applied to the pit of the stomach, will generally relieve the pain. Taking pepper tea in very small quantities, frequently repeated, will seldom occasion pain, even on an empty stomach.

Combining other stimulants with cayenne,—as ginger or black pepper,—will render it less liable to cause pain in the stomach.

As a gargle in recent attacks of sore throat, and in cases of ulceration of the throat in scarlet fever, there is no remedy, in point of efficacy, equal to cayenne pepper. A preparation of vinegar, salt, and cayenne pepper, has been a long time in high

repute in some southern countries, as a remedy for malignant sore throat and scarlet fever.

Tonics and other medicines are rendered more active and efficient, by being combined with a portion of cayenne.

Cayenne pepper, applied *externally*, is very useful in many cases, as in rheumatism, dropsy, and in all cases where the use of external stimulants are called for. Poultices of pepper may be employed with advantage in a great variety of cases, — as in chronic rheumatism, cold abscess, white swellings, hip disease, indolent ulcers, disease of the spine, and in all cases when it is necessary to stimulate the vessels of a part, by the direct application of a stimulant.

THOMSON'S COMPOSITION POWDER.

To make Composition Powder. — Take three pounds of finely-ground bayberry-root bark, one and a half pounds of best ginger, three ounces of cayenne, and three ounces of cloves; all finely pulverized, thoroughly mixed, and passed through a sieve.

A variety of formulas for preparing composition powder have been published as an improvement upon that of Thomson's. — Some recommend the addition of butterfly root (*asclepias tuberosa*); others, sassafras root; either of which, however, are comparatively useless articles, and when added to Thomson's composition powder, they occupy the place of more efficient articles.

The composition powder, besides its stimulating qualities, contains astringent and detergent properties. It may be used with safety in all cases of disease, and it is more employed by Thomsonians as a general medicine, than any other article or compound.

Dose. — The usual dose of composition powder is a teaspoonful scalded in a teacup, half or two-thirds full of boiling water, sweetened, and drunk warm. This is the proper mode of preparing the composition, when the patient is confined to the house, or when it is taken on going to bed; and also when it is desired to produce perspiration.

The following is a better way of preparing the composition for persons exposed to the weather, namely: Take of composition powder and sugar, each, a teaspoonful; rub them together, dampened with a little water; then add a teacup half full of lukewarm or cold water; stir it together well, and take before it settles.

A dose of composition, by increasing the sensibility of the stomach, will sometimes cause pain, frequently nausea, and even in

some instances occasion vomiting, followed almost invariably with benefit to the patient — never to the injury of the system.

In preparing composition, even for children, it should be made strong and well sweetened; — a wineglassful of composition tea, made strong, will, in general, prove more beneficial to the patient than three times the quantity, if made weak.

BLACK PEPPER.

BLACK pepper may be used with advantage in cases of excessive vomiting, intermitting fevers, cholera morbus, flatulency, and as a substitute for the capsicum, when the latter cannot be obtained. Some practitioners combine it with Peruvian bark, in cases of ague, or intermitting fever. A strong tea of black pepper is very useful as a gargle in common sore throat. Mixed with whiskey or vinegar, it constitutes a useful gargle in elongation of the uvula, (falling of the palate.)

Black pepper forms one of the important ingredients in the celebrated remedy for piles, called Ward's paste.

The dose of black pepper is from half to a teaspoonful of the powder, or the grains may be swallowed whole.

Black pepper gives to boiled milk an agreeable flavour, and may be given in this way to children, with especial benefit, when the system is in a weakened condition, requiring stimulants.

GINGER.

THE ginger plant "is a native of Hindostan, and is cultivated in all parts of India. It is also cultivated in the West Indies, whither it was transplanted from the east." — *U. S. Dispensatory*.

The common ginger of the shops is obtained almost exclusively from Calcutta. The best ginger comes from Jamaica, and is usually termed Jamaica ginger, or white ginger. The superiority of the Jamaica ginger arises from the manner in which it is dried. The best roots are selected, and the skin taken off; they are then dried separately in the sun. The common ginger, as sold by storekeepers and apothecaries, is often deprived of almost all its strength by long keeping, and altogether unfit for medical purposes. In making composition powder, the Jamaica, or white ginger, should be used, unless the common ginger can be obtained fresh and of good quality.

Medical Properties. — Ginger is a pure, mild stimulant, and, as such, it may be employed in all cases of disease; its use can in-

jure no one. Ginger tea forms a valuable medicine for infants and children. In fine, it may be employed as a mild stimulant in all cases of disease.

Ginger tea is much employed as a remedy for colic in infants. Its use promotes digestion and lessens the liability to colic.

In mild cases of measles, scarlet fever, small-pox, and varioloid, ginger tea may be employed as a general stimulant.

Combining ginger and cayenne in about equal portions, forms a sufficiently active stimulus for general use in the treatment of disease. Tonics may be rendered more efficient and less unpleasant to the taste, by the addition of a portion of ginger.

Ginger Porridge.—In England and other European countries, ginger tea is frequently used in the place of simple water, in making porridge and oatmeal gruel. It is not only made use of in this way for the sick, but the flavour of the food is so much improved by the ginger, that it is preferred on this account.

Tincture of Ginger.—To make tincture of ginger of a superior quality, put half a pound of bruised (not ground) Jamaica ginger to a quart of pure alcohol (not diluted); let it macerate a few days, and then filter it through paper.

The usual dose of the tincture of ginger is a teaspoonful. It may be taken in water sweetened, or added to other kinds of medicines.

“Ginger is a grateful stimulant and carminative; and is often given in dyspepsia, flatulent colic, and the feeble state of the alimentary canal, attendant upon atonic gout. It is an excellent addition to bitter infusions and tonic powders; imparting to them an agreeable warming and cordial operation upon the stomach.”
U. S. Dispensatory.

ASTRINGENTS.

THOMSON'S NUMBER THREE.

(*"Medicine for Canker."*)

SOME of the vegetable astringents are adapted to accomplish important purposes in the practice of medicine. To cleanse the mucous membranes, correct morbid secretions, and give increased tone and energy to the system, are important results effected by the use of this class of medicines.

Bayberry-root bark, and the leaves and berries of the upland sumac, are those chiefly employed as internal remedies, in the Thomsonian practice. They are free from any deleterious properties, and may be used without risk of injury in any case of disease. During the early stage of fever, when the tongue is dry, a portion of cayenne or ginger should be added to the astringent medicines.

Formerly, the astringent medicines were taken either in decoction, or the powder mixed with water. Of late, the *extract* of bayberry, combined with cayenne, and formed into pills, has been substituted in Philadelphia and other places; evidently increasing the medicinal powers of this medicine.

BAYBERRY.

(*Myrica Cirtifera.*)

OF the articles mentioned under the head of astringents, the bark of bayberry root is the best adapted to general use as an internal remedy.

Bayberry-root bark should be collected in the fall after the commencement of frost, or early in the spring, before the leaves put forth. Bayberry is a very important article in the Thomsonian practice, and great care should be taken to obtain that which is good. There are large quantities of bayberry sold that have been collected in an improper season, mixed with other bark, and mouldy, and consequently it possesses but little, if any medical

virtue. Composition powder, made of such bayberry, as above mentioned, old and worm-eaten ginger root, and damaged pepper, would prove a useless medicine; whereas, when prepared of good materials, it constitutes one of the most valuable medicines ever compounded.

The storehouses of wholesale druggists often contain large quantities of bayberry bark wholly unfit for medicine,—being collected at an improper season, mixed with trash of various kinds, and much of the bark itself in the first stage of decay.

The best bayberry is found in a sandy soil, and near the sea. The principal Thomsonian store in Philadelphia is supplied with bayberry from the coast of New Jersey, where it is collected in the proper season.

To prepare for taking.—Bayberry may be taken either in decoction, or the powder finely pulverized, mixed with sugar and water, or the extract formed into pills. Bayberry tea, to be effectual, should be made strong, by steeping the bark, either pulverized or unpulverized, in boiling water. Two large teaspoonsful of pulverized bayberry powder to a teacup two-thirds full of boiling water, will form a tea of the proper strength to answer the purpose for which it is generally given.

Astringent teas should never be made in an iron vessel.

A strong tea of bayberry, adding a portion of cayenne, constitutes a valuable medicine in the cure of disease in general. This preparation, though not so much used as the composition powder, is yet more effectual in cleansing the stomach and bowels of “canker,” or unhealthy secretions. A teacupful of strong bayberry tea, taken when the stomach is foul, will sometimes cause vomiting; but never unless the stomach be disordered.

As a preventive to disease, in general, there is probably nothing better that can be taken, than an occasional dose of bayberry and cayenne, or the No. 3 pills, taken in doses of from eight to ten pills, once or twice daily.

A very strong decoction of either bayberry or sumac should be used with lobelia, when administered as an emetic. Prepared in this way, an emetic will operate more effectually in cleansing the stomach and correcting the secretions; and at the same time occasion less sickness and retching than when given in pennyroyal tea or lukewarm water, as recommended in various works on the *Botanic practice*.

Syrup of Bayberry

To make Syrup of Bayberry.—Take two pounds of coarsely-ground bayberry; add a gallon of diluted alcohol, and let it mace-

rate two or three days; then separate the tincture from the powder with a displacer, and place it in a porcelain-lined vessel, over a slow fire, until one-fourth part has evaporated. Then add one pound of sugar to each pint of the medicine, and place it over the fire again, until the sugar is dissolved. When cool, bottle it; and if the weather be warm, keep it in a cool place.

The syrup of bayberry may be used as a substitute for bayberry tea, as a general medicine; and also to prepare lobelia in, for emetics.

The *dose* is a tablespoonful; for a child, a teaspoonful, either alone, or mixed with an equal quantity of water. The syrup of bayberry is well adapted, as a general medicine, to the cure of bowel complaints.

Extract of Bayberry.

The extract of bayberry is obtained by evaporating either an alcoholic tincture, or a simple decoction of bayberry, down to the consistence of thick molasses. The most suitable kind of vessel for this purpose is a porcelain-lined kettle or new tin boiler. The evaporation to be kept up by a slow fire, or by means of a hot-water bath. Neither iron, brass, or copper vessels, should be used in preparing vegetable astringent medicines of any kind. The extract of bayberry, with an equal quantity of cayenne, formed into pills, constitutes a medicine susceptible of as wide and diversified application as any other form or compound of medicine.

Extract of Bayberry Pills.

To make these pills, (also called "No. 3, or anti-canker pills,") take about equal quantities of cayenne and extract of bayberry; work the cayenne into the extract until thoroughly and equally combined, and then form into pills. By keeping the mixture warm, it may be more easily worked.

Medical Properties and Uses.—The ingredients composing these pills possess valuable medical qualities, and, excepting lobelia inflata and its preparations, constitute the most important medicines employed in the Thomsonian practice;—furnishing a pure stimulant, congenial with the health-restoring power of the constitution; an effectual detergent for cleansing the mucous membrane of the stomach and bowels; antiseptic properties opposed to putrefaction; and tonic properties adapted to promote digestion, and to give increased tone and energy to the system.

The No. 3 pills, possessed of medical qualities capable of accomplishing so many important purposes, constitute a medicine invariably tending to promote a healthy action in the system, and are consequently adapted to the treatment of all kinds of disease.

Quantity to be taken. — To obtain the full benefit from the pills, requires from twenty-five to thirty of them to be taken daily. They should be taken between meals — not on a full stomach. Taken daily, in doses of from eight to ten pills, three times a day, they will prove an excellent remedy, not only for slight derangements of the system, but will cure many cases of chronic disease, by cleansing the mucous membranes of morbid secretions that coat these surfaces, in seated complaints.

In all cases of disease, when the patient prefers taking medicine in the form of pills, the No. 3 pills may be used either as a substitute for composition or bayberry and cayenne, or taken with these medicines. They have been given in doses of from four to six or eight pills every two hours, as a general medicine, with signal benefit, in various acute diseases — pleurisy, dysentery, small-pox, measles, scarlet fever, and in fevers in general.

In bowel complaints, these pills have been found a valuable medicine; operating as a detergent — cleansing the lining membrane of the stomach and bowels, and restoring digestion. They may be used in all cases of the kind.

The No. 3 pills have proved successful in the treatment of dyspepsia, when taken regularly, for two or three weeks.

In *nervous complaints*, these pills have proved eminently successful.

The distressed sickness often attending pregnancy is readily relieved by the patient taking from twenty-five to thirty pills daily.

The No. 3 pills, taken in connection with the compound lobelia pills, — say from twenty to thirty of the No. 3 through the day, and from three to five of the compound lobelia at bed-time, — together with a proper attention to diet, exercise, &c., have cured many cases of disease of even long standing.

In numerous instances where these pills have been taken as a general medicine, a skinny substance has been observed to pass from the bowels, and then the patient begins to improve in health rapidly. This fact has been noticed in different varieties of disease, and is invariably followed by an improvement in the health of the patient.

To strengthen the muscular motions of the bowels, and thereby overcome costiveness, the No. 3 pills are admirably well adapted. By their continued use, and avoiding cathartics, long-standing cases of constipation have been cured.

As a general regulator of the system, or to correct slight de-

rangements of the stomach and bowels, a dose of pills—say from eight to ten, once a day—may answer the purpose.

The No. 3 pills are equally well adapted to the complaints of children; and when they can be taken more readily than medicine in another form, may be relied upon as a general medicine. Children may be induced to swallow pills, by softening them in water, and then mixing with them some finely-pulverized elm, made into a pulp.

UPLAND SUMAC.

(*Rhus Glabrum.*)

THE bark, leaves, and berries of sumac are employed for medical purposes, and, next to bayberry, may be regarded as the best astringent for cleansing the mucous membrane of the stomach and bowels. There are three species of the sumac, each of which possesses similar properties, and may be used for the same purposes. The species above named is most used. One species (*rhus copallinum*) is called dwarf sumac, scarcely ever reaching the height of six feet, and is found in dry, rocky ground. A strong decoction of the bark of the root of the dwarf sumac is employed as a sovereign remedy for venereal diseases, by the Chippewa Indians.

The leaves of the sumac should be collected in the autumn, before they are bitten by the frost, and when fully dried, should be packed away and kept secluded from the air.

Sumac berries should be collected soon after the first hard frost. The dust or powder that coats the berry is the part employed for medical purposes. Dr. A. C. Logan, who has collected and prepared large quantities of this article, has the berries thoroughly dried in an oven, and then rubbed over a sieve; by which process the powder is rubbed off and separated from the seed. This powder,—generally called sumac dust,—is used for cankered sore mouth, and when combined with bayberry powder, in the proportion of one ounce of the sumac to four ounces of bayberry, forms a better anti-canker medicine than the bayberry alone. This compound I have used of latter years as a substitute for the compound which Dr. Thomson calls No. 3. The powder from sumac berries and No. 6, mixed together, form a valuable remedy for tetter and ringworm; and also a wash, in cases of indolent ulcers and cankered sore mouth.

Sumac bark should be collected when the leaves are off, or after they have commenced falling. A strong decoction, made of the bark, or of the bark, leaves and berries combined, may be used with advantage in affections of the kidneys, and in all cases of weakness of the uterine organs.

“The gum which exudes from the bark on being punctured, during the summer, is beneficial in gleet and obstruction of the urine.” — *Mattson's American Vegetable Practice*.

WHITE POND-LILY.

(*Nymphia Odorata*.)

WHITE pond-lily grows in ponds and ditches, and is readily distinguished by its beautiful white flower. The root of the pond-lily possesses astringent qualities, and may be employed in combination with, or as a substitute for, bayberry and sumac, when the latter cannot be obtained. The difficulty of collecting and preserving this root, and the fact of its being inferior to bayberry or sumac, in point of medical virtue, has occasioned it to be almost abandoned, except in making poultices.

The pond-lily roots should be collected in autumn or very early in the spring, washed clean, cut into strips, and strung upon thread to dry.

WILD RED RASPBERRY.

(*Rubus Strigosus*.)

THIS shrub grows in great abundance in New England, and also in some southern sections of this country.

The leaf, which is the only part employed for medical purposes, is a mild astringent, and so agreeable to the taste, that many families use it as a substitute for imported tea.

A strong tea of raspberry leaves is a useful remedy for ordinary bowel complaints of infants and children. To be efficient, however, it should be made strong. In treating of this article, Dr. Thomson observes: “It is the best thing for women in travail, of any article I know of.” He recommends a strong tea of it to be given, sweetened, adding a portion of cayenne. A tea of raspberry leaf, adding milk and sugar, is good for infants; and Dr. Thomson asserts that it will prevent sore mouth.

WITCH HAZEL.

(Hamamelis Virginica.)

THE leaves of the witch hazel furnish an active astringent, and a strong decoction of this article may be used with much benefit as an injection in piles, fluor albus or whites, and chronic diarrhœa.

The leaves should be collected in the autumn, before they are injured by the frost, dried out of the sunshine, and as soon as dry they should be either pulverized or packed in a box and secured from the air.

GALLÆ (GALLS).

GALLS are round bodies which form on the bark and leaves of the oak. They are produced by the sap escaping through a puncture made by an insect resembling a common gnat. The sap becomes inspissated, and gradually hardens, forming these knotty substances, which possess the astringent properties in an eminent degree.

An ointment, made with two parts of finely-powdered galls and three parts of lard, may be used with especial benefit in piles and prolapsus ani.

EVAN ROOT.

(Geum Rivale.)

THIS plant is peculiar to low, marshy ground, and has received a variety of names, viz.: chocolate root, water avens, throat root, and purple avens. It possesses slightly astringent and tonic properties, and may be used with benefit in diarrhœa, dysentery, and in bowel complaints in general.

MARSH ROSEMARY.

(Statia Limonium)

THIS plant, the root of which is used for medical purposes, is found only in salt marshes.

The root of marsh rosemary is a powerful astringent, and is chiefly employed as a remedy for ulcerated sores in the mouth and throat. The powdered root has a good effect upon old sores, the powder being put dry into the sore, and a poultice or salve applied. In long-standing cases of piles, where the rectum is in a very relaxed condition, or in fluor albus or whites, when a powerful astringent is required, a portion of marsh rosemary, added to witch hazel or sumac, will form a better injection than either of the latter articles alone.

DEWBERRY.

(*Rubus Procumbens.*)

THE root of the dewberry, and also that of the blackberry plant, may be used as a substitute for bayberry or sumac, in dysentery and in bowel complaints in general.

"To the declining stages of dysentery, after the symptoms of inflammation are removed, they (the *dewberry* and *blackberry* root) are well suited; though I have given them, I think, with greater advantage, under nearly similar circumstances, in cholera infantum. To check the inordinate evacuations in the protracted stages of this disease, no remedy has ever done so much in my practice. They, moreover, are useful in all excessive purgings, from whatever cause proceeding, especially in the diarrhœa of old people, and when it occurs at the close of disease.

"My experience is limited pretty much to the cases which I have mentioned. But I cannot help believing that they will hereafter be found susceptible of a more diversified application; and, perhaps, under all circumstances where an agreeable bitter tonic or astringent is demanded. As an anti-lithic, and, indeed, as a corrective of all the depraved states of the stomach, caused by debility, I am persuaded that they will display valuable powers.

"Of the comparative utility of the dew and black berry, I am hardly entitled to decide very confidently. My impression, however, from what I have observed of their effects, is that the former is the superior medicine. Certain it is, that it is more pleasant to the taste.

"Every part of the plant is actively astringent — as the root, the leaves, the bark, the fruit — and all may be employed. But the root is to be preferred. The mode in which I have used it is in decoction — taking about an ounce, bruised, to a pint of water. Thus prepared, we have a beautiful claret-coloured liquor, having its bitterness, which is not very great, tempered by a pleasant, aromatic flavour." — *Chapman's Therapeutics.*

CROW-FOOT — CRANE'S BILL.

(*Geranium Maculatum.*)

THIS plant may be found in many sections of this country. The root possesses actively-astringent qualities. A decoction of this root has been used by injection with benefit, in chronic gonorrhœa, gleet, and fluor albus. The root, boiled in milk, is a good remedy in bowel complaints of children; more especially when the disease is of a mild character, requiring only astringent medicine.

A strong infusion of cranes-bill root, sumac leaves, and black-birch bark, combined, is recommended by Dr. Logan, in cases of cholera morbus and diarrhœa.

BEACH-DROP.

(*Orbanche Virginiana.*)

A DECOCTION of the root of the beach-drop may be employed for the same purposes as that of the crow-foot. The powdered root is a good application in cases of open cancer and indolent ulcers.

The powdered root of the beach-drop, crow-foot, or marsh rosemary, stewed in fresh tallow, may be employed as an ointment for external piles and eruptions on the skin.

ALUM-ROOT.

(*Heuchera Americana.*)

"THE root is a strong and powerful astringent, and contains more tannin than the *geranium maculatum*, detergent, styptic, antiseptic, and vulnerary. If the root be used in powder, as an external remedy in wounds, sores, and old, foul, indolent ulcers, it will deterge, and soon prepare for the formation of healthy granulations." — *Dr. A. C. Logan.*

TONICS—BITTERS.

To strengthen the System and promote Digestion.

GENERAL REMARKS.

BITTERS are particularly suited to the latter stages of acute disease, when fever has subsided and the tongue is cleaning; and in all cases where the system is left in a relaxed condition, with feeble digestion. In the suppurative stage of small-pox, and in cases of large abscesses that are secreting matter freely, bitters should be employed, in combination with pure stimulants, with a view to promote digestion, and furnish the system with the necessary strength to carry on her healing operations. In chronic disease in general, bitters may be employed indiscriminately, — provided the patient be clear of fever.

The vegetable kingdom furnishes a great variety of bitter tonics, of which those mentioned under this head are believed to be the best, and sufficient to fulfil the indications for which tonics are employed.

The chief objection to the use of bitters during the active stage of disease, is on account of their tendency, under these circumstances, to arrest the secretions.

As a general rule, it is better to take all bitter teas cold. Bone-set tea, taken cold, produces a tonic effect; but, taken warm, occasions nausea and vomiting. Thomson's spiced bitters, designed to supply the place of a stimulant and tonic, are generally taken warm.

PERUVIAN BARK.

(Cinchona Officinalis.)

THE genuine Peruvian bark is one of the most effectual tonics ever employed for the cure of intermitting fever or ague. It may be used as a general tonic in all cases where the use of this class of medicines is demanded. As a general rule, powerful tonics should not be employed in the first stage of disease, attended with

fever and a dry, coated tongue. Under these circumstances, bitters, unless combined with a large portion of cayenne, would repress rather than promote the secretions, and aggravate the disease. When, by the free use of cayenne and other appropriate remedies, the secretions are restored, the tongue cleaning, and the skin warm and disposed to perspiration, then Peruvian bark or other tonics may be employed with advantage.

Peruvian bark is rendered more efficient as a tonic, by combining with it Virginia snake-root, cloves, and cayenne pepper. I frequently mix equal parts of Peruvian bark and spiced bitters, and have always found it a good preparation.

A tea, made of equal parts of Peruvian bark and liquorice-root, is a good remedy for colic in infants; more especially where the spells of colic are observed to come on periodically.

The name *Jesuit's bark* has been applied to the Peruvian bark, from the circumstance of the Jesuits having had the chief control of the sale of the article during its first introduction into use in Europe, about the year 1640.

There are three species of Peruvian bark imported to this country: the pale, yellow, and red. At one time the *red* bark was esteemed the most valuable. This induced druggists to convert other species into red bark, by adulterations, which so materially lessened the efficacy of the bark, that at one period the red bark was little used. — Each species of bark above mentioned is efficient as a tonic, provided it be free from adulterations.

Peruvian bark is most active when taken in substance, mixed with some liquid; as a tea of spice bitters, Virginia snake-root, a solution of liquorice, or simply with water. The unpleasant taste of the bark will scarcely be perceived when it is taken in a solution of liquorice.

When the bark cannot be taken in substance, its virtues may be extracted by boiling water, and taken in decoction, cold. A small portion of orange-peel, liquorice-root, or spice, added, will improve the flavour of the tea; and where there is acidity of the stomach, a portion of the supercarbonate of soda, or salæratum, should be added.

Peruvian bark is often taken in wine, and with the most happy effects in many instances, as in recovery from disease, where the strength of the patient is much exhausted.

Dose. — The quantity of bark taken at a time varies from that of a teaspoonful to an ounce. Whilst some recommend it in small doses, repeated every hour or two, others direct an ounce to be taken at once. More especially is it recommended to be taken in large doses, in cases of intermitting fever, where, by a proper course of treatment, the system is placed in a condition that warrants the free use of tonics.

When Peruvian bark or quinine is used, all astringent medicines, viz.: bayberry, sumac, No. 3, pills, &c., must be laid aside at the time; as the tannin and gallic acid in the astringents, form an insoluble compound with the active principle of the bark, rendering it inert. Astringents may be used in the forenoon and barks in the afternoon, or *vice versâ*.

Three important indications in the treatment of disease are: 1st. To restore the natural warmth of the system. 2d. To cleanse the stomach and bowels of "canker," or morbid secretions; and, 3d. To restore digestion. The first requires the use of pure stimulants, and sometimes the application of the vapour bath; the second, the use of astringents and detergents; and the third tonics. Hence, the general indication for the use of tonics is when the secretions are restored, and the stomach and bowels cleansed of "canker."

Injections of a decoction of barks, retained, will prove almost if not quite as beneficial as when swallowed, and may be employed in this way in children, and in cases where the stomach rejects it or when patients prefer it administered in this way.

QUININE.

QUININE is the active principle of Peruvian bark, and may be used as a substitute for the bark. Quinine has sometimes been discovered to be adulterated with starch, stearine, sulphate of lime, and sugar. There are means, however, of detecting adulterations in quinine; for knowledge of which, the reader is referred to the U. S. Dispensatory.

Quinine is usually taken in the form of pills. Eight quinine pills, of the usual size, are supposed to be equivalent to an ounce of Peruvian bark. A pill, to contain a grain of quinine, (equal to a drachm of bark,) must be considerably larger than pills are generally made.

It is believed that quinine is rendered more active by the addition of cayenne pepper.

As a cure for intermittent and other forms of fever, when the condition of the system is favourable for the exhibition of tonics, there is probably no remedy of equal value with quinine. This medicine, however, is so easily taken, that it may be used too indiscriminately. It may be continued until large quantities have been taken, — the system, at the same time, not being in a condition to be benefited by its use.

Quinine has been employed, with great success, in cases of neuralgia, or tic-doloureux; more especially, where the attacks of pain are intermittent, like ague fits. It is not to be employed

when the tongue is thickly coated, or the patient is labouring under high fever.

There are cases of periodical sick-headach, in which more benefit may be derived from the use of quinine than from any other remedy. As a preventive, from ten to twenty grains should be taken a day or two before the time at which the attack is expected. It is in these cases, where there is no fever, and the tongue not thickly coated, nor too high-coloured, that quinine may be used without previously preparing the system by other remedies.

In fevers, as a general rule, quinine is better adapted to the treatment of cases that occur in spring, winter, and autumn, than in midsummer.

WHITE ASPEN AND BLACK ASPEN POPLAR.

(*Populus Tremuloides* and *Populus Grandidentata*.)

THE bark of these species of poplar possesses valuable tonic properties. Poplar bark constitutes an important part of the spice bitters. A very strong decoction of poplar bark may be employed as a tonic in any case where a tonic is needed.

The white aspen is not so bitter as the other species, and may be very readily given to children. It is well adapted to cases when the bowels are left in a weak and relaxed condition, after dysentery, diarrhœa, &c.

In treating of the poplar, Dr. Thomson says: "The inner bark, made into tea, is one of the best articles to regulate the bile and restore the digestive powers, of any thing I have ever used. The bark may be taken from the body of the tree, or from the limbs, or the roots, and the outside shaved off; preserving the inner bark, which should be dried and carefully preserved for use."

Poplar growing in low ground is said to have stronger qualities than that which grows on dry soil.

BALMONY.

(*Chelone Glabra*.)

THIS herb, commonly called snake-head, is found in low, marshy ground, and along the sides of brooks and ponds.

Balmony is a strong bitter, and may be employed as a general tonic, either singly or in combination with other bitters. The leaves, stems, and flowers, are the parts employed. The herb should be collected when in blossom.

BARBERRY.

(*Berberies Vulgaris.*)

THE bark of every portion of this shrub possesses tonic powers, and it is a good article to restore digestion. Barberry, balmony, and poplar bark, finely pulverized and mixed together in equal proportions, constitute Dr. Thomson's No. 4 bitters. — This is a valuable compound, and may be employed in all cases where a strong tonic is required.

GOLDEN SEAL.

(*Hydrastis Canadensis.*)

THIS plant, which has received a variety of names, — as Ohio kerkuma, yellow poccoon, and turmeric root, — is highly esteemed as a tonic, by some Thomsonians. The root is the part used, which should be collected in the fall, well dried, and reduced to powder.

Golden seal is found in great abundance in Ohio and Indiana, and it is from thence that the principal supply is obtained.

The usual dose is a teaspoonful of the powder, taken in warm water, or steeped in boiling water, and the tea only used.

Dr. Thomson recommends the use of the golden seal for distress, occasioned by indigestion after meals.

VIRGINIA SNAKE-ROOT.

(*Serpentaria Virginiana.*)

THIS plant, the root of which contains both tonic and stimulant properties, grows plentifully in many sections of the United States, and it is said to be a native of this country exclusively.

The Virginia snake-root may be employed with benefit in fevers, and in a variety of forms of disease, when the usual bitter tonics irritate the stomach.

The usual dose of the powdered root is a teaspoonful. To make the infusion, pour a pint of boiling water on half an ounce of the root, and let it steep in a covered vessel; — boiling the root dissipates its medicinal properties. It may be drunk freely in all stages of disease; — either cold or warm, as the patient may prefer.

CENTUARY.

(*Chironia Angularis.*)

"OF the centuary we have the above species, which is not inferior to the European. It is a beautiful annual plant, growing abundantly in the Middle and Southern States, and every part of it is medicinal, though the flowers possess the most efficacy. It is a pure bitter, with some little aromatic flavour, neither unpleasant to the taste nor offensive to the stomach; and is resorted to by every description of practitioners, regular and irregular, in our intermittent and remittent fevers. Like some other articles, it has an advantage over the Peruvian bark, of being susceptible of employment in every stage of these diseases. The usual mode of prescribing it is by strong infusion, which is directed to be taken without much limitation." — *Chapman.*

RED DOGWOOD — RED WILLOW.

(*Cornus Sericea.*)

THIS species of cornus is usually six or eight feet in height, with numerous erect stems, which are covered with a shining, reddish bark, and send out opposite spreading branches. The leaves are opposite, petiolate, ovate, pointed, entire, and on the under surface covered with soft, brownish hairs. The flowers are small, white, and disposed in terminal cymes, which are depressed and woolly. The fruit consists of globular, berry-formed drupes, of a cerulean blue colour, and collected in bunches." — *U. S. Dispensatory.*

The red dogwood is found growing in low, wet lands, and along streams in almost every section of the United States. The bark of this shrub contains valuable tonic properties, and many experienced practitioners assert it to be equal in efficacy to the Peruvian bark, and it may be employed as a substitute for the latter article. Growing in our own country, it can be obtained genuine; whereas a great portion of bark imported as Peruvian, is a spurious article, containing little or none of the medical properties of Peruvian bark.

GENTIAN.

YELLOW gentian root, much employed as a tonic, is imported from Germany. It grows among the Appenines, the Alps, and other mountainous regions of Europe. There are several species

of gentian; all possessing the same properties, and used for the same purposes.

Gentian is an invaluable tonic, and may be safely employed in any case where a tonic is wanted. It may be administered in the form of tincture, infusion, or extract, or in combination with other tonics.

Extract of gentian, made into pills, is a convenient form of tonic. With some, it is a favourite remedy for worms.

Gentian is well adapted, as a tonic, to cases of female complaints where tonics are demanded.

WILD CHERRY.

(*Prunus Virginiana.*)

THE bark of this tree has tonic and astringent properties. As a tonic, it is inferior in efficacy to either the red dogwood, or Peruvian bark. It is adapted to cases of consumption, hectic fever, and scrofula, and in chronic bowel complaints. It yields its properties to alcohol, and to hot and cold water. Boiling the bark destroys its medicinal powers. The proper plan is to have the bark cut into strips, or pulverized and put into cold water.

QUASSIA.

THIS tree, the wood of which contains the bitter principle, as it were, in a concentrated form, is a native of Surinam, Jamaica, and the Caribbean islands.

This medicine was first introduced into use by a West India negro, named Quassia, who employed it as a secret remedy, which proved successful in the cure of the malignant fevers of that country. The secret was "disclosed to a Mr. Rolander, a Swede. Specimens were taken to Stockholm by this gentleman, in the year 1756, and the medicine soon became popular in Europe. The name of the negro has been perpetuated in the generic title of the plant."

Quassia may be employed as a tonic in cases of general debility. It is usually prepared in infusion, in combination with other tonics,—columba, gentian, Virginia snake-root, and orange-peel.

Tonics are found to be more effectual, by occasionally substituting one article for another, or by frequently changing the compound.

TULIP POPLAR.

(*Liriodendron Tulipifera.*)

THE bark of this tree may be employed as a tonic; — the bark of the root is probably as powerful a tonic as the aspen poplar.

COLUMBA.

COLUMBA root possesses considerable power as a tonic, and as such, may be used either alone, or in combination with other tonics.

THOROUGHWORT — BONESET.

(*Eupatorium Perfoliatum.*)

A warm infusion or a decoction of this plant will operate as a nauseant and emetic; when taken cold, it acts as a tonic only.

Boneset has been extensively employed, of late years, in the treatment of intermittent and remittent fevers. It is employed as a diaphoretic, emetic, and tonic.

A cold infusion of boneset is an excellent general tonic, useful in cases of dyspepsia, fevers, &c.

YELLOW ROOT.

(*Xanthorrhiza Apufolia.*)

“THE bark of the root of this plant is equal, if not superior to the golden seal.” — *Dr. A. C. Logan.*

CHAMOMILE.

(*Anthemis Nobilis.*)

CHAMOMILE furnishes an agreeable and valuable tonic. It has been a long time employed as a medicine. A warm infusion of chamomile is often employed in domestic practice, to excite perspiration in case of colds. A strong tea of chamomile, drunk warm, will sometimes operate as an emetic. As a tonic or stomachic, the cold infusion is usually employed.

MYRRH.

Gum myrrh exudes from the body of a small tree growing in Arabia Felix and Abyssinia, called *balsamodendron myrrha*. As the juice exudes, it hardens and adheres to the bark.

“Two varieties of myrrh are distinguished in the market—the *India* and the *Turkey myrrh*—the former imported from the East Indies, the latter from the Levant. It is said that the *India myrrh* is collected in Abyssinia, and thence taken to the ports of Hindostan; while that which goes under the name of *Turkey myrrh* is brought from Arabia by the route of Egypt.”—*U. S. Dispensatory*.

There is a great difference in the quality of myrrh. That which comes from Turkey is of a brighter colour, and more free from impurities than the East India myrrh. “When of good quality it is reddish-yellow, and translucent; of a strong, peculiar, and somewhat fragrant odour, and a bitter, aromatic taste. It is brittle and pulverizable; presenting, when broken, a shining surface, which in the larger masses is very irregular.”

Myrrh is actively tonic, somewhat stimulant, and possesses, in a high degree, antiseptic properties. It constitutes the most essential ingredient in Thomson's No. 6, or rheumatic drops.

Myrrh has been employed internally, with much benefit, in chronic diarrhœa, and diseases of the lungs or chest, attended with a free expectoration and general debility. Its use is also well adapted to the cure of some complaints peculiar to females,—especially *amenorrhœa* (deficient or difficult menstruation),—and, in fine, in all cases of derangement of the menstrual function, when accompanied with general debility and a relaxed condition of the muscular tissues.

Myrrh may be taken in the form of pills, infusion, tincture, or the powder may be taken suspended in a liquid.

To make Myrrh Pills.—Take a tablespoonful of finely-pulverized myrrh, and of pulverized gum Arabic and loaf-sugar, each, a large teaspoonful. Rub these up with a quantity of water, sufficient to form a paste, and make into pills.

To make an Infusion of Myrrh.—Steep an even teaspoonful of pulverized myrrh in a teacup of boiling water, and add a large teaspoonful of sugar, and a small portion of cinnamon.

To make a Tincture of Myrrh.—Put three ounces of powdered myrrh, and a quart of alcohol or fourth-proof brandy, into a stone

jug, and boil half an hour in a kettle of water, or let it macerate several days in a warm place.

To prepare the Powder for taking.—Rub together half a teaspoonful of myrrh and a teaspoonful of sugar, then add a teacup half full of lukewarm water, or a tea of cinnamon or liquorice root, stir the mixture, and take before it settles.

When myrrh is taken in the form of pills or powder, care should be observed to select that of the best quality.

Medical Qualities and Uses of Myrrh.—Myrrh, prepared in either of the forms above mentioned, is applicable to cases of general debility, accompanied by a relaxed condition of the bowels, and an absence of fever. Dr. S. Thomson informs us, that he has discovered it to be a valuable remedy in what are called worm complaints, in children, for a child that can swallow pills.

The efficacy of Thomson's No. 6, and third preparation of lobelia, in preventing mortification in disease of a malignant or putrid tendency, may be partly, at least, attributed to the *myrrh* contained in these preparations.

Applied to fresh wounds, the tincture of myrrh excites the healing action, and lessens the liability to the occurrence of unhealthy inflammation. It is also a useful application in old sores, ulcerated sore throat, running from the ears, aphthous sore mouth, spongy gums, sore nipples, &c. The tincture of myrrh is also employed to promote the exfoliation of bones. In sinuous ulcers, and cavities that continue to discharge matter, in consequence of a debilitated state of the vessels of the part, tincture of myrrh, combined with an equal quantity of tincture of bayberry, or bayberry powder put in tincture of myrrh, injected into the cavity, and repeated daily, will seldom fail of establishing the inflammatory action necessary to the production of granulations, and a union of the sides of the cavity. Where the parts are too sensitive to admit the tincture to be used undiluted, it may be combined with water or bayberry tea. In cases of scrofulous ulcers, white swellings, hip disease, and wherever there is a free discharge of matter from a part, and the system is in a relaxed condition, the internal use of myrrh will generally prove beneficial. The most convenient way of taking myrrh is in the form of pills.

THOMSON'S NO. SIX, OR RHEUMATIC DROPS.

To this compound a variety of additions have been made by different individuals, as improvements upon Dr. Thomson's preparation. The value of this preparation as a medicine depends

chiefly upon the myrrh which it contains; and no article can be substituted that will prove more beneficial than myrrh, for the purposes to which the No. 6 is generally applied.

To prepare No. 6. — Take an ounce of *African* pepper, one pound of powdered myrrh, and a gallon of fourth-proof brandy. Put these into a stone jug, and boil it half an hour in a kettle of water — the jug to be uncorked.

This preparation is employed as a general family medicine by Thomsonians. It is an excellent tonic, and, taken soon after meals, will remove or prevent flatulency, and relieve oppression of the stomach. Ordinary colic may be speedily cured by taking freely of No. 6. It is an effectual cure for ordinary colds, provided the patient avoid exposure, and improper articles of diet. Sickness at the stomach, and even severe spells of sick-headach, may be relieved and frequently cured by a free use of No. 6, together with warm applications to the feet, to favour perspiration. It also constitutes a valuable remedy for bowel complaints in general. Taken after meals, it will prove a preventive against the summer complaint.

In deeply-seated colds, attended by a free expectoration of a thick, yellowish secretion, the use of No. 6 will be found beneficial. In the latter stages of disease, No. 6 may be employed as a restorative; and when there is a tendency to putrefaction, its use is almost indispensable to the recovery of the patient.

As an external application, No. 6 has been found useful in rheumatism, neuralgia, night-sweats, dropsy, consumption, and in all cases when the skin is in a relaxed condition. It may also be employed to great advantage in sprains, bruises, fresh cuts, indolent ulcers, putrid sore throat, sloughing ulcers, gangrene, and as a preventive to mortification, both internally and externally.

NO. FIVE SYRUP, OR RESTORATIVE CORDIAL.

TAKE of white and black aspen poplar, each, half a pound, bark of the root of bayberry, one pound, and boil them a few minutes in two gallons of water; then strain, and add seven pounds of good sugar, and simmer until the sugar is dissolved; then skim it, and add half a pound of finely-powdered peach-meats, and three quarts of good brandy.

Dose. — From half to a wineglassful, three or four times a day.

This syrup is useful in cases of recovery from sickness, attended with a weak and relaxed condition of the bowels.

Another method of preparing a restorative cordial, is to employ the tincture of myrrh in place of the brandy.

An objection to syrups in general, except when recently prepared, is their tendency to fermentation. The above syrup, however, may be kept good for years.

UNICORN.

(*Helonias Dioicia.*)

THIS plant, the root of which possesses tonic properties, is found plentifully in most of the Middle, and in several of the Western States. It has received a variety of names: blazing star, devil's bit, and blazing star-wort. The root is, in general, about an inch and a quarter in length, from a quarter to three-eighths of an inch in diameter, and its lower extremity terminating abruptly, as though it had been broken off. "The root leaves continue green all winter, and spread upon the ground in the form of a star. They are four or five inches long, narrow at the base, and terminated by a somewhat tapering point. The stem of the male plant is a foot or more in height, and terminates in a long, drooping, and very graceful spike of flowers, which are of a dirty white colour. They remain in bloom from June to July. The stem of the female plant is erect, much taller than the other, and is furnished with flowers of a larger size." — *Mattson's American Vegetable Practice.*

The author above quoted observes: "The *aletris farinosa*, or star-grass, which has also received the name of *unicorn*, is often mistaken for this plant. It is similar in growth and appearance, but may be identified by its sharply-pointed leaves, and brittle, scaly-looking root. It possesses tonic properties, but it is also narcotic and purgative, which renders its use objectionable, and sometimes hazardous." This plant, the *aletris farinosa*, has been introduced into Dr. Hersey's work on Midwifery, and also Dr. John Thomson's *Materia Medica*, as the *true* "unicorn root," used by Thomsonians.

The root of the *helonias dioicia* is spoken of by some in terms of the highest praise, as a remedy particularly adapted to complaints peculiar to females, yet it is very doubtful whether it possesses any specific properties apart from those of a general tonic.

BITTER ALMONDS, PEACH-MEATS, AND CHERRY-STONE MEATS.

ALL these articles contain valuable tonic properties. The essential oil obtained from bitter almonds and peach-meats by distillation, and supposed to contain prussic acid, does not exist in the almond in its natural state, but is the result of chemical action, which takes place during the process of distillation.

Dr. S. Thomson has, of late years, in preparing No. 6, employed liquor in which pounded cherry-stones have been kept for some time, which he calls "*cherry spirit*." This is an improvement on the old method.

WINE BITTERS.

VEGETABLE bitters, tinctured in wine, may be used with benefit in many cases of chronic disease, and in cases of recovery from sickness; but the simple decoction or infusion of bitters is to be preferred to wine bitters, in most cases.

A variety of formulas for wine bitters might be given; the following, however, is probably as good as any other:—

Take of best Peruvian bark,	1 ounce,
“ “ gentian bark,	1 “
“ “ columbo,	1 “
“ “ Virginia snake-root,	$\frac{1}{2}$ “

add a portion of orange-peel, and to this compound put two quarts of good Madeira or sherry wine.

Dose. — A wineglassful, two or three times a day.

Dr. Thomson employed sweet Malaga wine for making bitters, and used the same compound as the spice bitters, omitting the sugar, and adding a portion of prickly-ash berries.

SPICE BITTERS.

THE spice bitters are variously compounded by different individuals. Sometimes I have met with spice bitters that were actively cathartic; and, on other occasions, containing so much of cloves and cinnamon, as to prove decidedly binding to the bowels.

The following is a good formula: Take of black and white aspen poplar bark, finely powdered, each, three pounds; of ginger, two pounds; golden seal, two pounds; cinnamon, one pound;

cloves, one pound ; prickly-ash bark, half a pound ; cayenne, half a pound ; and eight or nine pounds of white sugar. These are all to be finely pulverized, thoroughly mixed together, and then run through a sieve.

Next to composition and No. 6, the spice bitters are more employed than any medicine or compound in the Thomsonian materia medica. The usual dose is a teaspoonful, prepared in decoction, with boiling water, or the powder may be taken with a small portion of lukewarm or cold water. The spice bitters, prepared according to the above formula, afford a mild stimulant and tonic, which may be used with great benefit in many cases, and with safety under all circumstances. As a tonic, in intermitting and remitting fever, and in cases of extreme debility and obstinate dyspepsia, the spice bitters are not to be relied upon, as stronger tonics will here be demanded.

LADIES' SPICE BITTERS.

ADDING finely-powdered myrrh and unicorn root to the common spice bitters, in equal quantity with the cloves, constitutes what are termed "Ladies' Spice Bitters, or Woman's Friend."

This preparation is well adapted to cases of general debility, and especially in complaints peculiar to females.

CONSERVE OF HOLLYHOCK.

Directions for making.—Take of poplar bark, bayberry, golden seal, cloves, cinnamon, and American valerian, each, an ounce ; and half an ounce of cayenne, — all finely pulverized ; mix them well together, and pass the compound through a sieve. Incorporate this powder and half an ounce of the oil of pennyroyal thoroughly with one pound of hollyhock blossoms, previously pounded into a jelly, and form it into balls of the size of a large marble, and dry them ; or put it into jars, to preserve it in a moist state.

The conserve of hollyhock possesses the same properties as the spice bitters, but is rather more active, both as a stimulant and tonic. It may be used on all occasions, to promote digestion, to warm the stomach and bowels, and also as a preventive to disease. It is a convenient medicine for persons while travelling.

WORMWOOD.

THIS garden shrub possesses the bitter principle in a high degree, and is suited to cases of general debility and feeble digestion. It should be prepared by steeping in hot water;—boiling it, impairs its tonic powers.

An infusion,—made by steeping wormwood and hickory ashes, in about equal proportions,—is often used to strengthen digestion, and to correct acidity of the stomach.

Wormwood is applied externally, by way of fomentation, steeped in vinegar. Swelled and painful breast, sprains, bruises, &c., are the kinds of ailments to which this application is suited.

BITTER-ROOT—INDIAN HEMP—WANDERING MILKWEED.

(*Apocynum Androsemifolium.*)

ALTHOUGH Dr. Samuel Thomson recommends bitter-root as a medicine, in his original guide, he abandoned the use of it in his own practice many years before his death. It is an active cathartic, and extremely liable, if taken in purgative doses, to prove injurious. If used at all, it should be given in small doses; not sufficient to purge. It is employed in the regular practice, for dropsy of the brain in children. Dr. Logan recommends the addition of a small portion of bitter-root to the No. 4 bitters, for cases of obstinate costiveness. It may prove beneficial in some chronic cases, given in this way. Combined with other articles, it may be given in jaundice, rheumatism, dropsy, and dyspepsia.

NERVINES.

To quiet Restlessness, calm Nervous Agitation, and promote Sleep

AMERICAN VALERIAN.

SEVERAL SPECIES. — *Cypripedium humile, pubescens, parviflorum, condidum, and spectabile.*

Common Names. — Moccasin flower, Noah's ark, wild lady-slipper, umbil, and valerian.

Each of the above-named species of valerian possesses the same medical properties. The root is the part employed for medical purposes. The root of the American valerian, dried and pulverized, constitutes the powder known among Thomsonians by the name of nerve powder. This powder is usually combined with emetics, in giving a course of medicine. It is more particularly needed when the patient is of a nervous temperament. From half to a full teaspoonful may be added to each dose of emetic. The powder may also be taken in hot water, sweetened, or it may be added to any of the medicines, when the condition of the patient requires it. The root should be collected in the autumn, washed clean, carefully dried, and kept from the air.

SCULLCAP.

(Scutellaria Lateriflora.)

THIS herb has recently been introduced into use as a nervine. It is found growing in meadows and along streams of water. There is a species of scullcap found upon upland, particularly in stubble fields; whereas the species employed for medical purposes is found only in low and marshy land.

I have not made a sufficient trial of the scullcap to form an opinion as to its medicinal powers. It certainly possesses tonic properties; and it may be that its powers of quieting nervous agitation, and tranquillizing nervous excitement, depend simply upon its tonic properties. New remedies are apt to be overrated

when first introduced; more especially by those who claim the honour of introducing them. Still, from testimony adduced in favour of the scutellaria, I do not doubt that its introduction into our materia medica may be a valuable acquisition.

The top of the plant is the part employed; which should be collected when the plant is in blossom, carefully dried, and preserved from the air. It may be taken prepared in the same manner and for the same purposes as Thomson's nerve powders.

HOPS.

Hop tea may be used with benefit as a means of quieting nervous agitation and promoting sleep. Hops are most employed in protracted fever and delirium tremens (craziness from drink).

The yellow powder, which may very readily be obtained from hops by rubbing and sifting them, contains the active principle of hops. This powder (called lupulin), by being rubbed up in a warm mortar, will form a paste, which may be made into pills, and taken for the purposes above mentioned.

Pills, composed of equal parts of lupuline and quinine, constitute an efficient tonic for the cure of intermittent fever.

Dose. — From fifteen to twenty pills of the ordinary size may be taken in the space of two hours, previous to the time at which the chill comes on.

GARLIC.

THIS article affords an agreeable and useful stimulant to the nervous system, in many cases of nervous debility; especially in gouty persons, and when the system has become debilitated by intemperance. "To stomachs enfeebled by excess of stimulation, garlic proves exceedingly cordial; and it may be remarked, that drunkards recur to it, as it were, instinctively."

Nervines alone are not to be relied upon as a cure for nervous complaints.

The complaints popularly called "*nervous affections*,"—such as hysteria, in its different varieties, St. Vitus's dance, nervous agitation, depression of spirits, &c.,—are frequently caused by impaired digestion, and an unhealthy condition of the mucous membrane of the stomach and bowels; and are curable only by a course of treatment that will restore the digestion, enrich the blood, and in this way improve the condition of the nervous system.

The *Extract of Bayberry Pills*, taken in quantities sufficient to produce their full effect,—say from twenty to thirty pills daily,—has proved eminently effectual in relieving various derangements of the nervous system, in cases where the ordinary nervines and anodynes had entirely failed of affording relief to any extent.

The articles and compounds treated of in the preceding pages of the Materia Medica, comprise the most essential and effectual medical agents employed in the Thomsonian practice.

Those hereafter treated of may be used as auxiliary remedies, and adapted, as such, to effect important purposes in the treatment of particular cases of disease, and in certain conditions of the system.

CARBONATE OF AMMONIA.

“CARBONATE of ammonia, recently prepared, is in white, moderately hard, translucent masses, of a striated and crystalline appearance, of a pungent smell, and a sharp, penetrating taste.” — *U. S. Dispensatory.*

Exposed to the air, carbonate of ammonia soon becomes changed to a white appearance, and in its texture resembles chalk; when it is no longer fit for use as medicine. Carbonate of ammonia should be preserved from the air, by being kept in a glass jar, entirely air-tight; or wrapped in tinfoil. By adopting the latter method, it may be preserved for months in a condition suited to medical purposes.

Medical Properties and Uses.—Carbonate of ammonia is a diffusive stimulant, and powerfully anti-acid. Its use is adapted to exhausted states of the system, as in congestive and typhus fever, and wherever extreme debility prevails.

The dose is from five to ten grains, or about as much of the powdered ammonia as will lie on a ten-cent piece. It may be taken dissolved either in water, wine-whey, pepper or Virginia snake-root tea, or it may be taken in the form of pills. The dose to be repeated every hour or two, as the circumstances of the case demand.

The unpleasant taste of the ammonia may be disguised by dissolving it in gum Arabic water sweetened with loaf-sugar, and adding to each dose four or five drops of the oil of cinnamon.

Dr. Eberle states that carbonate of ammonia has been employed with good success in nervous headach.

Either the aqua ammonia, or the spirits of hartshorne, applied

to a part stung by a bee, will neutralize the poison — relieving the pain at once, and preventing swelling.

Aqua ammonia is regarded as an antidote to the poison from the bites of rattlesnakes and other venomous reptiles. It is to be kept applied to the wound, and given internally.

CAMPHOR.

CAMPHOR is obtained chiefly from Japan, where it is found in distinct grains, interspersed throughout the roots and wood of the *laurus camphora*, a forest tree of that country. Camphor exists in small quantities in some native trees and plants of this country — the common sassafras, and in rosemary, sage, peppermint thyme, starwort, and lavender.

Medical Properties and Uses.—Camphor is a volatile stimulant and actively antiseptic. “In its primary operation it also allays nervous irritation, quiets restlessness, and produces a general placidity of feeling, which renders it highly useful in certain forms of disease, attended with derangement of the nervous functions. It is used in colic, fainting, sick stomach, &c.

“By its moderately-stimulating powers, its diaphoretic tendency, and its influence over the nervous system, it is admirably adapted to the treatment of all diseases of a typhoid character, which combine with the enfeebled condition of the system, a frequent, irritated pulse, a dry skin, and much nervous derangement; indicated by restlessness, watchfulness, tremors, subsultus, and low, muttered delirium. * * * * * In a great number of spasmodic and nervous disorders, and complaints of irritation, camphor has been very extensively employed. The cases of this nature to which experience has proved it the best adapted, are dysmenorrhœa, puerperal convulsions, and other nervous affections of the puerperal state; and in certain forms of mania, — particularly nymphomania, and that arising from the abuse of spirituous liquors.

“It is much used externally, as a local anodyne, — generally dissolved in alcohol, oil, or acetic acid, and frequently combined with laudanum. The ardor urinæ of gonorrhœa may be alleviated by injecting an oleaginous solution of camphor into the urethra; and the tenesmus of ascarides (worms) and dysentery, by administering the same solution in the form of enema. A scruple, or half a drachm of camphor, in substance, added to a poultice, and applied to the perinæum, allays the chordee which is a painful attendant upon gonorrhœa.”

The dose of camphor is from five to ten grains, or a piece of

the size of a large grain of corn, rubbed up with loaf-sugar, gum arabic, and water, or with milk. The dose to be repeated every two or three hours, or at longer or shorter intervals, as the circumstances of the case require.

Camphor tea is made by pouring boiling water upon camphor; but as a portion only of the camphor will dissolve in this way, it forms a weaker preparation than the above. Combining cayenne with the camphor, we have an efficient stimulant. For instance, take a lump of camphor, as large as a chesnut; a teaspoonful of cayenne; pour on half a pint of boiling water, and sweeten it or employ ginger root in the place of cayenne.

Camphorated Julep.—Take of gum camphor, one drachm; finely-powdered myrrh, thirty grains; sugar, two drachms; water, four ounces. Saturate the camphor with alcohol, or some kind of spirit; then rub the ingredients until thoroughly combined, and add the water. The dose is a tablespoonful for an adult, and a teaspoonful for a child; to be repeated every hour or two, as the nature of the case may require. This preparation, combined with cayenne tea, is particularly well adapted to the treatment of cases of disease, attended with extreme debility;—as in cases of typhoid and putrid fever; malignant scarlet fever; confluent small pox, &c.

Spirits of Camphor.—To make the tincture or spirits of camphor, put four ounces of camphor to a quart of alcohol.

The dose of spirits of camphor is from ten drops to a teaspoonful. To prepare for taking, it should first be poured on sugar, afterwards adding warm water.

Camphor, dissolved in oil of turpentine, constitutes a remedy in high repute for toothach, when the tooth is partly decayed. Wet a portion of lint or cotton with the drops, and place it in the cavity of the tooth.

OIL OF TURPENTINE.

THE oil of turpentine is obtained from common turpentine by the process of distillation. Internally, it may sometimes be used with benefit in children affected with worms; and also as an adjuvant remedy in low forms of fever. "There is a particular state of fever, usually attended with much danger, in which we have found this remedy uniformly successful. The condition of things alluded to, is one which occurs in the latter stages of

typhoid fever or lingering remittents; in which the tongue having begun to throw off its load of fur in patches, has suddenly ceased to clean itself, and becomes dry and brownish: the skin is at the same time dry, the bowels torpid and distended with flatus, and the patient sometimes affected with slight delirium. Under the use of small doses of the oil of turpentine, frequently repeated, the tongue becomes moist and less coated, the tympanitic state of the bowels disappears, and the patient goes on to recover, as in a favourable case of fever. We are disposed to ascribe the effect to a healthy change, produced by the oil in the ulcerated surface of the intestines." — *U. S. Dispensatory*.

The oil of turpentine, given internally, has been found useful in cases of lumbago and sciatica. It has also been employed, with general good success, in severe cases of colic, cramp, and gout in the stomach. A tablespoonful of the oil of turpentine, beat up with the yolk of an egg, and half a pint of warm water added, may be employed with benefit as an *injection*, in severe cases of bilious colic.

Next to the third preparation of lobelia, the oil of turpentine is probably the best remedy, used by injection, in cases of tympanites (a swollen condition of the abdomen), which often occurs in malignant forms of disease, and in peritoneal inflammation.

A tablespoonful of oil of turpentine, beat up with the yolk of an egg, and a teaspoonful of the mixture taken at a time, and occasionally repeated, is said to have generally proved effectual in checking bleeding from the nose, in typhoid fever.

Oil of turpentine has been much extolled as a remedy for tape-worm, and is one of the most popular medicines for worms in children. It has also been found useful in neuralgia, locked jaw, malignant and chronic dysentery, and in long-standing weakness of the urinary organs. It is not, however, to be considered as a specific for any disease; but, in certain conditions of the system, it may be employed with benefit.

The *dose* is from thirty drops to a teaspoonful. It may be taken dropped on sugar, or combined with mucilage of elm, or gum Arabic and sugar, or simply mixed with water.

The oil of turpentine may also be taken in the shape of pills, by mixing it with powdered liquorice root.

As an external application, it may be usefully employed in combination with Thomson's No. 6, in low forms of fevers, when the skin is colder than natural. This compound also forms a useful application in case of rheumatism and palsy. It is a good application in chilblains, and also in the cure of various species of eruptions.

WHITE TURPENTINE.

WHITE turpentine is chiefly obtained from the Southern States; more especially from North Carolina and Virginia. It is useful for making strengthening plasters, and may also be taken internally, in the shape of pills, for worms, chronic catarrh, lumbago, and sciatica, and also as a preventive to attacks of bilious colic.

OIL OF AMBER.

"AMBER is a kind of fossil resin of vegetable origin, occurring generally in small detached masses, in alluvial deposits, in different parts of the world. It is found chiefly in Prussia, either on the sea-shore, where it is thrown up by the Baltic, or underneath the surface, in the alluvial formations along the coast." — *U. S. Dispensatory*.

Amber has also been found in Maryland and New Jersey.

Oil of amber is obtained by putting a quantity of powdered amber and an equal weight of sand, into a glass retort, and then applying a gradual heat, by means of a sand-bath; an oil exudes, which is separated from the other matters, and should be kept in tightly-corked bottles. The oil of amber, thus obtained, is subjected to a process of distillation with water, when it is ready for medicinal purposes.

Medical Properties and Uses. — Rectified oil of amber is an anti-spasmodic and stimulant, useful in hysteria, violent colic, hic-cough, and in water-brash, attended with cramps or spasms.

As an external application, it is useful in palsy and chronic rheumatism.

It may also be used with benefit in whooping cough — applied along the course of the spine, morning and evening.

A *dose* of the oil of amber is from five to fifteen drops, rubbed up with a portion of gum Arabic, or slippery elm and sugar, and a portion of water added.

OIL OF HORSEMINT.

OIL of horsemint may be used internally, in cases of colic, heartburn, water-brash, and in gout or spasms in the stomach. The dose is from two to five drops, mixed with sugar and water. The oil of horsemint, applied to the skin, produces a very sudden rubefacient effect, — causing redness of the skin, and even blistering.

OIL OF JUNIPER.

OIL of juniper is obtained from juniper berries. It is frequently adulterated with turpentine.

Oil of juniper promotes the secretion of urine, and may be employed with advantage in many cases of dropsy. It has been found useful in other complaints, as in chronic bronchitis, chronic disease of the kidneys, gleet, and fluor albus.

There is a form of dyspepsia in which the oil of juniper has proved highly successful. It is especially adapted to cases of chronic inflammation of the mucous membrane of the stomach, where there is constant tenderness to pressure at the pit of the stomach.

OIL OF PEPPERMINT.

THE oil of peppermint is used to relieve colic, overcome nausea, and check vomiting. The dose of the oil is from one to three drops, — first rubbed up with sugar, and then water added.

The Essence of Peppermint is made by combining two ounces of the oil with a pint of alcohol. The dose of the essence is from ten to twenty drops.

OIL OF ANISE-SEED.

THE oil obtained from anise-seed is well adapted to colic pains in infants, on account of its mildness. The dose is from three to fifteen drops, rubbed with a small quantity of loaf-sugar, adding a teaspoonful or tablespoonful of hot water.

OIL OF CARAWAY.

OIL of caraway is chiefly employed to disguise the taste of medicine, and is much employed by nostrum venders, to give an agreeable flavour to syrups and pills.

VEGETABLE BALSAMS.

BALSAM COPAIVA.

BALSAM copaiva is obtained from the *copaifera officinalis*. This tree is a "native of Venezuela, and grows in the province of Carthagena, mingled with the trees which afford the balsam tolu. It grows also in the West India Islands, particularly Trinidad and Martinique, where it is said to be naturalized. The juice is obtained by wounding the tree; and the operation is said to be performed several times in the same season. As it flows from the wound, it is clear, colourless, and runs thin, but soon acquires a thicker consistence and a yellowish tinge."

Balsam copaiva has long been employed as a remedy in gonorrhœa, fluor albus, and in chronic affections of all mucous membranes, when attended with a profuse secretion, — particularly chronic bronchitis, and chronic diarrhœa. In a favourable condition of the stomach, the use of balsam copaiva is particularly beneficial in the above-named complaints.

The dose of copaiva is from fifteen to thirty drops, repeated three or four times a day. It is usually taken rubbed up with powdered gum Arabic, or powdered elm and sugar, adding a drop or two of the oil of peppermint or cinnamon, to which add a sufficient quantity of water to form it into a consistency convenient to be taken. Another method recommended for taking this medicine is, to drop the copaiva in a wineglass half full of water, and immediately drop on it a few drops of a bitter tincture; the copaiva is collected in a globule, and may be swallowed without imparting its peculiar taste to the mouth. Recently, however, the balsam copaiva is taken enclosed in capsules, by which both the taste and odour of the article are completely disguised.

BALSAM TOLU.

BALSAM tolu is obtained from a tree growing near Carthagena. It is obtained by making incisions into the trunk of the tree, from which a juice exudes, which is allowed to concrete. On keeping, the balsam becomes hard and brittle, like resin.

The dose is from half to an even teaspoonful of the powdered balsam. "The best form of administration is that of emulsion; made by triturating the balsam with mucilage of gum Arabic and loaf-sugar, and afterwards with water. It may also be taken in the form of tincture; of which the dose is a common-sized teaspoonful, mixed in some sweetened water, or mucilage. When mixed with water, it immediately becomes white, like milk.

Another way of taking this medicine is, by mixing it with conserve of hollyhock.

Balsam tolu is found beneficial as a remedy in long-standing cough, chronic catarrh, and bronchitis.

FIR BALSAM—CANADA BALSAM.

THE tree which furnishes this balsam grows in Maine and Canada. The balsam collects in blisters on the body of the tree these blisters are pierced, and the liquid received into vessels.

Uses.—Balsam of fir is employed for the same purposes for which balsam copaiva is used. The fir balsam is inferior to the balsam copaiva in point of medicinal powers. The usual dose is about twenty drops. It may be taken rubbed up with a portion of sugar or gum Arabic.

MISCELLANEOUS MEDICINES.

PENNYROYAL.

PENNYROYAL tea, drunk warm, promotes perspiration, and may be employed with safety in all cases of sickness. It is much used, even in the old practice, to promote the menstrual secretion.

DITANY.

THIS herb possesses properties similar to those of the pennyroyal, and may be used for the same purposes. Hot ditany tea, taken at bed-time, is good for common colds.

CATNIP.

CATNIP tea is used successfully as a remedy for colic and flatulency in infants. A few drops of tincture of lobelia added to each dose of the tea, improves its medicinal qualities.

HOARHOUND.

HOARHOUND is used chiefly in colds and catarrhal affections. It is slightly tonic, and promotes expectoration.

SCABIOUS.

(*Errigeron Philadelphicum* and *Errigeron Canadense*.)

EACH of the above species of the errigeron grows plentifully in the fields in the vicinity of Philadelphia. By some, the errigeron is called *fleabane*.

A tea of the scabious is an important remedy in cases of gravel, and inflammation of the neck of the bladder; and may be used freely in complaints of the kidneys and bladder.

The errigeron Canadense is a very effective diuretic, sudorific, emmenagogue, tonic, and pectoral; it is very efficient in uterine disease, almost always agrees with the stomach, and is very beneficial in cases of gout and gravel." — *Dr. A. C. Logan*.

HONEY.

HONEY is highly nutritious, and is very useful in many cases of sickness; more especially in complaints of the urinary organs, attended with stoppage of urine, or strangury. In these cases, it may be employed to sweeten teas with, — such as composition, sumac, pipsissewa, scabious, burdock, or any other article that may be employed in those complaints. Some experienced physicians state, that they have found more benefit from the use of honey, than from any other article, in some cases of strangury and gravel.

Honey disagrees with many persons, taken as food; occasioning severe colic pains. Eating it with milk, however, will prevent any unpleasant effects

PIPSISSEWA.

(*Pyrola Umbellata.*)

THIS evergreen, of which the tops and roots are both used, possesses some valuable medical properties. A decoction of this plant may be used with benefit as a common drink in scrofulous eruptions, rheumatism, dropsy, and in complaints of the urinary organs in general. Sweetened with honey, and drunk freely, it will, in general, promote the discharge of urine, relieve strangury, and assist expectoration.

In order to obtain the full strength of the pipsissewa in decoction, it should be boiled half an hour, in an earthen vessel.

CLEAVERS.

THERE are several species of the cleavers, all of which possess similar properties. A strong decoction is said to be useful in urinary obstructions, and in inflammation of the urethra or neck of the bladder.

BURDOCK.

THE root of burdock, cut into thin slices and put into sound cider, adding a small portion of mustard-seed and horse-radish, furnishes a wholesome drink; and in certain conditions of the stomach, where the patient has a desire for cider, as is often the case after fevers, this preparation may be found not only grateful, but it will also strengthen the digestive functions. In dropsy, after the stomach has been cleansed, and the patient has passed through a course of general constitutional treatment, this cider preparation will generally prove beneficial, — giving tone to the stomach, and promoting the secretion of urine. Burdock root, steeped in boiling water, and the tea drunk freely, is good in cases of scrofulous humours. Severe cases of scrofulous sore eyes have been cured by the free use of this tea, taken internally, and using the tea as a wash to the parts affected.

CUBEBS.

CUBEB berries are the fruit of a running plant, growing in the East Indies.

"Cubebs are gently stimulant, with a special direction to the urinary organs." In Java, this medicine has acquired a high

reputation as a cure for gonorrhœa, gleet, fluor albus, &c. The dose of the powder is from twenty to forty grains; or from half to a teaspoonful, taken in warm water, and repeated three or four times a day.

PRICKLY ASH.

(*Xanthoxylum Fraxineum*.)

THE prickly ash is a bush growing in wet and shady places, and seldom exceeds in height ten feet. "The leaves are alternate and pinnate, consisting of four or five pairs of leaflets, and an odd terminal one, with a common footstalk, which is sometimes prickly on the back, sometimes unarmed. The leaflets are nearly sessile, ovate, acute, slightly serrate, and somewhat downy on their under surface." "The flowers are small and of a yellow colour, growing in little clusters close to the branches. They appear in May, in advance of the leaves. The seed-vessels have the appearance of berries; and, during the summer, change from a green to a red; in the autumn they assume a brownish colour, and open by three valves: exhibiting a black, polished seed in the centre." — *Mattson*.

"Dr. Bigelow informs us that the *aralia spinosa*, or angelica tree, which grows in the Southern States, is occasionally confounded with the *xanthoxylum fraxineum*; in consequence, partly, of being sometimes called, like the latter, *prickly ash*. Its bark, however, in appearance and flavour, is entirely different from the *xanthoxylum*." — *Wood and Bache*.

The bark and leaves of prickly ash are extremely pungent when chewed. The pulverized bark, seed, and capsules, added to other tonics, constitute a good medicine in cases of rheumatism, where a tonic is wanting. A decoction of these articles alone, or combined with cayenne or composition, may be used in any stage of rheumatism. It is stated that a decoction of the prickly-ash bark is a useful remedy in venereal complaints, fluor albus, and in general weakness of the urinary organs. The berries may be used to impart an agreeable flavour to wine bitters.

SARSAPARILLA.

THERE are various species of sarsaparilla, only a few of which, according to the observation of some travellers, possess any valuable medical properties. The American sarsaparilla appears to be entirely inert. Indeed, the most of that which is imported is of little value; from which circumstance, no doubt, it has lost its reputation with many as a medicine. "The only criterion of

good sarsaparilla which can be relied upon, is its taste. If it have a decidedly acrid impression in the mouth, after having been chewed for a short time, it may be considered efficient; if otherwise, it is probably inert."

To prepare a simple Decoction of Sarsaparilla.—Bruise thoroughly the roots of good sarsaparilla, sift out the dirt, pour on boiling water, and let it steep two or three hours by a fire, in a covered vessel: strain, and sweeten with sugar or honey.

To make Sarsaparilla Beer.—Take of sarsaparilla root, bruised, one pound; guiac shavings, anise-seed, and liquorice root, each, two ounces; good molasses, one pound; and half a dozen bruised cloves; pour upon these, two gallons of boiling water, and shake the vessel several times a day. After fermentation takes place, it is fit for use.

Compound Decoction of Sarsaparilla.—Take half a pound of bruised sarsaparilla; and of bark of the root of sassafras, sliced; guiacum-wood, rasped; and liquorice-root, bruised; each, *an ounce*; pour on these ingredients, half a gallon of boiling water, and let it boil a quarter of an hour, and strain.

Excepting the omission of one article, this decoction is an imitation of the celebrated *Lisbon diet drink*.

The decoction may be sweetened with rock candy, sugar, or honey.

Syrup of Sarsaparilla.—Take of good sarsaparilla, bruised, *two pounds*; guiac shavings, *three ounces*; red-rose leaves, and liquorice-root, bruised, each, *two ounces*; add to these ingredients, five quarts of diluted alcohol, and let them macerate fourteen days; then strain through thick muslin. Evaporate the tincture, by means of a water-bath, to four pints and a half; then add eight pounds of refined sugar, and simmer until it forms a syrup; then take a teacup half-full of the syrup, and add to it a teaspoonful of the oil of wintergreen; mix them thoroughly, and stir it into the whole of the syrup.

Uses.—Sarsaparilla, either in decoction or syrup, is often found beneficial in scrofula, where the patient is in an emaciated and feeble condition; in mercurial disease; secondary syphilis; various eruptive diseases; and in a great variety of complaints of long standing, attended with emaciation and debility.

PURPLE ARCH ANGLE.

(*Lycopus Virginicus*.)

THE arch angle grows plentifully in meadow lands and along the margin of brooks. The purple arch angle, which is readily recognised by the purple colour of the under side of the leaf, is highly esteemed by Dr. A. C. Logan, as a remedy in disease of the heart, fevers, &c. The infusion may be drunk freely, in any case of sickness. Dr. Logan says "it will reduce inordinate action of the pulse rapidly, more so than digitalis, and without any of the bad effects always to be feared from the use of digitalis."

GUAIAECUM WOOD.

GUAIAECUM wood is imported to the United States from the West Indies, in the form of logs or billets. It is commonly called *lignum vitæ*. It is possessed of some medicinal properties, and is employed in cases of chronic rheumatism, cutaneous eruptions, and scrofula. The wood is kept by apothecaries in the form of raspings or shavings. The wood yields the greater part of its properties to boiling water. It is seldom, however, administered alone, being mostly combined with other articles, particularly sarsaparilla. The concrete juice of the guaiacum tree, commonly called *gum guaiac*, is employed for the same purposes for which the decoction of the wood is given. It may be taken either finely powdered and mixed with molasses or syrup, or in the shape of emulsion with powdered slippery elm, sugar and water, or in tincture.

The *dose* of the powder is from half to a teaspoon, even full. Guaiac is sometimes added to Thomson's No. 6, and administered internally in cases of rheumatism, gout, female weakness, mercurial disease and syphilitic taint of the system.

PRECIPITATED CARBONATE OF IRON.

THIS preparation is much employed in the old school practice, in chronic diseases—dyspepsia, chlorosis, amenorrhœa, hysteria, and neuralgia, where there is absence of fever, the skin pale, and the system relaxed. It is quite harmless, "always having been regarded as one of the metallic substances friendly to the living system." "It increases the activity and volume of the pulse, corrects the state of the blood and secretions, and invigorates the whole system."

The *dose* of the precipitated carbonate of iron is from five to sixty grains; mixed with mucilage of elm or gum Arabic; or, it may be mixed with honey and formed into pills. As a general rule, a teaspoonful, repeated three or four times a day, is the proper quantity for an adult. To be taken after meals. Patients, while using this preparation, should avoid acids and astringents.

TANSY.

TANSY is used both as a tonic and vermifuge. For children supposed to be affected with worms, the leaves, either in the green or dried state, are boiled in milk, and a wineglass full given three or four times a day. It is particularly adapted to a feeble and relaxed state of the system where the use of tonics is indicated.

SLIPPERY ELM BARK.

(*Ulmus Fulva.*)

SLIPPERY ELM BARK is employed as a demulcent, by stirring the finely ground bark into hot water, or by pouring hot water upon the bark unground, and allowing it to steep. The mucilage of slippery elm bark is very nutritious, and it may be employed as an article of diet in fever, pleurisy, inflammation of the lungs, scarlet fever, diarrhœa, dysentery, and in any other form or variety of disease, especially when accompanied with fever, for the stomach is very rarely in a condition to digest food when it is so much disordered as to occasion fever, except the food be of the lightest kind, such as elm gruel, barley water, and gum Arabic water. A mucilage of slippery elm sweetened with loaf-sugar or rock candy, adding a portion of lemon juice, is a good remedy for cough when attended by fever and a dryness of the tongue.

To form an emollient poultice, there is no article superior to finely powdered slippery elm bark.

YELLOW DOCK.

THE root of the narrow-leaved yellow dock is useful in tetter, itch, and in other cases of eruptions of the skin. A tea of the root should be drunk, and an ointment or tincture of the root applied to the eruptions.

Two ounces of the dried root pounded, to a pint of vinegar, is a good application for tetter.

STRENGTHENING SYRUP.

TAKE four ounces comfrey root dried; two ounces elecampane; and one ounce hoarhound. Boil in three quarts water down to three pints. Strain, and while warm add half an ounce of beth root pulverized, a pint of brandy and a pound of loaf-sugar.

Dose, a small wineglass full three or four times a day. Considered useful in cases of female weakness in general.

ACIDS.

VINEGAR.

THE use of vinegar on food promotes digestion in particular conditions of the stomach. With the addition of salt and cayenne pepper, it constitutes pepper sauce. This preparation is useful as an internal remedy in many cases of disease, and particularly so in some cases of fever, where the patient desires or craves acids. There are families who depend almost exclusively upon the internal use of a mixture of salt and vinegar in all cases of dysentery and bowel complaints. Although this is undoubtedly a valuable remedy, yet certainly not one to be relied upon exclusively, in diarrhœa or dysentery. Pepper sauce forms one of the best applications for the cure of ulcerated sore throat, so often attendant upon scarlet fever. The throat must be swabbed with the mixture and a dose occasionally administered. On many occasions, when patients have expressed a desire for acid, I have directed them to take stale wheat bread dipped in vinegar, and it has agreed well with the stomach in every case where I have recommended it. Within the past month, a patient of mine ate freely of bread soaked in vinegar and continued to take it three or four days, not only without receiving any injury from it, but, on the contrary, it was evidently of especial benefit as a medicine. This patient was affected with a form of disease which would have been termed congestive fever by medical men in general.

Some dyspeptics find nothing to set so well on the stomach as bread and butter dipped in vinegar. Even in cases of sour sto-

mach, vinegar or lemon juice has been found in some instances to suit the stomach better than alkalies.

Vinegar, applied after caustic potash, will neutralize the caustic and prevent it penetrating deeper into the flesh

Lemon juice may be used for the same purposes as vinegar in cases of sickness. Very often we find that a mixture of lemon juice and sugar, in the form of syrup, suits the stomach remarkably well in cases of disease, particularly in fever.

ELIXIR OF VITRIOL.

THIS preparation consists of sulphuric acid, alcohol, and the essential oil of ginger and cinnamon.

I have employed elixir of vitriol with especial benefit in some cases of disease, and though not used in the Thomsonian practice, still there can be no reasonable objection to its employment in the diluted state in which it is given. It may be employed to moderate night sweats, and as a tonic in intermitting fever or ague, particularly when the system is brought into a condition to admit of their use. In hectic fever and in consumption attended with urgent thirst, a few drops of the elixir of vitriol, added to a glass of water, will prove grateful to the taste, and tends to check thirst.

The dose of elixir of vitriol is from ten to thirty drops taken in a wineglass full of water, or in ginger or bitter tea. It is often given, combined with a decoction of Peruvian bark, in cases of remitting fever.

ALKALIES—ANTI-ACIDS.

Super-Carbonate of Soda—Bi-Carbonate of Soda.

SODA is obtained from the ashes of sea-weeds. It is subjected to certain processes by which it becomes purified and well adapted to general use as an anti-acid, in the form of the sup. carbonate, or bi-carbonate of soda.

It is a stronger anti-acid than pearlash, and is preferable to the latter on account of not being as liable to impurities as pearlash is on exposure to the air, or from long keeping.

Soda is preferable to sal æratus for neutralizing acid, and in assisting the operation of emetics.

Sup. carbonate of soda will generally overcome heartburn, and affords great relief in case of acidity and distress at the stomach after eating. It is a favourite medicine with epicures.

SAL ÆRATUS.

SAL ÆRATUS, as it is commonly called, is the bi-carbonate of potassa. It is employed in the place of pearlash, being less liable to impurities than the latter. It is used for the same medical purposes as the sup. carbonate of soda. It is more used by Thomsonsians than the sup. carb. soda, but it is not so strong an alkali as soda, and it is more unpleasant to take.

A solution of sal æratus in whiskey (for instance, take half a pint of whiskey and put into it as much sal æratus as it will dissolve,) is a favourite wash with some practitioners for the cure of scaly eruptions on the surface, constituting one species of tetter.

A solution of sal æratus in water has proved effectual, as stated by Dr. Anderson of Ohio, in curing cholera in children, even when the symptoms were violent and the case dangerous. In these cases, the sal æratus water was given freely, so as effectually to neutralize the acid existing in the stomach and bowels.

HICKORY ASHES.

A TEA made by pouring boiling water on hickory ashes, may be employed as an anti-acid when bi-carbonate of soda or sal æratus cannot be obtained. A tea of hickory ashes has been used with much benefit in some cases of dyspepsia attended with a superabundance of acid in the stomach.

The following was a favourite remedy for dyspepsia with the late Dr. Physick:

“A quart of hickory ashes, a teacupful of soot, and a gallon of boiling water.”

Dose.—A wineglass full of the tea immediately after meals.

CHARCOAL.

THE charcoal employed for medical purposes, is generally obtained from those who manufacture gunpowder. In their establishments, the charcoal is burned in iron cylinders, by which it is freed from all impurities; then being finely pulverized for the purpose of powder-making, it is well adapted also for medical purposes. Common charcoal is rarely entirely clear of impurities, and consequently it is not so well adapted to medical purposes as that prepared by the powder-makers. There are processes, however, for purifying the common charcoal and fitting it for medical

purposes, as follows:—Fill a crucible with ordinary charcoal reduced to fine powder, and lute on a perforated cover. Then expose the whole to a strong red heat, and continue the ignition as long as a blue flame issues from the aperture in the cover; when this ceases, allow the charcoal to cool, and transfer it immediately to bottles, which must be kept well stopped.

Another method.—“Take any quantity of thoroughly-burnt charcoal, very light, sonorous and pure, made from the wood of the linden tree, willow, poplar, or some other of the lighter woods, and moisten it with water. Reduce it to powder in an iron mortar, or by means of a mill; and having mixed it with water to form a thin fluid mass, let it stand for a few days; after which place it in linen-cloths to drain. Make up the paste into round cakes, and expose them to the rays of the sun until they are thoroughly dried. By this process of insulation, the charcoal, it is stated in the codex, is deprived of all adventitious colour and smell, and is singularly improved in efficiency.”—*U. S. Dyspen.*

Chemical properties and uses.—Charcoal is absorbent and powerfully antiseptic. Fresh meat may be preserved for months by being enclosed in a box of charcoal. Tainted meat may be sweetened by placing it in powdered charcoal.

The kinds of cases to which charcoal appears to be best suited, are dyspepsia, accompanied with heartburn and sour eructations, and fevers attended with sour taste in the mouth; constipation of the bowels; periodical sick-headache; and in dysentery and other forms of disease where there is a putrid tendency—the stools very offensive.

The *dose* of charcoal is from a teaspoonful to a tablespoonful, to be repeated from one to three or four times a day. To prepare the powder for taking, it should first be made into the form of a paste with a little sugar and water, and then it will combine readily with liquids. By preparing it in spice-bitters, composition, or pepper tea, the patient will obtain the benefit of two medicines in one dose. For children, it may be mixed with boiled milk. It is stated by some persons who have travelled through the sickly districts of the western and southern States, that by using charcoal freely, even strangers unaccustomed to the climate may reside in those districts without being attacked with disease.

Charcoal is often combined with other powders, such as cayenne, ginger, or spice-bitters, and taken in this way instead of the charcoal alone.

Animal Charcoal.—Charcoal made by burning strips of sole-leather in closed vessels, is said to be more efficient than the vege-

table charcoal as an absorbent, and to correct the putrefactive tendency that often exists in bowel complaints of children, and in cases of malignant diseases.

Administered in large doses, animal charcoal proves a powerful antidote to all the vegetable poisons.

LIMEWATER.

To prepare Limewater.—Take of fresh burnt lime two ounces, put it in an earthen vessel and pour on half a gallon of cold water: stir it occasionally with a piece of wood, and in the course of three hours put it into glass vessels and keep them corked. Pour off the clear part only for use.

Limewater is good to neutralize acidity in the stomach, to correct offensive breath, and overcome putrid eructations. A lady of this city informs me that for several years her diet consisted of boiled milk with the addition of about one-fourth its quantity of limewater; almost every other kind of food soured in the stomach, causing distress and vomiting. Persons subject to offensive eructations, which they say taste like rotten eggs, will find especial benefit from the use of limewater. Chronic eruptions in children are generally attended with acidity of the stomach, which may be relieved by the use of limewater. It may be employed with benefit in children who have worms, having the effect, as it is asserted, to dissolve the tenacious mucus in the stomach and bowels which supports worms. It is also useful in ordinary bowel complaints of children.

The *dose* of limewater, for an adult, is from two to four ounces. It should be combined with about an equal portion of milk. The dose to be repeated three or four times a day.

PREPARED CHALK.

PREPARED chalk is obtained by rubbing a portion of common chalk in an iron or earthen mortar, with a small portion of water; and when rubbed very fine it is put into a larger vessel, and a considerable quantity of water added; then it is to be thoroughly stirred, so that the fine particles of chalk will be suspended in the water, and the impurities, sand, &c., will remain in the bottom of the vessel, or soon settle. This water containing the fine chalk is to be poured into another vessel, and when the chalk settles, the clear water is to be poured off, and the chalk dried.

Medical Properties and Uses.—Prepared chalk is anti-acid and absorbent, and as such it may be employed with benefit in diseases

attended with a superabundance of acids in the stomach and bowels. A teaspoonful of prepared chalk mixed with a teacup half full of strong bayberry or composition tea, sweetened, forms a useful preparation in bowel complaints of children. In severe cases, the use of the vapour bath, emetics, and injections, must be chiefly relied upon; prepared chalk is to be employed merely as an auxiliary remedy.

Prepared chalk is beneficial in cases of sore mouth, inflamed and swollen gums, and ulcerated throat. In scarlet fever, more especially when the disease becomes protracted, the throat swollen, and the patient feverish, the prepared chalk will also prove beneficial. It may likewise be used with advantage as an adjuvant remedy in other forms of fever, particularly where there is a tendency to putrescency, as is very common in the fevers that prevail in warm climates, and during the hot summer months of our own climate.

STIMULATING LINIMENT.

THERE are a great variety of stimulating liniments, but that which is frequently alluded to in the practical part of this work, is prepared by my brother, A. Comfort. The basis of this liniment, is gum elastic. It is an imitation of Col. Jewett's liniment, which has been proved beneficial as an external application. It contains a large portion of essential oils and the liquid of the 3d preparation of lobelia. This liniment is one of the best external applications I have ever employed. This liniment is well adapted to neuralgia, rheumatism, and chronic eruptions. It has also been found especially beneficial, applied to the surface after a vapour bath, in cases of asthma, chronic bronchitis, chronic pleurisy, night-sweats, marasmus, St. Vitus' dance, cholera infantum, and dropsy; and wherever the skin is in a cold or relaxed condition. Spread upon oiled silk or soft leather, it forms a useful plaster in cases of pain in the side, disease of the chest, swollen joints, consumption, &c., &c.

WARD'S PASTE.

Take of black pepper, ground,	8 ounces,
“ dried elecampane root, ground,	8 “
“ fennel seed, powdered,	4 “
“ honey,	1 pound,
“ loaf-sugar,	1 “

mix these in a mortar to the consistence of paste, and it is ready for use.

Dose.—A piece as large as a shellbark, every morning, or a piece as large as a chestnut four or five times a-day.

The above preparation has long been a celebrated remedy for piles. It is designed to regulate the bowels and to strengthen the vessels of the parts affected with piles. This preparation may be used to overcome costiveness in general.

OF COUGH MIXTURES.

A GREAT diversity of compounds and syrups may be employed with benefit in cases of cough, yet none of them are to be relied upon further than as a means of relief: the general Thomsonian treatment constitutes the surest means of curing cough. A course of medicine will often relieve a cough, when all other means have failed.

Dr. S. Thomson, in treating of cough, observes, "The general opinion is, that cough is an enemy to health, and ought to be treated as such; but this I hold to be altogether an error, for cough is the effect and not the cause of disease. When the lungs are diseased, there will be a collection of matter, which must be thrown off; and the cough is like the pump of a ship, which discharges the water, and prevents her from sinking: so also the cough throws off what collects in the lungs, which, if suffered to remain, would soon putrefy and cause death."

The correct way to cure a cough is to remove the cause and not to deaden the sensibilities by the use of anodynes; for though these may afford relief for a time, they directly tend to impair the functions of the stomach and bowels. There are circumstances, however, under which it may be proper to administer anodynes; for instance, in cases of deep consumption, where the cough is so extremely harassing, as to prevent the patient from sleeping at night.

Ordinary cough, caused by cold, may be cured by taking composition, or pepper tea; whereas, in cases of seated disease of the lungs, courses of medicine will be needed. A variety of cough mixtures, however, of a mild character, may be employed, with more or less benefit, in cases of hard cough, or difficult expectoration.

The most effectual cough medicine that I have employed, apart from Thomsonian courses of medicine, is lobelia, given in broken doses, either in the form of tincture, or in powder.

COUGH POWDER.

EQUAL portions of lobelia powder, powdered liquorice root, finely pulverized skunk cabbage root, recently dried, and sugar, all well mixed, and taken in small teaspoonful doses, is a very good cough medicine.

In recent cough from ordinary colds, demulcents: gum Arabic, slippery elm, flax-seed, and Irish moss mucilage, may be useful, more especially if the patient be feverish and inclined to drink; whereas, in coughs that have been of long standing, or have become deeply seated, they will seldom prove of essential benefit. Mucilages may be rendered more agreeable to the taste, and their medicinal properties improved by the addition of lemon-juice and sweetened with rock-candy, loaf-sugar, or honey.

In cough of long standing; syrup of garlic, or onions, and the vegetable balsams, will be found the most beneficial kind of cough mixtures.

Garlic Syrup.—To make Garlic Syrup, mash the garlic, add warm water, and allow it to stand half an hour, but not heated; then squeeze through a cloth and add sugar.

Onion syrup may be made in the same way as the garlic syrup.

These syrups are well adapted to cases of long-continued cough in children, hystericky females, chronic bronchitis, whooping-cough, and in consumption.

Oxymel of Garlic is made by digesting garlic in vinegar, and then boiling the liquid with a portion of honey. This preparation is considered by Dr. Chapman to be superior to the simple syrup of garlic, as an expectorant.

The following preparation is often employed as a cough medicine:—

Take a tablespoonful of powdered liquorice root, add a pint of boiling water, then strain and sweeten with a tablespoonful of honey, and add the juice of half a lemon. To a wineglass full of this mixture, add half a teaspoonful of the tincture of lobelia. Repeat the dose every two or three hours, as the circumstances of the case may demand.

Thomsonian pepper candy and conserve of hollyhock are much used for cough, and they are generally found to answer a good purpose.

Several other cough mixtures are mentioned in the treatment of colds and bronchitis, which it is unnecessary to describe here.

VOLATILE LOTIONS AND LINIMENTS.

Take of aqua ammonia 5 tablespoonsful,
Spirits of rosemary, 4 ditto.
Spirits of camphor, 1 ditto.

This compound forms the celebrated *Granvill's Lotion*, at one time considered as almost a certain cure for neuralgia, or tic-douloureux, and acute rheumatism. The mode of applying it is to wet a piece of cotton with it, and lay it on the part affected. It must not be rubbed, or it will blister the part.

AMMONIA LINIMENT.

TAKE of water of ammonia one tablespoonful, of sweet oil six tablespoonsful, and mix them thoroughly.

This liniment is chiefly employed in inflammatory rheumatism, sprains, and bruises.

CAMPHOR LINIMENT.

CAMPBOR liniment is prepared by dissolving half an ounce of gum-camphor in four fluid ounces of sweet oil. This preparation may be used in cases of bruises, sprains, acute rheumatism, &c.

SOAP LINIMENT—OPODELDOC.

OPODELDOC is made by dissolving an ounce of camphor, and oil of rosemary and oil of origanum, each a fluid drachm, in a pint of alcohol; then add three ounces of castile soap, and keep it several days in a warm place.

The above compound forms an article extensively employed as an external application in cases of inflammation, swellings, bruises, &c.

SIMPLE CERATE.

MELT together *one ounce* of spermaceti and *three ounces* of white wax; and then add *six ounces* of olive oil.

Simple cerate may be employed as a salve to protect raw surfaces from the air. It contains no irritating properties, provided it be made of good articles.

BASILICON OINTMENT.

BASILICON ointment is prepared by melting together *five ounces* of resin, *eight ounces* of lard, and *two ounces* of yellow bees-wax.

This ointment is employed as a salve in cases of ulcers, burns, scalds, and chilblains.

GUM-ELASTIC.

THE sheet gum-elastic may be applied with marked benefit in many cases of chronic rheumatism, swollen joints, and neuralgia, more especially in neuralgia of the hip, commonly called *sciatica*. The gum should be washed with warm soapsuds before it is applied, and also every time it is removed. In some cases, the gum cannot be kept on more than twenty-four hours without occasioning a great deal of irritation. As a general rule, the sheet should be taken off and washed as often as once a-day.

TAR OINTMENT.

Mix a pound of tar with a pint of melted tallow, and stir the mixture until cold.

This ointment is especially well adapted to the cure of scald head and some species of tetter.

TAR-WATER.

To prepare tar-water—"Take of tar two pints; water, a gallon. Mix, stirring with a wooden rod for fifteen minutes; then, after the tar shall have subsided, strain the liquor, and keep it in well-stopped bottles."

As an internal remedy, tar-water may be used in cases of chronic cough, chronic catarrh, piles, and in affections of the kidneys and urinary organs. One or two pints may be taken daily.

Tar-water has been used with marked benefit as an injection in cases of fluor albus, and piles. A mixture of equal quantities of tar-water and a decoction of sumac and witch-hazel is better than the simple tar-water.

Tar-water and a strong decoction of marsh rosemary, mixed in equal quantities, is a good preparation for washing parts that are chafed in children, ringworm, and scaly eruptions on the face.

Tar-water has of late been successfully used as a styptic—to arrest the flow of blood from wounds.

THOMSON'S SALVE.

TAKE of bees-wax and fresh butter, each one pound; of turpentine, one and a half pounds; and three-quarters of a pound of balsam of fir. Simmer by the fire until all the wax is melted, and then strain.

This preparation, commonly called Thomson's *healing salve*, may be employed to protect injured parts from the action of the air, and in this way assist the healing efforts of nature. This and the basilicon ointment may be used for the same purpose.

ASTRINGENT OINTMENT.

TAKE a pound of sheep suet, melt it, and add two ounces of witch-hazel or sumac leaves that have been collected in the proper season and well dried. Simmer these half an hour or more, and strain whilst warm. This ointment may be used with benefit in cases of piles, chafing, chopped hands, sore nipples, &c.

PERSIMMON OINTMENT.

TAKE green persimmons, mash them, and stew them in lard; then strain. This ointment has been highly spoken of by surgeons as a cure for piles.

PITCH PLASTER.

TAKE of Burgundy pitch and Venice turpentine, each one pound melt them together, and add an ounce of cayenne pepper, and when it cools, if it be found too hard, melt it over, and add a portion of sweet oil.

This may be employed as a general strengthening plaster.

TURPENTINE PLASTER.

VENICE TURPENTINE, melted with a portion of bees-wax, to give it a proper consistence, forms as good a strengthening plaster probably as any other compound.

GUM HEMLOCK PLASTER.

GUM HEMLOCK, obtained from the bark of the hemlock spruce, contains the resinous principle, the same as Venice turpentine, and

is equally as good for strengthening plasters. It may be melted with a portion of bees-wax and balsam-fir to make it more adhesive, softer, and less brittle.

MUSTARD PLASTER.

A simple mustard plaster may be prepared by mixing ground mustard and warm water to form a proper consistency for a plaster. If it is desired to weaken the plaster, wheat or rye flour may be added.

A very common form of preparing mustard plaster, is to take equal quantities of ground mustard and wheat or rye flour, and moisten them with vinegar.

Mustard plasters are often found serviceable when not left on so long as to occasion a blister.

POULTICES.

THE composition of poultices requires to be varied to suit the different conditions of the parts upon which they are to be applied. Thus, in the early stage of acute inflammation, as in biles, felons, sudden swellings of glands; and in bruises and lacerated wounds; emollient poultices are required, such as the elm, flax-seed, or mallows poultice; but in chronic inflammation, and after a bile or abscess has discharged, stimulating and astringent poultices will be called for; and in cases of gangrene and mortification, the poultice should possess antiseptic properties.

There are particular forms of disease when poultices do not answer a good purpose: for instance, erysipelas, venereal chancre, some forms of tetter, and chafing in infants and children.

The following formulas describe poultices suited to the various conditions of parts attending the different stages and varieties of the complaints to which they are adapted as a curative agent.

Recently, the warm water and cold water dressings have been substituted for poultices.

EMOLLIENT AND SLIGHTLY STIMULATING POULTICES.

TAKE of slippery elm powder two parts, white pond lily root, pulverized, one part, green lobelia powder, half as much as of the white pond lily; mix with warm water.

This poultice may be used in all cases of biles and tumours attended with inflammation, and in cases of injuries when the flesh is lacerated. It also forms a suitable poultice for acute inflammation of the eyes, and when a part is burned with a red-hot iron or live coals, so as to sear the flesh.

STIMULATING AND ASTRINGENT POULTICES

TAKE of composition powder and slippery elm, pulverized, equal quantities, wet them with warm water, and then add a portion of sweet lard.

This poultice is well adapted to all cases of bile or abscesses when the matter has discharged, and in old sores that require cleansing and stimulating, and in chronic inflammation.

MALLOWS POULTICE.

TAKE of mallows, either in a green or dried state, steep them in milk and thicken with elm powder, ground flax-seed or fine Indian meal, and, when spread, put a portion of green lobelia powder over the surface.

This forms a useful poultice in the early stage of biles, felons, whitlows, &c. After a bile or abscess breaks, or is opened, a stimulating and astringent poultice should be applied.

CATNIP POULTICE.

CATNIP leaves, steeped in vinegar and water, and thickened with slippery elm, ground flax-seed, or fine Indian meal, form a poultice that may be applied with especial benefit in cases of ear-ache, face-ache, and swollen and painful breasts.

CHARCOAL POULTICE.

TAKE of purified charcoal three parts, ginger, one part, bayberry, one part, slippery elm, two parts; mix them in warm water.

This poultice is adapted to the treatment of putrid and offensive ulcers, and also gangrene and mortification.

YEAST POULTICE.

TAKE a quantity of yeast and thicken with a mixture made of equal portions of ginger and rye or wheat flour. Set it in a warm place until it begins to rise.

The yeast poultice may be employed in all cases of gangrene, mortification, &c., sloughing and offensive ulcers.

MYRRH POULTICE.

EQUAL quantities of the dregs of No. 6 and slippery elm powder, moistened with water, may be employed with especial advantage in cases of indolent ulcers, carbuncle and long standing inflammation. This form of poultice requires to be moistened occasionally, more particularly when it is applied to a part in which there is an unnatural degree of heat.

WILD INDIGO POULTICE.

THE bark of the root of wild indigo pounded fine, and applied to indolent ulcers as a poultice, will soon change the ulcer to a more healthy character; so say those who have tried it.

GUM ARABIC.

GUM ARABIC exudes spontaneously from the bark of a tree that grows abundantly in many parts of the continent of Africa. "Calculated by nature for a dry and sandy soil," the tree that furnishes this gum "flourishes in deserts where no other trees will grow, and even the date-tree perishes. We are told that the camels attached to the caravans derive from it their chief sustenance in many of those desolate regions in which Africa abounds."

Uses.—Gum Arabic, dissolved, is employed as an article of diet in sickness. The mucilage of it is well adapted to cases of disease where the stomach and bowels are extremely irritable, and where other articles of diet disagree. It is useful as a demulcent, as well as affording nourishment in catarrhal affections, pleurisy, inflammation of the lungs, and in inflammation of the urinary organs. A very good mode of preparing it is to dissolve it in composition, pepper, or ginger tea. Prepared in stimulating tea, I have found it to agree well with patients affected with diarrhœa and dysentery, and particularly in bowel complaints of infants and children. It is not to be exclusively relied upon, however, as a cure in those forms of disease, but to supply the system with nourishment, and being combined with a stimulant, another important object is obtained. It is asserted that six ounces of gum Arabic taken daily is sufficient to sustain life in a healthy adult. The Moors and Negroes who collect this gum, depend almost exclusively upon it for sustenance whilst they are engaged in collecting and conveying it to market.

CIDER.

SOUND cider, more especially old bottled cider, has been used on many occasions of recovery from sickness, with the best effects, especially in cases where patients had expressed a desire for it. The best time for taking it is at, or after dinner and supper.

A pound of the green, or half a pound of the dry burdock root, and a small root of horseradish, all cut up fine and put to a gallon of good cider, is a very healthy drink for those whom cider agrees with, and it is said to prove a powerful preventive to pestilential diseases.

The roots of burdock, parsley, and horseradish; and mustard-seed simmered in good cider an hour or more, is a good remedy in some cases of dropsy. Iron wire put into sound cider forms a tonic that may be given with especial benefit in many cases of debility attended with extreme paleness of the countenance, evincing deficiency of red blood.

ARROW-ROOT.

ARROW-ROOT is obtained from the root of a plant which is a native of South America and of the West Indies.

The greater part of the article kept in the shops called arrow-root, is largely adulterated with potato-starch finely prepared. It is believed by some, however, that potato-starch is equal to arrow-root in every particular, except that the former is not so agreeable to the taste.

Uses.—Arrow-root is employed as an article of diet in fevers, and in bowel complaints of infants and children.

To make Arrow-root Gruel.—Mix a tablespoonful of the powder in cold water, to the consistence of paste, and then pour this gradually into a pint of boiling water, stirring the water as the paste is poured in. Sweetened with loaf-sugar. For infants and children, arrow-root is usually prepared with boiled milk.

BARLEY WATER.

To make Barley Water.—Take two tablespoonsful of pearl barley, wash it in cold water, and then put it into a sauce-pan, adding a quart of cold water, place it over the fire and let it boil slowly until the water is reduced nearly one-half. Barley water may be rendered more palatable by having a small handful of stoned raisins.

sins, or some pieces of liquorice root, stewed with it. When done, it is to be strained. The addition of ginger not only improves the taste but affords a mild and pure stimulant, and promotes digestion.

Barley is mentioned in the earliest records of history as an article of diet in sickness. It is extensively used in cases of general fever, and in inflammatory affections, when the condition of the stomach will not admit of food, except it be in the form of a demulcent.

To make Milk Porridge.—Take of wheat flour a tablespoonful, mix it with cold water to the consistency of paste, pour it into a pint and a half of boiling water, and after boiling fifteen or twenty minutes, add half a pint of milk. As soon as it begins to boil again, after the milk is added, it will be fit for use. It must be salted to suit the taste, and, when patients prefer it, loaf-sugar may be added.

Milk porridge is much improved in flavour, and suits the stomach better, by allowing it to become cold before taken. It may be warmed again if preferred.

Another method.—Take a portion of wheat flour, say a pint or more, tie it in a bag, and put into boiling water; let it boil four or five hours. The inside will be hard and dry and thoroughly baked. The dry part to be grated fine, made into gruel, and a portion of milk added and made to commence boiling, and then it is done. Add a portion of salt. This is well adapted to cases of bowel complaints, both in children and adults. In making gruel or porridge, ginger tea may be employed in place of water.

Milk porridge, properly made, is an agreeable and nourishing article of diet, and the one mostly taken during and after a course of medicine, except in the early stages of violent forms of disease, as in violent fever, inflammation of the lungs, &c., when the digestive powers are too feeble for such food.

Cayenne, or black pepper, put into milk porridge, furnishes a stimulant congenial to the stomach, and promotes digestion.

The following preparation of food is especially well suited to infants and children when digestion is very feeble.

Take of boiled milk half a pint, ginger tea, half a gill, lime-water, half a gill, and slippery elm powder, a heaping teaspoonful.

To make Oat Meal Gruel.—Take of coarsely ground oat meal three tablespoonsful, and put it in a pint of boiling water; let it boil gently half an hour, stirring it occasionally. Then strain and add a little nutmeg, wine, and butter.

When the oat meal is finely ground, it should be sifted and mixed with cold water to the consistence of batter, and then poured into boiling water, allowing it to boil gently, and to be stirred frequently.

To obtain the Essence of Beef.—Take from one to two pounds of fresh lean beef, cut it into small pieces, sprinkle it with a little salt, and put it into a dry and perfectly clean porter bottle, and cork it lightly, or into a stone jar, placing a cover on the jar. Set the bottle or jar into a kettle of water, and boil the water an hour or more, and then remove it from the fire before the bottle is taken out, it may otherwise be broken by the sudden change of temperature. Essence of beef is highly nutritious and very easy of digestion, and consequently forms an important article of diet in disease attended with extreme debility, as in the advanced stages of fevers, pleurisy, small-pox, dysentery, &c.

Dried Beef Tea.—Boiling water poured upon chipped dried beef, not smoked, forms a nutritious drink, that agrees well with the sick.

French Method of making Beef Tea.—Take two pounds and a half of fresh lean beef, cut it into small pieces, put it into an earthen pipkin with three pints of water; let this simmer, but never boil, until the liquor is reduced about half in quantity; then strain, and add salt if the patient should prefer it salted. This may be drank either warm or cold.

Chicken Tea may be made in the same manner as above described, and employed for the same purposes.

To make Crust Coffee.—Take some of the crust and thin slices of stale wheaten bread, toast it thoroughly, so that there shall be no part of it unbrowned; pour on boiling water, and, after steeping ten or fifteen minutes, it will be ready for use. It may be sweetened, and a portion of milk or cream added if the patient prefer it so. Crust coffee is nourishing, and generally agrees well with the sick. To be taken cold or warm, as the patient may fancy.

To make Panada.—Take some slices of stale wheaten bread, pare off the crusts, and boil them in water four or five minutes, then take out the bread, and a little of the water it was boiled in, beat it fine, and add sugar and nutmeg, and if proper, a little fresh butter and some wine.

To make Mutton Broth.—Take two pounds of the lean part of mutton, and boil it slowly two or three hours in two quarts of water, adding a proper quantity of salt and some parsley. The fat must be skimmed off.

By cutting mutton into thin slices and pounding it, half an hour's boiling will be sufficient.

Chicken broth may be made in the same way. The chicken to be cut up before it is boiled. A small portion of rice, or pearl barley may be boiled with the chicken.

To make Wine-Whey.—Put a pint of new milk into a sauce-pan that will hold at least two quarts; set it over the fire, and when it is in full boiling and raised to the top of the vessel, dash in it a large wineglassful of Madeira or Sherry wine; set the sauce-pan off, and do not stir it for four or five minutes; then pour the clear whey from the curd into a bowl, and sweeten it with loaf-sugar. When it is desired to have the whey more stimulating, use more wine. Good currant wine may be used when neither the Madeira nor Sherry can be obtained.

Wine-whey contains a large amount of nourishment, which is readily absorbed without undergoing the usual process of digestion in the stomach. It operates, also, as a diffusive stimulant, and hence it is an important article in the treatment of typhus fever, and other forms of disease where the vital energies are much enfeebled.

The chief objection to the use of wine-whey is its tendency to become acid in the stomach. This, however, may, in a great degree, be prevented, by adding to each dose of the whey from five to ten grains of the carbonate of ammonia.

Egg Soup.—Beat up the yolk of a fresh egg and pour on half a pint of boiling water. A little wine, salt, and sugar, may be added. This is highly nutritious, and generally sets easy on the stomach.

Another Method.—Take the yolk of a hard-boiled egg, mash it in a bowl with a silver spoon; then add sufficient of boiling water to make it thin enough to be drank. It may be seasoned to suit the taste of the patient.

SUGAR.

SUGAR disagrees with many persons in consequence of its tendency to form acid in the stomach. There are conditions of the system, however, where sugar is a very important article, both as food and medicine, especially in long-standing cases of scrofula, where the system is weak and emaciated. In these cases, it will often prove highly beneficial by producing better chile, and richer

blood than can be produced by other kinds of food. It may be taken in the form of syrup, rock-candy, or loaf-sugar, and eaten between the regular meals, provided the patient find it to relish well, and occasion no unpleasant feelings.

DRYING ROOTS AND HERBS.

THE more speedily roots, barks, and herbs are dried after being collected, the better will their medical properties be retained.

Bayberry root bark, white pond lily root, and other astringent articles, may be dried either in the sun or in an oven. White pond lily root cannot be dried properly without either being strung on a string and hung up, or placed in an oven. Much of the bayberry root bark in the market has been so long in drying, that it is often moulded and in a state of decay. Bayberry root bark should be dried in an oven of a moderate heat, and then all its medical properties will be retained in a state of purity.

Small fibrous roots, such as Virginia snake-root, and American valerian, may be very readily dried in a warm room, or in the sun.

Medical herbs retain most of their natural flavour and medical properties by being dried quickly in an oven, at a moderate temperature, soon after they are collected. When thoroughly dried, they should be pounded and put into air-tight vessels, or packed in boxes and secured from the air and from dampness.

POISONS AND THEIR ANTIDOTES.

THE term *poison* is applied to all substances which, when introduced into the animal economy, either by cutaneous absorption, respiration, or the digestive canal, act in a noxious manner on the vital properties or the texture of an organ. Poisons exist in three kingdoms of nature, but those which proceed from animals are often called *venoms*, as the venom of the viper, scorpion, tarantula, &c., whilst those that are the products of disease have the name *virus*. In common parlance, therefore, *poison* is restricted to deleterious articles furnished by the mineral and vegetable kingdoms. Orfila has divided poisons into four classes.

1. "ACRID, IRRITATING, CORROSIVE, OR ESCHAROTIC—such as the concentrated acids and alkalies; mercurial, arsenical, cupreous, and antimonial compounds, cantharides, &c.

2. "NARCOTIC;—those that act particularly upon the brain; as opium, hyoscyamus, &c., but without inflaming the organ with which they come in contact.

3. "NARCOTICO-ACRID, or ACRONARCOTIC;—those that act on the brain, but, at the same time, inflame the parts to which they are applied; as, aconite, belladonna, &c.

4. "SEPTIC, or PUTRESCENT;—those furnished by the animal kingdom. See *Venom* and *Virus*.

"Various classifications, of a similar character, have been recommended by different toxicologists; but they are liable to the objection, that they throw substances together, whose physiological action on the system is very different. It is, indeed, difficult to avoid unnatural compression of matters into places not properly belonging to them, in all such arrangements."—*Dunghlison's Med Dic.*

CONCENTRATED ACIDS.

NITRIC AND OXALIC ACIDS.—*Antidotes*—"Carbonates of magnesia and lime."

MURIATIC AND SULPHURIC ACIDS.—The antidotes are "the carbonates of soda, potassa, lime, and magnesia; calcined magnesia also." "In the case of sulphuric acid, water should not be drunk, on account of the great heat which is produced by their mixture."

After an *antidote* has been given, an emetic should be taken and alkaline injections administered. A heaping teaspoonful of supercarbonate of soda, or a large teaspoonful of calcined magnesia, or of sal æratus, to half a pint of warm water, may be administered by injection, and repeated as often as it may be deemed necessary.

PRUSSIC ACID.—"Ammonia is an antidote; but it should not be employed in a very concentrated form. The cold *douche* to the head has been recommended."

CONCENTRATED ALKALIES.

CAUSTIC POTASH, CAUSTIC SODA, pure VOLATILE ALKALI, and QUICK-LIME.—*Antidotes*—The vegetable acids, such as vinegar, lemon-juice, citric and tartaric acid, in solution, are antidotes to the alkalies and their carbonates. The fixed oils, such as castor, linseed,

almond, and olive, form soaps with the free alkalies, and therefore destroy their caustic effects.

Two tablespoonsful or more of vinegar or lemon-juice should be added to a glass of water, and the patient continue to drink it freely; and, as soon as possible, give a lobelia emetic. In difficult cases the hot air or steam-bath should be employed in the treatment.

CREOSOTE.—The *antidote* to creosote is albumen—the white of eggs.

CORROSIVE SUBLIMATE.—This preparation of mercury is a deadly poison; from one to three grains taken into the stomach is sufficient to produce death.

This poison is decomposed and rendered inert by mixing it with the whites of eggs. When corrosive sublimate has been taken into the stomach, the whites of eggs, beaten up in a little water, should be given as soon as possible, even to the amount of a dozen eggs or more, and commence at the same time taking freely of lobelia, either the powder in warm water, or in the form of the tincture, or third preparation. If eggs are not at hand, let the patient drink largely of milk in the place of the eggs. No time should be lost to have something upon the stomach and to excite vomiting, and whilst other remedies are in preparation, the patient should drink warm water, and endeavour to excite vomiting by putting a finger or a feather in his throat. When the system is poisoned by the external application of corrosive sublimate, the same course of treatment will be required as above described.

ARSENIC.—The hydrated peroxide of iron diffused through water; or the precipitated carbonate of iron, are the antidotes to arsenic. Either one should be taken freely until relief is obtained.

When arsenic has been swallowed, and the antidotes not at hand, vomiting should be effected as soon as possible. The best plan of treatment is to mix lobelia, in any form, in warm water sweetened, and give it freely. Lime-water or animal charcoal should also be given if at hand. A piece of unslacked lime thrown into some warm or cold water, will form lime-water in a few minutes. It should be strained through linen or muslin, as there will not be time to allow it to settle. To assist in exciting vomiting, run a finger or feather in the throat. After free vomiting is produced, the patient should be steamed, kept warm, and take freely of pure stimulants, as pepper, ginger, or composition tea, and occasionally a dose of lime-water.

A large dose of arsenic will in general cause vomiting, and,

therefore, is not so dangerous as a smaller one. A large dose of this poison taken into the stomach and not shortly thrown off by vomiting, will destroy life in a few hours.

Arsenic is prescribed both by the homœopathic and old school physicians, in homœopathic doses, as a cure for intermitting fever and various other complaints: an unreasonable and injurious practice, for it only removes one form of disease by establishing another. The long-continued and distressing dyspepsia which almost always follows the use of arsenic, is, in nine cases out of ten, more harassing to the patient and harder to cure than the complaints for which this poison is prescribed. The best plan of treatment in cases of dyspepsia occasioned by the use of Fowler's solution and other preparations of arsenic, is an occasional course of medicine, a free use of cayenne pepper with food, or taken shortly after meals; and a tablespoonful of either animal or vegetable charcoal every morning, fasting.

ANTIMONY.—Preparations of this poison, especially the tartarized antimony, and antimonial wine, are extensively used in the old school practice of medicine, to excite vomiting, and in smaller doses to occasion nausea. These and other preparations of antimony occasion vomiting upon the same principle that arsenic causes it. Tartar emetic, when taken in ordinary emetic doses, if it do not cause vomiting, is apt to produce active purging, attended by severely griping pain, followed by general prostration of the digestive powers, and loss of tone in the bowels.

The best *antidote* for the antimonial preparations is lobelia, given in bayberry, sumac, or raspberry leaf tea; or, it may be taken in strong table tea. After free vomiting is produced, the patient should continue to drink strong table tea, and stimulants. If the patient be cold and chilled, a vapour bath must be administered to aid the operation of the medicine, and to throw the poison out of the blood, provided any should have been absorbed. In cases when the vital powers are greatly prostrated by the poison, the liquid of the third preparation of lobelia should be given as an emetic, administered in strong bayberry or table tea, or by injection.

COPPER.—The acetate of copper (verdigris) and the sulphate of copper (blue vitriol) are actively poisonous. The best antidote is the white of eggs, of which the patient should take freely, and of some preparation of lobelia, until free vomiting is produced. If neither eggs nor lobelia be at hand, the patient should drink largely of warm or cold water, and run his finger or a feather in the throat to excite vomiting.

Copper vessels should never be used for culinary purposes, unless they be coated inside with a metal not liable to form poisons with acids. Pickles greened in a copper kettle, contain more or less poison. Apples stewed in a copper or brass kettle, will taste of the copper. Iron, earthen, or tin vessels should always be employed for making apple butter.

LUNAR CAUSTIC—NITRATE OF SILVER.—The best antidote for lunar caustic, when swallowed, is common salt dissolved in water. This should be swallowed freely, and an emetic of lobelia given.

NITRE—SALTPETRE.—Nitro, though often prescribed in the regular practice of medicine, is, observes Orfila, "venomous both to man and to animals, even where applied to wounds."

The direct effect of nitre upon the system, when taken internally, is to weaken and destroy vital power. Hence it is called a sedative, and medical men, governed in their practice by a false theory of treating disease, employ this article in fever with a view to lessen arterial excitement. The necessary result of such treatment is to weaken the restorative actions—to saddle nature with a greater burden, and, at the same time, cripple her energies.

Nitre has sometimes been taken in doses of from half an ounce to an ounce, in mistake for Epsom salts. Taken in this quantity, it is apt to cause violent vomiting, purging of blood, convulsions and sometimes death.

When a large dose of nitre has been swallowed, the patient should drink largely of mucilaginous drinks, as flax-seed tea, or mucilage of slippery elm, and take freely of lobelia until copious vomiting be produced. If the system be in a cold and torpid condition, the vapour bath must be employed, and a moderate and continued warmth applied to the patient in bed, and he should take freely of pure stimulants, such as cayenne and ginger tea. This kind of treatment will increase the power of the depurative functions in working poisons out of the system.

Dr. Samuel Thomson was the first to call attention to the impropriety of employing saltpetre in curing meat. It hardens the fibres of meat and renders it more difficult of digestion. There is as much necessity for employing arsenic in curing meat, as there is for using saltpetre for this purpose. It is probable that scurvy on shipboard is occasioned by the saltpetre used for curing the meat used on sea voyages.

ALCOHOL.—When alcoholic drinks have been taken to the extent to induce deep intoxication and insensibility, free vomiting should be induced, either by means of an active lobelia emetic, or

irritating the fauces with a feather. When the extremities and surface are cold, external warmth must be applied.

POISONING FROM THE FUMES OF LEAD.—This subject is treated of under the head of painters' colic.

POISONING FROM SWAMP SUMAC (RHUS VERNIX), AND FROM POISON VINE, AND POISON OAK.—The poisonous effects of the above named articles are usually limited to the surface of the body, and rarely or never attended by serious consequences. The best external application is tincture of lobelia, or salt and vinegar. In severe cases, vapour baths should be administered and an emetic given, the patient continuing to take broken doses of lobelia in combination with composition, pepper, or ginger tea.

OPIUM.—This poisonous drug is generally taken in the form of laudanum. Notwithstanding the poisonous nature of this article, it is one of the general medicines employed in the old school practice. It eases pain by occasioning a partial stagnation of blood in the brain, and in this way blunts the sensibilities—smothering disease without removing the cause.

When an over-dose of laudanum has been taken, the patient should be made to vomit as speedily as possible. Lobelia, in any form, may be given freely, and the patient should be made to drink of bayberry tea or strong coffee. If the patient be in a stupor, the liquid of the third preparation should be poured down the throat, and a tablespoonful of the third preparation administered by injection, followed by an injection of brown lobelia powder in warm water, with a view to aid the operation of the emetic.

Mothers would be very cautious how they gave laudanum and other preparations containing opium, to make their children sleep, if they were acquainted with the principle of its operation, and were fully sensible of the injurious consequences which such a practice is liable to produce, not only upon the physical, but also upon the mental powers of infants and children.

BELLADONNA—DEADLY NIGHTSHADE.—This powerfully narcotic poison is chiefly found about old buildings, and along walls in shady places. The plant grows to the height of from two to three feet, and bears a round berry, which is at first green, then red, and finally they assume a deep purple colour and not very unlike a cherry in appearance.—Children, allured by the inviting appearance of the berries, are not unfrequently induced to eat them, and become poisoned.

The symptoms which follow an over-dose of the deadly night-

shade are, dryness in the throat, dizziness and a swimming sensation in the head, partial blindness, and difficulty of swallowing.

Belladonna is employed to a considerable extent by homœopathic practitioners, particularly in the treatment of scarlet fever. Strong poisons, given even in very minute doses, may change the symptoms of a disease; but, instead of aiding the constitution to cast off disease in the way which nature has provided, the recuperative actions of the system are weakened, and the designs of nature frustrated. 'Tis true that patients recover under this treatment, and probably better than under the old school practice, but where is the evidence that those patients who get well under such treatment would not have recovered even more perfectly without the medicine? Nature does a great deal which medicine gets the credit of.

The treatment for poisoning from this article should consist in giving an active lobelia emetic, followed by the use of stimulating teas.

STRYCHNIA—NUX VOMICA.—Strychnia is one of the most active poisons employed in the old school practice. "With the exception of prussic acid, it is perhaps the most violent poison with which we are acquainted, and should therefore be administered with great caution."—*U. S. Dispensatory*.

Administered even in homœopathic doses, it is capable of producing the most distressing symptoms. Professor Chapman, of the University of Pennsylvania, asserted that he had been called to two cases of *Tetanus* produced by strychnia, prescribed by a homœopathic physician.

The injurious effects of strychnia are believed to arise from the poison being absorbed and carried into the circulation.

Treatment.—To clear the system of this poison, give active stimulants, and apply the hot air bath, or vapour bath. The most efficient stimulant is the third preparation of lobelia.

DATURA STRAMONIUM—GYMPSON WEED.—This plant, commonly called Gympson or Jamestown weed, grows about hog-pens, and in other places where the soil is very strong. The leaves and seeds of this weed contain a narcotic poisonous principle. Children are sometimes poisoned by eating the seeds of this plant. "When taken in quantities sufficient to affect the system moderately, it produces more or less cerebral disturbance, indicated by vertigo, headach, dimness or perversion of vision, and confusion of thought, sometimes amounting to slight delirium, or a species of intoxication."

The treatment should consist of emetics and injections followed by the use of composition and other stimulating teas, and when the heat of the system is far reduced, the vapour bath will prove beneficial.

Purified Animal Charcoal an Antidote to all Vegetable Poisons.

By recent numerous experiments, made by Dr. Garrod of London, it has been ascertained that purified animal charcoal is an antidote to all vegetable, and some of the mineral and animal poisons.

Dose.—For an adult, a tablespoonful should be taken at once, and the dose repeated at short intervals until six or eight or more doses have been taken.

THE END.

INDEX.

A.			
Abscess in the Thigh.....	417	Aphthous Sore Mouth.....	156
Abscess of the Female Breast.....	450	Arsenic, antidote to.....	577
Acids.....	557	Arrow-root.....	571
Action required to remove diseases.....	xliii	Ascites.....	300
Ague.....	55	Asiatic Cholera.....	450
Alum-Root.....	525	Asthma.....	133
Alcohol.....	579	Astringent Poultices.....	569
Alkalies.....	558	Astringent Ointment.....	567
Amaurosis.....	332	B.	
American Valerian.....	541	Bayberry Syrup.....	518
Ammonia, Carbonate of.....	543	Bayberry Extract.....	519
Ammonia Liniment.....	565	Bayberry (Myrica Cerifera).....	517
Anasarca.....	302	Balmoney (Chelone Glabra).....	529
Antidotes to Poisons.....	575	Balsam Copaiva.....	549
Concentrated Acids.....	576	Fir.....	550
Alcohol.....	579	Tolu.....	549
Antimony.....	578	Barberry (Berberis Vulgaris).....	530
Arsenic.....	577	Basilicon Ointment.....	566
Belladonna.....	580	Barley Water.....	571
Blue Vitriol.....	578	Barks, Peruvian.....	526
Caustic Potash.....	576	Extract of.....	519
Caustic Soda.....	576	Syrup of.....	518
Copper.....	578	Beach-Drop.....	525
Creasote.....	577	Bee Stings.....	442
Corrosive Sublimate.....	577	Beef Essence.....	573
Datura Stramonium.....	581	Beef Tea.....	573
Deadly Nightshade.....	581	Belladonna.....	580
Gympson Weed.....	581	Bicarbonate of Soda.....	558
Laudanum.....	580	Biles.....	408
Lead Fumes.....	580	Bilious Colic.....	169
Nux Vomica.....	581	Fever.....	61
Opium.....	580	Bite of Mad Dog.....	290
Nitrate of Silver.....	579	Bitter Almonds.....	538
Poison Vine.....	580	Bitters.....	526
Swamp Sumac.....	580	Bitter Root.....	540
Strychnia.....	581	Bitters No. 4.....	539
Stramonium.....	581	Spiced.....	538
Saltpetre.....	579	Ladies.....	539
Verdigris.....	578	Wine.....	538
Anthemis Nobilis.....	533	Bleeding from the Lungs.....	370
Anti-Acids.....	558	Nose.....	370
Anti-Canker Pills.....	519	Stomach.....	378
Antimony.....	578	Wounds.....	376
Animal Charcoal.....	560	Blindness.....	331
Animal heat, how produced.....	xl	Bloodletting.....	471
Apocynum Androsemafolium.....	540	Bloody Urine.....	381
Apoplexy.....	249	Boneset.....	533
		Bronchia.....	128

- | | | | |
|-----------------------------------|-------|------------------------------------|------|
| Bronchitis, Acute..... | 118 | Constipation..... | 184 |
| Chronic..... | 122 | Consumption | 125 |
| Bruises | 391 | Bronchial..... | 128 |
| Bubo | 435 | Throat | 129 |
| Burdock..... | 552 | Tubercular..... | 126 |
| Burns..... | 404 | Conserve of Hollyhock | 539 |
| Broth, Mutton | 547 | Continued Fever..... | 68 |
| C. | | | |
| Camphor | 544 | Convulsion Fits..... | 261 |
| Liniment..... | 565 | Convulsions in Infants..... | 264 |
| Tea..... | 545 | Copaiva Balsam | 549 |
| Camphorated Julep..... | 545 | Copper, Poisoning by..... | 578 |
| Camphor, Spirits of..... | 545 | Cornus Cericea | 531 |
| Toothache Drops..... | 545 | Costiveness | 184 |
| Caloric..... | xxxix | Cough Powder | 564 |
| Canada Balsam..... | 550 | Cough Mixtures..... | 563 |
| Cancer..... | 382 | Course of Medicine..... | 460 |
| Cancer of the Female Breast..... | 383 | Course of Medicine, general direc- | |
| Lip | 387 | tions for administering | 461 |
| Skin..... | 388 | Course of Medicine, general direc- | |
| Tongue..... | 388 | tions for administering the | |
| Canker, Thompson's Theory of..... | liv | hot air bath..... | 461 |
| Capsicum—Cayenne Pepper..... | 510 | Course of Medicine, general direc- | |
| Carbonate of Ammonia..... | 543 | tions for administering the | |
| of Iron..... | 555 | Steam bath..... | 462 |
| Carbuncle..... | 410 | Course of Medicine, general direc- | |
| Cataract..... | 332 | tions for administering the | |
| Catarrhal Affections..... | 144 | Emetic | 463 |
| Cathartics, use of..... | 489 | Course of Medicine, general direc- | |
| Catnip | 551 | tions for administering the | |
| Catnip Poultice | 569 | Injection | 464 |
| Centaur (Chironia angularis)..... | 531 | Course of Medicine, general direc- | |
| Caustic, Lunar..... | 579 | tions for administering the | |
| Chafing in Children | 117 | second bath..... | 465 |
| Chalk, Prepared..... | 561 | Course of Medicine, general direc- | |
| Chamomile | 533 | tions for administering Drinks | 465 |
| Chancre | 432 | Course of Medicine, general direc- | |
| Charcoal Poultice | 569 | tions for administering Food | 465 |
| Animal | 582 | A Partial Course of Medicine..... | 466 |
| Cherry Stone Meats | 538 | Emetics without steaming..... | 466 |
| Chicken Pox..... | 92 | Preparing a Patient for a Course | 466 |
| Chicken Tea..... | 573 | Repeating the Course..... | 466 |
| Chilblains..... | 407 | Various symptoms manifested.. | 467 |
| Chlorosis | 267 | Peculiar symptoms produced... | 468 |
| Cholera, Asiatic..... | 451 | Cramp in the Legs and Feet..... | 445 |
| Epidemic | 450 | Croup | 146 |
| Morbus..... | 159 | Spasmodic | 147 |
| Cider..... | 571 | Crow-foot Crane's Bill..... | 525 |
| Chordee | 431 | Cubebs | 552 |
| Cinchona Officinalis..... | 526 | Craziness from Drinking..... | 344 |
| Cleavers | 552 | Crust Coffee | 573 |
| Colds..... | 143 | D. | |
| Colic | 158 | Datura Stramonium | 581 |
| Bilious | 169 | Deafness | 362 |
| Flatulent | 158 | Deadly Nightshade..... | 580 |
| Painter's | 172 | Decoction of Sarsaparilla..... | 554 |
| Cholica Pictonum | 172 | Delirium Tremens | 344 |
| Columba | 533 | Derangement of the Mind..... | 338 |
| Composition Powder | 514 | Dewberry..... | 524 |
| Compound Lobelia Pills..... | 508 | Diabetes | 228 |
| | | Disease defined..... | xlvi |

Diarrhœa	178	Fluor Albus	441
Ditany	550	Frozen Limbs.....	407
Dropsy	299		
in the Belly	300		
Brain	307		
Chest	301		
Cellular Tissue	302		
Of the Scrotum	306		
Drying Roots and Herbs	575		
Dried Beef Tea	573		
Dulness of Hearing.....	362		
Dysentery.....	174		
Dyspepsia.....	187		
	E.		G.
Earache	358	Garlic.....	542
Elixir of Vitriol.....	558	Syrup	564
Egg Soup.....	574	Oxyneel of	564
Emollient Poultices.....	568	Galls (Gallæ)	523
Emetics	463	General Insanity.....	340
For Children.....	467	Geranium Maculatum.....	525
General utility of.....	482	Gentian	531
Enemas	495	Geum Rivale.....	523
Enlargement of the Uvula.....	157	Ginger	515
Epilepsy.....	261	Porridge	516
Erigeron Philadelphicum	551	Tincture of.....	516
Canadense	551	Gleet.....	431
Essence of Beef.....	573	Goitre.....	315
Eupatorium perfoliatum.....	533	Golden Seal	530
Evan-root	522	Gonorrhœa.....	427
Extract of Bayberry.....	519	Gout	215
Bayberry pills	519	Chronic	217
Sheep Sorrel.....	386	in the Stomach or Kidneys.....	219
Clover	386	Green Sickness.....	267
Eyes, Inflammation of from cold....	320	Grippe	143
Rheumatic inflammation of....	322	Gum-elastic	566
Scrofulous inflammation of....	327	Gum Hemlock Plaster.....	567
Suppurative inflammation of... 324		Guaiacum Wood.....	555
	F.		H.
Fainting	276	Hamamelis Virginiana.....	523
Falling of the Palate.....	157	Headache, ordinary	351
Sickness	261	Sick	351
False Labour Pains	478	Another variety	355
Membrane.....	liv	Heart, Palpitation of.....	363
Felon	413	Structural Disease of.....	365
Fever	55	Helonias Dioicia.....	537
Continued	68	Hæmatemesis.....	378
Congestive	68	Hemiplegia	255
Intermittent.....	55	Hemlock Plaster.....	567
Nervous	68	Hemorrhage from the Lungs.....	370
Putrid	68	Nose	370
Remittent.....	61	Wounds	376
Scarlet	96	Hernia, or Rupture.....	449
Typhoid.....	68	Strangulated	449
Typhus	68	Heuchera Americana.....	525
Yellow	68	Hickory Ashes	559
Fir Balsam	550	Hip Disease.....	415
Fistula Lachrymalis.....	337	Hives.....	104, 146
Fits, Convulsions	261	Horehound	551
Hysteric	270	Honey	551
in Infants.....	264	Hops.....	542
		Hot Air Bath	474
		Hydrastis Canadensis.....	530
		Hydrocephalus	307
		Hydrocele	306
		Hydrophobia	290
		Hydrothorax	301
		Hypochondriasis	277
		Hypopyon	334
		Hysteria.....	270
		Hysteric Fits	270

- | | |
|---|---|
| <p style="text-align: center;">I.</p> <p>Incontinence of Urine..... 236</p> <p>Indian Hemp..... 540</p> <p>Indigestion..... 187</p> <p>Infantile Convulsions..... 264</p> <p>Infant's Sore Mouth..... 156</p> <p>Inflammation a Curative Action..... 1</p> <p style="padding-left: 20px;">of the Bladder..... 224</p> <p style="padding-left: 20px;">of the Eyes from Cold..... 320</p> <p style="padding-left: 20px;">Rheumatic..... 322</p> <p style="padding-left: 20px;">Scrofulous..... 322</p> <p style="padding-left: 20px;">Suppurative..... 323</p> <p style="padding-left: 20px;">of the Iris..... 333</p> <p style="padding-left: 20px;">of the Kidneys..... 220</p> <p style="padding-left: 20px;">of the Liver..... 240</p> <p style="padding-left: 20px;">of the Liver, Chronic..... 242</p> <p style="padding-left: 20px;">of the Peritoneum..... 180</p> <p>Inflammatory Sore Throat..... 150</p> <p>Influenza..... 143</p> <p>Injections..... 495</p> <p style="padding-left: 20px;">Simple Astringent..... 497</p> <p style="padding-left: 20px;">Simple Lobelia..... 497</p> <p style="padding-left: 20px;">of Turpentine..... 500</p> <p style="padding-left: 20px;">Tonic..... 500</p> <p>Insanity..... 338</p> <p style="padding-left: 20px;">General..... 340</p> <p style="padding-left: 20px;">Partial..... 341</p> <p>Intermittent Fever..... 55</p> <p>Iritis..... 333</p> <p>Itch..... 115</p> <p style="text-align: center;">J.</p> <p>Jaundice..... 266</p> <p style="text-align: center;">K.</p> <p>Kidneys, Chronic Disease of..... 223</p> <p style="padding-left: 20px;">Inflammation of..... 220</p> <p>Kine Pox..... 87</p> <p style="text-align: center;">L.</p> <p>Lacerated Wounds..... 400</p> <p>Lachrymal Fistula..... 337</p> <p>Ladies' Spiced Bitters..... 539</p> <p>Laryngitis, Acute..... 154</p> <p style="padding-left: 20px;">Chronic..... 155</p> <p>Lemon Juice..... 558</p> <p>Lime Water..... 561</p> <p>Life..... xxxix</p> <p>Lobelia Inflata..... 501</p> <p style="padding-left: 20px;">Brown..... 505</p> <p style="padding-left: 20px;">Green..... 505</p> <p style="padding-left: 20px;">Syrup of..... 505</p> <p style="padding-left: 20px;">Third Preparation of..... 506</p> <p style="padding-left: 20px;">Tincture of..... 505</p> <p style="padding-left: 20px;">Pills..... 508</p> <p>Locked Jaw..... 286</p> <p>Low Spirits..... 277</p> <p>Lunar Caustic..... 579</p> <p>Lumbago..... 214</p> <p>Lupus..... 388</p> <p>Lycopus Virgicus..... 555</p> | <p style="text-align: center;">M.</p> <p>Mallows Poultice..... 569</p> <p>Mania..... 340</p> <p>Mania-à-Potu..... 344</p> <p>Materia Medica..... 501</p> <p>Measles..... 93</p> <p>Medicines for Canker..... 117</p> <p>Mental Derangement..... 338</p> <p>Menstruation, Obstruction of..... 439</p> <p>Milk Porridge..... 572</p> <p>Mustard Plaster..... 568</p> <p>Muriatic Acid..... 576</p> <p>Mumps..... 152</p> <p>Myrica Cerifera..... 517</p> <p>Myrrh..... 535</p> <p style="padding-left: 20px;">Poultice..... 570</p> <p style="padding-left: 20px;">Tincture..... 534</p> <p style="padding-left: 20px;">Pills..... 534</p> <p style="text-align: center;">N.</p> <p>Narcotic Poisons..... 576</p> <p>Nature the real Physician..... xlii</p> <p>Nervous Fluid governs Motion..... xlii</p> <p>Nervousness..... 442</p> <p>Nervines..... 541</p> <p>Nerve Powder..... 541</p> <p>Nettle Rash..... 104</p> <p>No. 5 Syrup..... 536</p> <p>No. 3 Anti-Canker Pills..... 519</p> <p>No. 6..... 535</p> <p>Nitrate of Silver..... 579</p> <p>Nitre..... 579</p> <p>Nux Vomica..... 581</p> <p>Nutrition, the Basis, Life, Action... xli</p> <p>Nymphia odorata..... 522</p> <p style="text-align: center;">O.</p> <p>Oatmeal Gruel..... 572</p> <p>Obstructed Menstruation..... 439</p> <p>Oil of Amber..... 547</p> <p style="padding-left: 20px;">Anise-seed..... 548</p> <p style="padding-left: 20px;">Caraway..... 548</p> <p style="padding-left: 20px;">Horsemint..... 547</p> <p style="padding-left: 20px;">Juniper..... 548</p> <p style="padding-left: 20px;">Peppermint..... 548</p> <p style="padding-left: 20px;">Turpentine..... 545</p> <p>Opium..... 580</p> <p>Opodeldoc..... 565</p> <p>Ophthalmia..... 320</p> <p style="padding-left: 20px;">Purulent..... 323</p> <p style="padding-left: 20px;">Scrofulous..... 327</p> <p>Oxalic Acid..... 576</p> <p>Oxymel of Garlic..... 564</p> <p style="text-align: center;">P.</p> <p>Palpitation of the Heart..... 363</p> <p>Palsy of one side..... 255</p> <p style="padding-left: 20px;">of the lower half of the body... 255</p> <p>Panada..... 573</p> <p>Paralysis..... 254</p> <p>Paraplegia..... 255</p> |
|---|---|









