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RECOMMENDATIONS.

From the late NATHAN SMITH, M. D., Professor of the Theory and Practice of Physic, Surgery, and Midwifery, in the Medical Institution of Yale College.

This certifies that I have perused a manuscript of the "House Surgeon and Physician," and am decidedly of opinion that it is better adapted to the use of families, and those unlearned in medical science, than any other work of the kind which I have ever seen; and especially for the people of this country, on account of its containing a better description of the indigenous medical plants of this country, and their virtues, than is to be found in any European publication of this kind.

NATHAN SMITH.

New-Haven, April 24, 1818.

From the late MASON F. COGSWELL, M. D., President of the Connecticut Medical Society.

TO THE PUBLIC.

I hereby certify, that I have perused a treatise, entitled the "House Surgeon and Physician," and I have no hesitancy in saying that it is the best thing of the kind I have ever seen—that is, that it is better calculated for family use, and the use of the nursery, than any treatise extant. The list of the Plants of our country is more full, and their peculiar qualities and virtues are better defined and described, than can be found in any of our botanical writers. I sincerely wish the work may be encouraged.

MASON F. COGSWELL.

Hartford, April 18, 1818

THE
HOUSE SURGEON AND PHYSICIAN :

DESIGNED

TO ASSIST HEADS OF FAMILIES, TRAVELLERS, AND
SEA-FARING PEOPLE,

IN
DISCERNING, DISTINGUISHING, AND CURING

DISEASES ;

WITH

CONCISE DIRECTIONS

FOR THE

PREPARATION AND USE OF A NUMEROUS COLLECTION OF

THE BEST AMERICAN REMEDIES :

TOGETHER WITH

MANY OF THE MOST APPROVED, FROM THE SHOP OF THE
APOTHECARY.

ALL IN PLAIN ENGLISH.

BY W. M. HAND.

WITH AN INTRODUCTION,

BY J. L. COMSTOCK, M. D.

THIRD EDITION, REVISED AND IMPROVED.

HARTFORD :
PUBLISHED BY S. ANDRUS AND SON.
1847.

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PREFACE TO THE FIRST EDITION.

EVERY mortal is liable to be thrown into suffering by accident, or by disease; and no situation or circumstance of life exempts any one from "the common lot."

Physicians and Surgeons cannot be present in every place; nor can they *alone* do every thing, which should be done for those to whom they are called. The sick and wounded must depend much on nurses and attendants; and almost every individual thing which is done for the sick, is influenced by the notions or prejudices of the attendants. How important, then, that the means of information relating to the healing art, be extended to every one who may suffer, or who can watch. There are cases, also, where medical aid cannot be obtained; and shall the sufferer lie without relief?

In the following work, I have attempted, in the plainest language, to inform the reader what he should do, when he is a witness to pain and sickness, and no one present better informed than himself.

In the pursuit of this object, I have made a free use of any and every author, whose work I could obtain, without marking any quotations. This I should not have done, but as it became necessary to alter the dress of that which was designed for the learned, to make it intelligible to the unlearned.

How far I have succeeded in divesting my work of technics, or whether I have not in many instances run into vulgarity, I cannot myself determine; but this I can say, I have in every case sacrificed every thing to the desire of being fully understood. We, who are taught our profession in a language of made-up hard words, get so familiarized to the use of them, that we scarcely know when

we ornament our style, or embellish our conversation, with the ribbands of Greece and rags of Rome.

It is not necessary for me, here, to say much of my plan, or the execution of it; a little time will suffice to make the reader acquainted with it; and that without a *glossary*. Every body knows there can be enough taken out of a library to make a great book; but I have taken the greatest pains to keep mine a small one.

In the *Surgical* part, I have endeavoured to describe what every man may do, (and they may do much;) in many cases, immediate and effectual assistance may be afforded, where people are now idle spectators; and frequently departing life may be staid, till a surgeon arrives to make all safe.

In the part which treats of *Diseases*, I have been the fullest on those which are of minor consequence, and manageable; in the more terrible forms of disease, I have particularly pointed out urgent and alarming symptoms, that medical aid may be called in time.

The part which contains *Recipes* for Apothecaries' Medicines, will be found convenient.

What is said of *American Remedies*, I think may be relied on. The collection is sufficiently numerous to answer every purpose of medicine in common hands, and they should always be preferred, when and where they can be obtained. Where the common names are not certainly known, recourse should be had to a botanist, who, of all people in the world, is most ready to communicate.

Should a very learned critic cast his eye on these pages, he will here learn, that this book was written for the unlearned; and he will also learn, that a handkerchief tied loosely round a man's leg, above a wounded and bleeding artery, and a stick twisted into it, will as effectually save life as a surgeon's tourniquet—and many other such things. He will therefore please spare this little work, for the sake of him whose house is far removed from the surgeon, and who has no money to pay the physician.

June 22, 1818.

PREFACE TO THE SECOND EDITION.

THE primary object and design of the author is sufficiently declared and explained in the preface to the first edition ; yet, it should be further stated, that other considerations were not without their influence in the origin and progress of the work.

Every man owes to his country, his endeavours to rid the community as much as possible from the ills and disagreeables which breed in, or hover over society ; the least among which, are not the *empiric* and *gossip*. Besides, there is a blind credulity (not indeed confined to the unlettered,) which could not exist but in minds totally devoid of information on subjects relating to the healing art.

Else, why do we see the able physician, whose qualifications are unquestionable, and whose integrity was never doubted, set aside for the self-puffed, officeless, ignorant quack ; and why, the plain suggestions of nature, and the plainer dictates of common sense, thrown away, for the mutilated relics of incantations and witchcraft.

It was easy to foresee who would scout the idea, that a practical work on medicine and surgery in familiar English, could be useful. Indeed, the supercilious mouthings of *little men, dubbed Doctors*, only because they can try tricks, and talk *hocus pocus*, was anticipated.

Have not the pains and sicknesses incident to our nature, travelled in company with our mother-tongue, down the generations of our fathers even to us ? can any one in his sober senses suppose for a moment that the language of a nation is not a mirror of its troubles ? If our vernacular tongue is filled with signs of suffering, and types of disease, it is rich in the names of remedies ; and that man is a heathen who would hide them under an affectation of foreign gibberish.

Let it not be supposed that it is here meant to lower the physician

in the estimation of the people, or to depreciate learning; far otherwise; it is intended, to enable the people to appreciate their physician according to his true worth, and to look at the sun of science through a better medium than smoked glass.

Neither the arts nor the learned professions should be denied the aid of technology; yet the artist and professor should remember that the English language is sufficient to all the common purposes of intercourse; and that the man of learning, who cannot communicate with the world, in the world's vernacular tongue, has no claim on the public; he may indeed be a very industrious man in his closet, but a very useless one in society. The perfection of art is to do without apparatus, and here the great man and the useful man, meet on common well known ground, and here true learning and common sense embrace without reserve.

In corroboration of what has been here said, it remains to be added—It has been boldly declared from a professor's chair, and by one who yields to none in surgery, "that the operator who, if the urgency of the case required, could not find a tolerable substitute for his instruments in any common well-furnished New-England house, was never made for a surgeon."

Of the subscribers to the first edition, those who were prepared by nature, or education, to be benefitted by the reading of any English book, were pleased with their purchase; on the other hand, those who were ignorant of the common written English phraseology, and all those who consider *cant* as the *key* of science, were of course disappointed.

As was expected, frightful symptoms of discomfiture appeared among all the *penny-wise* venders and dispensers of drugs, which reminds one of the shrieking and scampering of the witches, when an honest guest said grace at their table.

The liberal members of the profession, who despise mystery, with all mean acts and actions, have bestowed full approbation on the work, and generously proffered their assistance to mend and bring it to perfection.

After all, it is but an essay, and the writer claims indulgence, chiefly because none who were qualified to finish such a work, have as yet undertaken so necessary a public service.

Ours is a noble profession when followed in the spirit of it, yet most thanklessly requited, because the body is measured by its little members. Yet, who has not seen the sick-worn countenance brighten at the sight of a good physician? 'Tis nothing to "set the table all on a roar" when health is there, and all are full of glee and merriment; but to carry smiles, and ease, and hope, and joy to the sad group who anxiously watch over the restless bed of wasting fever,—is a most gracious errand. Such men there are, and would to heaven their community so occupied the ground, that like as in a noble forest, there could grow no under shrubs or brambles.

It is enough, that politicians hold "that all mankind insist on being cheated and ridden," and that themselves may as well ride as any body. But softly, lest the patriot point to the Mantuan apothecary, and say,

"An if a man did need a poison now,
Here lives a caitiff wretch would sell it him."

INTRODUCTION.

THE following treatise was written by a gentleman of education and science, and, in the opinion of the public and his brethren, of high standing in the medical profession; nor is any extraneous circumstance necessary to shew that he was well acquainted with the subjects on which he wrote. The careful perusal of the book, indeed, will bring with it a conviction that it was not only written with discretion and care, but also that it cost the author much laborious investigation; and especially is this true with respect to the latter part, which involves more botanical knowledge, with regard to species, and a higher degree of information, concerning the properties and virtues of indigenous plants, than was common to the medical faculty, at that, or even at the present time. It is evident, too, (for every page shows it,) that he was constantly aware to whose use this medical and surgical treatise was to be dedicated, for he continually guards the uneducated in medicine not to venture too far in the use of powerful remedies, of whatever kind.— He takes care, also, not to fall into popular errors, for the purpose of gaining popularity for his book; on the contrary, as a medical man ought always to do, he often contradicts the common prejudices of the people, and of pretenders, even at the hazard of his own paramount knowledge, in the opinions of many people generally esteemed judicious. Thus at page 120, he directs that in case of insensibility from concussion, the patient should have a cordial, but not be bled. Here a very common, and no doubt often a fatal error is contravened; for bleeding, during the debility from concussion of the brain, has undoubtedly often destroyed the patient; and yet friends will sometimes insist upon it, and perhaps even offer to take upon themselves the responsibility.

We do not profess to know the virtues of all the plants in the

numerous catalogue which Dr. Hand has here introduced, but judging from the known properties of a considerable portion of them, it is but a fair inference to conclude that he has been equally mindful of his responsibility with respect to the whole, and that he has recommended nothing on the contingencies of mere common report.

The botanical names of many of the plants have been changed since the book was written, and, indeed, so frequent are these changes, either in consequence of new discoveries, or professed improvements in this science, that a new nomenclature to whole genera is sometimes affixed within the year. In the present instance, however, these changes are of no consequence to the common reader, since the names by which the plants are generally known, often with a good list of synonyms, are retained, and these have remained unchanged.

With respect to the Recipes, the author has certainly been judicious in the application of his remedies, and always careful, when a powerful medicine is recommended, to throw in a caution in regard to overdosing.

Finally, the book, without prejudice, can be viewed in no other light than as a safe, judicious, and discriminating treatise on family remedies, and as such, may, in many instances, be the means of doing much good to the community, and especially in such families as reside at a distance from a skilful practitioner.

J. L. COMSTOCK.

Hartford, January, 1847.

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THE
HOUSE SURGEON AND PHYSICIAN.

[The Recipes, referred to throughout the work, will be found numerically arranged, beginning on page 172.]

WOUNDS.

GENERAL OBSERVATIONS.

A WOUND is a recent division of the soft parts of the body, suddenly occasioned by external causes.

The degree of danger attending any wound depends very much on some of the following circumstances: The extent of the injury; the additional violence which the fibres of the part have suffered, besides their division; the nature of the nerves and blood-vessels which happen to be cut; the nature of the wounded part, in respect to its general power of healing kindly or not; whether the operations of the system at large, and life itself, can be well supported or not, while the functions of the wounded part are disturbed, interrupted, or suspended by the accident; the age of the patient; the goodness or badness of the constitution; and the opportunities which there may be of receiving proper surgical aid, and assistance of every kind.

Wounds made by a sharp cutting instrument need no description. Remove every extraneous substance from the wound; clean it with a soft sponge, or cloth, and warm water; dry the skin with a warm soft cloth; bring the sides neatly and closely together with straps of adhesive-plaster: the straps should be an inch wide, and extend across the wound far enough to secure it from gaping. The number of straps should be in proportion to the extent of the wound, and the width of a wheat corn between them, to allow the escape of any fluid which may run from the wound. Over the straps should be placed a cushion of soft lint, and over the whole a bandage drawn agreeably tight, and making equal pressure.

Under this dressing, a clean cut wound may be expected to heal without the formation of matter, *i. e.* without supuration; and this is what surgeons call *union by the first intention*. A cooling diet and regimen should be observed; and every kind of motion and disturbance of the part avoided. The rest is the work of nature.*

This dressing should not be removed till the third or fourth day, or longer. If pain or heat are felt in the wound, wet the dressing with spirit and water, or mineral water, frequently.

All this may be performed by any ingenious person, pro-

* Some surgeons prefer a plaster somewhat stimulating, in dressing a wound with a view to its healing by the first intention; and as a substitute for the common adhesive-plaster, prefer the Balsam of Fir or Burgundy Pitch. Indeed, when we consider that, within a few years, symptoms, strictly inflammatory, have almost ceased to attend our fevers, and that a cordial and invigorating treatment is indispensable in almost all our diseases, it should seem that even a simple wound might require excitants to enable the parts to take an adhesive inflammation.—See *Balsam Fir*.

vided the bleeding from the wound ceases after the proper cleansing; and this is commonly the case, unless a large blood-vessel is cut. When an artery is cut, the blood is of a bright scarlet colour, and gushes from the bleeding vessel in jets, with great force. When a vein is cut, the blood runs in an even unbroken stream, of a dark purple-red colour.

*Stopping of Bleeding.**

Pressure is the best means of stopping blood. If the wound be small, pressure of the thumb or palm of the hand, (resting most on the side next the heart, if an artery is bleeding, and the opposite side, if a vein,) is commonly sufficient while the dressings are preparing. Should a large vessel continue to throw out blood, so as to endanger life, press into the wound a handful of lint, or a rolled bandage, or a sponge; round it tie your neck-cloth or handkerchief, loop in a stick, and twist till the blood is effectually stopped. Send for an experienced surgeon.

LACERATED WOUNDS.

A lacerated wound is made by violently tearing the parts asunder; the edges of this kind of wound are unequal and

* Persons unskilled in surgery are apt, when they see a bleeding wound, to stuff in cobwebs, puff-ball, and such-like things, to stop blood, and, were they learned, they might quote high authority for so doing. Yet tradition, nor learning, nor authority, can change the nature of such uncouth applications: they are extraneous substances, and must ultimately be got rid of only by suppuration, which is a tedious process. A button of alum or copperas may be sometimes advantageously applied to a small bleeding vessel; these have been known to stop the bleeding, and disappear, so as not to hinder the union of the wound by the first intention.—See article *Bandage*.

jagged. But little blood issues from a lacerated wound, even though a large blood-vessel is ruptured. Whole limbs have been torn from the body without the occurrence of bleeding; but we know that a great wound, with little bleeding, was made with great violence.

Treatment.—Clean the wound, as directed for simple cuts; restore the parts, as near as may be, to their natural position. Apply warm emollient poultices and fomentations. Should sloughing (*i. e.* dying and cleaving out of the wounded parts) ensue, the treatment laid down for mortifications is proper. Opium should be taken, to allay the pain and irritation. When the laceration is but slight, a union by the first intention, as in cuts, may sometimes be effected; at least, the attempt should be made; if upon trial it fail, no harm is done, and we can still resort to the poultices and fomentations.

CONTUSED WOUNDS,

Made by the stroke of a blunt instrument against any part of the body; the skin remaining unbroken, and black and blue spots appearing on the bruised parts.

Treatment.—Slight bruises require only to be covered with linen wet with vinegar and water, brandy, alum water or mineral water, No. 1.

The bruised part should be kept quiet, with the muscles relaxed. A dose of salts is sometimes requisite. When, however, the contusion is greater, bleeding and saline purgatives are proper. Equal parts of vinegar and water, or hartshorn and vinegar and water, form an excellent wash. When the inflammation has a little abated, use No. 2 or 3. Sometimes a little laudanum or camphor is added, where there is tenderness of the part to which it is applied. Gentle pressure from a bandage should not be omitted.

When a contusion absolutely kills the skin or flesh, treat it as is directed for lacerated wounds.

PUNCTURED WOUNDS,

Made by a sharp-pointed instrument, as by a dagger, bayonet, scissors, &c.

Punctured wounds are not only dangerous on account of their depth, injury of blood-vessels, nerves, or vital parts; they also frequently give rise to extensive inflammation. Immense agitation of the nervous system, even to lock-jaw, sometimes follows the infliction of a punctured wound.

Treatment.—Punctured wounds are not apt to heal, but form deep-seated ulcers. But as no man can tell whether such wounds will heal or not, and as no harm can result from the attempt to unite them by the first intention; the orifice should be closed by straps of adhesive-plaster, and gentle compression applied along the whole course of the wound. Perfect quietude is to be observed. When the pain is severe, opium is to be administered. Sometimes, under this treatment, the wound speedily unites by the first intention. More frequently, however, in cases of deep stabs, the pain is intolerable, and the inflammation runs so high, as to leave no hope of avoiding suppuration. In this condition, an emollient poultice is the best application. When matter is formed, the treatment must conform to the principles laid down under the head *Suppuration, which see.*

WOUND OF THE EYE.

The slightest wound on the ball of the eye, especially if it be near the sight, should not be neglected. A flying chip, or stroke, or scratch, may induce inflammation which will destroy the sight; to prevent which, cover the eye from the light, with a cloth dipped in spirit and water, sus-

pended from a riband, tied round the forehead. This will, if properly managed, prevent inflammation. If the symptoms increase, send for an experienced surgeon.

BANDAGE.

A bandage may be made either of flannel, linen, or cotton cloth. For common surgical purposes, humhum or calico is preferred, as being softer and more elastic. Bandages should be of three or four fingers' breadth, and of sufficient length to accomplish the objects hereafter described.

In applying a bandage, care should be taken that it be put on tight enough to fulfil the object in view, without running any risk of stopping the circulation, or doing harm in any other way. If it be not sufficiently tight to support the parts in a proper manner, it is useless; if it be too tense, it will produce swelling, inflammation, and soon mortification.

To apply a roller (*bandage rolled up*) skilfully, the part which it is to cover must be put in its proper situation; the head of the roller held in the surgeon's hand, and only so much unrolled as will go once round the part.

In general, the bandage should, if possible, be applied in such a manner as will admit of its being removed with the most ease, and allow the state of the parts to be examined as occasion may require.

As soon as a bandage has fulfilled the object for which it is applied, and has become useless, its employment should be discontinued; for by remaining too long on parts, it may obstruct the circulation, diminish the tone of the compressed fibres and vessels, and thus do harm.

Although it is with plasters we bring together the sides and parts of a recent wound, and fix them point to point, still, it is with a bandage that we support the limb, preserve the parts in continued contact with each other, and prevent

any strain upon the straps of plaster with which the parts are immediately joined; and we may often unite parts with a bandage alone.

In the case of a bleeding wound, the bandage must be a principal mean of stopping blood; and when a bandage cannot be had, a handkerchief or neckcloth is the best substitute.

In every case which requires a tight-drawn bandage, (as in bleeding, for instance,) the bandage should be rolled smoothly from the very extremity of the limb, including the fingers or toes; the member must be thoroughly supported in all its lower parts, that it may bear the necessary pressure above. It is partial stricture alone that does harm, creates intolerable pain and anxiety, and brings on mortification.

In deep-seated ulcers, when the matter is working downwards along the limb, undermining the skin, insinuating itself between the muscles, and between the muscles and bones; here a proper use of bandages, with compresses, will do every thing. The evil may be stopped at once, and after proper cleansing, the parts may be kept in contact till the whole is healed.—See article *Fever-sore*.

In applying a bandage, begin below, and roll upwards, supporting the limb by general pressure; this is repeated, because it is all important to support the diseased part with a particular pressure. Lay compresses (folds of cloth) upon the hollows, and upon the bed of each particular lodgment of matter, (this having been previously evacuated.) It will be necessary, from time to time, to change the places of the compresses, so as to favour the escape of matter, and the union of the parts where it was lodged.

In rolling a bandage from the foot to the knee, the several layers or turns should lap one-third. Begin by a number of turns round the foot, proceed obliquely over the instep, up round the ankle, and down again; and by pro-

ceeding upward a second time, you will easily cover those parts which were before left naked. As you proceed up the swell of the leg, if you find one edge of the roller slack, turn the bandage over; this manœuvre will tighten the loose side, and enable you to proceed as before. The twist in the bandage should not be made over the shin-bone, as it will then occasion uneasiness, but behind the leg, where it will not be felt, and where the wrinkle will be "out of sight," and consequently "out o' mind," of the patient.

The foregoing general directions should be remembered in every case where a bandage is to be applied.

POISONED WOUNDS.

BITE OF THE VIPER.

The poison of the viper is lodged in a little sack at the roots of the fangs in its upper jaw, and is pressed out when it bites. In about twelve or fifteen hours, an acute pain and burning is felt in the wounded part. Swelling, heat, tension, and pain spread from the wound, over the limb, and sometimes over the whole body; dejection of spirits; small, weak pulse; head-ache, nausea, and vomiting; a fixed pain in the breast; yellow tinge of the skin; cold sweat, convulsions, and sometimes death.

Treatment.—The wound should be immediately cut or burned out. Let the patient take ten drops of spirits of hartshorn every hour; opium, musk, and camphor may be given advantageously.

BITE OF THE RATTLESNAKE,

Produces nausea; a full, strong, agitated pulse; the whole body swells, and the eyes are suffused with blood. Sometimes bloody sweat; bleeding from the nose, eyes, and ears; the teeth chatter; interrupted groans.

Treatment.—Local treatment same as for the bite of the viper. A poultice of quick-lime, with oil and honey, is said to have been used effectually; the fresh juice of plantain is by some considered an antidote. The firing of gun-powder on the part.—See several articles among *American Remedies: Sanguinaria Canadensis, &c.*

BITE OF THE RED ADDER.

Symptoms the same, though less distressing than of the rattlesnake, and the treatment the same.—See *American Remedies.*

STINGS OF BEES, WASPS, HORNETS,

And other insects of this country, produce a great deal of pain, redness, swelling and heat in the part affected.

Treatment.—Lemon-juice, vinegar, No. 1, cold water, oil, and hartshorn, are the principal local applications.

When the patient has been stung in many places, bleeding, salts, and spare diet ought to be observed.

BITE OF MAD ANIMALS.

Of all the poisoned wounds that happen in this country, the bite of a mad animal is most dangerous. The hydrophobic poison resides in the saliva of the rabid animal, and therefore, when a person is bitten through a boot or clothing, the danger is much diminished. A considerable time elapses between the bite and the attack of hydrophobia. The dis-

ease may be prevented, but is very seldom cured after the symptoms appear.

HYDROPHOBIA.—*Melancholy stage.*—A dull, heavy pain and swelling about the wounded part, although it may have healed; a numbness proceeding up the limb; patient anxious and gloomy; sleeps unsoundly, and loves solitude.

Raving stage.—Horror of water, even the sight or bare mention of which occasions disgust; every attempt to swallow liquids produces intolerable suffocation and convulsions. The patient is unable to swallow his own saliva, and throws it out, yet swallows dry things without the least difficulty. Excruciating pain, gradually extending to the midriff; convulsions and pain of the muscles continually augment; the countenance is full of horror; the eyes wild and furious; still the patient retains his senses to the last.

Treatment.—In every case where there are strong suspicions that the bite is inflicted by a mad animal, common prudence dictates a complete removal of the wounded parts by a knife. No man of conscience or discernment would neglect to urge in strong terms the use of the knife.

Wine, camphor, opium, hartshorn, night-shade, sea-bathing, mercurial frictions.

After the attack, opium, in conjunction with the above remedies, and in large doses, as in locked-jaw, may smooth the road to death, but is never perhaps efficacious enough to restore to health.

In this disease, as well as in many others, the intrusion of company is distressing to the patient, whose quiet should not be sacrificed to impertinent curiosity, nor to ill-timed obsequiousness; nor yet to the officious teasings of old women, either *in* or *out* of the practice of medicine.

LOCK-JAW.

Sometimes this disease arises without any previous injury, more especially in warm climates, and near the sea. Robust, vigorous, middle-aged men, are more liable than others.

In the majority of cases, lock-jaw comes in consequence of stabs and punctures in tendonous parts, and about the fingers and toes, and this frequently when the wound heals kindly.

Symptoms.—The muscles of the lower jaw become contracted and hard; at length, the patient cannot open the mouth at all. A difficulty of swallowing succeeds, resembling hydrophobia. The muscles of the neck and back, and indeed of the whole body, become successively affected with violent spasms. The symptoms are sometimes rapid, at others slow in their progress. If the patient survives the fourth day, there is a chance of his recovery. The symptoms never recede but by slow degrees.

Treatment.—The symptoms of lock-jaw are spasmodic, and opium in large doses is the principal remedy: at least two grains every two hours. If the symptoms abate, the opium should not be suddenly relinquished. Half an ounce of laudanum in a clyster has sometimes checked the progress of the disease. Opiate frictions on the cheeks, temples, neck, and back, have been of service. When the perspiration seems checked, the warm bath, camphor, hartshorn, and antimonial wine.

When there is debility, a liberal use of bark, wine, and cold bathing; but opium is still the grand remedy. *Fowler's Solution* has done wonders in this disease, but should never be given but by able practitioners.

DISLOCATIONS, BROKEN BONES, &c.

WHEN a bone is moved out of its place or articulation, so as to impede its proper functions, it is said to be dislocated, or out of joint. As this often happens to persons in situations where no surgical assistance can be obtained, so that loss of limbs, and even life, may be the consequence of such accidents, we shall endeavour here to point out the method of setting or reducing the most common dislocations which require immediate assistance. Any person of common sense and resolution, who is present when a dislocation happens, may often be of more service to the patient than the most expert surgeon can, after the inflammation and swelling have come on. When these are present, it is difficult to know the state of the joint, and dangerous to attempt a reduction; and by waiting till they are gone off, the muscles become so relaxed, and the cavities so filled up, that the bone can never be retained in its place.

A recent dislocation may generally be reduced by extension alone, which must always be greater or less according to the strength of the muscles which move the joint, the age, robustness, and other circumstances of the patient. When the bone has been out of its place for any length of time, and a swelling and inflammation has come on, it will be necessary to bleed the patient, and after fomenting the part, to apply soft poultices with vinegar to it before the reduction is attempted.

After reduction, all that is necessary is to apply cloths dipped in vinegar or camphorated spirit, and to keep it perfectly easy. Many bad consequences follow the neglect of this rule.

DISLOCATION OF THE LOWER JAW.

The lower jaw may be dislocated by yawning, blows, falls, chewing hard substances, and the like. It is easily known by the patient's inability to shut his mouth, or to eat any thing, as the teeth of the under jaw do not correspond to those of the upper; besides, the chin is either thrown down or toward one side, and the patient is neither able to speak distinctly, nor to swallow without considerable difficulty.

This dislocation is commonly reduced thus: Set the patient on a low stool, so that an assistant may hold the head firm by pressing it against his breast. The operator is then to thrust his thumbs (being first secured by wrapping them in leather or linen cloth, that they may not slip,) as far back into the patient's mouth as he can, while his fingers are applied to the jaw externally. After he has got firm hold of the jaw, he is to press it firmly downwards and backwards, by which means the elapsd heads of the jaw may be easily pushed into the sockets.

DISLOCATION OF THE NECK.

The neck may be dislocated by falls, violent blows, or the like. In this case, if the patient receives no assistance, he soon dies, which makes the people believe that his neck was broken. It is, however, for the most part, only partially dislocated, and may be reduced by any resolute person.

When the neck is dislocated, the person is deprived of all sense and motion, his neck swells, his countenance appears bloated, his chin lies upon his breast, and his face is generally turned to one side.

To reduce this dislocation, the unhappy sufferer should be immediately laid upon his back on the ground, and the

operator must place himself behind him so as to be able to lay hold of his head with both hands, while he makes resistance by placing his knees against the patient's shoulders. In this posture he must pull the head with considerable force, gently twisting it at the same time, if the face be turned to one side, till he perceives that the joints are replaced, which may be generally known by the noise which the bones make when slipping in, the patient's beginning to breathe, and the head continuing in its natural posture. This is one of those operations which it is more easy to perform than describe. Women have happily performed it.

After the neck is reduced, the patient should be bled, and keep himself quiet for some days till the parts have recovered their tone.

DISLOCATION OF THE RIBS.

The ribs are strongly articulated to the back bone, and a dislocation seldom occurs. It does however sometimes happen.

When the ribs are dislocated upwards or downwards, in order to replace them, the patient should be laid upon his belly on a table, and the operator must endeavour to push the bone into its proper place. Should this method not succeed, the arm of the disordered side may be suspended over a gate or ladder, and while the ribs are thus stretched asunder, the bones may be thrust into their sockets.

A bandage should be rolled round the chest, so that it may make gentle and equal pressure, and worn for some time.

DISLOCATION OF THE SHOULDER.

A dislocation of the upper bone of the arm, more frequently downwards, sometimes upwards. From the nature

of the articulation as well as from its exposed position upon the body, this bone is more subject to dislocation, than any bone in the body. A dislocation of this bone may be known by a depression or cavity on the top of the shoulder, and an inability to move the arm; when the dislocation is downward or forward, the arm is elongated, and a ball or lump is perceived under the arm-pit; but when it is backward, there appears a protuberance behind the shoulder, and the arm is thrown forward towards the breast.

The usual method of reducing dislocations of the shoulder, is to seat the patient on a low stool, and to cause an assistant to hold his body so that it may not give way to the extension, while another lays hold of the arm a little above the elbow, and gradually extends it. The operator then puts a napkin under the patient's arm, and causes it to be tied round his own neck; by this, during the extension, he lifts up the bone into its place. This is the way described in the books.

The compiler knows a farmer, who set the dislocated shoulders of his neighbours in a country village much more ingeniously than most surgeons. With his right hand he seized the elbow of the dislocated arm, keeping it bent, and gently moving it from the body; with his left hand he crowded a large ball of yarn as far toward the arm-pit as was practicable; then using the arm as a lever, the ball of yarn becomes a bait and roller, over which he guided the head of the bone into its socket. All this he did without assistance, and gratuitously.

DISLOCATION OF THE ELBOW.

A dislocation of this joint may take place in any direction. A protuberance may be felt on that side of the arm towards which the bone is pushed, from which, and the

patient's inability to move the joint, a dislocation is easily known.

Treatment.—Extension is to be made upwards and downwards by two assistants, while the operator guides the protruded bone into its cavity. All this time the arm should be half bent, that the joint may be as much relaxed as possible.

DISLOCATION OF THE WRIST AND FINGERS.

Dislocations of the wrist and fingers, are to be reduced by simple extension, and guiding the bones to their proper places.

It is only necessary to look at injured parts, to learn the method of relief required; yet strange as it may seem, bystanders will remain idle spectators, when a little resolution exerted on their part would instantly put all things right. In such cases an attempt should be made, a partial relief is better than none, and the swelling is less, even though a surgeon must finally be called.

DISLOCATION OF THE HIP.

The bone of the thigh may be dislocated four different ways.

Downward. In this case the leg is lengthened by an inch and an half; the knees are forcibly separated from each other; the foot is turned outward.

The patient is to be laid upon his opposite side, the knee bent so that it may form a right angle with the body. The right hand of the operator should be placed on the outside of the knee, his left hand on the inside of the thigh as high as possible. Now, the thigh should be made a lever, the right hand a power, the left a bait or opposing power. The left hand should raise the head of the bone from its new bed, and the right carry it to opposite its socket.

I have seen a dislocated hip reduced to its place by putting the patient astride a saddle and causing the horse to trot. If the stirrups of the saddle be buckled short, so as to relax the muscles of the limb, the effect of apparatus, position, and power, is readily imagined.

The other three kinds of dislocations distinguished by surgeons, require the same treatment, with little variation; a description will only tend to confuse the common reader.

KNEES, ANKLES, AND TOES.

Dislocations of these joints are relieved much the same way as the joints of the arm, viz. by extension in opposite directions, while the operator replaces the bones. In many cases, extension alone is sufficient, and the limb will slip into its place, merely by exerting sufficient force.

I would not be understood to suppose that force alone is sufficient for the reduction of dislocations. Skill and address will often succeed better than force. A dislocation of the thigh has been set by one man, after all the force that could be exerted by six had proved ineffectual.

The parts injured by dislocations, require rest, afterward easy motion, to enable them to regain their wonted vigor.

BROKEN BONES.

There is, in most country villages, some person who pretends to the art of setting bones. Though, in general, such persons are very ignorant, yet some of them are very successful; which evidently proves, that a small degree of learning, with a sufficient share of common sense, and a mechanical head, will enable a man to be useful in this way. We would advise, however, people never to employ such persons when a skilful and expert surgeon can be had; but when this is impracticable, they must be

employed. We shall therefore recommend the following hints to their consideration.

When a large bone is broken, the patient's diet should, in all respects, be the same as in inflammatory fever. His body should be kept open by emollient clysters, the food of an opening quality, as roasted apples, &c. He should keep quiet and cool. In all cases, however, persons who have been accustomed to high living may indulge more than those who have been more abstemious. Too sudden a reduction of living may have fatal effects on the gluttonous, and wine bibbers. There is often a necessity for indulging, even in bad habits, those patients who have already injured their own constitutions.*

It will be generally necessary to bleed the patient immediately after a fracture, especially if he be young, of a full habit, or has at the same time received any bruise or contusion. When several of the ribs are broken, bleeding is peculiarly necessary.

If any of the large bones which support the body are broken, the patient must keep his bed for several weeks. It is by no means necessary, however, that he should be all that time, as is customary, on his back. This situation sinks the spirits, galls and frets the skin, and renders the patient very uneasy; after the second week he may be gently raised up, and may set several hours, supported by a bed chair, or the like, which will greatly relieve him. Great care, however, must be taken in raising him up, and laying him down, that he makes no exertion himself, otherwise the action of the muscles may pull the bones out of place.

*At least, this is the case while labouring under disease. Yet I would by no means be understood to discourage a thorough and radical reform, so soon as a tolerable degree of health is restored.

It is of great importance to keep the patient dry and clean while in this situation ; by neglecting this he is often so galled and excoriated, that he is forced to keep changing his place for ease.

It is a bad custom to keep the limb for weeks upon the stretch. It is uneasy to the patient and unfavourable to the cure. The best situation is to keep the limb a little bent. This is the posture into which every animal puts itself when it goes to rest, and in which fewest muscles are upon the stretch. It is easily effected by putting the patient on his side, or making the bed so as to favour this position of the limb.

If the bone upon examination be found shattered in a number of pieces, or a large blood vessel is wounded, or accompanied with a wound of the soft parts, an experienced surgeon should be sent for.

All that art can do towards the cure of a broken bone, is to lay it perfectly straight, and to keep it quite easy. All tight bandages do hurt. They had much better be wanting altogether. A great many of the bad consequences which succeed to broken bones, are owing to tight bandages. This is one of the ways in which excess of art does mischief. Some of the most sudden cures of broken bones which were ever known, happened when no bandages were applied at all. Some method, however, must be taken to keep the member steady ; but this may be done many ways without bracing it with a tight bandage.

The best method of retention is by two or more splints of leather or pasteboard. These, if moistened before they are applied, soon assume the shape of the limb, and are sufficient, by the assistance of a slight bandage, for all the purposes of retention. The twelve or eighteen-tailed bandage is much easier applied and removed than long rollers, and answer all the purposes of retention equally well.

The splints should be as long as the limb, with holes cut for the ankle if the leg be fractured.

In fractures of the ribs, where a bandage is not alone sufficient, a strap of adhesive plaster will assist in keeping the parts in place.

The patient should keep himself quite easy, and avoid any thing which may occasion sneezing, laughing, coughing, and the like.

The most proper external application for a fracture, is a mixture of vinegar and water. The bandages should be wet frequently with this, if pain or inflammation come on.

All which has been said above, is taken principally from the directions of the English surgeons. I shall now attempt to describe the long splint of the French surgeons, with my own method of using it—in the

Dressing of a Broken Leg.

Take a piece of thin board or clapboard, the width of the hand, and of sufficient length to extend from opposite the highest part of the hip bone, to a few inches beyond the foot. Cut a hole in each end, similar to those seen in a Russia shovel or spade. Draw a bandage, or what is better, a large silk handkerchief, between the legs by the groin; pass the ends through the hole in the upper end of the splint; turn the ends, so passed through, back without crossing, and tie them firmly by the opposite hip. Thus the head of the splint becomes immoveably fixed, and will not roll. Now wind a second handkerchief round the ankle, laying under it bats of cotton or the like, that the joint be not fretted; pass the ends through the hole in the lower end of the splint; gradually extend the limb, by making the ends of the handkerchief act like a pulley over the end of the splint. By varying the direction of the ends

of the handkerchief, as from inside or outside of the foot, the limb may be made to assume a right position as it respects the body.

This dressing may be made effectual to prevent the overlapping of the ends of the bone in an oblique fracture; and it may be tightened or loosened at pleasure. Besides, the posture of the body may be varied, and the patient be allowed to sit up. No tight bandage is needed on or near the injured part, nor need the place of the fracture be covered at all, except for the purpose of retaining washes.

In the use of this splint it will be readily seen the limb takes its natural shape, even though it be broken in more places than one; and that the splint answers as a substitute for the bone, by giving firmness to the member till the bone is healed.

STRAINS, OR SPRAINS.

Strains are often attended with worse consequences than broken bones. The reason is obvious; they are generally neglected. When a broken bone is to be healed, the patient is compelled to keep quiet, because he cannot do otherwise. But when only a joint is strained, the person finding he can still make a shift to move it, is sorry to lose his time for so trifling an accident. In this way he deceives himself, and converts into an incurable evil what might have been removed by keeping the part easy for a few days.

Country people generally immerse a strained limb in cold water. This is very proper, provided it be done immediately, and not continued too long, in which case the parts are relaxed, instead of being braced.

Wrapping a bandage around the strained part is also of use. It helps to restore the proper tone of the vessels,

and prevents the action of the parts from increasing the disease. It should not, however, be applied too tight. But what we would recommend, above all, is *rest*. It is more to be depended on than any medicine, and seldom fails to remove the complaint.

A great many external applications are recommended for sprains, some of which do good, and others hurt. The following are such as may be used with the greatest safety, viz. : camphorated spirit, volatile liniment No. 3, common fomentations of bitter herbs, with the addition of spirit or brandy.

Previous to other applications, the sprained joint should be immersed in warm soap-suds, and rubbed for an hour lightly with the balls of the fingers. The evening is the best time for this operation.

GANGLION ;

OR WEAKENED, OR WEEPING SINEW.

A ganglion is a small hard tumor, composed of a little sac, and containing a fluid resembling the white of an egg. It is usually moveable beneath the skin ; its growth is slow, seldom larger than a hazle-nut. Its figure is commonly smooth, even, and rounded ; it seldom inflames, rarely suppurates, but when it does, it forms an ill-conditioned ulcer.

They are usually the consequence of sprains or bruises ; they adhere by a slender neck to a tendon.

Treatment.—Binding a piece of lead on ganglions, with a bandage, is a good method of dispersing them. Oil organ or hartshorn may be rubbed on the weeping sinew. They may be cut out by a surgeon.

DISEASES.

INTRODUCTION.

CONSTITUTIONAL TREATMENT, &c.

THE knowledge of disease does not depend so much on scientific principles as many imagine. It is chiefly the result of experience and observation. By attending the sick, and carefully observing the various occurrences in diseases, a great degree of accuracy may be acquired, both in distinguishing their symptoms, and in the application of medicines. Hence sensible nurses, and other persons who wait upon the sick, often discover a disease sooner than those who have been bred to physic. We do not, however, mean to insinuate that a medical education is of no use; it is doubtless of the greatest importance; but it can never supply the place of observation and experience.

Every disease may be considered an assemblage of symptoms, and must be distinguished by those which are most obvious and permanent. By a due attention to these, the investigation of diseases will be found to be less difficult than is generally imagined.

A proper attention to the patient's age, sex, temper of mind, constitution, manner of life, and other circumstances, will greatly assist in the investigation and cure of diseases.

In childhood, the fibres are soft and lax, and the nerves extremely irritable; in old age, the fibres are rigid, the

nerves insensible, and many of the extreme vessels obliterated. These and other peculiarities render the diseases of the young and aged very different, and of course they require very different treatment.

Females are liable to many diseases which do not afflict the other sex. Their nervous system is more irritable; they are less able to bear large evacuations; and much more caution is required in administering to them stimulating medicines.

Particular constitutions not only dispose persons to peculiar diseases, but likewise render it necessary to treat those diseases in a peculiar manner. A delicate person, with weak nerves, who lives mostly within doors, must not be treated precisely in the same manner as one who is hardy and robust, and who is much exposed to the open air.

The temper of mind ought to be carefully attended to in diseases. Fear, anxiety, and fretfulness, all occasion and aggravate diseases. In vain do we apply medicines to the body to remove maladies which proceed from the mind. When that is affected, the best medicine is to soothe the passions, divert the attention, and keep the person as easy and cheerful as possible.

Notice should be taken of the climate. Does the patient live in the city or country? In a high or marshy situation? Is he temperate, or otherwise? What is his occupation? It would be madness to treat, even under the same disease, the enervated shop-keeping citizen the same as you would the hardy happy rustic.

We should inquire, farther, whether the disease be constitutional or accidental; whether it has been of long or short duration; whether it proceed from error in diet, or manner of life. The state of the patient's body should be inquired into; of the evacuations, &c.; and likewise

whether he can perform with ease all the vital and animal functions, as breathing, digestion, &c.

Lastly, what diseases the patient has before been liable to, and what relieved him.

In the cure of diseases, much may be done by diet alone ; many patients think the more drugs they swallow, the better they shall do. This makes people trust to drugs, and neglect their own endeavours ; besides, it discourages all attempts to relieve the sick when medicines cannot be obtained.

Every disease weakens the digestive powers. The diet should be light and easy of digestion.

Exercise in many cases may be considered as medicine. Sailing, or riding on horseback, will be of more service in consumptions, scrofula, and nervous affections, than any medicine whatever.

Few things are of more importance than cleanliness. Many diseases may be cured by cleanliness alone ; most may be mitigated by it ; and in all of them it is highly necessary, both for the patient and attendants.

FEVERS.

SIMPLE INFLAMMATORY FEVER.

Symptoms.—Weariness, anxiety, chills and flushes alternating, terminating in a violent continued heat ; face flushed, eyes and skin red ; pulse frequent, strong, hard, and irregular ; great thirst, white tongue, scanty high-coloured urine ; exquisite sensibility, hurried breathing, and intolerance of the usual impressions ; sometimes delirium.

Favourable.—Moisture of the skin, nose-bleed, sores around the mouth, diarrhœa, soft pulse.

Unfavourable.—High delirium, high pulse, laborious breathing, hiccough, twitchings, involuntary evacuations.

Distinguished from Typhus—By full, strong pulse: from inflammation of the brain, by there being no delirium at the first attack.

Causes.—Sudden exposure to cold after violent exercise; intemperance; suppressed evacuations; violent passion. Most commonly, suppressed perspiration.

Treatment.—A quiet, dark room. Bleeding, purging, laxative clysters, sweating medicines, salts; senna, manna, cream tartar, and rhubarb.—See *Clysters and Sweating Medicines*. Cool air, sprinkling the floor with vinegar and water, light bed-clothes, and sitting up.

Drink of sorrel-tea, barley-water, solution of cream tartar, tea-spoonful to a tumbler of water, tamarind beverage, lemonade, balm-tea.

If delirium come on, blister the back of the neck; put the feet into warm water. If the strength fail and pulse sink, treat as for Typhus.—See *American Remedies*.

INTERMITTENT FEVER.

Symptoms.—*Cold stage.*—Languor, listlessness, yawning and stretching; pulse small, frequent, and irregular; breathing, anxious and short; the patient feels cold, first in the back, then over the whole body; followed by a universal shaking or ague.

Hot stage.—After the shaking, flushes come on, succeeded by a steady high heat; soreness of the flesh; acute sensibility; pain in the head, and flying pains over the whole body; pulse quick, strong, and hard; white tongue; great thirst; scanty, high-coloured urine; costiveness.

Sweating stage.—At length a moisture appears, then a sweat, first in the face, and proceeding downward to the feet. The heat abates; the pulse becomes slow, full, and free; the bowels move; the breathing is free; and all the functions are restored to their natural standard.

After an interval of twenty-four, forty-eight, or seventy-two hours, the ague and fever returns with nearly the same symptoms as before, and this distinguishes intermittent from all other fevers, viz. a time between the fit, when the patient is free from fever.

Causes.—Exposure to the *vapours arising from stagnant waters*, after fatigue, or any thing which debilitates; as poor food, fear, anxiety, disappointment.

Favourable.—When the paroxysms are short, regular, and go off clear.

Unfavourable.—When the paroxysms are long, violent with delirium; or other diseases appear with it. Or when convulsions, stupor, hiccough, double vision, prostration of strength, vertigo, black tongue appear.

Treatment.—During the cold stage. Artificial warmth; put the feet in warm water, or warm bath; warm drinks; cordials; hartshorn in pennyroyal or hyssop tea; warm tamarind beverage.

Hot stage.—Cold acidulated drinks.—Continue the remedies for the cold stage. If stupor come on, apply a blister to the nape of the neck. Mustard to the feet.

In the intermission, just before the fit, an emetic, No. 4.

Fifty drops of laudanum will sometimes prevent the fit. Bark is now the remedy principally depended on for the cure of this disease. It should be given in substance. After clearing the stomach by an emetic, No. 4 or No. 5.

An ounce, or nearly that, of fine powder of bark, should be taken in eight hours previous to the fit, in divided doses.

It may be stirred into wine. An infusion or decoction of bark may be taken if the substance will not stay on the stomach. No. 6.

Of this, take a wine glass every hour, the last eight hours of the interval before the ague.

A strong decoction of white-oak bark, or nut-galls, have been used as a substitute for Jesuit's bark.

The crack willow has also been used. Or No. 7, with which make twelve pills, to be taken as is directed for the doses of bark, in the interval before the fit.

If there is swelling or soreness in the bowels, under any course of treatment, calomel, from one to three grains, should be taken every night on going to bed.

Fowler's solution of arsenic will cure this disease, in doses of six drops twice a-day; but whoever thinks to enlarge the dose, should remember it is rat's bane. Yet it is a convenient, cheap, and safe remedy, as above directed; and moreover it is very certain to cure.—See *American Remedies*.

NOTE.—There is an anomalous state of disease, which attends northern-men who have been down the Mississippi, and there worn out an ague and fever without medication. They tell us that “two, three, or six months ago they had ague and fever, and that the agues became less and less, and that finally they missed them altogether. Yet that an ‘*Inward Fever*’ has followed them ever since.” They have now a dead white, or sallow countenance, swelled feet, tumid bowels, a crude or bloody lax, with increasing emaciation, and in most cases a voracious appetite withal.

This form of disease comes frequently from the low countries of the south, and sometimes from the large islands in the tropics.

The treatment which has succeeded best in the hands of the author, (and that in no small number of cases,) is a full dose of calomel and opium at night, superadded to the common treatment of Intermittent Fever. Frequently the first harbinger of returning health is a sound fit of ague.

REMITTENT FEVER.

This fever arises as the intermittent, from marsh vapours and from stagnant waters; although there is evident exacerbations or *rises*, and remissions of fever, still there is no interval of time when the patient is completely free from fever. The autumnal fevers of this country are commonly of this type, sometimes bilious, at others putrid symptoms predominate.

This fever is most favourable when it approaches in form nearly to an intermittent, or is inflammatory. If in symptoms it correspond with nervous or typhus fever, the danger is to be estimated as in those fevers.

Treatment.—If the disease assume the intermittent form, or especially if each rise of fever goes off with a sweat, or can be made to, by clearing the stomach and bowels with No. 4, or No. 5, followed with sweating medicines; then give the bark in the remission, or any of the remedies laid down in Intermittent Fever. If there are obstructions in the bowels, calomel, as in ague and fever.

Should it have a tendency to any of the fevers hereafter to be described, treat as is directed for that, to which it approximates in form and symptoms.

NERVOUS FEVER.

Called, also, Slow fever, Long fever, Mild Typhus, Slow Typhus, &c.

Symptoms.—General languor and lassitude, alternate chills and flushes, dejection of mind, loss of appetite, confusion of thought, giddiness, pain in the head, aching pain in the back, limbs, and flying over the whole body; nausea and vomiting; short, anxious breathing; pulse weak, quick, often intermitting; tongue at first white, moist,

covered with slime, border indented with the teeth, afterwards dry, brown, and tremulous, little thirst, urine pale, low muttering delirium.

As the disease advances, the heat becomes intense, tongue dry, brown, and morbidly red; delirium with suffused redness of the eyes; flushed countenance; throbbing of the arteries of the neck and temples; urine scanty, high-coloured, and fetid; sometimes drenching sweats, profuse diarrhœa, starting of the tendons, lethargic sleep, involuntary evacuations, cold extremities, convulsions, death. Such is usually the progress of this disease. Sometimes, however, the patient gradually, almost imperceptibly sinks, no threatening symptoms, no anxiety, no pain, or distress; yet in such cases the arteries are seen to tremble or throb, under the chin, and a dark rose or peony-coloured spot appears on one of the cheeks, while the limbs are apt to be cold.

Favourable symptoms.—About the seventh, fourteenth, or twenty-first day, the tongue peeling and becoming moist, showing a conical point and vigour of motion when put out, and quickly retracted; moist skin, gentle diarrhœa, pulse becoming slow and full, sores about the mouth and nose.

Unfavourable.—When no crisis appears on one of the above days, all of the symptoms enumerated in the second, or advanced stage.

Causes.—Exposure to a damp cold atmosphere, depressing passions, fear, grief, anxiety, exhaustion from fatigue, more especially in persons of delicate habit, accompanied with irritability and sensibility, of sedentary life, of poor living and indolence.

Distinguished from malignant typhus by its attack being more gradual, the succession of symptoms being less rapid, less urgent. See *Malignant Typhus*. From inflammatory fever by the pulse being quick, weak and feeble.

Treatment.—An emetic or cathartic should begin the treatment, No. 4, or if physic, No. 5; after which, sweating, with the effervescing mixture, or thoroughwort tea; this will act as a puke or purge, and bring on sweating.

After the stomach and bowels are cleared, and a moisture appears, give tonics, Bark, Virginia snake-root, columba, dogwood bark, willow, &c.; wine, mineral acids, and cordials.

If delirium, a blister to the nape of the neck, and mustard to the feet. No. 8.

This allays irritation, promotes perspiration, and procures sleep. After the emetic or carthartic, this powder may be used daily, till a uniform moisture appears, and the bark can be used.

If diarrhœa come on, use No. 8 more frequently. If the strength decline, it should be maintained by generous wine, nutritious diet, cordials, wine whey, jellies, broths, eggs, puddings, &c.; medicine, No. 6, 7, and bitters. The opiate powder once in four hours.*

*NOTE.—Much has been said on either side the question, whether fever can be broken up during its first stages?

Here we shall not attempt to argue or decide, but simply to give the outline of the practice which those adopt who claim it may be done.

Dr. Jackson, (author on fevers,) during the cold stage, put his patient into warm soap-suds, and rubbed him well with a brush or sponge; afterward, in the hot stage, before perspiration came on, dashed on cold water till the *fever heat* was gone.

Dr. Currie, of Liverpool, used water in cold affusion during the hot stage, when the heat was steadily above natural, and before a moisture appeared on the surface.

Many physicians of our own country use powerful emetic and cathartic remedies at the commencement of fevers. Others excite salivation with a view to the breaking up of fever.

TYPHUS FEVER,

Called also malignant, putrid, spotted, and jail fever.

Symptoms.—The attack is much more sudden than that of nervous fever; the strength gone, the horror and anxiety beyond expression; the skin cold, or of burning, acrid, almost stinging heat; the pulse quick, small, sometimes halting, at others wiry; nausea and bilious vomiting; intense pain in the head, ringing in the ears, throbbing in the temples, beating of the arteries visible in the neck; fiery redness of the eyes, furious delirium; tongue dry, black, and encrusted; breath hot and offensive; black crusts collect on the teeth; urine at first pale, thin, high-coloured, offensive, or depositing a black sediment.

As the disease advances, bleedings take place from different parts of the body; red, blue, purple, or black spots

The foregoing plans have all been published and supported by those who believed them practicable.

It remains to mention a plan adopted with success by an eminent practitioner of this state:—It consists in giving, at the commencement of the disease, say (yet varying the dose as the case may be) four-grain doses of calomel, at intervals of four or more hours, expecting the medicine slowly to pass the bowels, in the whole period of twenty-four hours. When the calomel threatens to pass before the system generally has been got under the influence of it, opium should be used to stay it for a time. We do not choose to salivate, nor would we deny our patients the other customary means.

It should be further stated, that in case this treatment fails, from having been delayed too long, or from some other adverse circumstance, still something is gained; the disease is more manageable, and yields sooner to other remedies than if the plan had been neglected.

It is possible that in a case of fever, the patient may be so prostrated, as that calomel would be inadmissible.—See *Spotted Fever*.

appear under, without raising the skin; involuntary evacuations, extremely offensive; pulse sinks and intermits; extremities grow cold; hiccough, convulsions, death.

Distinguished from all other fevers by symptoms which cannot be mistaken. Always dangerous, more especially if it proceed to the coming on of the symptoms mentioned in the advanced stage.

Favourable symptoms.—Rising of the pulse; return of sleep and reason; the spots of a florid colour.

Treatment.—By the means laid down in *Nervous Fever*, No. 5, 6, 8, putting the feet in warm water during the ague. In short, the same treatment as in Nervous fever, but more assiduously applied.

Sponging the body with warm or cold water, as best suits the patient's feelings; frequent change of bed and linen; sprinkling the room with vinegar and water; pure air, and every attention to cleanliness. Nos. 9 or 10.

Decoctions of oak bark, Virginia snake-root, cinnamon or orange-peel tea, to which may be added elixir vitriol, nitric or muriatic acids.

If bleedings appear, opium and muriatic acid. Through the whole, the bowels should be kept soluble by rhubarb, cream tartar, calomel, or clysters.

Light nourishing diet, jellies, broths, &c., as in Nervous fever. After the disease has abated, and the patient in a fair way of recovery, he should be cautioned not to make any sudden exertion of strength, or be suddenly raised to a perpendicular posture, which has sometimes proved fatal.

YELLOW FEVER.

Many of the symptoms of this fever are common with this and the fevers before described. Those in some measure peculiar to Yellow fever seem to be, pains in the eye-

balls and lower part of the forehead ; the saliva is viscid ; large quantities of frothy bile thrown up by vomiting ; the eyes, face, and breast of a deep yellow tinge ; a peculiar delirium, with permanent dilatations of the pupils of the eyes ; delusive remissions, which promise speedy recovery ; soon, however, the disease returns with redoubled violence ; the patient suddenly becomes giddy ; loses his sight ; or the eyes are much inflamed, watery, protruding, and wildly rolling ; anxiety ; vomiting of yellow or black matter ; sweats of a yellow colour, and highly offensive ; bleedings ; severe pains, more especially in the testicles and calves of the legs ; livid spots in the skin ; the patient, in an agony, throws out and draws back his extremities in violent succession ; black fetid stools ; hiccough ; sunk pulse ; death.

Such are the usual appearances ; yet so irregular and so varied is this disease, that the most eminent physicians consider it only as a remittent fever ; deranged, as to its form, by appearing in subjects unaccustomed to hot climates ; so that if all would stay in their native climates, this disease would disappear.

Causes.—Exposure to noxious exhalations from swamps, rivers, lakes, ponds, and marshes, or the filth of cities and towns, accumulated under a burning sun. The poison is assisted by an irregular life, intemperance, exhaustion of the system, from whatever cause.

Treatment.—Early in the disease, calomel, so as to clear the passages and affect the mouth. No. 12.

As soon as the bowels are loose, use No. 13 in place of No. 12.

If nausea appear at the commencement, wash out the stomach with camomile-flowers, but use no emetic medicine. Lay on the stomach decoctions of poppy-heads, or

tansy cloths. Injections of tansy-tea, and eighty drops of laudanum. Saline or effervescing mixture, No. 14.

For vomiting of black matter, use lime-water and new milk every hour, or oftener. Apply early a blister or mustard-paste over the stomach.

Affusion and sponging the body with cold water, when the heat of the system is steadily above the natural temperature, may be applied early in the disease.

After the bowels have become loose, when malignant symptoms threaten, the bark may be used in substance or decoction.—See *Intermittent Fever*. The bark should be continued till health is completely restored.

The patient's strength is to be supported throughout the disease with preparations of barley, sago, Indian arrow-root, &c., mixed with wine.

SPOTTED FEVER.

Perhaps there is no disease which so soon makes the tongue to falter, the knees to totter; locks up the senses, alienates the mind; and, with unconquerable weakness, saps the very basis of our life, as Spotted fever. It is not confined to any season, and it has not been observed to choose any peculiar aspect or atmosphere, but visiting in turn the bleak ridge and the banks of the clear stream.

Though the leading features of this enemy are always the same, yet his dress is endlessly varied.

To enumerate *symptoms*:—Some patients are seized with violent pains in the stomach, head, joints, limbs; and frequently the pain is confined to a single point; often to a single toe or finger. Some have a violent ague and shaking, and yet are not sensible of cold; and some have no heat succeed this symptom. Some were taken suddenly totally blind or impenetrably deaf; others were not affected at all

in those organs. A palsy of a member was not unfrequent, and a strange numbness was felt in the nose and face of some, which led them to rubbing their face, and that for hours.* Some had raving or furious delirium, others a playful or hysteric alienation of mind, while others were more shrewd than before. Some were conscious of their sinking, yet seemed not to mind it. Some fell into a snoring, lethargic sleep, from which nothing would rouse them. Some were so painfully sensible as to complain of the slightest touch or motion, while others felt not the pricks of needles, nor yet the contact of living coals.

The voice was low and melancholy, the countenance shrunk, the eyes sparkling or muddy, the breath failing; and the air seemed to withhold from the gasping sufferer its invigorating energy.

The pulse was commonly feeble, frequent, irregular, and often interrupted. In some cases it seemed inflated, yet would disappear upon the slightest pressure. Sometimes when the pulse was gone in the wrist, the arteries of the neck would be seen beating with seemingly impatient and fretful motion.

Bleedings were frequent from different parts of the body, and often fatal.

Purple spots† appeared in some, from oozing of blood

* This is a symptom which nurses consider as indicative of an over-dose of laudanum, and was one among many which appeared in Spotted fever, (such as staggering, inarticulation, &c.) and induced by-standers to suppose the patient intoxicated with medication; when the fact was, no medicine had been given; and those dreadfully-equivocal symptoms never gave way but upon a liberal use of powerful stimulants, as laudanum, spirit ether, and cantharides.

† Nothing could be more absurd than to style this disease *Spotted Fever*, merely because purple spots often attended among other

from the relaxed vessels of the *true skin*, yet without sufficient force to penetrate or elevate the *scarfskin*, and spreading to various sizes, from a point, to that of a shilling; and assuming different hues, from scarlet to black.

From the onset, a clay-like coldness came over the whole system, and all efforts to restore genial warmth were frequently unavailing.

The tongue was in some cases clear and moist, in others dry, in others bloodless; in the progress of the disease it commonly turned brown or black.

The swallowing was often difficult, from canker in the throat, or from palsy of the parts.

Nausea and vomiting commonly harassed the patient from first to last; *yet the contents of the stomach were not at all vitiated.*

The bowels seldom suffered at all.

A horrid sensation of cold was felt in the stomach, as if ice was melting there; this symptom, as well as that of puking, was greatly aggravated by drinking cold water, or any weak beverage. Patients who inquired for water could not distinguish it from brandy.

It must not be supposed that the whole of the above enumerated symptoms appeared in any one case. What

symptoms. It might as well have been called *Blind Fever*, or *Bleeding Fever*, or *Freezing Fever*, as what it is, and perhaps better; because the name *Spotted Fever* had been forestalled by the old English writers, and applied to a regular fever of their time. Indeed in this disease there are often no *spots* nor *fever* at all, and the patient is in many cases dead before fever could form. We know fever, strictly speaking, does sometimes follow an attack of this *disease*, and so it does some *labours*, and *riding of a foggy night*, or *sleeping on the damp ground*; yet whoever thought of styling the last mentioned states of uncomfortableness fever?

is put down in this article, is applicable to the more severe cases. Like every other disease, however, it sometimes occurred in so mild a form as to require very little medication. Yet it should not be out of our minds, that many, without feeling alarm in themselves, or exciting it in their friends, have suddenly and silently sunk into the arms of death, and that even while their physicians were beginning to investigate their case.

Treatment.—Now, if we will bring our minds steadily up to the work, and calmly look over the above enumerated appalling symptoms, two considerations, paramount to all others, force themselves upon us; viz. the immense prostration of the vital powers, calling imperiously for support of the most prompt, powerful, and durable kinds; and that nothing can be expected from evacuations, as the contents of all the cavities* are *ab initio* uncontaminated.

Under this view of the subject, we see what must “decide when doctors disagree,” the case giving laws to the prescriber, and the symptoms pointing with iron index to the only means which can save the patient from sinking, viz. *cordial stimulating medicine, and nourishing diet.*

The pressure of the disease, and the remaining strength, must determine the kind and quantity of means; and the range is between going into a warm bed, with drinking pennyroyal or peppermint tea; and hot bath, with brandy, laudanum, ether, and cantharides.

Begin the treatment by putting the patient into a warm bed, apply flannels wrung out of hot water, or bladders of hot water to the sides and feet of the patient. If the disease be more than slight, give to drink hot wine whey, milk

* By cavities, are meant stomach, bowels, kidneys, bladder, &c.

punch, or warm wine and water. If obstinate nausea or puking attend, give hot brandy, a spoonful at a time, with only water enough to keep it from strangling; put a blister over the stomach. If lethargic symptoms come on, apply blisters round the head, and increase all the stimulants.

If warmth and moisture return, and the pulse is raised, there is hope; yet the patient must be kept up, and the disease kept at bay, by laudanum in full portions every two or three hours, with tincture of cantharides and Fowler's solution.

It has before been observed, patients sooner crave and bear strong food than in, or after fever. Yet it is possible the patient shall have a run of regular fever, after he shall have passed this *anomalous state of disease*. In such a case, treat as for *Typhus Fever, which see*.

SCARLET FEVER.

This fever is most commonly inflammatory, but sometimes, either at its commencement, or in its progress, symptoms of typhus appear. About the fourth day, the face swells, and spots of a florid red colour appear, scattered through the skin, which at length run together, and after three days disappear, the scarfskin peeling off in branny scales. In severe cases the nails peel off with the skin.

It is not unfrequently succeeded by a dropsical swelling of the whole body. When the disease has symptoms of typhus fever; it appears like malignant quinsy, often the same affection of the throat; when it is to be treated like malignant quinsy, or typhus.—See *those diseases*.

Scarlet fever is distinguished from measles, by absence of cough, sneezing, flow of tears; the eruption is more diffused like a blaze, and not sensible to the touch.

Treatment.—Keep the bowels loose with calomel and rhubarb.

Cool vegetable acid drinks, lemonade, currants, raspberries, sorrel tea, No. 4, with snake-bite tea, and No. 8, at night.

Sponging the body with vinegar and water, if agreeable to the patient. Sprinkle the room with vinegar and water.

Beverage of muriatic acid, or elixir vitriol.

If delirium or stupor come on, blister between the shoulders. If soreness of the mouth and throat, with difficulty of swallowing, gargles of oak bark tea, sweetened with honey; add muriatic acid, as in quinsy.

At the decline of the eruption, bitters, bark and wine, and nutritious diet. No. 11.

PERIPNEUMONY, OR LUNG FEVER.

This disease has, seemingly, for a number of years, in New England, taken the place of Pleurisy.

It differs from pleurisy, in the pains being less acute, and more steady; a greater sense of oppression and weight all around the chest; the face is flushed, sometimes almost purple; pulse not hard, but quick. Bleeding is inadmissible, and so is tartar emetic.

Thoroughwort tea has been much used; take a table-spoonful every half hour, till it sweats, or pukes, or purges.

Blisters, if they produce stoppage of urine, it is a good symptom; squills, fomentations, injections, all will come in for a place. A stoppage of urine from a blister, is cured by gum Arabic, drank freely; or, infusion of marsh mallows, asparagus or parsley roots, &c.

For sweating in the first stage of the complaint, No. 8, with hoarhound tea. In the second stage, after the patient raises matter from the lungs streaked with blood, (a good

symptom,) use No. 9 or 10. Oxymel squills, with warm tea.

If the strength fails, wine whey, with hartshorn in it, warm broths. Bark No. 11, nourishing diet, cordials. For obstructions in the lungs, No. 17.

NOTE.—What is said of the calomel practice, in Note after Nervous Fever, is applicable to this disease.

Slight cases of Lung Fever are not difficult of cure, yet it sometimes appears with symptoms, which bid defiance to all common means. A mottled skin, a cadaverous smell, and the skin, to the examiner, feeling like that of negro's, flabby, or rather like one that is dead, but not quite cold.

This disease, (and so do some others,) sometimes lurks in a most fatal form under a semblance of health, *i. e.* the symptoms are, if I may so speak, *morbidly natural*. For instance, the patient does not complain; is absent; is obstinate, either in doing things of little consequence in themselves, but hurtful to a sick man, or neglectful of customary duties which he might do as well as not. Ask the patient if he is better? he says yes; if he is worse? he says no. Circumstances calculated to interest him, are either not regarded, or they produce a disproportionate effect. He smiles and frowns, and moves and stops, when you do not expect him to. A train of such like symptoms are discoverable, yet will be overlooked by a careless observer.

I would only observe farther, that the eye in such cases is either glassy, the pupil is muddy, or spreading unequally and indistinctly; the eye is never natural.

PLEURISY.

Symptoms of inflammatory fever, accompanied with a sense of weight in the chest, which in a short time becomes acute pain shooting into the side, thence to the breast bone, or through to the shoulder blade. Breathing difficult, and increases the pain. The patient cannot lie on the affected

side; cough; frequent, hard, contracted pulse, vibrating under the finger like the tense string of a musical instrument; white tongue; high-coloured urine; and indeed all the symptoms of inflammatory fever.

Caused most frequently by exposure to vicissitudes of temperature; violent exercise of body, or exertions of the voice.

Treatment.—Copious bleeding from the arm, according to symptoms. Fomentations to the sides.

Brisk purges at the commencement, of calomel 10, jalap 15 grains; purging medicines to be laid aside after the patient raises freely. Sweating with

R. Tartar emetic 2 grains,
Sage tea, 10 spoonfuls. Mix.

A spoonful of this, or a tea-spoonful of No. 16, may be taken any hour till a sweat breaks out.

Apply a large blister over the pained side. Drink freely of hoarhound or catnip tea; oxymel of squills, or blood root will help to raise from the lungs; or make free use of teas of flax-seed, rye bran, cat-tail-flag-root, bass-wood bark, &c.

The diet in all inflammatory diseases, should be gruels, wheys, mucilaginous roots, plants, &c.

FEVER SORE.

Inflammation and ulceration of a bone.

First stage.—A peculiar obtuse, deep-seated, aching pain, extremely distressing to the patient, and soon affecting the health to a remarkable degree. At length the part swells, and a tumor forms, possessing great hardness; the skin becomes red and extremely tender; there is an increase of heat, and other symptoms of inflammation.

Treatment.—Use in this stage blisters, fomentations, allay pain with opium; after the pain subsides, mercurial frictions.

Second stage.—The symptoms of inflammation before enumerated ; the preceding pain has usually been exceedingly severe and constant, and attended with great constitutional irritation, quick hard pulse, white tongue ; the parts become swelled and inflamed ; the patient is attacked with severe agues ; and an undulation is perceptible within the tumour ; ulceration takes place, and a thin acid matter is discharged ; when, by an examination with a probe, a cavity can be traced leading to, if not into, the bone. The progress of the formation of matter is sometimes extremely slow, at others the tumour soon has signs of the fluctuation of matter.

Treatment.—If the means prescribed in the treatment of the first stage fail, the whole should be laid open by a free incision. This must be performed by a surgeon. After the operation, use tincture of myrrh, as an injection, and treat it as laid down for ulcers.

Injections first of soap in water, then with a solution of corrosive sublimate, a full, compress, and thorough bandage will commonly succeed in healing the abscess ; if there is a tendency to such affections, insert an issue.—But all this a surgeon must direct.—See article *Bandage*.

INFLAMMATIONS.

GENERAL OBSERVATIONS.

CHARACTER.—Increased heat and redness, swelling, pain and tension.

Two Species.

I. Phlegmonous, the swelling forms a cake well defined.

II. Erysipelas, *which see.*

Symptoms of the first species, or Healthy Inflammation.—Itching and dryness of the part, succeeded by increased heat and circumscribed swelling; redness and increased circulation of the blood; shooting and throbbing pains.

If the inflammation runs high, and be of considerable extent, an increased action of the heart and arteries takes place; the pulse becomes full, strong, and hard, somewhat quickened; the skin is dry and hot; great thirst arises; the tongue is white; the urine is high-coloured; and the blood, when drawn from a vein, shows a glutinous buff-coloured scum on its surface. This is Sympathetic, or Inflammatory fever.

Causes.—Cold, wounds, compression, or any thing which irritates the part.

Favourable symptoms.—Absence of the above-described fever; the swelling becoming more circumscribed, pointing out and soft in the centre.

Unfavourable symptoms.—Violent fever, with delirium; sinking of the pulse; blisters forming, which discharge a

thin ichorous matter; the part becoming of a livid colour, and losing its sensibility.—See *Mortification*.

Treatment.—Remove the cause, if it continue to operate; apply leeches; lay upon the part cloths kept constantly wet with mineral water, No. 1, or No. 18.

Saline purges of Epsom or Glaub. salts, or sulphur and cream tartar. If the symptoms run high, bleed, and give sweating medicines, antimonial wine, &c. Warm emollient poultices, if it *will* suppurate. Poultices should never be suffered to get cold or dry, but be often renewed.—See *Suppuration*.

The generality of cases of inflammation undoubtedly receive most relief from the use of cold astringent lotions; but there are constitutions and parts which derive most benefit from the application of warm emollient remedies. The eyes, and parts about the face, and the private parts, when labouring under acute inflammation—also, boils, carbuncles, gun-shot wounds, and swellings which rise in the course of fevers—more frequently require emollients, as fomentations and poultices, though not always. The greatest surgeons are frequently compelled to change their applications, and it would be folly here to give precise rules; the patient's feelings should be consulted. Hence, in all cases in which the first kind of topical applications seem not to produce the wonted degree of relief, let the second sort be tried. From the opportunity of comparison, a right judgment may then be easily formed. Fomentations are only temporary applications, while emollient poultices must be permanent ones.

Fomentations are best made of infusion or decoction of bitter herbs, hops, tansy, poppies, lettuce; and for a poultice, stir flax-seed meal into the liquid part of the fomentation till a proper consistence is obtained.

INFLAMMATION OF THE BRAIN.

Symptoms.—Horror; the face becomes flushed and turgid; the eyes stare as if starting from their sockets; furious delirium; tears sometimes burst from the eyes; sometimes sweating at every pore; skin dry and hot; parched tongue, at first fiery red, then white, yellow, or black; hard, rapid pulse. If the disease is not soon removed, stupor, insensibility, a great failure of the strength.

Causes.—Exposure to heat, vertical sun; violent passion; intense thought; intemperance.

Distinguished from madness by its being attended with fever; from simple fever, by the delirium appearing as a first symptom; from typhus, by the pulse being hard and rapid.

Treatment.—By a copious and sudden evacuation of blood from the arm or temporal artery. Application of leeches to the temples. Putting the feet and legs into warm water, and pouring vinegar and water on the head, previously shaved. Blisters to the head, neck, and legs. Quiet room, secluded from light and sound. Give no food during the inflammatory stage, except barley-water, gruels, arrow-root, &c. Purging salts, strong doses of calomel, No. 5. Sweating, with cream tartar and effervescing mixture, No. 14, often repeated, or No. 19.

INFLAMMATION OF THE STOMACH.

Fever, anxiety, heat and pain in the region of the stomach, increased when any thing is swallowed; aggravated by pressure on the stomach; vomiting; hiccough; pulse hard and small; great prostration of strength. Send for a physician.

Treatment.—Bleeding; warm bath, long continued; fo-

mentations to the belly, constantly applied; blisters to the part. Large emollient clysters. Small quantities of flax-seed tea; barley-water, or gum Arabic and water.

INFLAMMATION OF THE BOWELS.

Acute pain in the belly, increased by pressure, and shooting and twisting round the navel; obstinate costiveness; belly tense; frequent inclination to stool; vomiting bilious, dark, and fetid matter. Fever; pulse quick, hard, and contracted; great prostration of strength; high-coloured urine. A terrible disease.

Distinguished from colic, by the pain in colic being relieved by pressure; absence of fever in colic, and the pulse is not affected.

Treatment.—Bleeding, warm bath, and fomentations continually applied and changed; purges of calomel, followed by oil; large clysters. Send for a physician without loss of time.

A slight inflammation sometimes takes place around the belly, with mild fever in the morning; bowels a little costive; strength a little diminished. Caused by exposure of the lower extremities to water in windy weather. Cured by large blisters, where the pain is most severe, and purges of calomel, salts, cream tartar, or rhubarb.

This disease has proved fatal by neglect, yet blisters and the other remedies are sufficient to the cure.

INFLAMMATION OF THE LIVER.

Tension and pain near the short ribs of the right side, more or less acute, shooting to the top of the shoulder, and through to the shoulder blade; increased by lying on the left side; fever, dry cough, sallow countenance, high-coloured urine; sometimes hiccough and vomiting.

Causes.—Violent emetics, hot climates, violent passions, intemperance, and all the causes of inflammation.

Treatment.—Bleeding; cupping; blisters, large and repeated. Purges, especially of calomel, No. 5, or No. 12. Dress the blisters with mercurial ointment.

If the disease become chronic, pills of calomel and opium, so as not to affect the mouth, No. 13.

A continued course of bitters and laxatives, as dandelion, Frazeri, gentian, columba and quassia, soda. A beverage of nitric acid should be used with calomel, or alternating with it. Remove to a cold climate.

INFLAMMATION OF THE KIDNEY.

Fever; pain in the loins, shooting to the bladder; drawing up of the testicle, numbness of the thigh; high-coloured urine; vomiting, costiveness, and colic pains.

Treatment.—Bleeding; applying leeches to the loins; cupping; salts; castor oil; senna; manna; cream tartar; emollient clysters. Blisters are inadmissible.

Mucilaginous drinks: sassafras twigs, dandelion, mallows, flax-seed, and nitre. Warm bath fomentation, with camphor or spirit; opiate clysters.

INFLAMMATION OF THE BLADDER.

Fever; acute pain in the region of the lower belly; soreness and pain increased by pressure; painful discharge of urine; frequent inclination to stool; vomiting.

Treatment.—Same as in inflammation of the kidneys. In both diseases may be used winter-green, sassafras, violets, peach-tree gum.

INFLAMMATION OF THE EAR,

Is, for the most part, a local disease, without fever; but in some instances, the sufferings of the patient are very

great, and the disease assumes a formidable appearance, as stupor, delirium, fever, convulsions, and soon a fatal termination has been the consequence.

Pain and inflammation of the ear may be produced by the causes of other inflammations, but none more readily than partial exposure to cold.

Treatment.—If there is no fever, apply a blister behind the ear, and warmth to the part; leeches, mullen leaves in warm milk and water, cathartics, salts, No. 5. Sweating, with No. 8, and balm-tea. When the pain is over the whole head, with fever, delirium, stupor, and other urgent symptoms, use the remedies laid down for inflammation of the brain, excepting the cold local applications. If it *will* suppurate, fomentations and poultices of hops and poppies.

QUINSY.

Inflammation of the almonds of the ears and throat.

Symptoms.—Chills and flushes succeeding each other, and terminating in the hot stage of an inflammatory fever. Swelling of the palate and almonds of the ears; swallowing becomes painful and difficult; voice hoarse or lost; shooting pains through the throat and almonds of the ears; frequent slimy spitting. Sometimes dangerous, and indeed fatal.

Causes.—Cold applied to the neck, damp linen, wet feet, damp rooms; halleoing, blowing wind-instruments, &c.

Treatment.—The timely exhibition of an emetic will frequently check the formation of the disease, No. 4, in divided doses. Bleed, if the pulse is high; cupping; leeches. Blisters to the throat, or nape of the neck. A flannel, dipped previously in volatile liniment, No. 3, and wrapped round the neck.

Purging with salts. Nitre, a few grains, rubbed with

loaf-sugar, and slowly dissolved on the tongue, and swallowed. Sweating with saline mixture, No. 14, No. 19. Inhaling steams of water and vinegar, and camphor.

Gargles of sage or rose tea, sweetened with honey and acidulated with muriatic acid.

If it *will* go on to suppuration, poultice with hops and flaxseed. If there is danger of suffocation, the swelling may be opened at any stage, with safety, by a surgeon.

MALIGNANT QUINSY.

This disease is a kind of ulcerous sore throat, attended with typhus fever and quick pulse; and requires the treatment of typhus, with the addition of gargles, frequently used. No. 20. Nos. 9 and 11 alternately every two hours. Call a physician.—See *American Remedies*.

RHEUMATISM.

Chills, followed by heat and fever, with hard, full, and quick pulse; obstinate costiveness. After one, two, or three days, tumour and pain, with inflammation, attack one or more of the large joints, and they become extremely tender to the touch. Tongue white; urine high-coloured; sometime profuse sweating, without relief.

In rheumatism, the pain shoots along the courses of the muscles, and often changes its seat.

Rheumatism often runs into a chronic state, *i. e.* the fever abates, and the pain or soreness continue. Sometimes chronic rheumatism is not preceded by the acute.

Causes.—Obstructed perspiration, damp rooms, damp linen, exposure to cold after exercise.

Treatment.—Bleed with caution; cupping and leeches; purging with calomel, oil, salts, rhubarb and cream tartar; sweating; Nos. 8, 14; pennyroyal tea. Foxglove, cicuta,

calomel, and opium, may be given by medical prescription. Fomentations with bitter herbs and poppy-heads. After the fever abates, bark, wine, guaiacum.

In chronic rheumatism, cupping, blisters, No. 13, volatile tincture of guaiac, hartshorn, spirits turpentine, mustard, blisters, sarsaparilla. Above all, blisters, frictions, patience, and flannel; queen of the meadows, white-wood-root bark, prickly ash, thoroughwort.—See *Colic*.

GOUT.*

Pain in the joints, chiefly in the great toe, hands, feet, and small joints, returning at intervals. Previous to the attack, the functions of the stomach are much disturbed, with dejection of spirits; coldness and numbness of the extremities, cramps, &c.; succeeded by horror, rigours, and fear. The attack comes on about midnight, subsides next evening, the patient falls asleep, and awakes with swollen limbs, but apparently comfortable till in the night, when his distress returns, but goes off in the morning. The pain during the paroxysm imitates almost every species

* Gout seems to have been common in Old England, during the earliest ages of barbarism. It is frequently noticed by the Anglo-Saxon historians, and was called *fot-adl*, or *foot-ail*.

The following prescription was regarded as a specific by the ancients; and will be considered as a curiosity by the reader: "Take the herb *datulus ortitulos*, which we call *greata cranleak*, (a species of iris, or flag-flower.) Take the heads of it, and dry them very much, and take thereof a pennyweight and an half; and the pear-tree and Roman bark, and cummin, and a fourth-part of laurel-berries; and of the other herbs half a pennyweight each, and six pepper-corns, and grind all to dust; and put two egg-shells full of wine. This is the true leech-craft. Give it to the man to drink, till he be well."

of torture. This is regular gout, for which much may be done to very little purpose. Lamb-skin slippers and gloves, with the wool turned inward; regular life and abstemiousness after the fit is over.

ATONIC GOUT,

Is when, in a gouty patient, there are all the symptoms, except the pain and inflammation in the joints, viz.: nausea, vomiting, palpitation of the heart, giddiness, low spirits, and other nervous affections.

Treatment.—Avoiding all the causes of debility, moderate exercise, animal food, good wine, bitters, wearing flannel, blisters on the extremities.

RETROCEDENT GOUT,

Is where, after the inflammation has appeared on the limbs, it suddenly leaves them, and attacks some internal part, as the stomach, lungs, &c., occasioning vomiting, pain and sickness, spasms; or the heart, occasioning faintings; or the head, occasioning apoplexy, palsy, &c.

Treatment.—If the stomach be the suffering part, which is commonly the case, liberal use of warm brandy and water, or wine and aromatics, castor, hartshorn, fetida, camphor, blisters and mustard to the extremities.

MISPLACED GOUT,

Is when the inflammation first, instead of the great toe, takes hold of some vital part, as the lungs, heart, stomach, &c. For which, in strong constitutions, treat as for Pleurisy; in weak ones, as for Retrocedent Gout.

ERYSIPELAS.

Character.—The swelling diffused, of a bright scarlet colour, tinged with yellow, not very prominent. Erysipelas is prone to spread rapidly to a great extent; the swelling

is neither so hard, so elevated, nor so prominent as that of common inflammation; when pressed with the finger, the colour leaves the skin, but soon returns. The pain is of a burning, itching kind. Sometimes this disease in its course changes its seat entirely, leaving one part for another. Frequently little blisters arise, (called St. Anthony's fire,) not dangerous, if other symptoms are mild.

Favourable symptoms.—Absence of fever, or, if present, assuming the inflammatory form, bright red colour, strength little diminished.

Unfavourable.—Appearing in the face; colour of a dark red, or brown, or livid; inflammation rapidly extending; pulse small, hard, rapid; brown tongue; stupor, delirium, flabby swelling, livid blisters.

Termination.—As the disease abates, the skin peels off in branny scales; this is to be wished. Suppuration is to be dreaded, and mortification still more.

Causes.—This form of disease is apt to take the place of healthy inflammation, in weak, irritable habits, and in worn-out constitutions.

Treatment.—If the fever be inflammatory, and the swelling hard, wash the part with mineral water No. 1. If blisters arise, or the skin is livid, use flour or starch, sifted in cotton. Never apply a poultice in Erysipelas.

In severe Erysipelas, evacuations are indispensable; for it is usually connected with derangement of the biliary secretions. Cream tartar, Glaub. salts, senna, manna, calomel. If the patient have a foul tongue, a bitter taste in the mouth, and a propensity to vomit, an emetic is proper. After full evacuations, and the pulse becomes soft, or there is a change to a purple colour, bark, wine, and nourishing diet are necessary.—When Erysipelas spreads from a wound, local applications are necessary, and their use

should be regulated by the rules laid down in common inflammation; the warm emollients commonly do best, not always; weak warm mineral water is often an excellent application, or spirit and water, with the part covered or not, as feels best to the patient.

SUPPURATION;

OR, PROCESS OF THE FORMATION OF MATTER, CALLED "PUS."

During the progress of inflammation, a suppuration is known to have taken place by the following symptoms:

Chills, sense of weight, and stinging pain in the part; a pointing out of the swelling, and soft fluctuation felt in the centre.

If the means prescribed for healthy inflammation fail to disperse the swelling, and it is thought best to hasten suppuration, use a poultice of bread and milk, or linseed meal, or if the pain is severe, a decoction of poppy leaves or heads, or lettuce, either as a fomentation or poultice, or hops may be used. Never suffer a poultice to get cold on the part.

Should suppuration proceed too slow, it may be hastened by hot fomentations to the part; and by bark, wine, and nourishing food.

If you have patience, you may wait for the spontaneous bursting of the swelling; or you may open it with a lancet or any instrument which will not injure subjacent parts.

Good pus is of the consistence and colour of cream, without smell, and little, if any, taste; it will commonly sink in water, and does not readily unite with water, unless the water be heated.

If a hardness remain after opening, a poultice may be applied, lint being first placed in the orifice, to prevent the growth of proud-flesh; as soon as the cake disappears, the

poultice should be discontinued, and the abscess treated as a common ulcer.—See *Ulcers*.

MORTIFICATION.

Symptoms.—If it supervene on inflammation, an excessive, acute, and constant pain; great anxiety, often delirium, followed by a sudden cessation of all inflammatory symptoms. The part before tense, now becomes flaccid, of a livid colour, losing its heat and sensibility. Blisters are formed, under which appear brown spots. The parts soon become black, and acquire a fetid smell.

If the event prove favourable, the mortified portion is completely surrounded by a white line, about which pus (matter) is formed. The dead part now loosens, and sloughs out, leaving a suppurating ulcer.

If, on the contrary, the termination be fatal, the mortification rapidly extends; great constitutional irritation arises; the pulse becomes small, rapid, and irregular; there is a fixed flush on the countenance, with great anxiety and prostration of strength, and death soon ensues.

Mortification is sometimes produced without previous inflammation, by blood-vessels being choked by pressure, by long-continued cold, by long-continued pressure, violent bruises, &c.

Treatment.—Liberal use of bark, wine, nourishing diet, opium, and cordials.

Local Applications.—Fomentations of oak bark, spirit of turpentine, or wash the part with No. 2, or a wash of nitric acid, one drachm to a pint of water. Fermenting poultice, made with yeast and oatmeal or bran; common bread and milk poultice, with powdered charcoal in it. After the sloughing, or separation of the dead parts, treat it as an ulcer.—See *Ulcers*.

In the mortification of the toes and feet of old people, nothing is of service but opium, bark, and wine. This disease begins at the ends of the toes: first a blister rises, from which mortification spreads up the limb.

MARASMUS.

PURGATIVE MEDICINES.

THE following is taken from a work of Doctor James Hamilton, of Edinburgh; from which, if attentively read, a better idea will be gained of that wasting disease of children, which is usually ascribed to *worms* as a cause, than from any thing which I can offer on that interesting subject.

Observations on the utility and administration of purgative medicines in the Marasmus which appears in childhood and early youth.

I comprehend under the general title, marasmus, a variety of symptoms which affect the young of both sexes.

A sluggishness, lassitude on slight exertion, depravity and loss of appetite, wasting of the muscular flesh, fullness of the features, and paleness of the countenance, swelling of the abdomen, an irregular and generally a costive state of the bowels, a change in the colour and odour of the feces, fetid breath, swelling of the upper lip, and itching of the nose, mark the beginning of the disease.

When these symptoms have continued for some time, they

are followed by alternate paleness and flushings of the countenance, heat and dryness of the skin, feeble and quick pulse, thirst, fretfulness, increasing debility and disturbed sleep, during which the patients grind or gnash their teeth, and are subject to involuntary starting, and twitching of different muscles.

Every case of marasmus does not necessarily include all the symptoms which I have enumerated. Different combinations of them give a variety of the disease, which is, however, in general, readily known and distinguished.

Marasmus appears most commonly among weak and infirm children, whether they are so from delicacy of constitution, or from incidental causes. It is particularly prevalent in large and populous cities, where children are deprived of ready access to exercise in pure air, and sicken and pine in the nursery; or when they are confined in crowded and airless school-rooms, whither they are sent, partly for the purpose of education, and partly, to use a common phrase, with a view of being kept out of harm's way. Children, also, who are employed in manufactories, where their occupation and confinement are such as to weaken and enervate them, are liable to be attacked with this disease. Irregularity in diet and improper food, also give rise to marasmus. We accordingly observe it to prevail most commonly in autumn, the season which affords opportunity for eating unripe fruit and vegetable articles from the garden.

In proof of the operation of these causes, I remark, that I have held the office of Physician to George Herriot's Hospital for two and thirty years. During this long period, I scarcely recollect an instance of this marasmus among the children entertained in that institution. This may be attributed to the healthy site of the building; to the clean-

liness and free ventilation of every part of it; to the wholesome, nourishing food of the children, and to their exposure to pure air while enjoying their infant sports.

Marasmus has been generally attributed to the presence of worms in the alimentary canal. This supposition, however, is questionable. *Ascarides*, (*Pin worms*,) *Teniæ*, (*Tape worms*,) and *Lumbrici*, (*Long round worms*,) are the worms most commonly found in the human intestines.

Ascarides, which are often passed in great numbers by children when at stool, are not accompanied by the symptoms of marasmus. Except an itching about the anus, they give little other uneasiness.

The *teniæ* or tape worm, the presence of which is known by peculiar symptoms, which are the source of much suffering in after periods of life, is altogether unknown in infancy and childhood.

The *lumbricus*, or round worm, therefore, must be the generally supposed cause of the symptoms of marasmus. Medical gentlemen, who have practised in tropical climates, speak much of the *lumbricus*, and mention the number of them that is occasionally passed to be very great. There may be something in the climate, soil, or state of the air of these regions; in the mode of life or constitution of the inhabitants, with which we are unacquainted, which may account for this circumstance. But in our cooler latitudes, no such instances of numerous *lumbrici* have been noticed. On the contrary, after the best directed course of anthelmintic (*worm destroying*) medicines, when the symptoms of the disease are going off, no *lumbrici* have been seen, unless we admit that the worms, destroyed by the efficacy of the medicines, constitute the unnatural and fetid feces which, in such instances, are voided in great abundance.

This admission, however, is not to be readily granted;

for similar feces are passed upon the exhibition of an early purgative, and before any specific vermifuge (*worm destroyer*,) is employed.

Farther, the presence of lumbrici in the bowels is by no means an uniform cause of bad health. *They have been known to exist in the intestinal canal without any disease ensuing.* These instances are not rare, and are not confined to childhood. They militate against the received opinion, that lumbrici, within the intestines, are the cause of marasmus; for if they are so in a single case, they should be so in every one.

This opinion, however, that worms exist, and exert a baneful influence in the intestines, has been so prevalent for ages, that a great many anthelmintic medicines, some peculiar to the nursery, others to the regular practitioner, have been mentioned and extolled. Of these, some have been considered as specific poison to the insect, and others are conceived to destroy it by mechanical triture. Most of them have had their partisans for the day, and have passed in succession through the ordeal of experience into oblivion. The utility of such anthelmintics as have been found to be most beneficial, has, in my opinion, been in proportion to the purgative powers which they possessed.

When I consider the languor and lassitude which precede this marasmus; when I recollect the constitutional or acquired debility of those who are more particularly exposed to be affected by it, instead of adopting the common opinion, of its being occasioned by worms, I am more disposed to think, *that a torpid state, or weakened action of the alimentary canal,* is the immediate cause of the disease; whence proceed costiveness, distention of the bowels, and a peculiar irritation, the consequence of remora of the feces. I have accordingly been long in the habit of employing purgative

medicines for the cure of this marasmus ; the object is, to remove indurated and fetid feces, (*matter passed at stools,*) the accumulation perhaps of months ; and as this object is accomplishing, the gradual return of appetite and vigour mark the progress of recovery.

The history of the disease, from the first indisposition to the appearance of more urgent symptoms, disposes me to consider it as consisting of two stages or periods ; the incipient, and the confirmed. The first period commences with the disease, and continues to the accession of the febrile (*feverish*) symptoms. These usher in the confirmed stage, which continues to the end. This is not a frivolous remark ; it is of use in practice.

In the incipient stage, the bowels are not altogether torpid and inactive, neither are they overloaded with accumulated feces. Mild purgatives, therefore, repeated at proper intervals, effect a cure. They preserve the bowels in proper action, carry off feces which had begun to be offensive and hurtful, and prevent further accumulation.

In selecting purgative medicines, we must flatter the taste of our young patients. Powder of jalap is not altogether unpleasant. The mild neutral salts, dissolved in a suitable quantity of beef tea, are also convenient purgatives ; but calomel will prove on several accounts, the most certain and useful remedy of this kind.

Neglect, on some occasions, and too great confidence in inert medicines, on others, allow the confirmed stage of marasmus to steal on imperceptibly. Manifest danger now threatens the young sufferer, whose remaining flesh and strength are rapidly wasted by the supervening fever ; while prostration and depravity of appetite withhold necessary nourishment. And at the same time, the more

Inactive bowel, and greater bulk of feculent matter throw additional difficulties in the way of a cure.

Under these circumstances, I adopt active practice, in the view of stimulating the intestines, and of putting the collected mass in motion without delay. I find these ends are best obtained by giving small doses of the purgative medicine which I employ, and by repeating these frequently; so that the latter doses may support the effects of preceding ones. When the bowels are once opened, stronger purgatives, given at longer intervals, will accomplish the cure.

I observe calomel to be equally useful in this, as in the incipient state of the disease; but great attention must be given during the exhibition of it. Without this, as the fetor of the breath prevents us from recognizing the mercurial fetor accurately, the mouth may be affected unnecessarily and unexpectedly.

While I thus give appropriate purgative medicines, I find it necessary, in order to have full information of their effects, to inspect daily what is passed at stool. The smell and appearance of the feces are a criterion of the progress we make in the cure, and direct the farther administration of the purgatives. This inspection is the more necessary, as we cannot expect the information we want from our little patients; and we shall often look for it in vain from the attendants, whose prejudices, and whose ignorance of our views, prevent their seeing the propriety of the inquiry.

During the prevalence of the disease, the feces are dark, fetid, and varying from a costive consistence, to that of clay, and are often fluid; and such they appear upon the first exhibition of the purgative medicines. I observe that the recovery of the sick keeps pace with the return of feces of natural colour, form and smell; a change which the repetition of purgatives does not fail to produce.

While I give purgative medicines after this manner, in this stage of marasmus, in which the obstinacy of the disease is sometimes great, and the danger attending it imminent, nourishing food, of light and digestible quality, and suited to the taste of the patient, and the moderate use of wine, are much wanted.

For some time after the symptoms have disappeared, it is expedient to continue a mild stimulus to the bowels. As they have recently suffered, and have been weakened by over distension, they are apt to favour subsequent accumulation of feces, the forerunner of a relapse, which is to be dreaded the more, as the patients have been weakened by previous disease.

This gentle solicitation of the alvine (*by the bowels*) evacuation, for it ought to be gentle, is not attended with danger; on the contrary, it is the greatest promoter of recovery in this case, with which I am acquainted. It relieves the stomach, and improves the appetite and digestion. Besides, nothing more is intended by this practice, than to establish a regular action of the bowels, after long constipation, (*costiveness*;) by procuring daily one or two easy motions, which are indeed at all times necessary to the healthy condition of childhood.

With this precaution, I do not feel the necessity of employing tonic and bracing medicines to complete the cure; this object is readily obtained, in general, by the use of light nourishing food, and by the patient's being much in the open air.

I do not, however, say that strengthening medicines may not be useful towards the close of the disease, and many practitioners set a value upon them. Lime water infusions of vegetable bitters and chalybeates, (*preparations of iron and steel*) are of this description; and, provided they do

not, by any peculiar effect on the stomach, prevent nourishment being taken, will advance the return of the tone and vigorous action of the stomach and alimentary canal.

I have thus endeavoured to unfold the opinion I entertain of this marasmus, and of the causes which induce it; and to explain the method of cure which I have employed for a great length of time, with success, in my private practice.

As marasmus proceeds from symptoms of slight indisposition, through a series of others which becomes daily more and more obstinate and dangerous; as the first deviation from health is easily obviated by the stimulus of purgative medicines, which brings the sluggish bowels into regular action, and evacuates their contents; and as the disease attacks the young and thoughtless, who can hardly explain their feelings, it behoves mothers and nurses, and superintendants of nurseries and of manufactories, to whom the care of the young is committed, to watch over their charge with assiduity. Prostration and depravity of appetite, a changing complexion, tumefaction of the abdomen, scanty and unnatural stools, and fetid breath, indicate approaching danger. When these, therefore, are observed, assistance should be asked; by the prompt interposition of which, much eventual distress, and even death itself, may be prevented.

But other considerations weigh with me also, when I call for this assiduity. Marasmus has a close connexion with other formidable diseases, and either precedes or seems to accompany them; of these, I shall at present notice two, hydrocephalus, (*water in the brain,*) and epilepsy, (*falling sickness.*)

Hydrocephalus internus, the bane of infancy and of childhood, a disease big with suffering, and of a fatal tendency, has at all times occupied the attention of physicians.

They have endeavoured to investigate its nature, to assign the causes which induce it, and to propose curative indications. Different sentiments on these subjects have led them to employ numerous and discordant remedies. Nevertheless, even now they are not agreed as to the causes of hydrocephalus, so involved are these in obscurity. Neither have they made the most distant approaches towards the discovery of a certain remedy for it.

This much is known, that hydrocephalus often steals slowly on, with symptoms resembling those of incipient marasmus. Till some better theory, therefore, is established, it is not unreasonable to suppose that the marasmus, of which I have treated, may on some occasions give rise to hydrocephalus, by impairing the vigour of the constitution, and by favouring serous effusion (*watery collection*) into the ventricles (*interstices between the folds of the brain, where the water is lodged in dropsy of the head*) of the brain.

This conjecture merits the greater attention on this account, that while the symptoms of hydrocephalus resemble those of incipient and even of confirmed marasmus, they have been removed by the diligent exhibition of purgative medicines. The truth of this observation has been repeatedly confirmed in my private practice, and it affords an additional reason for the exercise of watchful attention, to prevent the confirmed state of marasmus, which may, in more instances than we are aware of, have been the forerunner, if not the cause, of hydrocephalus.

Epilepsy, than which no disease is so distressing to the patient, and perplexing to the physician, often appears in childhood. It acquires a hold, and is confirmed by the repetition of the fits, till their frequency and the force of habit fix it, and make it a constitutional disease for life.

It is not my present purpose to inquire in what manner

the functions of the organs more immediately affected by epileptic paroxysm are influenced, so as to give permanency to the disease. The uncertainty of the theories proposed on this subject, and the little benefit that arises from them in practice, hold out little inducement to enter on the discussion.

It is, however, I believe, generally understood, that the first attacks of epilepsy are not always idiopathic, (*without previous or attendant symptoms, which operate as a cause,*) but are frequently the effect of particular irritation of the mind or body. There are many instances of irritation of the body inducing epilepsy. When no other is evident, the loaded intestine and the change induced on its contents in the course of the marasmus, of which I have spoken, may be suspected of giving the irritation in question.

In fact, practitioners have had this circumstance in view ; *for they enumerate worms in the intestines, or marasmus, as I understand their language,* among the causes of epilepsy. Surely, therefore, this consideration suggests another cogent reason for watching the rise and progress of marasmus. And it will induce us, on the first attack of epilepsy in children, arising from an uncertain cause, to set on foot the most decided and active course of purgative medicines ; and not, peradventure, to allow the disease to strike root, while we are idly employed in the exhibition of inert and useless vermifuge medicines, or are groping in the dark in quest of other causes of the disease, or of uncertain remedies for their removal.

FEMALE COMPLAINTS.

THE MONTHLY PERIOD.

THE age at which the monthly evacuation commences, varies not only in different climates, but also in different individuals, in the same place. It usually appears about the fourteenth year, and continues for a period of thirty years.

In some instances, this change takes place without any previous indisposition or uneasy feelings. But frequently it is preceded by various affections of the stomach and bowels, with pain in the back, and the health seems to decline, and not unfrequently a train of nervous or hysterical symptoms occur.

FIRST APPEARANCE PROTRACTED.

With regard to the management of the constitution of young women, about the time when this evacuation commences, I would observe, that that which insures general health, prepares the way for the happy establishment of this important change in the female constitution. If the health declines with a disordered state of the stomach and bowels, the surface of the body should be kept warm by wearing a flannel shirt and drawers; the use of the warm bath every second night; moderate but regular exercise; food easy of digestion; keeping the bowels regular by rhubarb, Epsom-salts, or No. 6.

It will be useful to employ tonic remedies, such as tinc-

ture of steel or *Ens. veneris* and myrrh. If there appear symptoms which indicate an approaching consumption, it will be necessary to have early recourse to a practitioner.

If the system seems to be simply lax and debilitated, the general remedies for strengthening are the best; wine, iron, bark. As the strength returns, use aloes and myrrh, or calomel and rhubarb. Riding in a waggon or on horseback.

Sometimes girls, robust, florid, and healthy, suffer from a protracted appearance of the periodical evacuation, and complain of uneasiness, head-ache, and flushes; such should observe a spare vegetable diet; keep the bowels loose, and avoid violent exercise, particularly in crowded rooms. The most effectual remedy is to bleed from two to six ounces every twenty-eight days, and after the second or third bleeding, to postpone the operation a day or two longer to wait for the desired event.

SUPPRESSION.

In temporary and accidental suppression or stoppage from cold, bathe the feet and legs; or the common practice of setting in, and over decoctions of herbs, and tightening the garters, are good means to restore the discharge. A dose of Elixir Pro. is a good addition to the treatment, and drink freely of catnip or motherwort teas on going to bed. If these fail, a little blood should be taken as soon as it is ascertained the period is missed. See *American Remedics*.

DEFICIENCY.

A deficient and painful turn is with some women very distressing. Such women should carefully avoid cold and every thing which tends to disturb the general health; at the period should keep the house, drink freely of warm teas, especially on going to bed; should keep a moist skin,

and use the warm bath, or sit over warm decoctions of herbs, and allay immoderate pains with opiates.

PROFUSE DISCHARGE

A more frequent and more serious complaint is a profuse flowing at the period, or an appearance at too short intervals. Such women should confine themselves to a horizontal posture on a hard bed or matress; take cold drinks, astringents are to be preferred, such as rose-leaf tea, oak-bark and the like. Elixir vitriol may be added to the drinks. In obstinate cases, cold water and vinegar may be applied to the parts with cloths or otherwise; and opiates relieve pains and moderate the discharge,—acetite of lead, joined to opium is a powerful and safe remedy when a physician attends, but should not be taken without advice. This should be said of the cold bath during the period.

During the interval the patient should use exercise, such as riding in the open air, in a carriage, or on horseback, and should use wine, nourishing food, and preparations of iron, No. 6.

Both in deficient and profuse discharges at the period, the prime object should be, next to obviating symptoms at the time, to mend the health during the interval. Irregularity is commonly the effect of bad health, and people mistake when they suppose confirmed ill health grows out of accidental suppression. Violent and forcing remedies should always be avoided, and in female complaints the physician is too seldom consulted.

CESSATION OF THE MENSES.

The periodical discharge ceases spontaneously in most women between the ages of forty and fifty. In some it

disappears suddenly, in others gradually ; when no symptoms of disease appear, no other attention to the change is necessary, than to observe temperance in all things ; every kind of excess, particularly that of spirituous liquors, should be carefully avoided.

If symptoms of disease occur, during or at the time of the cessation of the periodical discharge, they should be treated as is elsewhere directed for such diseases.

WHITES, OR SEXUAL WEAKNESS.

This is a disease in which women have a thin white glairy discharge, in its mildest form resembling thin starch, and if attended with no pains is easily cured by removing the irritating cause, and washing and bathing in cold water.

When, however, the discharge is of a yellow, brown, or green colour, and acrid or fetid, it then is certainly a constitutional disease, and should receive immediate attention. If the patient be of a full habit, with flushings in the face and palms of the hands, with strong full pulse, bleeding, with cool evacuating medicines, and a spare diet, will be sufficient to a cure.

If the disease be of long standing, and the health is much impaired, and the strength much reduced, the stomach should be cleansed by a vomit, then should follow cordial and bracing medicines, such as bark, wine, elixir vitriol, preparations of iron. Thus we should endeavour to effect a cure by remedies which tend to re-establish health. But local remedies should not be long omitted, such as injections of tea, oak-bark, but more particularly a solution of half an ounce of alum in a quart bottle of soft water ; these should be frequently thrown up in the passage by means of a proper syringe.—See *American Remedies*.

HYSTERIC AFFECTIONS.

In a well marked hysteric fit, a sense of pain or fulness is felt in the belly near the navel or left side. This gradually spreads, and a sensation is felt as if a ball passed up and stuck in the throat. The patient falls down insensible, or convulsed, with irregular breathing, sobbing, and sometimes shrieking; after this the symptoms are wonderfully varied in different cases, alternate laughing and crying, fainting, &c.

The treatment during the fit is simply this—lay the patient on a sofa or bed in a warm room, open a door or a window, apply lavender or camphor to the temples, hold hartshorn to the nose; as soon as the patient can swallow, give a tea-spoonful of lavender and hartshorn in a spoonful of water, or a dose of laudanum, and if necessary repeat them.

To prevent a recurrence of the fit, purgatives of aloes, strengthening medicines, and avoiding high seasoned food, and every irregularity of body and mind.—See *American Remedies*.

DISEASES OF INFANTS.

INTRODUCTION.

It is frequently said, little can be done for infants labouring under disease, because they can give no history or statement of their feelings and symptoms.

Their diseases are simple and uniform; and to an experi-

enced examiner sufficiently apparent. Their signs of suffering cannot be mistaken, or pass unheeded, by a man of sagacity or feeling. Their language is that of nature unsophisticated, they never cheat us. They have no imagination of their own, and fortunate it would be for them if their tenders had none. The God of Nature has provided for them medicine and food, in the first issues from their mother's breasts; and common sense forbids the substitution of any filthy product of the gossip's brains, whether it be "chamber-ley to keep off sore mouth," or "strawberries or cherry-rum, to obviate the *terrible effects* of the *entailed longings* of the mother."

Soon as convenient after a child is born, it should be put to its mother's breasts. If circumstances forbid this, let it be fed with a little clean molasses and water, the best substitute for the first of its mother's milk, which is laxative. Its dress should in no way make it uncomfortable. It should be suffered to sleep much of the first months, and when awake, carefully dandled for exercise.

The worst that can happen to an infant, is to have a nurse who "knows a thousand things good for wind; and how to draw the mother's breast, and make pap and caudle;" and is skilled in "elixirs and laudanum."*

When the bowels of a new-born infant do not move in time, and the molasses has been given, give a tea-spoonful

* Formerly a surgeon could not live in peace, within hail of a "prime nurse," unless he cut the strings of the tongues of all the children born in his vicinity. Fortunately, however, for the children of men, they are not now presumed to be sent into the world "half made up;" and it were to be wished that all gossips who believe in tongue-ties, chamber-ley, hot caudle, wind, and apparitions, could be sent to nurse the children of that nation who shall be at war with us twenty-five years hence.

of castor oil, and repeat it in four hours; should it be ineffectual, or vomited, take

Senna, 2 drachms,
Manna, 1-2 a drachm,

boiled in a gill of water, and administered freely till the bowels move. Physic may be assisted by emollient injections, and fomentations to the bowels. Calomel in grain doses, repeated at four hours, is sometimes necessary to obviate the habit of costiveness. Infants will not be salivated, and often require a repetition of the calomel.

When convulsions are present, put the child into a warm or tepid bath: it removes spasms, and helps cathartics—and do not forget injections in this case.

It is sometimes necessary to give a dose of elixir asthmatic after the operation of a cathartic, if the child seems restless and uneasy.

THRUSH OF INFANTS.

Needs no description. Is sometimes with, and sometimes without fever. Is best treated with an emetic of ipecac.

Ipecac, 4 grains,
Warm water, 6 tea-spoonfuls.

Give one tea-spoonful every half-hour, till the patient pukes or purges. Should the bowels not move, give calomel as directed for costiveness. After the stomach and bowels are free, gargle with strong green tea, or touch the parts affected with borax and sugar ground together and moistened with cream.

RED-GUM.

Red-Gum is an eruption of fine pimples of a red colour, affecting infants mostly within the first month.

Give snake-root and saffron teas, to keep out the eruption; and magnesia, to move the bowels and keep them free.

SORE EARS.

This is frequently a troublesome symptom, and one which should be cautiously treated.

It may be washed with soft soap and water; after which apply a scorched linen rag. During the cure, the patient should take a grain dose of calomel at evening. Should the bowels be readily moved and remain loose, should be repeated only every other night.

It is doubtful whether this disease should ever be treated with astringents, except by a physician.

DIARRHŒA.

A diarrhœa often follows infants and children in consequence of bad diet, damp rooms, and negligence.

In attempting the cure, we should be careful to avoid all causes which are obvious, and pay particular attention to the diet. It is frequently the case that the diet is offensive to the stomach, or badly digested, when we least suspect it. Consequently we should watch carefully what food agrees, and not fail to inspect the stools.

If there is fever, we should begin the treatment with an emetic of ipecac. If no fever is present, calomel; and calomel should be given after ipecac when there is fever.

This disease is frequently obstinate, and requires a repetition of the medicine to clear the stomach and bowels. Besides, it not unfrequently depends on a disordered state of the liver, which has existed a long time, perhaps before

the birth of the child. After the stomach and bowels are free, we may use the following julep.

Prepared chalk, 1-2 oz.
 Powdered cinnamon, 2 drachms,
 Gum Arabic, 1 oz.
 Carbonate of potash, 1 drachm,
 Water, 1 pint. Mix,

and boil half an hour. Give a spoonful at a time frequently; and add laudanum according to the age of the patient, every four hours.

As a strengthener, use the following, which is Moseley's tonic solution.

White vitriol, 3 drachms,
 Alum, 1 do.
 Water, 1 lb. Mix.

Dose, from 4 to 20 drops, three times a day, according to the age and other circumstances.

Opium in some form or other is a great help.

The tepid bath is useful in rousing the skin, and soap added occasionally, will be beneficial, both as a medicine and detergent.

Injections should not be forgotten, and Castile soap should be dissolved in them also.

There will be cases where the head suffers, and symptoms of dropsy in the head may attend, for which, apply blisters behind the ears and back of the neck.

If vomiting supervene, put mustard paste or blisters on the stomach and limbs. Those on the limbs may be changed to another place, soon as they begin to inflame the skin, as we wish only to produce counter irritation, and not blistering.

VOMITING.

Vomiting is very common to healthy children, who eat

or drink more than is necessary—needs no medication of course.

Children bear pukes better than adults, and they should not be dreaded in croup, hooping-cough, &c.

When vomiting in children becomes troublesome, and attended with fever or emaciation, apply irritants to the skin, as mustard, paste of ginger, &c. Warm bath. Give internally the following :

Chalk,	2 drachms,
Lesser cardamom seeds,	1 drachm,
Carbonate potash,	1 1-2 do.
Boiling water,	1-2 lb.

Feed freely.

NOTE.—Many of the diseases incident to childhood have been noticed elsewhere.—See articles *Croup*, *Hooping-cough*, &c.

VENEREAL DISEASE.

CLAP.

A PRETERNATURAL flux from the urethra in men, arising from impure connexion. The action of the venereal poison on the passage, producing first an itching at its orifice, afterwards a discharge like matter, heat of urine, swelled testicle, and other painful and disagreeable symptoms.

Treatment.—While the heat of urine continues, drink infusions of flax-seed, barley-water, or solution of gum Arabic. Use spare, cooling diet, avoiding spirits and spices,

using cooling gentle laxatives, as cream tartar and jalap, senna and manna, &c., not to purge much.

Perfect attention to cleanliness, by purifications with warm milk and water, that the poison may not be absorbed into the system. If the parts at the head of the yard be much swollen and tender, soft fomentations, or flax-seed poultice with mineral water. For chordee, wrap the parts with cloths wet with laudanum, or take sixty drops of it on going to bed.

When every appearance of heat and inflammation have subsided; astringent injections may be used to stop the disease: as white vitriol, twenty grains; rose-leaf tea, or soft water, one pint, make an injection; or, sugar of lead, fifteen grains; white vitriol, ten grains; soft water, one pint, used for an injection. While these injections are using, injections of opium, dissolved in water, may be frequently thrown up to relieve pain and allay irritation. Or opium may be taken internally for the same purpose.

If injections are used too early in the disease, a swelled testicle is the consequence; rest must be enjoined; a brisk purge of ten grains calomel and fifteen grains jalap, every two days; cloths dripping with mineral water, cold, must be laid on the swelling, often repeated; while the part is suspended in a bag attached to a strap around the body.

After the inflammatory symptoms abate, and injections are used, a pill of one or two grains of calomel, made up with bread crumb, may be taken every night or two, but not to purge, yet so as slightly to affect the gums, continued till all symptoms of the disease disappear. If swelled testicle come on, lay by the pills until it is abated; then resume them.—See *American Remedies: Sarsaparilla, Hercules' Club, Poke-weed.*

NOTE.—There are some kinds of inflammatory affections which are, in the outset, treated with stimulating applications advantageously; and clap is one of those; and may be treated, from the beginning, with the following injection :

White vitriol,	10 grains.
Soft water,	5 oz.
Mix for use.	

Or the following remedy, to be taken internally:

R. Balsam capivi,	1-2 oz.
Gum Arabic,	2 oz.
Water,	4 oz.
Compound spirit of lavender,	2 drachms.
Sweet spirit of nitre,	2 “

Mix.—Dose, a table-spoonful, morning, noon, and night.

Or the following :

Take tincture of cantharides, in tea-spoonful doses, every three hours, till a severe strangury (stoppage of water with heat) come on; then drink freely of mucilage of gum Arabic till the strangury and disease both disappear together, which will probably take place in less than thirty hours.

CHANCRE.

Venereal sores may be sprinkled daily with red precipitate or calomel, and covered with lint or soft salve. Attend strictly to cleanliness. Take the calomel pill, as mentioned in clap.

BUBO.

A swelling in the groin; should be rubbed with blue ointment of mercury. A lump of unguentum, as big as a hazle-nut, should be rubbed on the inside of the thigh every night; increase the quantity, till you double that mentioned.

If the bubo is too forward to be dispersed, a soft poultice

may be applied over it, to promote suppuration. In due time they may be opened as a boil. After opening, it may be treated with lint, red precipitate, and strict cleanliness.

During the cure of every form of the venereal disease, the pill prescribed for clap may be used as there directed, avoiding spirits, spices, &c. If the mouth become sore, a gargle of borax half an ounce, honey one ounce, rose tea or soft boiling water one pint, may be used, and the medicine omitted for a short time.

GLEET.

By the term Gleet, we understand a continued running, or discharge, after the inflammatory symptoms of clap have subsided, being attended with pain, scalding in making water, &c.

Gleets are always attended with a relaxed constitution, and may come without previous venereal infection, or may come long after such affections have been cured, by excessive venery, and other debilitating causes; a simple gleet is never infectious.

Treatment.—Cold sea bathing cures more gleets than the use of the common cold bath. Balsams, turpentine, and tincture of cantharides, taken internally, are useful, and will effect a cure soon, if at all, and need not be long continued. Injections of white vitriol, oak bark, alum, lead, &c., may be used, and usually cure.

A solution of corrosive sublimate, two grains in eight ounces of water, is a powerful injection, but should not be used in irritable habits.

Bougies are a powerful means in the hands of surgeons or well-informed apothecaries.

URINE.

Suppression, and difficulty of passing urine.

Treatment.—Asparagus and fennel roots, infusion of sassafras twigs, wintergreen tea, solution of gum Arabic. Inject into the passage sweet oil, or milk and water. Let the patient stand on a cold hearth, sprinkle his loins with cold water. Pour a gentle stream of water in the hearing of the patient.

In every case of difficulty of making water, opium is of the utmost service.

INVOLUNTARY DISCHARGE OF URINE.

Put a blister on the rump, and take pills of Burgundy pitch.

GRAVEL.

Use wintergreen tea, soda habitually, gum Arabic, uva ursi, opium, warm bath. Injections as above.

In every difficulty of urine, live a temperate life, and avoid every kind of irregularity.—See *American Remedies: Prince's Pine*.

ULCERS, BOILS, & c.

ULCERS commonly appear as sequels to other diseases; as, external injuries, inflammation, suppuration, mortification, &c.

When an ulcer is of a recent nature, it should be healed as quick as possible. But when an ulcer has been of long

standing, or has become habitual, especially in an old person, a surgeon should be consulted; or a blister or issue should be applied, and kept open for some time, as a substitute for the drain of the old ulcer. Many have fallen martyrs to their neglect of this precaution, particularly old men who have suddenly cured their sore legs, and children who have been cured of ulcers about the head.

Ulcers are either healthy or vitiated.

The matter in healthy ulcers is white, thick, and does not stick to the surface.—(See article *Suppuration*.) The *granulations* (growth of new flesh) are small, florid, and pointed at top, rising no higher than the surrounding flesh; a smooth film begins to form from the skin at the edges, which spreads over the whole; this is the new skin, which is to complete the cure.

An ulcer answering this description is in a healthy or healing state.* The dressing should be soft lint or mild ointment of lard and beeswax, or No. 21. Avoid all sources of irritation, by observing perfect rest.

Filling the ulcer with soft lint, and applying over it a plaster of simple ointment; the lint to absorb the matter as it forms, and the plaster to prevent evaporation, (which make the dressing stick to, and wound the surface,) is a good way of dressing.

If over this we wind a bandage, which makes gentle and equal pressure, the rest may be left to nature; only renewing the dressing daily, and cleansing the ulcer thoroughly with warm water and Castile soap.—See *American Remedies*.

* Perhaps the term *healthy*, as applied to ulcers, is objectionable. We mean by it, *ulcers* whose tendency is to heal, in distinction from those whose tendency is to degenerate, and so become worse, and more difficult of cure.

Foul or ill-conditioned ulcers, must become healthy before they can heal, and may be divided into Irritable and Indolent

IRRITABLE ULCERS.

The irritable ulcer has an undetermined jagged edge ; the bottom has unequal lumps and hollows ; a thin gleet discharge ; the surface when touched is painful, and bleeds.

Treatment.—Steam of warm water ; fomentations or decoctions of poppy-heads, night and morning. Extract of hemlock and henbane, dissolved in warm water. Emollient poultices of flax-seed : under the poultice lay a piece of lint or cloth, dipped in opium-water, made by dissolving one drachm of opium in three gills of water. Carrots, boiled and beat to a pulp, applied as a poultice. A change of dressing is indispensable. Bandaging is pernicious in irritable ulcers. As soon as this, or any other ill-conditioned ulcer, assumes a healthy appearance, treat as directed under healthy ulcers.—See *American Remedies : Common Elder, Stramonium.*

INDOLENT ULCERS.

The edges of this kind of ulcer are thick, prominent, smooth, and rounded ; the bottom smooth and glossy, covered with a thin, transparent, glairy fluid, or a tough, thick, white matter, which can hardly be rubbed off. Sometimes these ulcers turn livid ; not unfrequently a sloughing takes place.

Treatment.—Internally, bark, iron, wine, and generous diet.

Local Applications.—Red precipitate sprinkled on, over which place lint or simple salve, and a tight bandage.

Night and morning bathe with decoctions of oak bark or walnut leaves, or immerse in quick ley.

But all applications must give place to Mr. Baynton's new method of treating indolent or habitual ulcers, which consists in applying strips of adhesive-plaster round the limb, so as to cover the sore, and at least an inch above and below the ulcer. The straps should be three or four inches wide, and drawn tight. The parts are to be covered with compresses or soft cloth, and the limb rolled in humhum bandages. The dressings are to be wet with cold spring-water, which helps to remove the dressings, and keeps off inflammation. With this dressing, the patient may walk about, and attend to his business. In this way, the scar is much less, and the ulcer less likely to break out again.—See article *Bandage*.

BOILS.

The common boil is a circumscribed, very prominent, hard, deep-red, painful inflammatory swelling, not exceeding in general the size of a pigeon's egg; seldom attended with fever.

Treatment.—Gentle purgatives of salts, cream tartar, and sulphur. Local applications of diachylon-plaster, paste of flour and molasses, or yolk of an egg with flour. Emollient poultices; if there is much pain, add to the poultices decoction of poppy-heads, lettuce, henbane, &c.

If the boil is tardy in bursting, it may be opened with a lancet or knife, but so freely that the core may escape. Be careful to distinguish this from a carbuncle, soon to be described.

BLIND BOILS.

Persons are sometimes afflicted with a number or succession of what are popularly termed *Blind Boils*. These,

for the most part, appear on the back part of the body, as near the shoulder-blades, nape of the neck, elbows, back of the wrists and hands, as well as about the joints of the lower extremities; at the same time the health is poor, and the appetite impaired.

In consequence of a prevailing prejudice, repeated doses of salts are resorted to; with a view, as they say, "to cleanse the blood;" but nothing worse could be done.

A portion of calomel should be given at evening, followed in the morning with a portion of rhubarb, should the calomel fail to move the bowels. These should be repeated every second evening and morning, till the stools are evidently bilious, by their green, or rather dark colour. This will prepare the system for receiving a free use of bark and wine, which will at once bring those tardy livid lumps to a suppuration, and effectually prevent a succession of crops.

Under a liberal use of bark and wine, with nourishing diet, every symptom of disease will disappear; the countenance, before pale and wan, will assume a florid, healthy hue, and cheerfulness take the place of languor and irresolution.

CARBUNCLE.*

A carbuncle is a malignant kind of boil. Sometimes they are as large as a plate: a number of small openings appear on the surface, discharging a yellow, greenish, bloody, irritating matter. Large sloughing, and sometimes mortification takes place.

* It will be seen that boil and carbuncle require opposite general treatment, viz.: For a boil, a spare diet and cool regimen; for a carbuncle, full diet and cordials.

Carbuncles are sometimes symptoms of plague and malignant fevers.

Treatment.—A free opening should be made in every carbuncle. An emollient poultice should then be applied; the matter and sloughs will then escape, and make room for a healthy suppuration.

An emetic or cathartic, to clear the stomach and bowels; bark, camphor, cordials, tonic remedies, with wine and nourishing diet. Opium, to relieve pain and irritation. After the sloughing has taken place, and the carbuncle has become an ulcer, treat as is laid down for ulcers.

CORNS

Are commonly brought on by tight shoes and boots, and will be relieved by wearing loose ones. Eight or twelve pieces of linen, smeared with soft salve, having a hole cut in the middle, fitting the corn, and laid over each other, so that the corn may not touch the shoe or stocking, applied for several weeks, generally causes them to disappear.

Take of yellow wax, gum ammoniac, each two ounces; six drachms verdigris, make a plaster, and apply to the corn. If the corn does not disappear in a fortnight, apply another plaster. Some cure corns by rubbing them repeatedly with lunar caustic. Others, by laying on a little blister, larger than the corn, which will commonly raise the corn with the plaster, so that it drops from its bed.

PAINFUL AFFECTIONS.

GENERAL REMARKS.

SYSTEMATIC writers have generally considered painful affections only as symptoms of other diseases; and although this may be satisfactory to scientific readers, still we may be excused for attempting to afford assistance to the unscientific sufferer, by putting down his case under a well known head, as "tooth-ache, pain in the side," &c. Further,

If we mistake not, pain does occur independent of *other disease in form*; for instance, generally, pains from torpor or inanition; as the fingers aching with cold, hunger, &c.

I would not be understood to suppose that pain comes *sua sponta* of *its own accord*; but that, in some cases, pains may be properly considered and treated independently of those diseases, with which they are customarily associated by systematic writers.

TOOTH-ACHE.*

It is difficult to account for the rotten specks and holes which occur in the teeth, and that even while the constitution remains unimpaired, since the teeth seem to be almost indestructible after they are extracted.

* Our unlettered anglo-Saxon forefathers called this disease "*tothece*," and it seems at least to be as old as the common-law of England. Yet, forsooth, Europeans talk and write as if decayed teeth were peculiar to America! Strange those wiseacres have never argued hence, that Americans were becoming less carnivorous and blood-thirsty.

Teeth more commonly ache in consequence of exposure of the nerve, through a defect of the animal and bony part. May be relieved by removing with a proper instrument the rotten part, and filling the cavity with tinfoil or gold. By this process of "loading the teeth," as it is called, pain is relieved, and decay is suspended for years. Until this can be done, a dossil of cotton, dipped in oil of peppermint, or cloves, or cajeput, or laudanum, will frequently relieve for the time.

When a number of teeth and gums are painful, putting grated horse-raddish, or paste of ginger, on the jaws, or chewing pelletory or ginger-root will relieve.

The practice of extracting teeth for slight pain or incipient disease, should be reprobated. They in every point of view are important.

To preserve the teeth, wash them morning and evening with a soft brush in clean water; should this not be sufficient, rub them once a-day with fine powdered charcoal, kept in a close-stopped vial; should the gums be spongy or incline to bleed, use powder of bark, or tincture of bark as a wash.

Acids and gritty substances are pernicious applications for the teeth; they soon change the living white of the enamel for a dingy harbinger of destruction. I mention this principally with a view to caution against pompous dentifrices and quack dentists; yet, I do consider a faithful, honest, and ingenious dentist as a valuable member of society, and one who should be encouraged.

NERVOUS FACE-ACHE.

"TIC-DOULOUREUX" OF THE FRENCH WRITERS.

Physicians scarcely find a more intractable disease than this to manage, and patients seldom one more intolerable to bear.

It commonly attacks by keen lancinating pains, first as if a nail was driving in between the eye and cheek bone; spreading to the wings of the nose, upper lip, teeth and gums, through the temple, ear, and side of the head, yet generally confined to one side.

This disease is known from nervous head-ache, rheumatism, and tooth-ache, by the shortness of the paroxysm, the rapidity of succession and complete intermission of pain during the interval. Besides the slightest motion or touch of the part is sufficient to set the pain to radiating like lightning, so to speak, through all the branches of the side of the face.

Treatment.—To talk here, of cutting through to the nerve, would be idle, only to state it has been done, and usually the operation has succeeded, not always. Preparations of arsenic; opium; extracts of henbane, hemlock, nightshade; stramonium, with ipecac; all in large doses, as the stomach will bear, are chiefly relied on. Mercurial ointment so as to effect the gums, has relieved.

I mention nothing here in treating this disease, which will be safe in the hands of any but able physicians. Perhaps the yellow powder of hops made into pills, with extract of hemlock, would relieve the pain, at the same time hops taken from hop-infusion might be applied externally to the part.

HEAD-ACHE.

Pain in some instances over the whole head. Sometimes it is confined to a point; when this is the case the pain is felt most commonly over one eye.

Head-ache attends most febrile diseases as a symptom.

In this article we shall confine ourselves to those species of head-ache which are unattended by fever.

When the disease originates from foulness of the stom-

ach, a gentle emetic is the best remedy ; when costiveness prevails, laxatives or Epsom salts, or pearlsh in cider, drank on an empty stomach, and while foaming.

When gouty or rheumatic pains attack the head, blister the extremities and give laudanum.

Periodical head-aches may be cured by Fowler's solution, used as for ague and fever, *which see*.

Most head-aches may be relieved by application of camphorated spirit, bay rum, vinegar and water, and spirit and water.

STOMACH-ACHE.

Some persons are at times attacked with severe pains in the stomach, and the common application of warm and stimulating things do not relieve.

When the pain is continual and oppressive, it may be necessary to premise an emetic of ipecac. But when the pain comes in severer paroxysms, with short intervals of comparative ease, complete relief may be had by taking a full dose of No. 9 or 10 after the return of every paroxysm. On waking from sleep after dosing as above directed, give, before rising from bed, a single dose of the powder, or a glass of sling ; else sickness at stomach and swimming of the head will be troublesome.

STITCH, OR PAIN IN THE SIDE.

This occurs in delicate habits upon sudden or long continued exertion. May be relieved by a long strap of adhesive plaster, or a bandage rolled round the chest so as to make equal pressure.

Tight stays have unquestionably helped their wearers to a misgiving chest, and so have corsets, boards, and the like ; yet these can be no way injurious, provided they give only gentle and equal pressure.

POISONS.

MINERAL POISONS.

THE chief of these are arsenic, strong preparations of mercury and lead.

Where arsenic, or muriate of mercury, (corrosive sublimate,) has been swallowed, a strong puke should be given as soon as possible.

Drink freely of some diluting liquor, as of barley-water, gum-water, flax-seed tea, mallows, &c. Oils should be given freely, and large injections of oil with any of the above-mentioned drinks. Pearlash water, quickly drunk, will somewhat counteract the poison. Where metallic poison has been swallowed, ipecac should be immediately given without measure.

Where an over dose of arsenic has been swallowed, a pricking burning heat is felt in the stomach, and most excruciating pains in the bowels, rough, parched tongue, unquenchable thirst, anxiety and restlessness; swelling of the belly, hiccough, fetid puking, stools, and death.

Lead produces colic, and palsy, *which see*.

Verdigris swallowed is highly poisonous. Emetics as in the case of arsenic, and followed by pearlash water, drank freely.

The tests of poison can be known only to physicians and chemists.

VEGETABLE POISONS.

The vegetable poisons produce, when taken, giddiness, confusion, or loss of sight, with dilatation of the pupils of the eyes, palpitations, loss of memory, fatuity, low-muttering, delirium, stupor ; sometimes vomiting, convulsions and death.

Those most liable to be taken, are wild fennel, hemlock, night-shade, thorn apple, and other such plants.

Opium, henbane, foxglove, Carolina pink, are liable to be taken in over doses, or by mistake, as medicines.

The running rooting sumac, called mercury, is sometimes eaten inadvertently, as it climbs fruit-trees, and being bruised, drops its juice, which dries upon the fallen fruit. This produces an eruption upon the skin ; is cured by a wash of corrosive sublimate, ten grains to a pint of water. Bark may be given internally with wine.

As soon as it is ascertained that a person has swallowed a vegetable poison sufficient to endanger life, emetics of white vitriol, tartar emetic and ipecac should be given till they operate.

When the patient pukes, a free use of dilutents should follow ; vegetable acid drinks, as vinegar, lemonade, &c. Coffee is a good drink in such cases.

If the remedies are directed in time, the principal source of danger is the fear of overdosing ; vegetable poisons render the stomach insensible ; and consequently common doses have no effect ; and it is best to repeat in quick succession, a full dose of the first mentioned remedies, till a retching and vomiting takes place. Then proceed as is above directed. Cases of intoxication may receive the same treatment as vegetable poisons.

ANIMAL POISONS.

Most of the animal poisons have been mentioned in the surgical part of this work. See *Bites of Venomous Serpents*, &c.

Some persons, owing to peculiarity of constitution, or from some other cause, are poisoned by eating freely of oysters, lobsters, eels, &c.

Symptoms produced are, uneasiness, giddiness, and a blaze in spots on the skin. A smart vomit should be immediately taken, followed by vinegar, and a free use of milk.

But a terrible poison is found in many kinds of fish in hot climates. The yellow bill-sprat, and cavalee, are most to be dreaded; but rock-fish, and king-fish, are sometimes poisonous, with others. As in other cases of poison, vomiting should be premised, then a purge of oil or calomel.

Ardent spirits, strong cordials, and Madeira wine should be drank freely.

If vomiting or cholera morbus come on, or follow, opium, and more particularly if convulsions come on.

The alkalies, hartshorn and pearlsh, may be of service.

Pains of the joints and other symptoms often continue a long time to harass the patient; wrap the parts in flannel; warm bath. Remove to a cold climate.

The entrails of a suspected fish should be given to a cat or a dog, and if no ill effect follow in two hours to the animal which eats them, the fish is good. The test by a silver spoon should not be relied on. Unknown fish without scales, and uncommonly large fish of their kind, are suspicious.

ACCIDENTS, CASUALTIES, & c.

SUSPENDED ANIMATION.

It is certain that life, when to all appearance lost, may often, by due care, be restored. Accidents frequently prove fatal, merely because proper means are not used to counteract their effects.

In consequence of drowning, suffocation, and stangulation, a check is given to the principle of life without wholly extinguishing it. In drowning, the circulation of blood becomes slow and feeble. Air is discharged from the lungs, and water drawn in, a struggling comes on, succeeded by convulsions; the breast ceases to rise, and the breath stops; soon the skin, especially about the face and neck, becomes of a purple or blue colour, and the body sinks.

When a person dies from suffocation, the symptoms are nearly the same as in apoplexy.

In strangulation, convulsions are joined to apoplectic symptoms.

Livid dark spots on the face, stiffness and coldness of the body, a glassy appearance of the eyes, and a flaccid state of the skin, denote a perfect extinction of life. *Actual putrefaction* is the only certain sign of death. The noble machine may be stopped, yet the spring retain its elastic vigour.

The following are the means to be employed for the recovery of persons recently drowned:

As soon as the body is taken out of the water, it is to be conveyed with as little tossing and agitation as possible to the nearest house, where it is quickly to be stripped of the wet

clothes, and wiped perfectly dry ; then to be laid between warm blankets, and on the right side : the head to be covered with a warm woollen cap, and bags filled with warm sand, or bricks heated and wrapped in flannel are to be applied to the feet and sides. The doors and the windows are to be thrown open in order that the pure air may be freely admitted, and no persons but such as are necessary in the operation, should be allowed to enter.

We should in the next place endeavour to expand the lungs, and if possible, make them resume their office. This may be done by inserting the tube of a bellows in one nostril, and stopping the other, as also the mouth, and gently forcing the air into the lungs till the chest is raised, then with the hand depressing the breast, and thus imitating natural breathing, a strong person with a tube in the nostril, or by putting his mouth in contact with that of the sufferer, may raise the lungs.

The lungs being inflated, rub every part of the body with salt, and flannel cloths, carefully avoiding the access of cold; and gradually increasing the warmth as symptoms of life seem to return. Should the friction with flannel fail, apply flannels wrung out of very hot water, to the region of the heart, and sides of the chest. Or put the patient into a warm bath.

Apply hartshorn to the nose, and with it wipe the temples. Stimulating clysters to the intestines, but not of tobacco. As soon as the person can swallow, a cordial may be given.

By perseverance in such means, persons have been restored to life long after all signs of life had become extinct. The use of the means should not be given up, till four or five hours have elapsed.

After the vital heat and circulation are restored, bleeding may be proper ; of this a physician alone can judge.

In cases of apparent death from suffocation and strangling, the same precautions are necessary, and many of the same means are proper; bleeding may be sooner used.

In all cases of suspended animation, on the smallest appearance of respiration, or restoration to life, wine cordials, or a little brandy and water, should be conveyed into the stomach, in small quantities at a time, and frequently repeated. When the patient comes perfectly to himself, he should be allowed every benefit from repose.

CHOKE DAMPS.

Ærial poisons.—Persons cannot breathe where a candle will not burn. The air becomes contaminated and useless by repeated breathing, by burning charcoal in a close place, and when rendered noxious, being much heavier than the pure atmosphere, collects in low places, as caverns, wells not used, and in vaults where fermenting liquor are kept, &c. The fumes of some of the metals are also deleterious, such as lead, copper, antimony, mercury, &c.

The danger from damp, or foul air, is increased by their silently extinguishing life, particularly that of fixed air, (carbonic acid gas.) This ærial poison benumbs the sensibility and faculties, so that the person immersed in it is entirely insensible of his danger, and dies without a struggle.

Symptoms.—The head, face and neck are swollen, the eyes are propelled from their sockets, the tongue hangs out at one side of the mouth, the jaws fixed, the face livid, and the lips blue, and the person appears in a profound sleep.

On breathing deleterious fumes, the patient feels a sense of weariness, giddiness succeeded by head-ache, lethargy,

fainting, convulsions, general stupor ; frequently, however, death comes without a precursor.

Treatment.—As soon as a person is discovered, who has suffered by breathing any kind of foul air, he should be carried immediately into pure cool air, and freely exposed, being supported in a leaning posture on a chair. The face should be sprinkled with vinegar, and the stomach with cold water. After each sprinkling of cold water, rub the skin with flannel or a soft brush. Apply hartshorn to the nose, and warm water to the feet. Clysters of vinegar and water ; and if there appear an inclination to vomit, promote it by a feather dipped in oil ; continue the sprinkling and frictions. The first symptoms of returning life, are shivering and foaming at the mouth.

Air may be introduced into the lungs as mentioned in other cases of suspended animation ; as soon as the patient can swallow, give vinegar and water, or some other acid beverage.

CHOKING.

As soon as any person is observed to be choked, and more particularly children, the obstructing body should be felt for with a finger at the top of the throat ; it is possible many times to remove it directly ; and should we fail in this, the puking excited by the finger frequently removes the offending body.

Food and foreign substances are sometimes lodged in the top of the windpipe, and produce immediate suffocation ; help in this case must be afforded at the moment by introducing the finger.

Unless the offending body can be seen, any apparatus is unsafe, except in the hands of an experienced surgeon.

Presence of mind will enable any person to do much in

all cases of casualty, particularly in this; and the directions above are sufficient. The finger, and the vomiting which it is sure to produce, will do much more at the instant than is commonly thought.

FALLS.

The concussion or shock of a sudden fall from an eminence is such, as to leave the sufferer breathless; and here there is often apparent death, though no destruction of parts has taken place.

In this case, the person should be turned to an easy posture of body, and the air freely admitted, or waved into his face. Should the breath not return, the lungs should be filled, as in cases of drowning. A cordial should be given; and the patient should not be bled, simply because he has fallen; yet symptoms may require it, such as obstructed breathing. Bleeding is of essential service when the pulse rises, or pain and inflammation come on.—See *Contused Wounds, &c.*

In falls from fainting, the head should not be raised, nor persons crowd around. A little water sprinkled in the face is commonly sufficient. Hartshorn, lavender, ether, &c., may be administered.

LIGHTNING.

Persons apparently dead from lightning, may frequently be restored by proper means. Sprinkling or affusion of cold water, and in general the means laid down for ærial poisons, are to be persevered in. A rigidity of the limbs usually attends persons recovering from a stroke of lightning. Sprinkling, and rubbing the parts with cold water, should be often used.

The means to be used for the recovering of persons

apparently deprived of life, are nearly similar in all cases. They are practicable by every one who happens to be present at the accident, and require but little expense, and less skill. The great aim is to preserve or restore the vital warmth and motion. This may in general be attempted, by heat, frictions, blowing air into the lungs, administering clysters, cordials, &c. These must be varied according to circumstances. Common sense, and the situation of the patient, will suggest the means of relief. Above all, we would recommend *perseverance*. Much good may, and no harm can result. Who would grudge pains in such a case?

BURNS AND SCALDS.

Instantly plunge the parts in cold water. If not blistered, wrap in cotton bats, or wash in alum-whey or vinegar.

The new practice is, to bathe the part in rectified spirit of wine, or camphorated spirit; then apply a plaster of yellow basilicum, (No. 21,) softened with spirit of turpentine, to remain twenty-four hours; then renewed, with as little exposure to the air as possible. If *fungus* (proud-flesh) arise, sprinkle with powdered chalk. Give internally opium to allay pain and irritation. If the part is absolutely destroyed, apply an emollient poultice till it sloughs.—See *Mortification*.

Stramonium ointment, made of the juice of the plant in the common way, has justly been celebrated; an ointment made from indigo-weed is also much used by the judicious country people.—See *Thorn-apple and Wild Indigo*.

FROST.

In order to thaw frozen limbs, they should be rubbed in snow, or water with ice in it, until sensibility and motion return; taking care not to break slender parts, as the ear,

fingers, &c. As soon as feeling and motion return, the friction is to be continued with brandy, oil of amber, tinct. myrrh, or camphorated spirit. Put the patient to bed in a chamber with a fire in it; give mulled wine, and in this situation let him remain till a perspiration appears, and a perfect recovery of sensibility takes place.

Sudden exposure to heat, occasions inflammation, mortification, and loss of life or limb. If this has been imprudently done, still try the above plan, and save what you can. If inflammation or mortification has already taken place, see the proper treatment under those heads. If ulceration succeeds, the ulcers are commonly of the irritable kind.—See *Ulcers*.

If the whole body is frozen, treat as above directed. If signs of life appear, apply strong volatiles to the nose, blow into the lungs. Never use tobacco injections in any case of suspended animation.

CHILBLAINS

Are red tumours, commonly about the heels, occasioned by suddenly exposing a cold part to the fire, or a heated part to intense cold. They are accompanied with intolerable heat, itching, pain, and soreness. After a while, they burst, and form ulcers, slow to heal, and which sometimes turn black and mortify.

Treatment.—When they first appear, immerse the part three times a-day in ice-cold water; after which, dry them well, and cover with socks.

If they inflame, use mineral water, camphorated spirit, alum-water, spirit of turpentine, balsam capivi.

If they ulcerate, warm vinegar, lime-water, quick-ley, salve No. 21, with red precipitate rubbed into it. Touch with lunar caustic.

RUPTURE.

This disease is the protruding of a bowel through the sides of the belly, and lifting the skin and fat over it. It is not in consequence of laceration or tearing, but the opening is in consequence of relaxation of the parts, and straining. The bowels are not held in place by a strong sac or bag; for the strong sides of the belly are made by an overlapping of the flat muscles which bend the body forward and sideways; not unlike the layers of green leaves which compose the child's basket for summer small fruit. In violent straining, the edges of the muscles which overlap give way from each other, and the bowel escapes through the interstice, carrying the lining of the belly with it.

Treatment.—When ruptures can be reduced by the hand, it ought always to be done; and the patient should always retain the parts in place by a bandage or truss. Persons who cannot keep up a rupture, should support it by a bandage, and carefully avoid pressure and bruises. Also avoid costiveness, or any irregularity.

If heat, pain, or inflammation come on, apply cloths dipped in cold water, or filled with snow; use injections, while you send for a surgeon.

VARIX, OR ENLARGED VEIN.

These are most apt to appear in the legs. Slight affections of this kind may be cured by rolling a bandage neatly from the toes to the knee, so as to produce equal pressure; and it should be moistened with cold water, snow, brandy, or alum in vinegar.—See article *Bandage*.

DISEASES OF THE EYES.

INFLAMMATION of the eyes, redness, heat, pain, intolerance of light, effusion of tears; in more severe cases, there is a violent throbbing, burning, darting pain in the eye; the eye feels pressed; the pain is increased by motion of the eye; sometimes there is considerable swelling. Inflammatory fever.

After a few days, the heat, throbbing, and violent pain abate, as also the fever; but the eye remains weak, more moist than usual, and more or less red. This is the chronic state of inflammation, and requires different treatment from the acute.

Treatment for the acute stage.—In general, mild cases are easily cured by means of low diet and gentle purging, with small doses of antimonial wine, or, in more violent cases, bleeding, salts.

R.	Tartar emetic,	1 grain.	
	Barley-water,	1 1-2 pint.	
	Cream tartar,	1 drachm.	
	Loaf sugar,	1-4 oz.	Mix.

Take a whole or half a wine-glass full every two hours. This will move the bowels, promote perspiration, and check inflammation and fever. Apply externally milk and water for a wash, and roasted apples as a poultice in a muslin bag at night.

As soon as the acute inflammatory symptoms are over, use the following: A wash made of rose-leaf tea, half a pint; white vitriol, five grains: mix. Or, sugar of lead,

eight grains; camphorated spirit, ten drops; soft water, three gills. Or, No. 23 diluted, if it cause pain.

NOTE.—A partial or total loss of sight, in one or both eyes, sometimes occurs; and yet to an examiner no external appearance of disease presents itself, except perhaps a fullness of the ball, without redness. I have heard this disease (though it should seem improperly) called “White inflammation of the eyes.”

Treatment.—In the first instance, a full emetic, (and tartar emetic is the best, if the strength will bear; if not, ipecac;) and, were I writing to physicians, I would say, “Continue the nauseating effect till the absorbent system is thoroughly roused;” after which, give *Fowler’s Solution*, as directed for Intermittent fever.

There is a weakness, or, rather, tenderness of the eyes, which sometimes creeps on almost imperceptibly; and at other times succeeds other diseases of the eyes: this is relieved and cured by dropping frequently into the eye *Sydenham’s Laudanum*.

R. Spanish (white) wine,	1 lb.
Opium,	2 oz.
Saffron,	1 oz.
Cinnamon and cloves, each	1 drachm.

Mix.—Digest 14 days.

Upon the first use of it, a severe smarting is felt, with profusion of tears: to this succeeds a warm glow of the parts, and finally a pleasant sensation and clearness of sight. Perhaps more cases of chronic weakness of the eyes will yield to this medicine than to all others. Yet, to expect much relief, the use of the medicine should be persevered in.

Where a large quantity of *matter* (pus) is discharged from the eye, or adheres to the edges of the lid, use as a wash Ware’s Eye-water.

R Blue vitriol,	1 oz.
Armenian bole,	1 oz.
Camphor,	1-4 oz.

Grind to a fine powder, and project into 4 lbs. boiling water: let it stand till it is clear. Put one drachm of the clear liquor to one ounce of clear water for use.

TUMOURS, EXCRESCENCES, &c.

KING'S EVIL.

PERHAPS this is a subject that requires more elucidation than any other with which medical practitioners have so much to do.

Scrofula is more terrible from being an hereditary disease. A fine skin, a delicate complexion, light blue eyes, a tumid unhealthy countenance, and a swelling of the upper lip, are so frequently observable in scrofulous patients, that such marks are deemed signs of this peculiarity of constitution.

Scrofulous inflammation is attended with a soft swelling of the affected part. The swelling has at first a doughy feel, which in time it changes for that of elasticity or fluctuation. A circumscribed hardened margin surrounds the base of the tumour; the skin is slightly red. As the swelling advances, it changes to a light purple colour, with small red veins running over its surface. The skin at length becomes thinner, and more dark-coloured at a particular point; then bursts, and discharges a thin fluid, blended with a curdy matter. The redness of the skin continues, but the aperture enlarges in proportion as the tumour subsides, and thus a scrofulous ulcer is the result.

The margins of this ulcer are smooth, obtuse, and overlap the sore; they are of a purple colour, and are rather hard and tumid; the surface of the ulcer is of a light-red colour; the granulations are flabby and indistinct; the dis-

charge is thin, and contains flakes resembling curd. The pain is inconsiderable.

Scrofulous ulcers frequently heal in one place and break out in another, and are generally worse in summer than in winter.

There is no medicine which has the power of completely correcting the peculiarity of constitution implied by the term scrofulous habit.

Bark, sea air, and sea bathing, are among the means from which patients afflicted with scrofula derive the most relief. Burnt sponge and soda are useful. Cicuta is good when the sores are irritable.

Salivation is always hurtful. Nitrous acid is sometimes serviceable: if, on trial, it does no good, it should be discontinued. Vitriolic emetics, repeatedly exhibited, are said to be useful. Scrofulous swellings should never be opened.

External applications are of little use. Before the tumours break, a piece of swansdown, to keep the part from suffering from change of temperature. After the tumour has broke, dress with No. 21, adding a little red precipitate.—See *American Remedies: Oxalis Stricta Phitolacca Decandra, Triostium Perfoliatum.*

CANCER.

Puckering of the skin; lead colour; feeling knotted and uneven; darting pains; the skin adhering to the parts beneath, distinguish a cancer before ulceration.

Before the tumour arrives to a very large size, it commonly ulcerates, throwing out some sloughs and a mixture of matter; leaving a large chasm, the bottom of which is uneven and ragged; the edges thick, hard, jagged, and painful. The ulcer sometimes spreads rapidly, with alarming bleedings and great debility; at other times, the ulcer

seems to be healing for a while, but the new flesh shoots out fungus and bleeding lumps, which cannot be controlled. At length other parts are affected; cough and difficulty of breathing come on, and death is welcome to the sufferer.

Treatment.—Pressure, and equal temperature, by means of a piece of rabbit's skin, with the fur inside. Cicuta and nightshade applied to the tumour have sometimes relieved. Mercury and gum ammoniac are too irritating and dangerous.—The knife, in good hands, is the safest, best, and should be the only remedy. Preparations of lead, arsenic, iron, barytes, and mercury, may be useful by medical prescription. Carrot and fermenting poultices.

WHITLOW.

A painful inflammatory affection on the finger, at or near the end. There are four kinds, distinguished by their depths in the parts of the finger.

I. Seated immediately under the scarfskin, called a *run-round*. It may be for some time immersed in warm water, or a soft fomentation, repeated until it suppurates, when it may be opened with a lancet or scissors.

II. Seated under the true skin, more painful than the first, but requiring the same treatment.

III. Seated under the muscles.

IV. Seated on the bone.

The two last species of whitlow should be treated with nothing but a surgeon's knife, and followed by a little lint and spirit and water, or perhaps a little laudanum. The operation should be performed as soon as the second or third day. Any thing else will expose to the loss of bones, if not of limb; at least a dreadful disease.—See *American Remedies*.

WHITE SWELLING.

The large joints, such as the knee, ankle, and elbow, are most liable to attacks of this malady.

In the first stage of this disease, the skin is not at all altered in colour. In most cases, the tumour is trivial, although the pain is severe, and felt commonly at one point, of the articulation. The swelling at first occupies the little hollows of the joints, but soon becomes general. The patient soon only touches the ground with the tip of his toes, and the limb becomes stiff and crooked. These are the appearances in the first stage.

At length the diseased joint appears of an enormous size, the skin not much altered, but smooth and shining, with a few red veins running over it. Soon openings appear, and discharges from them; sometimes these heal, but soon break out again. The health fails, and hectic fever comes on.

Treatment.—A continual discharge is to be kept up by blisters from the part, first from one side, then the other, or issues may be used; however, they are thought not so good. The common blistering salve may be used; or bruised roots of the ranunculus, vulgarly called buttercups, (see *American Remedies*,) will do equally well, and some think better.

All other means are totally unequal to the cure of this formidable disease, and no time should be lost. The treatment here laid down is designed for the first stage only. After openings appear, life should be saved by loss of limb.

DROPSY OF THE KNEE JOINT,

Is known by a swelling of the part, in which pressure on the knee-pan swells out the hollows of the joint.

Treatment.—Blistering, as directed for White Swelling;

bandaging, moderate exercise, frictions, with flannel and vinegar, or a perpetual blister, as for White Swelling; mercurial purges. Bandaging the joint often. Blisters are good.—Has been considered not difficult of cure.

RICKETS.

This disease shows itself in a large head, prominent forehead, protruded breast-bone, flattened ribs, big belly, emaciated limbs, great debility.

Weakly children are most subject to this disease. The bones become soft, so that they will not bear the weight of the body without bending; and even the muscles draw the body out of shape.

Treatment.—Nourishing food, wine, bark, country air, cold or sea bathing; No. 22. Above all, pure air and exercise.

ANEURISM, OR ENLARGED ARTERY.

This tumour throbs and keeps time with the pulse or beating of the heart. If they burst or are wounded, death instantly follows, if the artery be large.

A patient, on perceiving one, should immediately consult an experienced surgeon, that the disease may be removed by an operation, or directions obtained that may prevent accident.

SCALD HEAD.

This is an infectious disease, and consists of an eruption of pustules among the hair, containing a substance like honey, and soon forming large white or yellow scales; the disease spreads over the head, and sometimes down the body, and is frequently mistaken for the itch. Unless the disease is attacked at its very commencement, the hair

must be clipped, after having softened the scales and freeing the roots of the hair by lard, oil, or soft poultices. This cannot be done at once, but by repeated operations it may be effected.

External Applications.—Ointment or decoction of hellebore, diluted citrine ointment, soap and water, or a solution of corrosive sublimate mentioned for the itch.

PIMPLED FACE.

If pimples on the face have been of long standing, they should be cured with caution. In the treatment, abstain from spirits; wash with corrosive sublimate, as mentioned for the itch, adding as much soft water to weaken it. *Fowler's Solution*, six drops twice a-day, for some time, will cure. A dose of calomel should be premised.

NOTE.—The author is not unaware that, in prescribing *corrosive sublimate* and *Fowler's Solution*, he names two terrible poisons; nor should his readers be ignorant that he does the same when he mentions *opium* and *tartar-emetic*.

The truth is, that all the powerful remedies which physicians use, are, when administered unskillfully, or in immoderate doses, strictly speaking, poisons. Yet, when the effects of a medicine are known, its proper dose ascertained, and its use established, we do not hesitate to prescribe it, but we must insist on the patient's keeping within our rules.

In the present state of things, and under existing prejudices, more danger is to be apprehended from the general prescription of old remedies, than from those more lately introduced. Nobody fears being killed by blood-letting, antimony, pink, gamboge, or red precipitate, because they have become familiar with them.

RING-WORMS,

May be communicated by contact. Use No. 23, and wash twice a-day; at night rub on red precipitate and lard.

Gun-powder ground fine, moistened with vinegar or saliva, and rubbed on, will often cure them.

WEN.

The swellings popularly called wens, consist of a sac, filled sometimes with a fluid, at others a hard substance, most commonly with fat.

The most successful applications for dispersing this kind of tumour, are such as contain common salt, sal ammoniac, &c. The best practice is the operation by which the wen is cut out; but this must be done by a surgeon.

MARKS.

The marks on infants are either a varix or an aneurism, more frequently the former. Pressure, as directed for ganglion or weeping sinew, will commonly cure them, if applied in season.

WARTS,

Need no description.—Spirits of hartshorn and tincture cantharides are good applications. The warts should be moistened with one or the other every day, or lunar caustic moistened and rubbed on the wart.

A strong decoction of oak bark, used as a wash, and often repeated, will certainly cure warts, if persevered in.

Large warts should be cut out, unless cured with oak bark, as the irritating applications are apt to make fungus flesh shoot out of them.—See *American Remedies*.

NERVOUS AFFECTIONS.

Loss of appetite; distention of the stomach; belchings; nausea, heart burn; costiveness, or looseness; small slow pulse, quickened upon the least exertion; palpitation; tongue white and dry in the morning; limbs cold, sallow countenance. Senses depraved, or impaired; sadness; want of resolution; timidity as to future events; dread of impending evil; particular attention to the health; and, upon every unusual feeling, (which the patient is sure to have) a fear of imminent danger, and even death itself. Disturbed sleep and frightful dreams,

“And all that misery’s hand bestows
To fill the catalogue of human woes.”

In respect of all these feelings and apprehensions, the patient is most obstinate in his belief and persuasion.

Treatment.—“*Contraria contrariis mendentur,*” or in plain English, change every habit of life, and every train of thought in the mind. Abandon the use of opium, and the immoderate use of ardent spirit, and tobacco; give up tea, and coffee, and chocolate; go to bed, and get up, early; use moderate exercise in the open air. Engage in new and interesting pursuits.

It has been unfortunate for the medical profession, as well as patients themselves, that persons labouring under nervous disorders, have expected too much from the prescription of the physician, and the shop of the apothecary, what is only to be obtained from their own caution and circumspection: we thus find most of them ready and

greedy to swallow every medicine that is recommended ; but stubborn and untractable in all that relates to breaking in upon established habits and customs ; whether of luxurious living, depraved appetites, indolence of body or mind, or indulgence of any kind, inconsistent with health. Many of these habits, it is true, are so far interwoven with the constitution, as to make some changes almost impracticable ; but as indisposition is so frequently brought on, or aggravated by the patients themselves, the physician cannot be too much on his guard, in demonstrating to them all that belongs to their own government and demeanor. The medical adviser, therefore, who observes the most disinterestedness towards his friends, will often be the first man to be dismissed ; while the selfish dissembler, however ignorant, will become a favourite, and engross the emolument. On such an occasion, the virtuous mind of a liberal physician would know where to look for approbation.

Nervous people are commonly endued with acute feelings ; liable to act from the first impression and impulse, and easily deceived by the designing and interested. And should they fall into the hands of a gossiping physician, or a wheedling apothecary, these personages become a kind of appendage to their establishment, if not fixtures in their houses. Being singular in the choice of their friends, they seldom mix in company ; sedentary from habit, they go little abroad ; their amusements and recreations are thus limited, and such as possess the talent of bringing news, and telling a story, are at all times welcome guests. But as the tale of their own complaints engrosses so much of their conversation, a medical gossip, before all others, is the most acceptable. Nevertheless, let the nervous and valedudinarian beware how they trust their health and purse in such hands.—See *Dr. Trotter on Nervous Temperament*.

Exercise and recreation in the open air, even to labour and fatigue ; and always till it produce a moist skin, if not a profuse sweat.

Riding on horseback, is universally acknowledged to be beneficial ; a journey should be taken, and if possible with some business, or object in view.

Cold bathing, by a shower. Begin by setting a vessel of water in the morning, the south side of a building ; at 11 o'clock the water will, in summer, have become tepid in it ; sprinkle the patient, at first with a small quantity ; rub him dry with flannel immediately. Every fair day, use the shower, and every day putting the vessel out later, and increasing the quantity ; soon the patient will bear the full dash of a pail of cold water. Now, if the patient has no longer a dread of cold water, he may plunge and swim ; and exercise in the cold bath increases greatly its beneficial effect.

Mineral springs may be visited with advantage by many. Nervous people should clothe warm and guard against variable weather. For cold feet, flannel or broadcloth, pasted on the innermost sole of the shoe. Change of climate may sometimes be resorted to with great advantage.

Medicine.—Nervous patients should begin with small doses. If an emetic is thought proper, ipecac should be used, or perhaps white vitriol. If a cathartic, rhubarb with a little salt of tartar, magnesia, or soda.

To strengthen the digestive organs, bark, in powder, or infusion, or Whytt's tincture. Bitters, as quassia, columba, gentian, and the like.

The mineral acid, as sulphuric, nitric, and muriatic, dropped into sugar water.

Iron in the mineral spring waters, or 22, or 24.

Zinc is much praised by many. No. 7.—See *American Remedies*.

COUGHS, ASTHMA, &c.

CONSUMPTION.

Symptoms.—Regular consumption usually begins with a short dry cough, so slight as to become habitual before it excites the attention of the patient. The breathing is more easily hurried by bodily motion; the patient becomes languid and indolent, and gradually loses his strength; the pulse is small, soft and quicker than usual; at length, from some fresh exciting cause, the cough becomes more considerable, and is particularly troublesome during the night; the breathing more anxious; sense of straitness and oppression of the chest is experienced; and a raising from the lungs of a frothy mucus, and is most considerable in the morning; afterwards becoming more copious, viscid and opaque.

The breathing becomes more and more difficult; the emaciation and weakness go on increasing; pain arises in some part of the chest; at first generally under the breast bone, but as the disease advances is felt in one or both sides, is increased by coughing, and is sometimes so acute as to prevent the patient from lying down on the affected side. The face now begins to flush; the pulse becomes quick and hard; the urine is high-coloured, and deposits a branny sediment; the palms of the hands, and soles of the feet, are affected with burning heat; the tongue from being white, is preternaturally clean and red; the matter raised is now like that from a boil, dull white, or turned of yellow and green; all the symptoms are increased toward evening,

and the fever assumes the hectic form. *Hetic fever* has two exacerbations in a day; the first about noon and inconsiderable, and is soon followed by a remission; the other in the evening which gradually increases till after midnight. Each exacerbation is commonly preceded by chills, and is terminated by a profuse perspiration, and the urine deposits a sediment. The appetite often now mends; the white of the eyes assume a clear pearly colour; during the rise of fever a red spot appears on each cheek; at other times the face is pale and dejected; food is vomited up; a diarrhœa comes on, and generally alternates with drenching sweats; the emaciation is extreme, the countenance sunk; the cheeks prominent; the eyes hollow and languid; the hair falls off and the nails are hooked; the feet and legs swell; thrush in the throat. Still the appetite remains entire, and the patient flatters himself with hopes of speedy recovery, and is often vainly forming distant projects of interest or amusement, when death puts a period to his existence.

Causes.—Hereditary predisposition, marked by long neck, prominent shoulders, narrow chest, slender fingers; scrofulous constitution, known by fine clear skin, fair hair, delicate rosy complexion, large veins, thick upper lip, weak voice, and great sensibility.

Caused also by some diseases; as bleeding at lungs, pleurisy, catarrh, asthma, King's-evil, venereal disease, small-pox and measles; the dust of certain trades, as of stone cutters, millers, &c.; fumes of burning poisonous metals; intemperance, profuse evacuations, natural or artificial; depressing passions, damps, colds, &c.

Treatment.—In the first stages, small and repeated bleedings, unless the patient be of a scrofulous habit. Gentle laxatives, as cassia, manna, Rochelle salts.

Mild perspiratives, as No. 8, No. 14, substituting volatile salts of hartshorn for the pearlsh.

Occasional use of emetics of white vitriol in doses of from two to five grains.

Blisters, issues, and setons over the part affected, are highly serviceable.

Cictua, beginning with doses of one grain, and increasing. Foxglove in tincture, beginning with fifteen drops in infusion of gentian, three times a day, gradually increased till the pulse is slower.

At the same time may be taken three pills, (No. 24,) three times a-day.

The diarrhœa may be relieved by opium and chalk. The cough by opium and liquorice. No. 25.

A light and nutritive diet; the farinaceous vegetables, arrow-root, what some call consumption root, (its botanical name not ascertained;) milk.

Removal to a warm climate. Moderate exercise, either by swinging, riding on horseback, or by sailing; carefully guarding against cold, by wearing flannel next the skin; a sea voyage, but not the sea shore. The air at sea is favourable to consumptive patients; but the change on the shore, in consequence of the sea and land breezes, unfavourable. So that inland situation, or to be fairly out of sight of land, should be the object of a hectic patient.

COLDS.

A common cold is produced by suppressed perspiration, and is cured as soon as an equable perspiration is again restored.

Abstaining from animal food; drinking freely on going to bed, of cold water or tepid herb drinks, as hoarhound

tea, motherwort, flax-seed and tansy; and lying in bed late of a morning will commonly loosen a cold.

If the symptoms run high, see *Influenza*.

CROUP, OR RATTLES.

This disease, generally of children, creeps on imperceptibly, with hoarse dry cough; wheezing; at first the breathing sounds like blowing through muslin; then a rattling in the throat; soon it is like the croaking of a fowl when caught in the hand.

Treatment.—Emetics of ipecac, and oxymel of squills between; the former as often as every two hours at least; warm bath often repeated; a blister put between the shoulder blades; calomel two grains, doses every two hours.

Strong mercurial ointment plasters, under the knees.— See *American Remedies: Sanguinaria Canadensis*.

NOTE.—In diseases, terrible as the last described, and many others, incident to human nature, no time should be lost; but medical aid obtained as quick as possible; yet something should be done while the physician is coming, and more especially if he cannot come at all.

In a work of this kind, most should be written on the more manageable diseases.

MUMPS.

This is commonly a mild disease,* requiring only that the patient avoid all causes of cold.

Should fever appear, treat it as simple inflammatory fever.

*The philanthropic Dr. Rush, of Philadelphia, said, that there was no disease so trifling but at one time or other it had proved an avenue to death; and there are times, or rather cases, in which this disease puts on a frightful aspect.

If swelling of the testicles in men, and the breasts in women, or delirium supervene, apply blisters to the head, mustard paste to the feet, and fomentations to the parts affected.

INFLUENZA.

An epidemic cold; whole countries are sometimes affected with it. It has been thought contagious, but its progress is too quick, and its effects too general. Contagion is slow. It seems to depend on a peculiar state of the air, and sweeps whole nations at a blast.

Symptoms.—Fever, weight and pain in the head; oppression of the chest, and difficulty of breathing; sense of fulness and stopping of the nose; watery, inflamed eyes; chills and flushes; soreness of the jaws and wind-pipe; cough; pain in the chest; shooting pains in the head and back; running of a scalding fluid from the nose, &c.

If the fever is inflammatory, spare diet of vegetables, salts, saline mixture No. 14, and antimonial wine as a perspirative, teas of bran, flax-seed, thoroughwort in small doses. After the fever subsides, oxymel of squills, and laudanum. If the fever has symptoms of typhus, with prostration of strength, give wine whey with hartshorn, warm wine and snake root, No. 11, also opium, No. 9, or 10, more especially in old people. Generous diet, moderate exercise. In the course of treatment, snake-bite, thoroughwort, motherwort, sorrel tea, elecampane, &c. If the symptoms run high in either case, blisters may be used advantageously; so may mustard paste to the feet, warm drinks, and No. 8. In the advanced stage, No. 17 is an excellent remedy.

ASTHMA.

Symptoms.—Paroxysms generally coming on in the night,

in which there is frequent and extremely anxious breathing, with wheezing noise and tightness across the chest; propensity to cough; with sense of immediate suffocation, starting up from an horizontal posture, as if to get air; the face turgid, or livid, or pale and shrunk.

Towards morning the patient is relieved by raising freely from the lungs, and falls asleep. The tightness of the chest remains for some days, with a return of the distress at night.

Treatment.—If the pulse is full, bleed, otherwise not. Purge with calomel 6 grains, rhubarb 15 grains. An emetic of ipecac will break up the fit; and if followed with a pill at night, of opium, calomel, and ipecac, each one grain, the paroxysm will not return.

Some asthmatics find relief in smoking tobacco, others in smoking stramonium. *Lobelia inflata* has lately come into great repute for the cure of asthma. A tea-spoonful of the infusion, or tincture, repeated till it vomits, or sweats.

Observe a light nutritious diet; warm clothing; avoid damps and wet feet; use regular exercise.—See *American Remedies*.

HOOPING COUGH.

Convulsive strangulating cough, with hooping, relieved by vomiting. Contagious.

Treatment.—Emetics given frequently, will moderate the symptoms.

Keep the bowels open with mild laxatives.

Change of air. Riding on horse-back.—See *American Remedies*.

MEASLES.

Fever, cough, hoarseness, difficulty of breathing, sneezing, sense of weight in the head; nausea or vomiting;

drowsiness, dulness of the eyes, and flow of hot tears; running from the nose, itching of the face.

On the fourth day, small red pimples appear, first on the face, spreading over the whole body; the pimples hardly elevated above the surrounding skin, but by the touch are found to be a little prominent. On the fifth or sixth day, they turn brown, and disappear with the peeling off of the scarfskin. A diarrhœa often appears with the turning of the measles.

Treatment.—Abstinence from animal food, light vegetable diet; a moderately cool room, temperature to be regulated by the patient's feelings; carefully guarding against sudden changes.

Saline purgatives. Solution of cream tartar; sorrel tea; sweating with No. 8, warm herb drinks.

If the symptoms run high, with pleuritic symptoms, bleed, and blister the chest. If the eruption suddenly recede, put the feet in warm water while lying in bed; apply mustard paste to the breast and feet. Blister between the shoulders. Warm wine whey with hartshorn, tea of Virginia snakeroot, &c.

Hoarseness and cough, may be palliated by bran-tea, flax-seed tea after the fever abates; these symptoms may be relieved by oxymel of squills, and opium, or No. 17. Bloodroot made into a tincture by shaving the root, filling a phial half with the shavings, and adding spirit.

If paleness or purple spots appear, with prostration of strength, and other symptoms of typhus, treat as in typhus, with cordials, wine, bark and snakeroot.

NON-CLASSIFIED DISEASES.

SMALL-POX.

FEVER, eruption of red pimples on the third day, which on the eighth contain matter, and, drying, fall off in crusts.

Formerly, a great proportion of every medical work was religiously devoted to this disease; and till less than a century since, one in seven, at least, of the persons born in England, died of the small-pox. It is fortunately now unnecessary even to describe this loathsome and fatal disease.

COW-POCK.

The cow-pock consists of a single vesicle, which appears on the spot where the *vaccine* matter is inserted. The colour is a dull white, but it is red at the edges. It contains a fluid clear as crystal, about the eighth or ninth day. A redness or inflammation of the skin spreads to a little distance from it, about the size of half a dollar. This begins to fade on the eleventh or twelfth day, and the vesicle becomes brown, and presently is covered with a glossy harsh scab, which discovers, when it falls off, a permanent scar.

In boys, it is of little consequence where the matter is inserted, and the arm is as good as any part; but in girls, (children) it is better to inoculate on the outside of the thigh, a little above the knee. Parents cannot too generally know, that the arm may inflame, and yet the vesicle may not be of the genuine kind. If the progress be differ-

ent from the usual course, then there is always a doubt, lest it may not give security against the small-pox. If, for example, there be no inflamed circle at all, or if, on the other hand, it appear early, for instance on the fifth or sixth day, and especially if the vesicle be not round or oval, but jagged and irregular, and contain on or before the eighth day, a turbid white, instead of a clear fluid, it will be necessary to re-inoculate. It is possible the vesicle may be of the genuine kind, and the constitution not affected by it. This cannot be determined by appearances or symptoms, but it may be by a very innocent and slight test. If on the morning of the sixth day, a second inoculation be performed on the other arm or leg, it will advance quickly, and become surrounded with a red circle, nearly as soon as the first vesicle. If this trial be neglected, we have still two other methods of determining whether the constitution be properly altered, viz. by inoculating a second time with the kine-pock matter, any time after the child has fully recovered from the disease. If he has had the genuine cow-pock, in either case, the scratch only inflames a little, it soon heals, and no other effect is produced. No child can be presumed safe without having tested the operation in one of the above ways.

If it be asked why every parent does not re-inoculate, as a test, it can only be answered, that it is from the same cause which makes many neglect insuring their property, namely, a belief that there is no great chance of its taking fire.

It has been urged as an objection to the cow-pock, that it produces cutaneous diseases afterwards, but this is groundless.

With regard to the treatment of cow-pock, I have only to observe, that the part should, when the red circle forms,

be frequently dusted with flour or chalk; and after the vesicle breaks, the same should be continued, in order to form a crust on the sore, which is much better than dressing it with ointment.

It is to be regretted, since inoculation of this disease has become fashionable, that ignorant people should undertake to propagate it; as no one but a physician can decide whether any individual case is of the genuine, or spurious kind. With a view to caution those who are willing to incur the responsibility of inoculating with vaccine matter, I here give what Good has inserted in his *Definition and Arrangements of Diseases*, lately published in London.

Species.

Vaccinia.—*Cow-pock*; vesicles few, or a single one, confined to the part affected; circular, semi-transparent, pearl-coloured; depressed in the middle, surrounded with a red areola. (Circle somewhat broad.)

Vaccinia.—*Nativia.* *Natural Cow-pock*; vesicles on the hands, or such parts as have been in contact with the affected udder of a cow; of a bluish tint; the fluid at first limpid; afterwards opaque and purulent, (like pus;) often with enlargement of the axillary glands (kernels in the armpits,) and considerable fever. A preventive of Small-pox.

Vaccinia.—*Spuria.* *Spurious kind*; vesicles less uniformly circular; purulent from the first; without blueish tint; with little or no central depression. Affords no security against the Small-pox.

Vaccinia.—*Inserta.* *Genuine Inoculated Cow-pock*; vesicles single, confined to the puncture; cellaulose; bluish, brown in the middle; fluid clear and colourless to the last;

concreting into a hard, dark-coloured scab after the twelfth day.

NOTE.—This is the only variety which should be propagated in this country as a preventive of Small-pox.

Vaccinia.—Degener. *Degenerate Inoculated Cow-pox, Blane*; vesicle amorphous (imperfect,) uncertain; fluid often straw-coloured or purulent; areola absent, indistinct, or confused with the vesicle; scab formed prematurely.—Affords little or no security against the Small-pox.

CHICKEN-POX.

Slight fever, pimples bearing some resemblance to those of small-pox; scaling off in three or four days.

This disease is of so trivial a nature as seldom to need the aid of medicine. Gentle laxatives and cool regimen is all that is necessary.

THRUSH, OR CANKER.

The mouth becomes redder than usual; tongue swelled and rough; white specks or spots invade the palate, almonds of the ear, and inside of the cheeks, gums, and jaws. The disease sometimes spreads to the stomach and bowels: they frequently disappear in a day or two, and a new crop succeeds. But this is more favourable than to have the first crop continue. While the spots remain white or yellow, and the parts between of a florid red, and moist, there is no danger. But if there is hiccough, oppression, pain in the stomach, and sense of suffocation, and the spots turn brown or black, and great prostration of strength, it is nearly allied to Malignant Quinsy, and to be treated as such.

Treatment.—Emetics of ipecac; gentle laxatives of manna, rhubarb, oil, calomel in small doses, copious emollient

clysters; No. 11, used as a gargle; touch the spots with borax and cream. If the stomach and bowels seem affected, a powder of borax, nut galls, chalk or charcoal, in equal parts, five or six grains of which may be taken every four hours, and oftener, if it does not produce costiveness.

If the strength fails, wine, bark, No. 11, should be taken, with nourishing food. Canker-root, oak bark and alum, elm, bass-wood, and upland violets, are all useful in the course of this disease.

There is a chronic kind of canker, which yields to emetics and No. 7.

NETTLE-RASH.

An eruption on the skin, resembling that produced by the stinging of nettles, whence its name; suddenly appearing and vanishing, or changing its seat. The part affected is frequently considerably swelled. In the eruption appear little white lumps, resembling bites or stings of insects, sometimes long wheals, like the strokes of a whip-lash. These lumps or wheals do not contain any fluid, and itch intolerably. All the symptoms increase at night. The parts which have been affected with this disease, peel off branny scales on recovery.

Treatment.—Laxatives, salts, cream tartar, calomel in small doses with rhubarb. Nitrous acid beverage; perspiratives, as sorrel tea, snake-bite, &c. Cool vegetable diet. If it strike in, and occasion nausea and distress, teas of peppermint, hyssop, or rosemary, &c.; wine whey, with hartshorn.

DYSENTERY.

This disease sometimes comes on with cold shiverings and fever; at others, the complaints of the bowels first

show themselves. Costiveness, flatulence of the bowels, severe gripings, frequent inclinations to stool, with small fetid evacuations of slime and blood; or a fluid resembling beef brine; loss of appetite; nausea and vomiting; quick and weak pulse; sense of burning heat, and intolerable bearing down of the parts; febrile heat and dry skin; hic-cough; livid spots on the breast, and not unfrequently fatal termination.

Favourable symptoms.—Moist skin; stools becoming easy and natural; sediment in the urine; strength not much diminished.

Treatment.—An emetic of ipecac or white vitriol, followed by the saline mixture, No. 14.

Cathartics, calomel, oil, manna, Epsom or Glaub. salts. Ipecac in small doses to sweat, but not to vomit; No. 8. Clysters of mutton broth, arrow-root, or starch, in either of which put from sixty to one hundred drops of laudanum, often repeated. Mucilaginous drinks: sassafras twigs, dandelion, arrow-root, flax-seed, and tansy.

Fomentations to the bowels, of poppy-heads, burdock or stramonium leaves, with camphorated spirit; frictions with No. 3. Blisters.

Opium, with antimonial or ipecac wine, or Nos. 8, 9, 10.

If symptoms of malignancy supervene, and the strength flags, bark and snakeroot; wine whey, with hartshorn; quassia, columba, angustura, and simouraba barks. Nitrous acid with opium.

If the disease become chronic, opium, oak-bark, and fennel-seed.

APOPLEXY.

Symptoms.—The usual forerunners of apoplexy are giddiness; pain and swimming of the head; loss of memory;

drowsiness ; noise in the ears ; night-mare ; flux of tears ; laborious breathing. When plethoric old people notice in themselves these symptoms, they should endeavour to prevent a fit, by bleeding, slender diet, and opening medicines.

In the fit, if the patient does not die suddenly, the face is bloated and red ; the blood-vessels turgid ; the eyes are prominent and fixed ; breathing difficult and snoring ; the excrement and urine are voided involuntarily ; sometimes vomiting.

Treatment.—The patient should be perfectly easy and cool ; the head raised, and the feet hanging down ; the clothes should be loosened, but the garters tightened. Now, if his pulse beats strong, he should be bled freely, otherwise not. Clysters with oil, and two table-spoonfuls of salt. Blisters between the shoulders and on the calves of the legs. Drink warm tamarind-water, or cream tartar whey ; a potion of salts.

If the pulse be weak, do the same ; except for drink, give warm wine or mustard-whey, adding hartshorn. Omit blood-letting.

PALSY.

Loss of voluntary motion or sensation, or, both in certain parts of the body ; often with sleep, and slow, soft pulse, preceded by universal torpor ; giddiness ; sense of weight and pain in the head ; loss of memory ; sense of creeping, numbness, and pricking in the part afterward to be affected. Often preceded by apoplexy. :

Causes.—Any thing which impairs the nervous power, whether it acts on the brain itself, or injures the nerves in their course.

Treatment.—If the attack is sudden, with symptoms of apoplexy, treat it as directed for that disease.

In debilitated constitutions, and in old age, with the head little affected, powerful stimulants will be proper, as mustard, horse-radish, spirit, and salt of hartshorn; tincture of guaiac., ether, electricity, &c.

Frictions with flour of mustard, spirit of turpentine.

Tincture cantharides; flesh-brush; blisters; whipping with nettles; exercise; warm and salt-water bath.

Light nutritious diet.

In palsy from exposure to lead, balsams of Peru and capivi; mercury in small doses.

In palsy of the tongue, chew pyrethrum.

EPILEPSY, OR FALLING SICKNESS.

Sudden falling, with strong convulsive motion of the muscles of the limbs and whole body, and spasms of the face and eyes; frothing at the mouth; insensibility; followed by sound sleep.

Causes.—Worms, teething, acute pain, violent passions, intemperance, hereditary predisposition; often continued by habit.

The cure is seldom effected, except by medical prescription. The medicines are, mercury, zinc, nitrate of silver. Of late, stramonium is much used. The stomach and bowels should be first cleared: afterwards, one-fourth or one-half a grain of the seed, ground to a powder with chalk, may be given twice a-day, gradually increasing the dose, till the pupil of the eye is somewhat dilated. Keeping the patient at that point will frequently cure the disease.

ST. VITUS' DANCE.

Symptoms.—Convulsive motions of one side of the body. A kind of lameness in one of the legs, which the person draws after him in an odd and ridiculous manner; nor can

he hold the arm of the affected side one moment still: if he is desirous of drinking, he uses many gesticulations before he can carry the cup to his mouth, when he pours the liquor down his throat with great haste, as if to divert the bystanders. The eye loses its lustre and intelligence, and the countenance is pale and vacant; the flesh wastes, and the appetite and digestion are impaired.

Treatment.—Purgative medicines. Calomel and jalap; Nos. 5, 12; rhubarb and iron; No. 22. Cold bathing; good food; warm clothing, &c.

A physician may prescribe nitrate of silver, stramonium, &c.—See *Epilepsy*.

NIGHT-MARE.

Such as are subject to this affection, should avoid all gloomy reflections; tell no dreams, but keep the mind as cheerful and easy as possible; take exercise in the open air; eat light suppers; use cold bathing, if it can be borne; cordials, hartshorn, rhubarb. Iron, No. 22.

Keep the bowels free with rhubarb and cream tartar.

PILES.

In this disease, the patient should use cool diet, consisting of bread, milk, vegetables, and broths; drink beer, infusions of mucilaginous plants, of mallows, sassafras twigs, &c.

Medicine.—Balsam capivi, from twenty to fifty drops morning and evening. Emollient clysters; laxatives of cream tartar; grind together one part rhubarb with three parts cream tartar, and take a tea-spoonful in molasses occasionally, to prevent costiveness.

Many have, seemingly, cured themselves by attending to the proper use of this remedy.

If the gut protrudes, it is common to put the patient on

his face, and make long-continued pressure with a soft cloth dipped in milk and water. The compiler has seen cold water succeed where warm water had failed.

Where the common means fail, an emetic has caused it to return.

Regularity in going to stool has a wonderful effect in preventing and curing many troublesome complaints of the bowels, and particularly so in this.—See *American Remedies*.

COLIC.

Pain in the belly, and twisting round the navel; vomiting; costiveness.

Treatment.—Warm bath, and fomentations to the bowels. Opium, till it relieves the pain, in clysters or by the mouth. To stop vomiting, effervescing mixture. No. 14.

Cathartics; calomel in full doses, eight or ten grains every four hours; with oil, and milder laxatives frequently interposed.

R. Jalap, rhubarb, and senna, each one drach.

Manna, half an ounce.

Fennel-seed, a table-spoonful.

Pour on three gills of water, boiling; let it steep, and strain; add pearl-ash half a drachm, cream tartar one drachm, and sweeten with molasses. Give a wine-glass full every hour till it operates. Clysters with oil and salts: they should be bulky, and often repeated.

In colic, much depends on constantly plying the patient with the means above directed, no part of which should be neglected, and more especially the opium and calomel.

External means should not be forgotten: fomentations, and applications of burdock-leaves heated upon a fire-shovel; mustard paste; and sometimes blisters are necessary.

Such applications relieve pain, relax spasms, and promote an equal motion of the bowels.—See *American Remedies*.

The muscular coat of the intestines is sometimes affected painfully, perhaps with rheumatic inflammation. This occurs in those colics which are not cured by cathartic remedies. This species of disease may be known by a concurrence of the following

Symptoms.—Tension and soreness of the abdomen, equal to that of genuine inflammation of the bowels, though not increased by an erect posture, and the patient is more apt to seek relief by change of position; excessively acute pains, travelling slowly round the body, yet not quitting one place to appear in another, as does pure spasm, but occupying in succession every point of the intestines.

This painful disease may last for months, and during its continuance the bowels may be lax and costive alternately, or even natural as to discharges.

The soreness and tension seem to depend on that species of inflammation mentioned in the first paragraph of this article, and the wandering pains on a natural effort of the parts toward healthy vermicular motion, yet a failure seems to take place, and an uncertainty whether the attempted motion shall be forward or retrograde.

Irregularity of life, late hours, hard riding, with exposure to sudden changes of weather, will bring on this disease.

Emetics of ipecac, followed by opium and gentle laxatives, will break up the disease; and,

Avoiding all the causes, and wearing a broad elastic woollen belt will keep it off.

I have added this, because the patient, in such a case, will surely call his disease colic, yet will look in vain for relief among the appropriate remedies for genuine colic.

COSTIVENESS.

In this disease, the excrementitious contents of the bowels are retained an inordinate length of time.

This may happen in firm, rigid constitutions, in which cases the matter accumulates in large, hard, dry masses, with little or no pain; or, in slender, weakly habits, attended with irritation, when the matter discharged is small, hard, in button-like divisions, scarcely affording relief.

The treatment of the two species of disease now under consideration, must vary as do the causes, and the constitutions in which they severally obtain.

In the former case, use salts, calomel, nauseating doses of ipecac and antimonials; in the latter, warm aromatic purgatives, as aloetics, Hull's powder, picra, &c.

Those who would avoid this troublesome complaint, should observe regularity in going to stool, and this particularly, after the fullest meal of the day.

There is one thing further to be said, which may be of consequence to those who have not studied the animal economy, viz.: There is a disposition in all the hollow muscles, (like the stomach, bowels, bladder, &c.) to assume regular periodical movements: and defying compulsion during the interval. Witness the process of parturition, and even tartar emetic will not make the stomach vomit, but at periods of from ten to twenty minutes, and the interval is left to repose; so the bowels will move with very little assistance from the voluntary muscles, provided time is given them, and a proper attention is paid to the daily intimations of nature.

Ill-timed straining at stool, does mischief in more ways than one. It not only deranges the excretory function generally; hinders the return of the blood from the lower parts

through the veins, and thus causes Piles; but it tends to open the joinings of the abdominal muscles, and so paves the way to Rupture.—See article *Rupture*.

I would not be understood here to deny the agency of the diaphragm and abdominal muscles in vomiting and dejection; what I intend, is to deprecate ill-timed straining.

CHOLERA.

Violent and frequent vomiting, and purging of billious matter; frequent, small, unequal pulse; thirst and heat, followed by cold sweats; great anxiety; spasms of the belly and calves of the legs; sometimes universal convulsions, hiccough, and death in a few hours.

Causes.—Excessive heat, and sudden changes; cool damp evenings, after hot days; indigestible food; poisons; violent passions.

Treatment.—Copious draughts of chicken broth, or barley water, or arrow-root tea. Emollient clysters, and those with nourishment.

Opium in large doses, often repeated, by the mouth or in clysters, or rubbed on the bowels. Fomentations to the belly, No. 14. Warm wine whey, and other cordials; hartshorn, &c. Nourishment, as the stomach will bear.—See *American Remedies*.

DIARRHŒA.

Copious and frequent discharges by stool; each motion is usually preceded by murmuring of the bowels, and griping; sense of weight, wind, and uneasiness in the lower belly, which ceases for a time after a discharge; frequently sickness and vomiting; pale, sallow countenance; thirst, bitter taste in the mouth, yellowness of the tongue; dry rigid skin; if the disease continues, great emaciation.

Causes.—Cold applied to the surface of the body; suppressed perspiration; indigestible food, imprudent use of purgatives; worms; unripe fruit, &c.

Treatment.—Emetics of ipecac.

Laxatives of rhubarb, calomel, magnesia, castor-oil, salts, saline mixture, No. 14. Solution of pearlshes; chalk-water, No. 8. Opiates, lime-water, and milk.

Mucilages, dandelion, barley-water, arrow-root, rice-water, elm-bark, cat-tail flag-root, brier-roots.

Tonics. Rhubarb in small doses; iron-filings, No. 22. Columba, bark and wine, Virginia snakeroot.

Nourishing diet. Lamb, chicken, calves-feet jelly; brandy and water, wine whey, hartshorn, &c.

As soon as the bowels are cleansed, oak-bark, and fennel-seeds: an infusion with milk and sugar is an excellent remedy.—See *American Remedies*.

TYMPANY.

Elastic distention of the bowels, not readily yielding to pressure, and sounding, when stricken, like a drum; croaking of the bowels; costiveness; wasting of the flesh; no fluctuation of water, which distinguishes it from dropsy.

Causes.—Weakened bowels, from any cause; from errors in diet; exposure to cold; intemperance, &c.

Treatment.—Evacuate the air, by seeds of motherwort, cassia, anise, &c. Opium, fetida; and drawing it off with a clyster pipe, and rubbing the bowels with the hand dipped in oil, with camphor dissolved in it. This should be frequently repeated. Clysters of opium and motherwort. Laxative pills, of equal parts of myrrh and aloes.

Bitters, exercise, digestible food. Leaves of burdock, horse-radish, or meadow cabbage, externally applied to

the bowels, and frequently renewed. Frazeri, harvest-weed root, (*asclepias tuberosa*.)—See *American Remedies*.

DROPSY.

A preternatural collection of a watery fluid in some of the cavities, or diffused over the whole body, the latter pitting on pressure of the finger. In this disease, the urine is high-coloured and scanty; costiveness; insatiable thirst. Skin pale and sallow, unless it is inflamed, when it is red, smooth, and shining; cough; slow fever.

Treatment.—Evacuate the fluid, by Emetics of tartar emetic, ipecac, squills.

Cathartics, jalap and calomel No. 5, or cream tartar, three parts, rhubarb one part. Or No. 26.

Diuretics. Medicines which promote discharges by urine, cream-tartar, acetite of potash, sweet spirits of nitre; foxglove, junipers, horse-radish, wintergreen, &c.

Tonics. Friction, bandages, as for ulcers of the legs; exercise, cold bathing. Bitters, wine, bark and iron, No. 11. Nos. 22 and 24.—See *American Remedies*.

DROPSY OF THE CHEST.

All the symptoms of dropsy, except the swelling, which in this disease is at first confined to the chest. In addition, impatience of horizontal position, loss of breath, numbness of the arms; starting from sleep, frightful dreams; palpitation of the heart; fluctuation of water in the chest.

Treatment.—Same as in dropsy. May be tapped by an operating surgeon.—See *American Remedies*.

WATER IN THE HEAD.

This is a fatal disease of children, and unfortunately of very frequent occurrence. It may come on spontaneously,

or succeed teething, disordered bowels, sudden healing of ulcers of the head and skin.

Symptoms.—Pain in the head, vomiting occasionally. This state lasts some days or weeks. Now the child complains seriously, the bowels are costive; skin hot; pulse unequal and quick; interrupted sleep, as if by dreams; asleep or awake, the child keeps up a continual moaning: this is sometimes the first symptom; and if accompanied by inability to support the head erect, should alarm the parents; cheeks flushed, the rest of the skin pale; no appetite; he starts frequently; grinds his teeth, picks his nose, tosses his hands over his head, and screams when apparently slumbering.

In a few days the pupil of the eyes dilate, a squinting comes on; the pulse is slow and intermitting; complains less, but moans and screams most piteously. Presently the pulse becomes quick; one side is convulsed, the other palsied; convulsions come on; the eyes are glazed; breathing noisy; stupor, shrunk features, and death.

Treatment.—Whenever a child complains of symptoms of the first stage of this complaint, no time is to be lost; use brisk purges of calomel; apply leeches to the temples, and repeat this if the symptoms return. Quiet, and food of the lightest kind.

Shave the head, and apply cold vinegar or a blister.

If these do not help, the symptoms become more urgent, and the danger is great; and it is to be feared nothing will avail. Attention to cleanliness, beef tea, arrow-root, and ripe fruit for food; gruel, lemonade, and wine and water, for drink; holding the hand gently on the head, will somewhat relieve the sufferer. This done, all is done.—See *American Remedies*.

INSANITY.

Erroneous judgment from imaginary perceptions, attended with agreeable emotions ; or a perception of false relations ; exciting the passions, and producing unreasonable actions or motions, with terrors of mind in pursuing a train of thought ; and in running from one train of thought to another ; attended with incoherent and absurd speech, called raving ; violent impatience of either contradiction or restraint, without fever.

Maniacs have frequently lucid intervals, hence called lunatics.

Treatment.—Much depends on gaining the confidence of the maniac, by gentle, conciliating treatment ; or more frequently, by inspiring awe and dread of correction, tempered with mildness and humanity. Diverting the attention ; frequent change of scene ; spare low diet ; bleeding, if the patient be plethoric and the attack recent.

Purgatives, and emetics, No. 4, 5, 15, and 26.

Henbane, hemlock, and stramonium, but not without advice.

Cold bathing, blisters to the nape of the neck.

If there is great debility, nourishing food ; bitters, bark, wine and iron.—See *American Remedies*.

JAUNDICE.

Languor, inactivity ; loss of appetite ; yellow colour of the skin, especially of the eyes ; bitter taste in the mouth ; yellow tinge communicated to the linen by the urine ; white or clay-coloured stools ; dryness of the skin ; and if long protracted, ulcers, bleedings, and all the symptoms of the scurvy.

Treatment.—Warm bath, and fomentations to the upper part of the belly.

Gentle emetics when the pain is not acute, No. 4.

Cathartics, No. 5, 15, 26.

Opium to relieve pain.

Soda, soap, raw eggs, turpentine, ether.

Bitters, columba, quassia, frazeri, bark of white-wood root, box-wood bark, prickly ash, &c.

If the disease assumes the appearance of scurvy, treat it as such.—See *American Remedies*.

SCURVY.

Extreme debility, complexion pale and bloated; spongy gums, livid spots; breath offensive; swelling of the feet and legs; bleeding, from various parts; fetid urine; stools extremely offensive.

Treatment.—Pay the utmost attention to cleanliness; vegetable food of every description; vegetable acids, limes, lemons, apples, &c.

Fermented liquors, beer, cider, wine, &c.

Mineral acids in beverage, sorrel tea, mustard whey, tamarind water, arrow-root tea, gargles of oak bark, No. 11, and steams of vinegar. Pains relieved by opium, fomentations of vinegar and water, pure air, regular exercise, biters, bark, iron, &c.

Stimulants. Horse-radish, mustard, cabbage.—See *American Remedies*.

ITCH.

The Itch is a contagious eruption of small pustules, with a hard hot base, and watery-looking top. Too well known to need a minute description.

The best application is an ointment of sulphur and lard.

When sulphur fails, or is not employed on account of its smell, other remedies have been used; such as strong decoction of juniper berries, or of hellebore, or solution of ten grains of corrosive sublimate of mercury, in a pint of rose-leaf tea; these are to be applied as a wash to the part three times in a-day.

An ointment of hellebore, or of twenty grains of corrosive sublimate, ground into two ounces of lard, have been used.

Great attention to cleanliness, and frequent washings in soap and water, are necessary during the cure. Frequent change of linen throughout.—See *American Remedies*.

WORMS.

Unwholesome food, with bad digestion, seem to be the principal causes of worms. They appear most frequently in those of a relaxed habit, and whose bowels contain a great quantity of mucus or slimy matter. Children are most subject to suffer from worms, but adults are affected sometimes with them to a high degree.

Symptoms.—Variable appetite, fetid breath, sour belchings, pain in the stomach, grinding of the teeth, picking of the nose, swelled hard bowels, griping pains of the bowels, paleness, emaciation, slow fever, convulsive fits.

Treatment.—Calomel and jalap, No. 12, followed by the daily and continued use of No. 6, lime water, &c.

This course may be preceded by an infusion of Carolina pink.

Generous diet, wine, animal food. Crude unripe fruit, and poor, unwholesome food avoided.—See *American Remedies*.

STY.

This is a small boil, seated in the edge of the eye-lid. It is attended with heat, stiffness, pain, and considerable irritation.

Apply a small poultice of roasted apples or poppy-leaves. An opening may be made with the point of a lancet, as soon as there is matter in the tumour. Afterwards dress with red precipitate rubbed in a little lard.

Old ulcers of this kind, or lumps remaining after a sty, should be touched with an ointment made by rubbing red precipitate in lard, or they may be touched with lunar caustic.

WATER BRASH.

Heartburn, pain in the stomach, and running from the mouth of a thin watery fluid, in considerable quantity.

Treatment.—Wear broadcloth soals in the shoes; flannel shirt and drawers. Opium; hartshorn; soda; lime-water for a steady drink, No. 24.

BLEEDING FROM THE NOSE.

Treatment.—Erect position of the body, with the head falling a little backward; free exposure to cold air; cold water applied to the head, back of the neck, or genitals; lint dipped in alum water, or a solution made by putting one drachm of white vitriol in a pint and a half of soft water, stuffed into the nose.

If there is fever, with strong pulse, head-ache, &c., bleed at the arm; salts and sweating medicine.

If the face is pale, and pulse feeble, opium in large doses.—See *American Remedies*.

BLEEDING FROM THE LUNGS.

Symptoms.—Coughing up florid frothy blood; heat and

pain in the chest; irritation in the windpipe; saltish taste in the mouth.

Treatment.—Carefully avoid heat and every kind of exertion, with every cause of agitation. Cool acidulated drinks; sprinkling the genitals, feet, and legs, with cold water.

A table-spoonful of fine salt, repeated if necessary.

Sugar of lead one grain, with one grain of opium every six hours, is a powerful remedy in bleeding; oil to keep the bowels loose at the same time.

Tinc. foxglove, with laudanum, 24 drops three times a-day. To prevent a return, small bleedings at the arm, if there is a sharpness of the pulse.

Sailing, swinging, riding in an easy carriage, gentle motion on horseback, are the best kinds of exercise.—See *American Remedies*.

BLEEDING FROM THE STOMACH.

In this disease the blood is vomited up, of a dark colour. A free use of cooling purgative medicines.

NOTE.—The bleedings which occur in Malignant Quinsy, Scarlet Fever, and Typhus, are only symptoms of those diseases, and opium with cordials are proper.

BLOOD LETTING.*

IN whatever part of the body bleeding is to be practised, it is necessary to make pressure on the vein, betwixt the

*In preparing the first edition of this work, we said nothing of the manner of performing this operation, then deeming it inexpe-

place where the opening is to be made and the heart. Thus the return of the blood through the vessel is prevented; consequently it swells, becomes conspicuous, and bleeds freely, which it would not do if the blood could readily pass on towards the heart.

In bleeding in the arm, a fillet or garter is to be tied with moderate tightness round the arm above the elbow. In doing this, we should be careful sufficiently to intercept the flowing of the blood through the veins, without materially affecting the pulsation of the artery at the wrist.

Before cording the arm, however, the operator should carefully press upon the place designated for the orifice, and ascertain that no artery lies underneath, which might be wounded.

In general, a vein should be selected which does not roll easily under the finger. The operator should always fix the vein as much as he can, by placing the thumb of the left hand below the place where he intends to introduce the lancet.

Persons who bleed but seldom, had better use a German or spring lancet; but when a common lancet is to be used, it should be pushed into the vein in an oblique direction, and, when its point is felt, or seen to be a little entered within the cavity of the vessel, it is not to be introduced further, but the opening rendered sufficiently large by carrying the instrument obliquely upward and forward, by which movement it is also brought out of the part again.

The opening being made, the patient is to support his

dient to put a lancet into common hands. Yet when we consider that lancets are usually deposited in medicine chests, and that no body would be likely to assume the responsibility incident to this operation, when it is possible to obtain a decent bleeder, we have concluded to insert this article.

arm in a convenient position for allowing the blood to flow into a basin, by taking hold of a walking-stick or pummel of a chair. The running of the blood may be facilitated by opening and shutting the hand frequently, and with some force.

The due quantity of blood having been drawn, the ligature is to be removed gently, and not too suddenly, lest the patient faint. Should the bleeding not cease spontaneously, the operator should place his thumb upon the vein below the orifice. The arm in this state is to be washed with a sponge or cloth, and water, and when dry, the edges of the wound are to be placed in contact, a little lint and a compress laid on, and a bandage applied, so that the several turns shall cross each other over the compress.—See article *Bandage*.

INTRODUCTION TO MEDICINE.

IN prescribing a medicine, even the best calculated to fulfil the object intended, it is necessary to consider the age, sex, temperament and habits of the patient, before the dose can be properly apportioned; and as far as the medicine itself is regarded, the most convenient and agreeable form of exhibiting, whether it should be given alone or combined with other ingredients; and how far these are likely to impede, modify, or facilitate its operation. An attention to these circumstances is absolutely requisite to prevent the errors which too frequently occur in forming a prescription.

Circumstances connected with the state of the patient.
Age.—Here it must be observed, that the doses of medicine mentioned in this work (with some exceptions pointed out in their place, are those adapted for an adult; but, as in the two extremes of life, childhood and old age, the body is weaker, and in early youth more susceptible of all the impressions, these quantities cannot be administered with safety in every case; and hence the judgment of the prescriber must be exercised. *See a table of doses reduced, &c., under article weights and measures.*

Sex.—Although some women possess as much bodily strength and vigour of constitution as the majority of men; yet, the general greater delicacy and sensibility of the female frame, at every period of life, require not only caution in apportioning the doses of active medicine, which should be less than those ordered for men of the same age;

but, the medicines themselves should be such as are likely to fulfil the indications, without much violence. The state of the uterine system likewise must not be overlooked in prescribing for a female. Thus the employment of aloetic and drastic purgatives, bark, sulphuric acid, and astringents, should be suspended during the period.

Temperament.—It is undoubtedly true that persons of different temperaments or original conformations of body are differently affected by the operations of medicines. Stimulants more readily affect those of a sanguine temperament than those of a phlegmatic; and, therefore, smaller doses are required. In the phlegmatic, also, the bowels are generally torpid, and require both a description of purgatives and such doses, as would endanger an irritable and delicate constitution. Habits, have considerable influence in modifying the operation of medicines. Persons addicted to the use of spirit, narcotics, and other stimulants, are less easily excited both by medicinal stimulants and narcotics. Persons in the daily habit of taking purgatives, must take a different article to produce much effect upon the bowels. In the employment of medicines, also, which require to be long continued, the beneficial effect is soon lost, if the doses be not increased.

Of the form and composition of prescriptions.—In every prescription, simplicity should be kept in view, and when medicine will answer the intention of the prescriber, it ought to be preferred. The nauseous taste, however, and the other qualities of the great majority of drugs, require the addition of others to modify their taste, or action; but, although medicines are more generally prescribed in a compound form, yet the practice of accumulating a great variety of ingredients in one prescription should be avoided.

Medicines exhibited in a fluid form operate sooner, and

with more certainty, than in a solid state; but in choosing the vehicle or solvent, the taste of the patient ought not to be overlooked. Thus, for those to whom peppermint-water is not disagreeable, the nauseous taste of Epsom salts is more completely concealed by that vehicle than any other; if bark in powder be ordered, milk effectually covers its taste, provided the dose be taken the moment it is mixed; and if aloes, the most nauseous article of the materia medica, be prescribed in a fluid form, a solution of extract of liquorice renders it by no means unpalatable. Medicines, which when given alone, produce griping, require the addition of aromatics to correct that quality, and when they operate with violence, mucilages, or opiates are necessary to moderate their action. In prescribing purgatives, it is also necessary to consider the particular part of the alimentary canal on which they more immediately act. Thus, rhubarb acts chiefly on the upper part of the bowels, aloes on the lower, and calomel and jalap on the middle, or larger intestines. Another reason for ordering medicines in a compound form is the necessity of producing two or more effects at one time. Thus the same dose may be required, in a case of colic for example, to allay pain and to open the bowels; or, in fever, to determine to the skin, to allay irritation and produce sleep. But in combining medicines, care must be taken not to bring together incompatibles, or substances that decompose each other, or chemically combine and consequently alter the nature of the mixture, or render it inert; unless the resulting compound be the remedy on which the prescriber relies. Thus acid and alkalis are incompatible, unless the neutral salt they produce be the remedy required; and astringent vegetable infusions and decoctions destroy the emetic and diaphoretic property of tartar emetic.

EMETICS.

For adults, a scruple of ipecac, or an ounce of ipecac wine. For children, from four to ten grains of ipecac, or from a tea to a table spoonful of ipecac wine, according to the age. Antimonials should not be given but by medical prescription.

LAXATIVES.

For adults, a table-spoonful of castor-oil taken alone or mixed with brandy, lemon juice syrup, or the thin part of marmalade, an ounce or an ounce and an half of glaub. or Rochelle salts. Jalap from a scruple to a drachm, with a little ginger, or six or eight grains of calomel rubbed up with loaf sugar. Or No. 27. Or magnesia or cream tartar.

For children, rhubarb and magnesia, or senna tea, from a tea to a desert-spoonful of castor-oil; from a quarter of a grain to six grains of calomel, according to the age, should be given in jelly or syrup of preserves.

OPIATES.

For adults, a grain of opium, or twenty-five drops of laudanum; but in severe pain or lock-jaw, the dose of laudanum may be very much increased or repeated. Extract of henbane (*Hyosciamus*,) in double the quantity of opium.—See *American Remedies*; poppy, lettuce, and henbane.

SWEATING MEDICINES.

See *American Remedies*. Thoroughwort, lemon baum, cat-nip, Virginia snake-root, Queen of the meadows, everlasting.

CORDIALS.

Wine, spirit, No. 13, 14, laudanum, wine whey, mustard whey.—See *American Remedies: motherwort, prickly-ash, sanicle.*

CLYSTERS.

A pint of gruel or broth, to which may be added a spoonful of common salt. When there is tenderness of the bowels or in the parts adjacent, infusions of tansy, or roots of motherwort may be used. Opiates are administered in gruel or starch, but the dose of opium should be double the quantity taken by the mouth.—See *American Remedies: hops, motherwort, masterwort, American senna, hard-hack.*

DRINKS.

Barley-water, toast-water, oat-meal gruel, rice gruel, ginger wine and water, apple tea, lemonade, tamarind beverage.—See *American Remedies: baum, lemon baum, catnip, spice-bush, sassafras, spearmint.*

SICK DIET.

Light boiled rice, stewed apples, prunes or gooseberries, soft boiled eggs, eggs beat up in sugar, arrow-root, bread-water, calves-feet jelly, chicken broth, beef-tea, spinage, asparagus, cauli-flower, turnip, &c.

FAMILY DISPENSATORY.

UNDER this head will be found what is conceived to be a *choice of remedies*. The limits of the work would not admit of a great variety of preparations; yet enough are to be found here, including those frequently referred to in the body of the work. A few things, well understood and well improved, are better than a thousand, of which we have but half-knowledge.

WEIGHTS AND MEASURES.

Apothecaries' Weights and Wine Measures are used in this Work.

WEIGHTS.

Twenty grains	make	a scruple.
Three scruples . . .	“ . . .	a drachm.
Eight drachms . . .	“ . . .	an ounce.
Twelve ounces . . .	“ . . .	one pound.

The grains the same as in money-scales, from which the other weights may be calculated: as, 24 grains make a pennyweight, &c.

NOTE.—Apothecaries in this country do not distinguish between the Grocer's or Avoirdupois pound and their own.

MEASURES.

Eight drachms	make	one ounce.
Twelve ounces . . .	“ . . .	one pint.
Eight pints . . .	“ . . .	one gallon.

A table-spoonful is supposed to be equal to half an ounce, and a tea-spoonful to seventy drops. A drop will contain a quantity proportioned to the size of the mouth

of the vial from which it falls. A common ounce-vial should be a medium size.

The doses mentioned are for adults, except when otherwise particularized.

DOSES REDUCED FOR PERSONS UNDER 21 YEARS OF AGE.

For 14 years,	. . . . .	Two-thirds.
“ 7 do.	. . . . .	One-half.
“ 5 do.	. . . . .	One-third.
“ 3 do.	. . . . .	One-fourth.
“ 28 months,	. . . . .	One-fifth.
“ 14 do.	. . . . .	One-eighth.
“ 7 do.	. . . . .	One-twelfth.
“ 2 do.	. . . . .	One-fifteenth.
“ 1 do.	. . . . .	One-twentieth.
Under one month,	. . . . .	One-twenty-fourth.

Laudanum and other active fluids should not be given to young children after there is a cloud in them, as the strength is then uncertain; the top of the fluid is then weaker and the bottom stronger, as the substance has fallen to the bottom.

RECIPES;

OR,

APOTHECARIES' FORMS OF MEDICINES.

NOTE.—Recipes to the number of twenty-six, referred to through the previous pages of the work, are here numerically arranged; to which several more are added, that will be found valuable for various diseases.

- R. No. 1. Sugar of lead, one drachm.
 Soft water, half a pint.
 Vinegar and spirit, half a gill each. *Mix.*

- R. No. 2. Sal ammoniac, half an ounce.
Spirit and vinegar, a pint each. *Mix.*
- R. No. 3. Spirit of hartshorn, one part.
Sweet oil, or fresh butter, two parts. *Mix,*
and shake in a vial: *volatile liniment.*
- R. No. 4. Powder of ipecac, 15 grains.
Tartar emetic, one grain. *Mix.* Take in
warm water or in molasses.
- R. No. 5. Calomel, 8 grains.
Jalap, 15 do. *Mix.*
- R. No. 6. Peruvian bark, 1 oz.
Cloves, 1-2 oz.
Boiling water, 1 pint—poured on the bark,
strained while warm, stirred when taken.
- R. No. 7. White vitriol, 3 grains.
Extract gentian, 1 drachm. *Mix.*
- R. No. 8. Opium and ipecac, 10 grains of each.
Camphor, 20 grains. *Mix*—grind into fine
powder; divide into ten parts. Half,
or the whole of one may be taken at
once.
- R. No. 9. Volatile salt of hartshorn, 10 grains.
Opium and camphor, each 10 do.
Chalk, 30 grs. *Mix.*—grind to fine powder;
divide into ten parts: take one every four
hours, more or less, according to symptoms.
- R. No. 10. Equal parts of laudanum.
Spirits of hartshorn, and
Camphorated spirit. *Mix.* A tea-spoonful,
more or less, as urgency may require.

- R. No. 11. No. 6, a wine-glass.
Tincture of bark, a tea-spoonful.
Muriatic acid, 5 drops. *Mix* for a draught.
To be repeated every four or five hours.
- R. No. 12. Calomel, 4 grains.
Jalap, 15 grs. *Mix*.—Repeat every four or six hours, till effect is produced. Assist the application by rubbing in a half or full drachm of mercurial ointment every four hours, until the mouth becomes affected.
- R. No. 13. Calomel, 2 grains.
Opium, half a grain. Make a pill—to be taken every four hours.
- R. No. 14. Sal. tart. or pearlash, half a drachm.
Vinegar, enough to destroy taste of pearlash.
Cinnamon tea, a gill.
Loaf-sugar, a tea-spoonful. *Mix*, and take half the above quantity every half hour or hour, till it allays sickness, produces moisture on the skin, or moves the bowels.
- R. No. 15. Calomel, 6 grains.
Rhubarb, 12 grains. *Mix*—taken in molasses, and repeated, if necessary.
- R. No. 16. Ipecac, 15 grains.
Thoroughwort tea, 12 tea-spoonfuls. *Mix*.
- R. No. 17. Gum ammoniac, the size of a nutmeg.
Loaf-sugar, twice as much. *Mix*—grind to fine powder; add a tea-cup full boiling water, stirring. After it settles, a spoonful every half hour, till patient raises freely; assist by warm tea; tinct. blood-root.

- R. No. 18. White vitriol, one drachm.
Soft water, one pint. *Mix.*
- R. No. 19. Nitre, 10 grains.
No. 14, 2 tea-spoonfuls.
Sage tea, a gill.
Loaf-sugar, a tea-spoonful. *Mix*—to be
taken every two or four hours.
- R. No. 20. Powder of bark, a table-spoonful.
Boiling water, a tea-cupful.
Honey, two tea-spoonfuls. Strain while
warm; add muriatic acid, to make it sour.
- R. No. 21. Yellow wax, white resin, frankincense, of
each 1-4 lb. *Mix.* Melt over a gentle
fire; add 1 lb. lard, and strain warm: the
best dressing for all healthy ulcers.
- R. No. 22. Rhubarb, 1-4 oz.
Iron filings, 1-2 oz.
Loaf-sugar, 1 oz.—grind to a powder: take
daily at 11 o'clock, so as not to purge.
- R. No. 23. White vitriol, 1-2 drachm.
Sugar of lead, 11 grains.
Soft water, 3 gills.
- R. No. 24. Myrrh, in powder, 2 drachms.
Sulphate of iron, 1 scruple.
Salt of tartar, 1 drachm.
Extract of gentian, half a drachm—simple
sirup to pill; make into 70 pills.
- R. No. 25. Opium, in powder, 12 grains.
Ipecac, do. 15 do.
Camphor, 20 do. *Mix*—make
15 pills with balsam capivi; take one
every six hours, and oftener, if necessary.

- R. No. 26. Nitre, 2 grains.
 Aloes, 4 grains.
 Gamboge, 8 grs.—Make 6 pills; take one
 every two hours, till they operate freely.

PILLS.

R. No. 27. *Laxative Pills.*

Take of powder of cinnamon, 10 grains.
 Socotorine aloes in fine powder, and
 Castile soap, of each one drachm.

Beat them together in a stone or iron mortar, adding one
 or two drops of sirup or molasses. Make into 32 pills.
 Dose for grown persons, two at bed time.

R. No. 28. *Pills of Aloes and Fetida.*

Take of Socotorine aloes,
 Aassa-fetida, and
 Soap, equal parts.
 Pill with gum Arabic.

These pills are good in indigestion, attended with costive-
 ness, and wind in the stomach and bowels.

Purging pills, see No. 26.

R. No. 29. *Hull's colic Pills.*

Take of cinnamon, cloves, mace, myrrh, saffron, ginger,
 Castile soap, of each one drachm, socotorine aloes one ounce,
 and essence of peppermint sufficient to moisten it.

Make common sized pills; take them till they operate.

POWDERS.

R. No. 30. *Picra.*

Take of Socotorine aloes, 1 pound,
 White canella, 3 ounces,
 Separately powdered, and then mixed. Good purga-

tive. Dose between a scruple and drachm. May be taken in sirup or molasses.

R. No. 31. *Powder of the Gums.*

Take of Tragacanth, in powder,
Gum Arabic,
Starch, of each 1 1-2 ounce,
Loaf sugar, 3 ounces.

Grind to a powder.

Good in coughs, hectic, stoppage of urine, old fluxes, &c. Dose one or more tea-spoonfuls.

R. No. 32. *Sweating Powder, or Dover's Powder.*

Take of Ipecac in powder,
Opium, (dry,) of each one part,
Sulphate of potash, eight parts.

Grind them together to a fine powder. Dose from 5 to 20 grains, as the stomach and strength will bear it; lessen the dose if it threatens to puke. Avoid much drinking after it. This is a powerful sweating remedy in fevers, rheumatism, and dropsies, excellent in colds and suppressed perspiration. In general this is the best opiate, as the ipecac lessens the danger of a habitual use of opium,—a thing to be avoided next to habits of intoxication.

PLASTERS.

Blistering plaster should be prepared by an apothecary.

R. No. 33. *Common Plaster, or Diachylon.*

Take of Litharge, one part,
Olive oil, two parts.

Boil them, adding warm water to prevent its burning,

and constantly stirring the mixture till the oil and litharge be formed into a plaster. All this should be done with caution; the water added should be neither very hot nor very cold. It is better to remove the kettle from the fire while the warm water is added.

This is a common application to slight flesh wounds; they keep the parts soft and warm, and defend them from the air, which is all that can be expected from any plaster.

R. No. 34. *Sticking Plaster, or Adhesive Plaster.*

Take of common plaster, five parts,

White resin, one part.

Melt them together, and make a plaster. This is the plaster used in dressing recent wounds; it supplies the place of the surgeon's needle and stitch, and this from a simple cut finger, to an amputated thigh. See its use under the head of *Ulcers*. This makes the best strengthening plaster. Rub opium into it, and you have the anodyne plaster.

SALVES AND OINTMENTS.

Basilicon. See No. 5.

R. No. 35. *Simple Ointment.*

Take of Olive (sweet) oil, five parts,

White wax, two parts. Melt together.

May be used for softening the skin, and healing chaps and excoriations.

R. No. 36. *Ointment of White Hellebore.*

Take of White hellebore, one ounce,

Hog's lard, four ounces,

Essence of lemon, half a scruple. Mix.

Used to cure eruptions on the skin, ringworms, and the like.

Ointments of mercury are difficult of preparation, and apt to change by keeping; for which reason they should be purchased of an apothecary when wanted.

R. No. 37. *Tar Ointment.*

Take of tar and mutton suet, of each half a pound. Melt them together and strain.

Successfully employed in some eruptions of the skin, especially scald head.

R. No. 38. *Sulphur Ointment.*

Take of Hog's lard, four parts,
Flowers of sulphur, one part.

To each pound of this ointment may be added,
Volatile oil of lemons, or,
Oil of lavender, 1-2 drachm.

A certain remedy for the cure of itch. A pound serves for four unctions. The patient should be rubbed four nights in succession, each time one fourth part of the body.

For other ointments, see *American Remedies*, as stramonium, (thorn-apple) wild indigo, elder, &c.

TINCTURES, OR ELIXIRS.

See *Tinctures*, under *American Remedies*.

R. No. 39. *Elixir Proprietatus, Elix. Pro. or Tincture of Myrrh and Aloes.*

Take of Myrrh in powder, two ounces,
Alcohol, one pound and an half,
Water, half a pound. Mix the alcohol with

the water, and add the myrrh. Steep four days, and then add,

Socotorine aloes, an ounce and a half.

Saffron, an ounce.

Steep three days, and pour off the clear liquor from the sediment.

Laxative and stomachic.

R. No. 40. *Tincture of Assa Fetida.*

Take of Assa fetida, four ounces.

Alcohol, two pounds and a half.

Digest seven days, and strain through paper.

Dose from ten to fifty drops.

R. No. 41. *Elixir Salutis, or Elixir of Health, Tincture of Senna.*

Take of Senna leaves, two ounces.

Jalap, one ounce.

Coriander seeds, half an ounce.

High spirit, three pounds and a half.

Digest seven days, and to the strained liquor add four ounces of loaf sugar.

Useful in bowel complaints, colic, especially in intemperate persons.

R. No. 42. *Tincture of Bark, or Huxham's Tincture.*

Take of Peruvian bark in powder, two ounces.

Orange peel dried, half an ounce.

Virginia snakeroot bruised, three drachms.

Saffron, one drachm.

Proof spirit, (rum) two pounds.

Steep fourteen days, and strain.

Good preparation of the bark taken as a bitter, a tea-

spoonful to a glass of wine before eating; useful in low fevers.

R. No. 43. *Tincture of Guaiac.*

Take of Gum Guaiac, one pound.

Alcohol, two pounds and a half.

Steep for seven days, and strain.

A powerful stimulating, sweating remedy in rheumatic and old gouty affections.

Dose, a tea-spoonful in spirit.

R. No. 44. *Laudanum.*

Take of Opium, two ounces.

Diluted Alcohol, two pounds.

Digest seven days.

This is an elegant opiate, but separates by keeping.

R. No. 45. *Elixir Paragoric.*

Take of Purified opium,

Flowers of Benzoin, of each one drachm.

Camphor, two scruples.

Oil of anise, one drachm.

Proof spirit, two pints.

Digest for ten days, and strain.

This has been called Elixir Asthmatic, relieves coughs, and the bowel complaints of children.

R. 56. *Bitter Tincture of Rhubarb.*

Take of Rhubarb, two ounces.

Gentian root, half an ounce.

Diluted alcohol, two pounds and a half.

Digest seven days, and strain through paper.

Good in indigestion, debility of the bowels, diarrhœas colic, and other similar complaints.

R. 47. *Tincture of Balsam Tolu.*

Take of Balsam tolu, one ounce.

Alcohol, one pound.

Digest till the balsam be dissolved, then strain through paper, mixed with simple sirup of sugar; it forms an elegant preparation called Sirup of Balsam; this with Elixir Paragoric in equal parts, is an excellent remedy for night coughs, and in consumption.

SIRUPS.

R. No. 48. *Simple sirup.*

Take of Double refined sugar, fifteen parts.

Water eight parts.

Let the sugar be dissolved by a gentle heat, and boiled a little so as to form a sirup.

See Tincture of Balsam.

R. No. 49. *Sirup of Ginger.*

Take of Beat ginger, three ounces.

Boiling water, four pounds.

Double refined sugar, seven and an half pounds.

Steep the ginger in the water, in a close vessel, for twenty-four hours, then to the strained liquor add the beat sugar, so as to make a sirup. This is an agreeable and moderately aromatic sirup; impregnated with the flavour and the virtues of the ginger.

R. No. 50. *Sirup of Lemons.*

Take of juice of lemons, (suffered to stand till the sediment falls, then strain off the liquor,) three parts. Double refined sugar, five parts. Dissolve the sugar in the juice till it forms a sirup.

In the same way are prepared,
 Sirup of Mulberry juice,
 Sirup of Raspberry juice,
 Sirup of Black-currant juice.

All these are pleasant, cooling sirups; quenching thirst; and may be used in gargles for sore mouths.

LINIMENTS.

VOLATILE LINIMENT. See No. 3.

R. No. 51. *Liniment of Oil and Lime.*

Take of Linseed oil, lime water, of each equal parts, mix them.

This liniment is extremely useful in burns and scalds; efficacious in preventing inflammation after such accidents.

R. 52. *Camphorated Oil.*

Take of Olive oil, two ounces.

Camphor, half an ounce.

Dissolve the camphor in the oil.

Good applied to local pains, to glandular swellings, and to the bowels in Tympany.

R. No. 53. *Opodeldoc.*

Take the best of hard soap, two ounces; camphor, one ounce; very strong spirit, one pint: mix the soap with the spirit, and let them stand in a moderate heat until the soap is dissolved, occasionally shaking the vial; then add the camphor, and continue to shake the vessel frequently, until the whole is dissolved. Useful in sprains, bruises, and in rheumatic pains. Good to disperse swellings, tumours, and the like.

SUPPLEMENT TO FORMS OF MEDICINES.

NOTE.—The following recipes may be found convenient “for a change” in the several complaints mentioned in them.

POWDERS.

Cathartics.

- R. Calomel, 3 grains.
 Jalap in powder,
 L. Sugar, of each 10 grains. Mix.

May be taken morning or evening.
 In bilious fevers, and slimy and obstructed bowels.

- R. Cream tartar, 15 grains.
 Gamboge,
 L. Sugar, of each 5 grains. Mix.

May be taken in the morning. In all dropsical cases.

Diuretic.

- R. Cream tartar, 1 drachm.
 Powdered squills, 2 grains.
 “ ginger, 4 do. Mix.

May be taken every four hours. In dropsy.

Tonic.

- R. Simaruba bark in powder, 1 scruple.
 Opium, do. 1-4 grain. Mix.

May be taken every three hours. In dysentery, after the bowels have been cleared.

PILLS.

Opiate.

R. Opium, 1 grain.

Made into a pill. To procure sleep in ordinary cases.

Antispasmodic.

R. Opium, 1-2 grain.

Castor, 6 grains.

Foxglove, 1 grain.

Sirup, q. s.

Make into a pill, and repeat it three times a-day.

Cathartic.

R. Scammony in powder, 4 grains.

Extract of dandelion, 16 do.

Make six pills; take three, morning and evening. In hypochondriasis and chronic liver complaints.

R. Calomel, 3 grains.

Jalap in powder, 9 grains.

Mucilage of Gum Arabic, q. s.

Make into three pills, to be taken at night.

To empty the bowels in bilious affections.

R. Rhubarb in powder, 1 1-2 drachms.

Soap, (Castile) 15 grains.

Moisten with water, and make 24 pills; take as occasion requires. In costiveness, arising from deficiency of bile in the intestinal canal.

Diuretic.

- R. Foxglove in powder, 12 grains.
 Calomel, 4 do.
 Extract of dandelion, q. s.

Make 12 pills, to be taken every eighth hour.—In dropsy of the chest, with obstructions.

Diaphoretic, (sweating.)

- R. Tartar emetic, 2 grains.
 Opium, 6 do.
 Camphor, 36 do.
 Alcohol, 3 drops.

Make 12 pills; take one every four hours. In fevers.

Expectorant, (raising from the lungs.)

- Squills in powder, 30 grains.
 Gum ammoniac, 1 1-2 drachms.
 Extract of hemlock, 30 grains.

Make 30 pills. Take one or two every six hours.
 In asthma and chronic catarrh.

Tonic and Purgative combined.

- Ammoniated iron, 1 drachm.
 Extract of aloes.
 Extract of gentian, of each 1-2 do.

Make into thirty pills; take two or three each day.
 In indigestion, hysterics, scrofula, and in obstructions.

AMERICAN REMEDIES.

ADVERTISEMENT.

THE reader, who may be skilled in botany, is requested to notice, that the first term applied to the subsequent plants, is always the name of the lowest division above species, that has received a name, whether this division happens to be genus or sub-genus; and that the writer does not, by this selection of appellations, intend by any means to go into the question, whether the Linnæan or the Tournefortian genera are to be preferred; whether sub-genera are to be elevated to the rank of independent genera, or whether they are still to remain in subordination, and as tributaries.

It is to be observed, likewise, that the writer of these sketches thinks it but justice to acknowledge, that for a considerable proportion of the unequivocally ascertained facts respecting those articles of which there has never, heretofore, been any published account, he is indebted to ELI IVES, M. D., of New Haven, Professor of Botany and Materia Medica in Yale College, whose pupil he was, some years since.

INTRODUCTION TO AMERICAN REMEDIES.

COLLECTION AND PRESERVATION OF SIMPLES.

VEGETABLE matters, intended for medicine, should be collected from where they grow spontaneously: in general, from high and dry soils.

Roots should be gathered before the plant shoots, or after the sap has returned in the autumn. They should be dried without washing; after drying, they should be cleaned with a brush, and freed from worm-eaten and decayed parts, with a knife. Such as lose their virtue by drying, should be preserved in dry sand.

Herbs and leaves are to be gathered when they are in full vigour; aromatics, when the flower-buds are opening. They are usually tied in bunches, and hung up under a roof; if they are juicy, they may be dried on a seive, near the stove.

Sprouts are collected before the buds open.

Stalks are gathered in autumn.

Barks, in spring and autumn. Barks should be taken from young trees, and freed from all impurities.

Woods should be gathered in spring and autumn, and from trees not very young.

Flowers are collected after the dew is off, before noon.

Seeds and fruits are to be gathered when ripe, but before they fall spontaneously. This is a rule with exceptions.

PREPARATIONS.

INFUSION.

Upon a handful of the article, pour on boiling water till a coffee-bowl may be filled of the strained liquor; it should stand in a cov-

ered vessel fifteen or twenty minutes. Dose, a full draught, unless differently prescribed.

We use infusion for those articles which have virtues liable to be driven off by heat in continued boiling.

DECOCTION.

Proceed as for Infusion, but continue the boiling gently, for a sufficient length of time to obtain the wished for product.

EXTRACTS.

To any quantity of the article, pour on a large quantity of water; boil away one third or one half; strain through thick cloth; put the strained liquor into a small kettle; set it into a large one with water previously put in it. This precaution will prevent the burning of the extract, which totally ruins it.

Evaporate to the consistence of honey or wax.

NOTE.—When extracts are prepared from poisonous plants, as hemlock, henbane, lettuce, stramonium, and the like; the fresh plant, as the flowers fall off, should be gathered, cut up and bruised in water in a wooden mortar, then the fluid pressed out of them through a thick cloth. The liquor to be treated as the strained liquor for the common extract.

AMERICAN REMEDIES.

ABIES BALSAMIFERA. *Michaux.*

Balsam of Canada, Balsam of Fir.

A LIQUID resin, or turpentine exudes from this tree, which, taken freely, proves laxative, increases the discharge of urine, assists in raising phlegm from the lungs, and in females promotes the monthly discharge. In smaller doses, and continued for some time, it strengthens the stomach and bowels, and promotes healthy action in the lungs, liver, and urinary organs. In reference to these effects, it may be given in cases of habitual costiveness, in piles, in colic, in moderate cases of jaundice, in chronic coughs, in old pains of the breast and side, in ulcerated or weakened states of the womb, and urinary organs, in gravel, whites, gleet, and in chronic rheumatism. By way of injection, it is very celebrated in colic; and as an external application, it is much used in eruption of the skin, in vitiated ulcers, in burns, in punctured or contused wounds, to promote suppuration, and to recently cut wounds, to promote adhesive inflammation. It should not be used where there is active inflammation. In the small quantities, in which it is commonly employed, by common people, nothing can be more insignificant; and if used freely, it can be properly adapted to the symptoms only by a physician. Improperly used it produces bloody stools, bloody urine, &c., and aggravates the symptoms which it was intended to relieve.

ABIES CANADENSIS. *Machaux.**Hemlock-spruce, Canada-Fir.*

This affords a liquid resin, or turpentine, which has all the properties of Balsam of Fir, and which may be used in the same way, and in the same cases. From this tree, as well as from the *Abies balsamifera*, an essential oil may be obtained, which has all the properties of common oil of turpentine. This oil dissolved in spirit of wine is in much popular repute, under the name of essence of Hemlock. Strong tea, made by boiling the young branches, is much used as a sweating drink, at the outset of colds, and low-fevers, for the purpose of breaking them up, and frequently with success.

ACHILLEA MILLEFOLIUM. *Linne.**Yarrow, Milfoil.*

This herb is bitter and spicy to the taste. The expressed juice is strengthening, and carminative. It is useful in indigestion, air in the stomach and bowels, hysterical and spasmodic complaints, &c. The recent plant is much better than the dry. The fresh roots have the properties of the *contrayerva* of the shops.

ACHYRANTHES-REPENS. *Elliott.**Forty-knot.*

The whole plant made into a strong tea by boiling, sensibly increases the urinary discharge. In suppression of urine, or difficulty of evacuating it, it is commonly a successful remedy. It must be drank freely, whilst it is warm.

ACORUS CALAMUS. *Linne.**Sweet-Flag, Myrtle-Flag, Sweet-Calamus, Sweet Myrtle-grass.*

The root has a strong but grateful aromatic-smell, and a

pungent bitterish taste. Its flavour is much improved by drying. For medicinal purposes this article is not inferior to nutmeg or cinnamon. It may be combined with strengthening remedies to hasten or increase their effect, or it may be used by itself, in cramps of the stomach, &c. Withering informs us that it is capable of curing some cases of fever and ague. The juice obtained by expression of the recent root, after being reduced to a pulp in a mortar, is said to be a mild emetic. The dry powder snuffed into the nose produces sneezing.

ACTÆA ALBA. *Willdenow.*

White-Cohosh, Coral-and-Pearl.

The root tastes spicy and bitter, and has stronger sensible properties, when recent, than when dry. Made into a strong tea, and drank freely, it produces perspiration, and relieves restlessness. It is useful in chronic-rheumatism, low-fevers, hysterics, &c. It should not be given where there is inflammatory, fever, or active inflammation.

ACTÆA RUBRA. *Willdenow.*

Herb-Christopher, Red-Cohosh, Red-bane-berry.

This has the properties of White-Cohosh, and may be used in the same manner, except that it seems to be rather more powerful.

AGAVE VIRGINICA. *Linne.*

Thick-leaved-Snake-root, Rattle-snake's-master.

The root of this article is bitter. Steeped in spirit, it is much used in some places, as a remedy for colics, from air in the bowels. It is an article deserving of notice.

ALETRIS ALBA. *Michaux.*

Star-grass, Star-root, Colic-root, Devil's-bit, Unicorn.

The root is a smart bitter, and strengthening medicine. When taken in sufficient quantity, it purges. It has been used with benefit in agues, accompanied with dropsical swellings, in indigestion accompanied with nervous symptoms and sickness, and in hysteric and flatulent colic. It may be taken in the form of strong tea, made either by steeping or boiling, or in dry powder, or occasionally in spirit.

ALETRIS AUREA. *Michaux.*

Star-wort, Devil's-bit, Shaw-root.

The root of this species possesses the same properties as that of *A. alba*. Both are sometimes steeped in vinegar for medicinal purposes, but this preparation cannot be as good as a similar one in water or spirit.

ALNUS SERRULATA. *Willdenow.*

Hazle-Alder, Candle-Alder.

The bark tastes astringent, and bears considerable resemblance in sensible properties, to Peruvian bark. It is a good strengthening medicine, and may be used in cases of indigestion, agues, the secondary stages of bowel complaints or laxes, and in low fevers. It may be given in the form of fine powder, or strong tea, made either by steeping, or boiling, or it may be put into spirit.

AMARYLLIS ATAMASCO. *Linne.*

Atamasco-Lily, Stagger-grass.

This article has the popular reputation of being poison

ous, and of producing the disease in calves, which is called staggers. This is rather questionable, as the disease appears where the plant is never found. It is mentioned here with a view to turn the public attention to the subject, because if it possesses what are commonly called poisonous qualities, it is no doubt capable of curing diseases.

AMBROSIA ELATIOR. *Linne.*

Bitter-weed, Roman-Worm-wood, Rag-weed, Iron-weed.

This whole plant has a bitter, disagreeable taste, but in the form of strong tea, it is useful in nervous and hysterical cases, and in after pains. It promotes perspiration, and is composing and strengthening. It should be drank freely.

ANDROMEDA NITIDA. *Walter.*

Male-Whortleberry, Sour-wood, Sorrel-tree.

The leaves are agreeably acid to the taste. A strong tea made by boiling, cures the itch, and some other eruptions of the skin. It should be applied warm. It generally causes smarting. One application is frequently sufficient.

ANEMOIDES QUINQUEFOLIA. *Persoon.*

Wind-flower.

This plant is said to be acrid to the taste, and when externally applied to the skin, to be capable of producing redness, and blistering. This effect is said to be more speedy, less painful, and equally serviceable, as the effect of the Spanish-fly. The plant should be bruised before it is applied.

ANEMOIDES VIRGINIANA. *Persoon.*

Thimble-weed, Virginian Anemone, Wind-flower.

This plant has similar sensible and medicinal qualities to

Anemone memorosa, except that it is much more powerful, and may be used in the same way as is directed for that. It is likewise of use internally in suppressions of the monthly evacuation in women, when dependent upon weakness exclusively, in blindness from obscurities in that part of the eye called the cornea, in venereal pains, and tumours of the bones, and ulcers from rottenness, in indurated glands, in chronic-creeping eruptions, and in melancholy, and palsies. The distilled water and extract, are the only forms in which it is known to have been given. Half an ounce of the former, and five or six grains of the latter, two or three times in a day, is a customary dose. It generally produces some sickness and vomiting, some increased discharge of urine, a lax, and frequently some increased pain, in the seat of the local complaint, for which it is given. It should not be used, except by physicians.

ANGELICA ATROPUREA. *Linne.*

Purple Angelica.

The root of this plant is fragrant and spicy, and is useful in hysterics, cramps, air in the stomach, and a variety of such complaints. The powder made by grating the root, will be the most convenient form of giving it. Water does not extract its virtues.

ANGELICA LOBATA. *Walter.*

Angelica.

The root of this article has the same properties as Angelica atropurpurea, and may be used for the same purpose, and in the same manner.

ANGELICA TRIQUINATA. *Michaux.*

Wild Angelica.

This plant possesses medicinal properties, but of precisely

what nature is not entirely settled. Its powers have been said to be similar to the other species of *Angelica*, by some ; and by others it has been considered to be one of those virulent poisons analogous to *Cicuta maculata*. Till these disputes are settled, there should be the greatest caution in its use. On either hand it is probably a valuable medicine, but should not be meddled with by common people.

ANTHEMIS COTULA. *Linne.*

May-weed, Mathen, Stinking-Chamomile.

The whole of this plant has the same properties as Chamomile, except that it is much less agreeable. By different management, it may be made to give strength to the stomach, to promote perspiration, or to vomit. A cold tea made by steeping or boiling in water, or a preparation made in spirit, taken moderately, gives strength. A hot tea, drank strong and plentifully, promotes perspiration, and vomits. In some one of these ways, it is useful in hysterics, cramps, and colics, from air in the bowels, &c. A strong tea is likewise a good fomentation in external inflammations, and other cases where fomentations are proper, and makes an excellent injection. The bruised herb is frequently a good addition to a poultice. The American plant is probably a distinct species from the European. The latter has mild blistering properties, which the former is entirely destitute of.

APOCYNUM ANDROSEMIFOLIUM. *Linne.*

Dog's-bane, Indian Hemp, American Ipecac.

This plant is milky, and acrid to the taste. The bark of the root, in doses of thirty or forty grains, sometimes vomits, and has been recommended as a substitute for ipe-

cac. From its intense bitterness, however, and its trifling emetic powers, it is thought to promise more as a strengthening remedy. A strong tea, made by boiling the root, cures the itch, but sometimes takes off the skin from tender parts.

ARABIA HISPIDA. *Michaux.*

Wild-Elder, Bristly-Ash, Poison-Elder.

The root of this article is a good vomit.

ARALIA NUDICAULIS. *Linne.*

Sarsaparilla, Wild-Sarsaparilla.

This has been erroneously supposed by common people to be the same as the Sarsaparilla of the shops. The root is the only part used, and this seems to be much more powerful when recent, than when dry. A strong tea, made by boiling, promotes perspiration, cures some eruptions of the skin, is serviceable in chronic rheumatism, and is a good restorative, after a course of mercury. It may be advantageously combined with sassafras, mezereum, &c.

ARALIA RACEMOSA. *Linne.*

Spikenard, Hungary-root, Wild-Liquorice, Petty-Morrel, Life-of-man.

The fresh root is full of a juice which resembles turpentine in taste. It is better in this state than when dry. A strong tea made either by steeping or boiling, is useful in thrush and canker of the mouth, and in very mild cases of malignant sore throat. The recent root, bruised to a pulp in a mortar, makes a useful poultice for ill-conditioned sores.

ARALIA SPINOSA. *Linne.*

Angelica-tree, Tooth-ache-tree, Pigeon-wood, Shot-bush, Prickly-Ash, Hercules-club.

A strong tea made of the bark of the fresh root, both vomits and purges. It is perhaps a better vomit than any of our native plants. An extract, prepared by boiling the root in water, makes an excellent purge. Drying very much weakens its active properties. Given with a view to the above-mentioned effects, this medicine is efficacious in the bites of snakes and other venomous reptiles. In smaller doses it is useful in many eruptions of the skin, and in rheumatism, especially if connected with venereal complaints. The bark of the top, and the berries infused in spirit, relieve certain colics, and sometimes the tooth-ache. The medicine generally produces perspiration, but should not be given in fever, or in cases of local active inflammation.

ARBUTUS UVA-URSI. *Linne.*

Uva-Ursi, Bears' Whortleberry, Bear-berry, Bears'-grape.

The leaves are astringent, and moderately bitter to the taste. A strong tea made by boiling, is useful in gravel, ulcerated states of the urinary organs, weakness of the same parts, suppressions of urine, &c., and likewise in many hectic cases. It seems to produce its beneficial effects, by giving strength, operating as an astringent, and moderately increasing the urinary discharge.

ARCHYROCOMA AMERICANA. *Persoon.*

Everlasting, Life-everlasting, Sweet-Lavender-Cotton, Indian-posy, Cud-weed.

The smell of the flowers of this plant is peculiarly pleas-

ant and grateful. A tea made by steeping evidently promotes perspiration more than simple water, and the stomach will bear a great deal more of it, without inconvenience, than it will of water. Hence it is a useful drink in the early stages of fevers and colds.

ARCTIUM LAPPA. *Linne.*

Burdock, Clot-bur, Hur-bur.

The seeds, made into strong tea, and taken freely, powerfully promote perspiration, or if the patient is kept cool, the discharge by urine. Taken in this way, this article is useful in chronic rheumatism, the secondary symptoms of venereal complaints, and in many cases of eruptions of the skin. The roots possess the same properties. The recent wilted leaves are a good application to the feet when dry, in fever, to swelled bowels, and in a great variety of local pains.

ARISTOLOCHIA SERPENTARIA. *Linne.*

Virginia Snakeroot, Birthwort.

The root has a very pungent and spicy bitter taste. Taken in powder, in doses of twenty or thirty grains, or in the form of tea made by steeping, it promotes perspiration, and gives strength. It is useful in the secondary stages of all low fevers, and cases of mortification. It sometimes relieves cramps of the stomach. Boiling injures it very much. The tea, made as above directed, and very strong, is serviceable in the bites of snakes, and venomous reptiles. It must be drunk freely.

ARISTOLOCHIA SIPHO. *L'Heritier.*

Birth-wort, Snake-root.

The root has the same sensible and medicinal properties as *Aristolochia Serpentaria*, except that it is more bitter, and

less spicy to the taste, and more permanent in its effects. It may be prepared in the same manner, and given in much the same cases.

ARONIA ARBUTIFOLIA. *Persoon.*

Choke-berry.

The fruit tastes rough and astringent, and in the form of conserve, may be used in fevers and bowel complaints, to correct the state of the mouth. A strong tea made by boiling the bark of the root, has some popular reputation, for the relief of chronic rheumatism; but with what foundation is doubtful.

ARTEMISIA ABSINTHIUM. *Linne.*

Wormwood.

The expressed juice of the leaves of this article is a bitter strengthening medicine, which is sometimes used in moderate cases of indigestion, hypochondriasis, the slight jaundice in the spring season, and in cases of worms. A table-spoonful is a medium dose. It may be taken about four times a-day, at as nearly equal intervals as is convenient.

ARUM DRACONTIUM. *Linne.*

Green Dragon, Dragon-root.

The root of this plant has the same sensible properties as *Arum Triphyllum*. It may be prepared in the same way, and given in the same cases.

ARUM TRIPHYLLUM. *Linne.*

Wild-turnip, Indian-turnip, Dragon-root, Wake-robin.

The medicinal virtues of this root, reside altogether in

an acrid principle, which cannot be extracted, either by cold or hot water, by milk, by wine or spirit, or by vinegar or any other acid. It is entirely destroyed by age, and drying; and likewise by too much pounding. In order to use it in medicine, it must be reduced to a pulp in something oily, mucilaginous or saccharine, and suitably diluted, must be taken in this form. It is useful in old cases of asthma, chronic coughs, especially in old people, and in cases of accumulation of phlegm in the stomach and bowels. Bruised to a pulp, with lard, it is a good external application, in all those cases in which volatile liniment is prescribed by physicians.

ASARUM ARIFOLIUM. *Michaux.*

The root is said to have the same sensible and medicinal properties as *Asarum Canadense*. It may be prepared in the same way, and given in the same cases.

ASARUM CANADENSE. *Linne.*

Colts-foot, snakeroot, Wild-Ginger.

The root of this article has a bitterish, and very spicy taste, something resembling Virginia snakeroot, and ginger. A strong tea made by steeping, promotes perspiration, and strengthens the stomach. Its virtues are however best extracted by spirit. Boiling injures it. It is useful in the secondary stages of all low fevers, cramps of the stomach, and most nervous symptoms that are connected with weakness.

ASARUM VIRGINICUM. *Linne.*

The root has much the same properties as *Aristolochi Serpentaria*. It may be prepared in the same way and used in the same cases.

ASCLEPIAS ACUMINATA. *Pursh.*

The root of this species very closely resembles that of *Asclepias tuberosa*. It may be prepared in the same way, and used in the same cases. The recent root, as in all the other species, is more powerful than the dry.

ASCLEPIAS PULCHRA. *Willdenow.*

Water-silk-weed, Hairy-silk-weed, Lobelia.

The sensible properties of this root differ considerably from the most common species of this numerous family. Its taste is pungent, bearing some resemblance to tobacco. Taken in the form of strong tea, in doses of a wine-glass full, it promotes perspiration, increases the urinary discharge, assists to raise phlegm from the lungs, &c., and is a good restorative after a mercurial course. It is useful in chronic rheumatism, chronic coughs, asthmas, and catarrhal affections in general. It has sometimes done good in cases of gleet, and when taken in substance, brought away worms. It probably possesses the most medicinal efficacy of any of the American species of this genus. Its effects have been compared to Seneca snakeroot, or to hops and gūaicum in combination.

ASCLEPIAS SYRIACA. *Linne.*

Milk-weed, Silk-weed, Swallow-wort, Butterfly-weed.

This is the most common species of *Asclepias* in the United States, and the greatest proportion of the American milk-weeds resemble it in medicinal as well as sensible properties. A strong tea, made by boiling the root, promotes perspiration, but more especially the urinary discharge; and if taken freely, seldom fails of proving laxa-

tive. It has been used principally in dropsies, as an assistant to a customary course.

ASCLEPIAS TUBEROSA. *Linne.*

White-root, Flux-root, Pleurisy-root, Butterfly-weed, Harvest-flower, Wind-root.

A strong tea of the root of this plant, made either by boiling or steeping in water, is quite useful to promote perspiration. The powder of the root taken in substance, is a mild laxative, especially relieving those symptoms that proceed from air in the stomach. In mild inflammations of the lungs and liver, and in dysenteries, this article may frequently be made a useful auxiliary to a more energetic course, and it may sometimes be employed with advantage as a purgative for children. The taste of this root is first sweetish and mucilaginous, then somewhat bitter. As a laxative for children, it may be boiled in milk.

ATRIPLEX MUCRONATA. *Rafinesque.*

Jagged-Orache.

The fruit of this article contains a juice which, when inspissated, resembles the gamboge of the shops, both in sensible and medicinal qualities. In a dose from five to ten grains, it is said to operate as a powerful purgative, and is supposed to be especially suited to certain cases of asthma and dropsy.

BERBERIS CANADENSIS. *Pursh.*

Berberry, Pipperidge-bush.

The inner bark is a pretty pure bitter. It gives strength, and proves laxative. It is useful in torpor of the liver and bowels. The fruit is intensely acid, and is grateful and cooling in low fevers and fluxes.

BETULA LENTA. *Linne.*

Black-Birch, Sweet-Birch, Cherry-Birch, Mountain-Mahogany.

The bark of the young branches is sweet, spicy, fragrant and astringent. It contains a pungent essential oil, very nearly resembling, if not identical with that from *Gaultheria procumbens*. This oil promotes perspiration, and the discharge by urine, and relieves nervous and spasmodic complaints. It is useful in cramps of the stomach, spasmodic asthma, suppressions of urine, and gravel, when not attended with inflammation. Indeed, it never does good in cases attended with any actively inflammatory symptoms.

BRACHYSTEMUM LINIFOLIUM. *Willdenow.*

Wild-Hyssop, Mountain-Mint.

A strong tea, made by steeping this plant, is a good sweating drink in the beginning of low fevers. The essential oil resembles that from American Penny-royal, and may be used for that in every case. It relieves cramps of the stomach, old coughs, sickness, vomiting, and griping of the bowels, in cases of a lax, &c. It does good, externally applied, in chronic rheumatism, and the secondary stages of sprains and bruises.

BROMUS PURGANS. *Linne.*

Purging-Brome.

This plant is capable of operating as a purgative.

CÆNOTUS CANADENSIS. *Nuttall.*

Colt's-Tail.

The whole of the plant is pungent to the taste. Taken

internally in the form of decoction, it promotes perspiration, and discharge of urine, and seems to operate upon the stomach and bowels, like any of the aromatics. It is useful in gravel, and most of the diseases of the urinary organs, when not accompanied by active inflammation. It has likewise proved a useful auxiliary in the treatment of laxes, and other bowel complaints, and likewise in many cases of dropsy. It is commonly taken in the form of strong tea, made by boiling.

CALLA VIRGINICA. *Michaux.*

The root of this plant has the same sensible and medicinal properties as *Arum triphyllum*. It may be prepared in the same way, and given in the same cases.

CALYSTEZIA SEPIUM. *Brown.*

Great-bear-bind, Hedge-bear-bind, Poison-vine.

The expressed juice, dried till it is of the consistence of pitch, or an extract made by boiling the plant in water, straining and boiling away the liquor, is a powerful purgative. Its operation may be rendered mild, by combining it with a little opium, or even with liquorice, sugar or common gum. As a purge it is peculiarly adapted to dropsies. From ten to twenty, or even thirty grains of these preparations are proper doses.

CAPRIFOLIUM PERICLYMENUM. *Persoon.*

Honey-suckle, Wood-bind.

The berries are a strong purgative.

CARTHAMUS TRINCTORIUS *Linne.*

Safflower.

The seeds of this plant, reduced to a pulp, and taken

internally, prove a griping purgative. The flowers in the form of tea, are a mild carminative and bitter strengthening remedy. They are popularly supposed to be the same as the saffron of the shops, but are, in reality, as unlike that article as chalk is to cheese.

CASSIA MARILANDICA. *Linne.*

American Senna, Wild-Senna.

The leaves of this plant have been much recommended, and used, as a substitute for the senna of the shops; but they are but little more than half as powerful. Not less than an ounce, made into a tea by steeping, (boiling impairs its power,) will be sufficient to operate as physic. The extract of the root is said to be much more efficacious, and capable of operating in a less dose. The strong tea of the leaves makes a very good common injection.

CAULOPHYLLUM THALICTROIDES. *Michaux.*

Blue-Cohosh, Pappoose-root, Squaw-root.

The root tastes, at first, moderately bitter, but in a moment, a disagreeable pungency diffuses itself through the mouth, leaving a sense of acrimony in the throat, which somewhat resembles that from Seneca snakeroot, and from the green seed-capsules of the Moose-wood together. From its sensible properties, it would seem to possess the medicinal powers of a combination of Virginia and Seneca snakeroots. A late empirical writer recommends it to promote the monthly evacuation in women; and says, it is likewise useful in certain cases of fever, rheumatism and dropsy. The Indians are said to have used it *ad partum accelerandum*. Its properties have not been investigated and it is accordingly recommended to the notice of the public.

CEANOTHUS AMERICANUS.

Red-root, New-Jersey Tea, Continental Tea.

The bark of the root is an intense astringent, and may be employed in all cases where astringents are proper. It may be given in the form of tea, made by steeping, or boiling in water, or prepared in spirit, or even in substance. It may be of use in the secondary stages of bowel-complaints or laxes, in bleedings, accompanied with weakness, and in whites; also as a gargle in canker and thrush. The leaves possess a much less degree of astringency, and were much used, during the revolutionary war, as a substitute for tea.

CEPHALANTHUS OCCIDENTALIS. *Linne.*

Button-wood, Button-bush, Globe-flower, Head-flower, Pond Dog-wood, Dwarf-Elder.

The inner bark of the root is an agreeable bitter, and has been used in obstinate chronic coughs, dropsies, consumptive cases, &c. It seems likewise to possess some astringency. It may be given in the form of dry powder, or of strong tea. Whether it possesses any other virtues than that of a mere strengthener, is not known.

CERASUS VIRGINIANA. *Michaux.*

Wild Cherry-tree, Black Cherry-tree.

The bark of this tree is a bitter strengthening medicine, but it contains a principle which gives it some degree of that property, called by physicians narcotic. This combination of powers renders it peculiarly suited to cases of weakness, connected with some excessive discharge, or with irritability, or pain, as in hectic cases, connected

with discharge of matter from the lungs, the liver, or from the ulcers of king's-evil. It is likewise useful in the secondary stages of laxes and bowel complaints generally. It is commonly given in the form of strong tea. The fruit possesses less bitterness, with much mucilaginous and some saccharine matter; otherwise it is similar to the bark. A gum similar to gum Arabic exudes from the tree.

CHAMÆSYCE COROLLATA. *Persoon.*

The root of this article possesses the same properties as that of Chamæsyce Ipecacuanhæ, except that it is said to be preferable.

CHAMÆSYCE IPECACUANHÆ. *Persoon.*

Wild Ipecac, Spurge, Ipecacuanhæ.

This, though a humble plant, has a very deep root.—Pursh observes that he has dug more than six feet, and to all appearance been as far from its end as ever. The powder of the dry root has very little taste or smell, and in doses of ten or fifteen grains, is a sure and safe vomit, always producing perspiration, and generally purging. It is not inferior to the South American ipecac, either for the general purposes of a vomit, or in the treatment of the early stages of low fevers. With opium and sulphate of potash, it makes good Dover's powder. It is thought to be more certain in producing sweating, than even this celebrated preparation.

CHELIDONIUM MAJUS. *Linne.*

Celandine.

The root of this article is an acrid, bitter, strengthening medicine, possessing considerable power of removing obstructions in the bowels. It is useful in the secondary

stages of coughs, jaundice, &c., in certain cases of indigestion, and, in short, in most of the cases in which bloodroot is proper. It is likewise a good external application to indolent and vitiated ulcers, and to many eruptions of the skin. For internal use, a strong tea is a common mode of preparation. For external application, the tea, or an ointment made by bruising it to a pulp, with lard, will answer. The yellow juice of the plant sometimes cures ring-worms, canker, &c.

CHELONE GLABRA. *Linne.*

Snake-head.

This plant is bitter to the taste, and is a good strengthening remedy. It may be used in the form of strong tea made by steeping or boiling. It is proper in cases of indigestion, loss of appetite, and weakness in general.

CHENOPODIUM AMBROSIOIDES. *Linne.*

Mexican Goose-foot.

The properties and medicinal uses of this article are exactly similar to those of *Chenopodium anthelminticum*.

CHENOPODIUM ANTHELMINTICUM. *Linne.*

Oak of Jerusalem, Worm-seed.

The expressed juice of this plant, or the essential oil, possesses the power of relieving hysterical and spasmodic complaints and worms. For the latter purpose, the seeds are sometimes given in substance. An excessive dose of the oil sometimes produces bad symptoms. A tea, made either by steeping or boiling, possesses comparatively but little of the virtues of the plant. The last mentioned form is the only one, however, in which it may be administered safely, without the direction of a physician.

CHENOPODIUM BOTRYS. *Linne.**Oak of Jerusalem, Oak of Cappadocia.*

The properties of this article are very nearly similar to those of *Chenopodium anthelminticum*.

CHIMAPHILA CORYMBOSA. *Pursh.**Pippsissewa, Wintergreen, Prince's-Pine, Ground-Holly, Rheumatism-weed.*

Bitter and astringent to the taste. A strong tea made by boiling, is an efficacious remedy in dropsies, promoting the urinary discharge, and at the same time giving strength to the stomach and increasing the appetite. The tea is likewise useful in all diseases of the urinary organs that are not accompanied with any inflammatory symptoms. It possesses all the properties of *Uva-Ursi*, except in a much more eminent degree. The bruised leaves applied externally to tender parts raise blisters. It is capable of curing many cases of fever and ague. Extract is a very common form of preparation.

CHIMAPHILA MACULATA. *Pursh.**Variiegated Wintergreen, or Prince's-Pine.*

This possesses similar sensible and medicinal properties to *Chimaphila corymbosa*; and it may be prepared and administered in the same form and in the same cases.

CHIONANTHUS VIRGINICA. *Linne.**Fringe-tree, White-Ash, Old-man's-beard.*

The root is used in the form of tea, as a remedy in long standing agues, and other chronic diseases.

CHRYSANTHEMUM LEUCANTHEMUM. *Linne.**White-weed, Moon-flower, Ox-eye-Daisy.*

A strong tea made of this plant increases the urinary discharge. It is useful in cases of weakness, attended with sweating. It should be drunk freely, and the patient kept cool.

CICHORIUM INTYBUS. *Linne.**Hickory.*

The juice, and strong tea made by boiling, gives strength, and removes obstructions in the bowels. If taken very freely it proves laxative, and so cures many eruptions of the skin.

CICUTA BULBIFERA. *Linne.**Wild-Fennel, Water Cow-bane, Fennel-leaved Cow-bane.*

This article is one of those poisons styled by physicians narcotic. Its powers seem to be concentrated in the very acrid juice of the root. Its virtues are similar to those of *Conium-maculatum*, except that it is much more powerful. It is used in the cure of jaundice; it frequently relieves that painful disease of the face called *Tic-doloureux*, and it may be given as a palliative in cancer, and in old and painful venereal complaints. The plant in substance, or the extract, or a preparation in spirit, are proper forms. Common people should not meddle with it, as they value life; as it requires much skill and judgment to manage it with safety.

CICUTA MACULATA. *Linne.**Wild Carrot, Water-Hemlock, Snake-weed, Cow-bane, American Hemlock.*

This is a poison of the same kind as *Cicuta bulbifera*.

It should never be meddled with by common people. It may be prepared in the same way, and given in the same cases, as the above-mentioned species, with the exception of the seeds, which differ in having less of the poisonous quality, and in having considerable heating and spicy properties. Dried and powdered, and given in doses from five to ten grains, they are useful in all cases of irritation of the urinary organs and lungs, when not accompanied with inflammatory symptoms, also in chronic cough, and some cases of confirmed consumption, &c.

COCCOLOBA UVIFERA. *Linne.*

Sea-side Grape.

One variety of the Kino of the shops is an extract from this plant. It is a good astringent, useful in bleedings, the secondary stages of bowel complaints, as a gargle in canker of the mouth, and in sore throats, and in a variety of other cases. It may be prepared in water or spirit, or given in powder, as will be best suited to the case.

COCHLEARIA ARMORACIA. *Linne.*

Horse-radish.

The root of horse-radish is useful in palsy, chronic rheumatism, the secondary stages of dropsy, asthma, chronic coughs, &c. Its virtues reside in an essential oil, which may be obtained by distillation, and which is imparted to water and spirit by steeping. Boiling of course dissipates it. It is perhaps best to take the root in substance, grated fine. The leaves are a good external application, in all those cases in which burdock leaves are recommended. They are, however, a much more powerful application, and generally blister.

COMPTONIA ARPLENIFOLIA. *Aiton.**Sweet-Fern.*

The leaves and stems of this plant, when taken freely, promote perspiration, and seem to be moderately composing. In the form of strong tea, it has been recommended in cases of chronic-rheumatism, the secondary stages of venereal complaints, and as a restorative after a mercurial course. As a wash, applied externally, at the same time that it is taken freely internally, it is considered by many to be peculiarly efficacious in curing many eruptions of the skin, particularly St. Anthony's fire, and poisoning from swamp-sumac.

CONIUM MACULATUM. *Linne.**Hemlock.*

All parts of this plant are a virulent poison, but it may be used for very valuable purposes, as a medicine, and with perfect safety, by skilful and judicious physicians. Given in small doses, and at regular intervals, just so as to keep up the slightest possible dizziness of the head, and continued for a week or two, it is very efficacious in jaundice, and other obstructions of the liver, in chronic rheumatism, and the secondary stages of the acute; in schirrous and cancerous complaints; in old venereal cases; in that painful disease called Neuralgia, or by the French, Tic-doloureux, and in short in any very painful chronic disease. Expressed inspissated juice, tincture, and substance, are the common forms for administration.

CONVALLARIA MAJALIS. *Linne.**Lily of the Valley.*

The extract of the root of this article, both in sensible

properties and medicinal qualities, resembles aloes. It may be used in those cases to which aloes is adapted, and in similar doses.

CONVOLVULUS PANDURATUS. *Linne.*

Wild-Potato Vine.

The root of this article is supposed to possess mild purgative powers; but these are too inconsiderable to render it of much use in this point of view. The tea, made either by steeping or boiling, and taken freely, is said to be serviceable in gravel.

COPTIS TRIFOLIA. *Salisbury.*

Golden-thread, Mouth-root.

The root is a very pure bitter, and strengthening medicine. Either alone, or combined with spices, it may be used in the secondary stages of low fevers, in chronic weakness of the stomach, and in almost every case in which strengthening remedies are proper. Its effects are similar to gentian, Columbo, quassia, &c. It may be prepared either in spirit, or made into strong tea. It is likewise good in substance, but is not easily reduced to powder. It has been supposed, but without the least foundation, to be useful in sore mouths.

CORNUS CIRCINATA. *L'Heritier.*

Round-leaved Dogwood.

This bark has the same properties, and may be used in the same manner, and in the same cases, as *cornus florida*, and *cornus sericea*.

CORNUS FLORIDA. *Linne.*

Box-wood, Dog-wood, Box-tree, Dog-tree, Camel-tree.

The bark of this tree is a good astringent, bitter, and

strengthening medicine ; useful in all cases in which Peruvian bark is used. It may be given in powder, or in the form of tea, made by boiling or steeping. Unless it is dry, and about a year old, it will sometimes offend the stomach. A strong tea made of the flowers, is a pleasant substitute for that of red rose leaves.

CORNUS SERICEA. *Linne.*

Swamp Dog-wood, Blue-berried Dog-wood.

The bark of this article has the same medicinal properties as *cornus florida*, and may be used in the same way. It is even supposed to be preferable.

CUTLERA CATESBÆI. *Rafinesque.*

Sampson's Snakeroot.

The dry root has a mucilaginous, sweetish, and intensely bitter taste. It may be used in powder, or in the form of strong tea, or steeped in spirit, to give strength, in cases of indigestion, the secondary stages of low-fever, and in weakness generally. It is supposed to have some power of promoting perspiration.

CUTLERA OCHROLEUCA. *Rafinesque.*

Sampson's Snakeroot.

The root of this article has the same properties as that of *Cutlera Catesbæi*, except that it is apt to nauseate.

CUTLERA SAPONARIA. *Rafinesque.*

The root of this article has the same properties as *Cutlera Catesbæi*.

DATURA STRAMONIUM. *Linne.*

Thorn-apple, Apple-Peru, Stink-weed.

Every part of this plant is a strong poison, of that kind

called by physicians narcotic. Given internally it is useful in epilepsy, or falling sickness, St. Vitus'-dance, convulsions of the disease called tic-doloureux, when not occasioned by organic affection; also in madness, suppression of the monthly evacuation in females, and asthma, when accompanied by tendency to spasm; also in rheumatism of the loins and hips, with much pain. Externally applied, it is serviceable in common inflammation, burns, ulcers, piles, accompanied with pain, and in certain eruptions of the skin, attended with heat and itching. The powder of the seeds and leaves, the extract, or a preparation in spirit, are suitable for internal use. For asthma the dry leaves may be smoked; for external use, an ointment or the leaves may be used. Common people should never meddle with it, as it would be highly dangerous in their hands.

DATURA TATULA. *Linne.*

Blue Thorn-apple, Purple Stink-weed.

This, which is certainly a distinct species from *Datura Stramonium*, has precisely the same properties, and may be used in the same way. Common people cannot be too cautious how they take these two articles internally. It will never be safe, except under the direction of an experienced physician.

DELPHINIUM CONSOLIDA. *Linne.*

Larkspur.

The seeds are capable of puking, purging and increasing the discharge by urine. They also relieve spasmodic complaints, cure eruptions of the skin, destroy worms in the stomach and bowels, and lice of all kinds externally. It may be employed in the form of tea, made by boiling or steeping, or in spirit. Asthma, whooping-cough, dropsy,

and worms, are the diseases in which its internal use is proper. The itch and lice, are the cases in which its external application is advised. Common people ought not to use this article, without the advice and direction of a physician, since if it is used freely enough to do good, there will be danger of ill effects, without such precautions as one skilled in medicine only can direct.

DELPHINIUM STAPHISAGRIA. *Linne.*

Staves-acre, Bee Larkspur.

The seeds of this article have the same medicinal properties as those of common larkspur, except in a more eminent degree.

DENTARIA DIPHYLLA. *Michaux.*

Tooth-wort, Pepper-wort, Coral-wort, Indian-Mustard.

The root of this plant resembles mustard, in sensible properties, and may be used for it, both in diet and medicine.

DIERVILLA LUTEA. *Desfontaines.*

Yellow-upright Honey-suckle.

The young twigs have a sickish, rather disagreeable taste and smell. In the form of strong tea, they sometimes cure scaly and ring-worm-like eruptions of the skin, and also relieve certain venereal complaints. The tea, besides being drank freely, should be applied externally, and continued for a length of time. The medicinal qualities of this article are similar to those of *Solanum-Dulcamara*.

DIOSPYRUS PUBESCENS. *Pursh.**Downy-Persimon or Date-Plum.*

This article has the same properties as *Diospyrus Virginiana*.

DIOSPYRUS VIRGINIANA. *Linne.**Persimon, Date-Plum.*

The bark of the root is astringent and strengthening, and when taken freely, laxative. The ripe fruit, before it is mellowed by the frost, possesses the first two properties in a less degree, and the last in a greater. Both the bark and the fruit have been supposed to be capable of destroying worms. A fine gum, like gum-Arabic, exudes from the tree. The bark of the root is recommended in the secondary stage of bowel complaints, in canker of the mouth, worms, &c. The gum may be used as a substitute for gum-Arabic.

ERIGERON BELLIDJFOLIUM. *Willdenow.**Robert's-Plantain, Rattle-snake's-Plantain, Purple-Daisy.*

This plant has the same sensible properties, and medicinal powers, as *Cænopus Canadensis*.

ERIGERON PHILADELPHICUM. *Linne.**Skevish, Philadelphia Flea-bane.*

This has the same sensible properties, and medicinal powers, as *Cænopus Canadensis*.

ERYNGIUM FÆTIDUM. *Linne.**Stinking-Eryngo, Stinking-Holly.*

This article has a very disagreeable smell. *Pursh* informs

us that it is in high repute among the savages of this country, as a medicine, but does not inform us how it is used. It probably possesses the properties of *Eryngium Yuccifolium*, which see, for preparatories, and cases to which it is suited.

ERYNGIUM YUCCIFOLIUM. *Michaux.*

Button-Snakeroot.

The root of this plant has a pungent bitter and aromatic taste, and when chewed it excites a flow of saliva. A strong tea of this root promotes perspiration, assists in raising phlegm from the lungs, and if taken freely, sometimes vomits. It resembles Seneca snakeroot, but is preferred by many to that article.

ERYTHRONIUM LANCEOLATUM. *Pursh.*

Adder's-tongue, Adder's-violet, Dog's-tooth-violet.

This article is capable both of vomiting and increasing the discharge by urine; and is a remedy adapted to most cases of dropsy. The juice of the recent plant may be given in doses of a table-spoonful, or prepared in wine or cider, it may be given to twice the quantity, as circumstances require.

EUOSMUS BENZOIN. *Nuttall.*

Spice-bush, Spice-wood, Benjamin-tree.

A strong tea made by steeping or boiling the bark and twigs of this shrub, is considerably efficacious in promoting perspiration, and is a grateful beverage in fevers. The powdered bark has been recommended as a remedy for worms.

EUOSMUS SASSAFRAS. *Nuttall.**Sassafras.*

A strong tea made by steeping the bark, especially of the root, promotes perspiration, and the discharge of urine. It is useful in the early stages of low fevers, in gout, rheumatism, and a variety of eruptions of the skin. It likewise assists other medicines in old venereal complaints, and is something of a restorative after a mercurial course. A tea made of the pith of the twigs is mucilaginous, and is useful if drunk freely, in gravel and suppressions of urine. The essential oil, obtained by distillation, is a good application to old strains and inveterate cases of chronic rheumatism, creek in the back, &c.

EUPATONIUM PERFOLIATUM. *Linne.*

Thorough-wort, Thorough-stem, Thorough-wax, Cross-wort, Bone-set, Indian-Sage, Ague-weed, Vegetable-antimony.

This article is very nauseously bitter to the taste. By different preparation and management, it may be made to produce a variety of effects. A strong tea prepared by long steeping, or by boiling, and taken freely while warm, may, according to the quantity, be made either to produce perspiration and assist in raising phlegm from the lungs, or to purge, or to vomit. Taken cold, and in more moderate quantity, it gives strength. In one or other of these methods, it may be useful in common cold, influenza, malignant pleurisy, low-fevers, agues, indigestion, and weakness in general, being managed as above directed, according to the effect desired.

EUPATORIUM PURPUREUM. *Linne.*

Queen-of-the-Meadow, Trumpet-weed, Gravel-weed.

The leaves have similar properties to thorough-wort,

but are considerably weaker and less liable to vomit and purge. The root in substance, powdered or grated, or in the form of strong tea, made by boiling, increases the discharge by urine, and strengthens the urinary organs. It is useful in suppressions of urine, bloody urine, gravel, and weakness of these parts generally. It has some popular reputation in chronic rheumatism; but it is uncertain with what reason.

EUPATORIUM TEUCRIFOLIUM. *Willdenow.*

Wild-Hoarhound.

The leaves of this plant are bitter to the taste. When made into a tea, either by steeping or boiling, and drank warm, it promotes perspiration. If taken very freely, it vomits and purges moderately. If the tea is taken cold, it strengthens the stomach and bowels, and promotes the urinary discharge.

FRASERA VERTICILLATA. *Muhlenberg.*

Pyramid-flower, Colomba-of-Marietta, Wild-Colomba, American Colomba.

The root is bitter and rather sickish to the taste. It is a good strengthening remedy, possessing in its recent state considerable vomiting and purgative power, which is not altogether lost by drying. It is well adapted to the secondary stages of low fever, and may be taken earlier than most other articles of the kind. It is useful, likewise, in chronic weakness of the stomach, especially when attended with costiveness. It has been supposed to resemble the foreign colomba, but it is much more like gentian.

GALIUM CIRCÆZANS. *Michaux.**Wild Liquorice.*

The taste of this plant resembles the liquorice of the shops, and in the form of strong tea it is much used for it, in cases of cough, dryness and irritation of the throat, &c. It must, however, be admitted to be considerably inferior to it, for these purposes. The tea is sometimes used in cases of colds, as a laxative, for young children and infants. Its effects are probably very moderate.

GAULTHERIA PROCUMBENS. *Linne.*

Wintergreen, Mountain-tea, Deer-berry, Partridge-berry, Grouse-berry, Tea-berry, Ground-Holly, Ground-Ivy, Spice-berry.

A very elegant essential oil is obtained by distillation, which is quite a heating perspirative. It is useful in spasmodic asthma, in irritation about the urinary organs, lower intestines and womb, when not accompanied with any inflammatory disposition. It likewise relieves cramps, from air in the stomach, &c. The leaves in substance are quite astringent as well as spicy. The tea, which is much used by common people, contains but little of the virtue of the plant.

GELSEMINUM SEMPERVIRENS. *Elliott.*

Carolina Jessamine, Yellow Jessamine.

The flowers and root, and probably the other parts of this beautiful shrub, are a poison, of that kind called by physicians narcotic. The root, steeped in spirit, has been used successfully for the cure of rheumatism.

GERANIUM MACULATUM. *Linne.*

Crane's-bill, Allum-root, Flux-root, American Tormentil, Crowfoot, Spotted Geranium.

The root is a pure and strong astringent, much preferable to the kino of the shops. It may be used with advantage in bleedings accompanied with weakness, the secondary stages of laxes, in the whites, gleet, &c.; likewise in old gravelly cases, and as a gargle in canker and thrush. Dry powder, strong tea, or a preparation in spirit, are all good forms to give it in.

GEUM NUTANS. *Rafinesque.*

Water-Avens, Avens-root, Herb-Bennet.

The root of this plant is a strong astringent and strengthening medicine. The powder, or a very strong tea made by boiling, is good in bleedings, the secondary stages of bowel complaints, sore mouths, &c. A weaker tea is good in chronic complaints of the lungs, indigestion, and weakness generally. It should be drunk with food, as it is a pretty good substitute for tea and coffee.

GILLENIA STIPULACEA. *Barton.*

Indian Physic, American Ipecac.

The root of this plant is recommended for the purposes of a vomit, in all cases where the South American Ipecacuanha would be proper. Its medium dose is considered to be twenty or thirty grains of the dry powder.

GILLENIA TRIFOLIATA. *Moench.*

Beaumont's or Bowman's-root, Indian Physic, American Ipecacuanha.

The bark of this root, like that of *Gillenia stipulacea*,

is considered to be emetic, like ipecacuanha from South America. It may be given in the same doses and in the same cases as ipecac.

GOSSIPIUM HERBACEUM. *Linne.*

Cotton Plant.

The wool which invests the seeds has been highly recommended as an application to burns, but on repeated trial it is found to produce no beneficial effects that may not be better obtained some other way; and its employment frequently interferes with the use of better remedies, and often does much mischief. It is a useful application to indolent, irritable, and vitiated ulcers, and of course to burns, when degenerated into such a state.

HEDEOMA PULEGIOIDES. *Persoon.*

American Pennyroyal.

This plant makes an excellent sweating herb-tea in the forming or cold stage of fevers and colds. A fine essential oil is obtained from it by distillation, which is not inferior to the oil of marjoram, as an external application in bruises, sprains, chronic rheumatism, &c. Taken internally in small quantity, it relieves cramps, pains in the stomach, &c., and promotes the effect of opium and astringents in checking cholera and laxes. Taken freely in the cold and sinking stages of some low fevers, it does good; also in hooping and spasmodic coughs. A drop or two put daily into the ear, in cases of deafness, from palsy of the nerve, sometimes cures.

HELENIUM AUTUMNALE. *Linne.*

Sneeze-weed.

The leaves and flowers of this plant possess the power

of exciting sneezing. The flowers are the strongest, and especially the central parts of them. A very small quantity of these reduced to a powder between the fingers or otherwise, produces a strong and durable impression, without any violent or dangerous effect. This article may be employed by itself, or in combination with other articles. Articles of this sort have sometimes been useful in certain kinds of inflammation of the eyes, in blindness, from palsy of the nerve of sight, in deafness, ear-ache, head-ache, and in rheumatic affections of the jaws and neighbouring parts. The whole plant is intensely bitter to the taste, and is recommended as a substitute for chamomile, which it resembles in sensible properties.

HELONIAS DIOICA. *Pursh.*

Unicorn, Devil's-bit, Blazing-star, Star-wort, Colic-root.

The roots are intensely bitter, and are a good strengthening medicine, particularly calculated to improve the state of the stomach. In obstinate vomitings it frequently gives speedy relief, and that even in cases of pregnancy. In chronic weakness, and in fever and ague, it is capable of effecting a cure in a majority of cases. It is reputed to be capable of destroying worms, and has been suspected of possessing anodyne properties, from the fact that it relieves some cases of colic. A strong tea, made by steeping, is the common method of using it.

HELONIAS ERYTHROSPERMA. *Michaux.*

Fly-poison, Star-wort.

The root is a poison, of that kind called by physicians narcotic. It is capable of stupefying insects, and even rats. It is a useful article, belonging to that class of med-

icines in which opium, foxglove, thorn-apple, &c., are placed. It should not be used, except by physicians. It may be reduced to a pulp in a mortar with honey or molasses, or it may be given in the form of tea, and probably prepared in spirit.

HEPATIC TRILOBA. *Willdenow.*

Liver-wort, Herb-Trinity.

The leaves are moderately astringent and strengthening, and have been supposed to be suited to cases of disordered stomach and liver, in connexion. Dry powder in doses of a tea-spoonful, or strong tea drank freely, is the customary preparation. This article is, in reality, worth little.

HEUCHERA VISCIDA. *Pursh.*

Alum-root, American Sanicle.

This root is roughly astringent to the taste, possessing very little character beside. Its properties are similar to those of geranium maculatum, which see, for preparations and doses; and cases to which it may be suited.

HIBISCUS PALUSTRIS. *Linne.*

Marsh-Mallows.

This root, by boiling, affords a great abundance of a good mucilage, which is useful in hoarseness, pleurisies, dysenteries, gravel, strangury, and scalding of urine.

HUMULUS LUPULUS. *Linne.*

Hop.

The medicinal powers of the hop depend entirely upon the yellow powder, which is so abundant in the fruit. It is strengthening and anodyne, and in some cases is a tolera-

ble substitute for opium. This powder is best taken in the form of a pill, but it is sometimes used steeped in spirit. It is useful in indigestion, hysterics, melancholy, vapours, obstinate watchfulness, chronic rheumatism, &c. A strong tea, made by boiling the roots, is useful to promote perspiration in the last mentioned disease.

HYDRASTIS CANADENSIS. *Ellis.*

Yellow-root.

The root of this plant is one of our strongest and purest simple bitters, and strengthening remedies. It may be given in the form of powder, or of strong tea, made by boiling, in indigestion, the secondary stages of low fevers, and all cases of weakness in general. The tea, when cold, and carefully strained, is supposed to be an efficacious wash in many cases of inflamed eyes.

HYOSCYAMUS NIGER. *Linne.*

Henbane, Black-Henbane.

The extract, and inspissated expressed juice of this plant, has been recommended as a substitute for opium; and in some instances it has appeared to answer very well, but in general it will be found to fall infinitely short of it. It is uncertain, both in relieving pain, and producing sleep, and it is liable to produce nausea and dizziness. Besides, in order to produce any continued effect, the dose must be very rapidly increased, and even then it soon ceases to give the desired relief. It is recommended only to alleviate pain, and produce sleep.

HYPERICUM PARVIFLORUM. *Willdenow.*

Low-Centaury.

The whole of this plant has a moderately bitter and

excessively disagreeable taste. It has had considerable popular reputation as a strengthening remedy in indigestion, loss of appetite, and weakness generally, but it is not likely ever to come into much repute, so long as we have so many preferable articles. Strong tea, made by boiling, is its most proper form.

HYPERICUM PERFORATUM. *Linne.*

John's-wort.

This plant is an acrid, and rather unpleasant bitter. It has been considered to be a good strengthening remedy, but is at present entirely out of use. The leaves given in substance, have been reputed to destroy worms.

ILEX OPACA. *Aiton.*

American Holly.

The berries of this tree are strongly purgative, and, taken to the number of fifteen or twenty, excite vomiting. It is probable that in the form of sirup, prepared like that of Buck-thorn-berries, it would be a useful addition to the medicines now in use. The inspissated juice, wrought into pills, would quite likely be another convenient form of preparation.

IMPERATORIA OSTRUTHIUM. *Linne.*

Master-wort.

The roots and seeds are a strong, but not very pleasant aromatic. They have been used internally, to relieve cramps of the stomach, and pain from flatulence, and likewise to promote the effect of common bitter, and strengthening remedies. It is much more used, however, in the form of strong tea, made by boiling, for injections in cases of colic, and distention of the bowels with air, &c.

INULA HELENIUM. *Linne.**Elecampane.*

The recent root has a pleasant, spicy smell, and some pungency and bitterness to the taste. In substance, or in the form of strong tea, made by boiling, it relieves hoarseness, chronic coughs, &c. It has been supposed to possess some efficacy in removing obstructions of the bowels.

IRIS GRACILIS. *Bigelow.*

The root of this species has the same medicinal and other properties as *Iris versicolor* and *Virginica*.

IRIS VERSICOLOR. *Linne.**Blue-Flag, Flower-de-Luce.*

The root has a very nauseous taste, which is soon followed by a sense of heat, and pungency. A few grains of it, in a recent state, is an active and certain purgative, very apt, however, to produce nausea and languor. By drying, its powers are considerably impaired, and a much larger quantity is necessary. These roots, made into a strong tea, or steeped in spirits, promote the discharge of urine, and are often capable of curing dropsies. An ointment made of them, when fresh, if sufficiently strong, cures the itch, and many other eruptions of the skin, and is a good application to inflamed breasts, and to indolent, inirritable, and vitiated ulcers.

IRIS VIRGINICA. *Linne.**Flower-de-Luce.*

The root of this species has the same properties as *Iris versicolor*, and may be prepared and used in the same way, and in the same cases.

JEFFERSONIA DIPHYLLA. *Barton.*

The root of this article has the same medicinal properties as that of *Podophyllum peltatum*.

JUGLANS CINEREA. *Linne.*

Butternut, Oil-nut, White-Walnut.

An extract from the inner bark of this tree, especially of the root, operates as a purgative, in doses of fifteen, twenty, or thirty grains. Age impairs its power. It seems to be peculiarly suited to cases of habitual costiveness, and has been considered almost a specific in diarrhœa and dysentery.

The bark of the root should be collected in May or June; after cleaning, cutting and bruising, should have eight times its weight of water added to it; it should then be boiled to one half, strained through thick cloth, and afterwards evaporated to the consistence of thick honey, at such a distance from a fire that it shall not be burnt in the least. It may then be dried in a warm oven till it will pill; take four or five pills, the size of a pea.

NOTE.—All extracts should be thus made; if they are burnt, they are effectually spoiled.

JUNIPERUS DEPRESSUS *Rafinesque.*

American-Juniper.

The berries, prepared by boiling in water or steeping in spirit, promote the discharge of urine, and are used in dropsies, but they are rather to be employed to promote the effect of other articles, than relied on alone. The leaves, prepared by boiling in water, and applied externally, cure itch, and some other eruptions of the skin. Taken inter-

nally, this same preparation is serviceable in chronic rheumatism, and suppression of the monthly evacuation of women, when unaccompanied with any inflammatory symptoms. The whole virtues of this article reside in an essential oil, which may be obtained by distillation. In its pure state, its medicinal qualities are somewhat similar to oil of turpentine.

LACTUCA ELONGATA. *Muhlenberg.*

Tall-Lettuce, Wild-Lettuce.

The expressed inspissated juice is anodyne, and promotes the discharge by urine, and likewise favours perspiration, and obviates costiveness. It is recommended in dropsies proceeding from obstructions in some internal part, particularly in dropsy of the chest, accompanied with troublesome difficulty of breathing. Hooping cough, and other spasmodic diseases of the organs of respiration, are sometimes relieved by it. A commencing dose may be four or five grains, four times a-day, and gradually increased to as many drachms in the twenty-four hours. It is probable that the inspissated sap would possess the same properties as that of common lettuce.

LACTUCA SATIVA. *Linne.*

Common Lettuce, Garden Lettuce.

A strong tea, made by steeping the dry plant, collected when in flower, is pleasantly bitter to the taste, and promotes perspiration, at the same time that it alleviates pain and occasions sleep. It must be drank freely. The sap of the plant, collected like that of the poppy, and dried in the air, bears considerable resemblance to opium. It may be used for the same purposes, but must be given in much larger doses. A drachm in the form of pills is said to be

a suitable dose. It may be prepared in spirit, like opium, and used in tea-spoonful doses. It is supposed to be peculiarly adapted to chronic coughs, and consumptions, in which opium sometimes produces troublesome costiveness.

LEONTODON TARAXACUM. *Linne.*

Dandelion.

A strong tea, made by boiling the root, or an extract in the form of pills, tends to remove obstructions in the bowels, and promote the discharge of urine. It is recommended in diseases of the skin, dropsy, tubercular consumption, jaundice, and other obstructions of the liver, and in incipient schirrhus of the stomach. It must be taken freely.

LEONURUS CARDIACA. *Linne.*

Mother-wort.

A strong tea, made by boiling this plant, or the expressed juice, has similar medicinal powers to valerian, and is useful in many nervous and hysterical complaints, particularly in that peculiar restlessness to which hysterical people are subject. It seems to possess the power of relieving moderate hysterical tendency, and of giving strength to the stomach.

LIRODENDRON TULPIFERA. *Linne.*

Tulip-tree, White-poplar, White-wood.

The bark of the root is a pungent aromatic bitter, and is much used in combination with other pure but less heating bitters.

LOBELIA INFLATA. *Linne.*

Indian-Tobacco, Lobelia.

Two ounces of the plant put to a pint of hot water or

spirit, make the first an infusion, the last a tincture ; of these, a tea-spoonful is a medium dose. In spasmodic asthma, it should be given every twenty minutes, till it vomits or relieves. In dropsy, every two hours, till it vomits, or increases urine.

MAGNOLIA ACUMINATA. *Linne.*

Cucumber Tree.

MAGNOLIA AURICULATA. *Barton.*

Indian-Physic.

MAGNOLIA CORDATA. *Michaux.*

Indian-Physic.

MAGNOLIA GLAUCA. *Linne.*

Beaver-tree, Swamp-Sassafras, Elk-bark.

The bark of the top and root of all the species of the Magnolia is heating, bitter and tonic ; promoting the fluid secretions, and moving the bowels when used freely. Best used in decoction. Good in chronic rheumatisms, agues, and wherever the bark and other stimulants are needed.

MALVA ROTUNDIFOLIA. *Linne.*

Common Round-leaved Mallows.

Infusion and decoction are used in dysenteries and urinary complaints, gravel, asthma, and indeed wherever a mucilage is wanted.

• MARRUBIUM VULGARE. *Linne.*

Hoarhound.

Expressed juice, infusion, or the plant cut up in milk. Bitter tonic, promotes sweat, relieves coughs and colds ;

restores a healthy motion to the stomach and bowels; anodyne.

MEGOTRYS SERPENTARIA. *Rafinesque.*

Black-Cohash, Black-Snakeroot, Black-bane-berry, Squaw-root, Rich-weed, Rattle-weed.

This root tastes strongly bitter and spicy. In the form of strong tea made by steeping, it promotes perspiration and produces sleep. It is useful in rheumatism, hysterics, colics from air in the stomach and bowels, low fevers after evacuations, and in most cases of debility accompanied with troublesome nervous symptoms. It should be made strong and drank freely. Washing with a strong tea, cures the itch. Its properties have not been sufficiently investigated. It is believed to possess considerable activity. It appears to be more powerful in its recent than in its dry state. Boiling is supposed to injure it. Empyrics confound this article with Caulophyllum Thalictroides, but they differ in taste. Both were supposed by the Indians to be efficacious *ad pardum accelerandum.*

MELISSA CORDIFOLIA. *Willdenow.*

Lemon Baum.

Preferable to the common baum.

MELISSA OFFICINALIS. *Linne.*

Common Baum.

A pleasant beverage in fevers.

MELIA AZEDARACH. *Willdenow.*

Pride of India.

Substitute for *Spigelia Marilandica.*

MENTHA PIPERITA. *Linne.**Peppermint.*

Infusion and essence, warm aromatic; expels wind, and relieves pains of the bowels and stomach. Highly stimulant.

MENTHA VIRIDIS. *Linne.**Common Spearmint.*

More heating and stimulant, but less pleasant than peppermint.

MONARDA DIDYMA. *Linne.**Balm of Gilead of the gardens.*

Resembles common baum in medicinal properties.

MYRICA CERIFERA. *Linne.**Bay-Berry, Myrtle-wax, Candle-Berry.*

A powerful sneezing powder is made from the bark of the root, and in doses of a scruple to half a drachm, operates as an emetic.

NARCISSUS PSEUDO NARCISSUS. *Linne.**Daffy, Daffodil.*

The root is much used as an emetic for children in whooping cough, and rising of the lungs, &c. Prepared and given like garlic tea.

NEPETA CATARIA. *Linne.**Catnip, Catmint.*

Elegant warm cordial aromatic. Infusion promotes perspiration.

NICOTIANA QUADRIVALVIS. *Pursh.**Ricara, or Mandane Tobacco.*

This is a fine new species of tobacco lately found in Louisiana, and now cultivated in many parts of the union. This plant, though smaller, is much more mild and grateful than the common tobacco. The Indians prepare a most elegant and delicate tobacco from the dried flowers.

NICOTIANA TABACCUM. *Linne.**Common Tobacco.*

The use, and abuse of this article is too well known; an ointment may be prepared from it for irritable ulcers. Should not be put into injections.

ORIGANUM VULGARE. *Linne.**Wild Marjoram.*

Infusion, a warm cordial and stimulant, and stomachic. The essential oil is a heating stimulating application in the secondary stages of sprains and bruises, and in numbness of the limbs.

OROBANCHE VIRGINIANA. *Linne.**Beech-Drops, Cancer-Root, Broom-Rape, Virginica.*

Substance, infusion, and decoction, all good, applied to foul ulcers, cancerous affections, sore mouths. Internally, in secondary stages of dysentery, diarrhœa.

OXALIS STRICTA. *Linne.**Common Wood-Sorrel, Toad-Sorrel.*

Bruised in water, it makes a cooling acid beverage in fevers and measles, and boiled in milk produces a fine acid whey. Good, applied to indolent ulcers; bad to irritable ones.

PANAX QUINQUEFOLIUM. *Linne.**Ginseng.*

Moderate aromatic. Bitter sweating medicine.

PAPAVER SOMNIFERUM. *Linne.**Great Red and White Poppy.*

From these may be obtained, by all who will take the trouble, the genuine opium. It should be collected by slitting the exterior rind of the head, as the blossoms fall off, and scraping the milky juice off with a knife as it dries. It should be sun-dried.

Poppy leaves and tops make a poultice very soothing to painful inflammatory affections around the face and head.

PAVIA RUBRA. *Persoon.**Buck-eye.*

The young branches, and the powdered seeds, possess the property denominated by physicians narcotic, which denotes a combination of exhilarating and stupefying qualities. The parts above mentioned, bruised, and thrown into a small pool of water, cause small fish to rise to the surface, almost lifeless, so that they may be taken with the hand. Such fish may be eaten, without any hazard or inconvenience.

Physicians may apply this article to the cure of such diseases as they think proper. The root of the shrub is used as a substitute for soap in washing woollen clothes.

PHYTOLACCA DECANDRA. *Linne.**Poke-weed, Scape, Coakum, Cunicum, Garget.*

The bruised leaves, expressed juice, and an ointment prepared from the leaves, may all be used with benefit in

chronic inflammation, chronic rheumatism, in secondary stages of venereal disease, scrofulous and cancerous affections, in itch, ringworm, piles, &c., to foul ulcers, the milder species of whitlow. For the same purposes a tincture of the seeds may be used internally. Infusion of the dried root vomits.

PINCKNEYA PUBENS. *Michaux.*

Georgia Bark-Tree.

May be substituted for Peruvian bark.

PODALYRIA TINCTORIA. *Michaux.*

Wild-Indigo, Indigo-weed.

Bruised to a pulp, or a decoction, or made into an ointment; it cleans foul ulcers, relieves painful swellings, and irritable sores.

PODOPHYLLUM PELTATUM. *Linne.*

May-apple, Mandrake, Duck's-foot.

Excellent purgative; powdered root similar to jalap, operating more kindly in less doses, though equally effectual.

POTENTILLA SIMPLEX. *Michaux.*

Five-finger, Cinquefoil.

Infusion is astringent and tonic; may be used for tea; relieves urinary complaints.

POLYGALA SENEGA.

Seneca-Rattlesnake-root.

Powder of the root in doses of thirty grains or more, pukes and purges. Is useful in smaller doses in low fevers, particularly in lung complaints, dropsy, croup. It may

be given in infusion and decoction. Indians use it for the bite of the rattlesnake.

POPULUS BALSAMIFERA. *Linne.*

Balm of Gilead-tree, Balsam-Poplar.

Bark, good bitter and tonic. The buds afford an acrid resinous juice, good in foul ulcers.

PRENANTES SERPENTARIA. *Pursh.*

Lion's-foot Snakeroot.

The milky juice or substance of the root is celebrated in diseases, of a maglignant tendency. Bite of mad dog. In bites of venomous serpents, particularly of the rattlesnake.

PYRETHRUM PARTHENUM. *Willdenow.*

Fever-few, Feather-few.

Infusion, an aromatic tonic peculiarly appropriate to hysterics, and other female complaints.

QUERCUS ALBA. *Linne.*

White-Oak-bark.

Astringent and tonic, in powder or decoction. It should be given in the secondary stages of all fluxes; in bleedings from relaxed vessels; may be applied to foul ulcers, in cases of mortification; to decayed relaxed limbs and to old sprains and bruises.

RANUNCULUS ACRIS. *Linne.*

Crowfoot, Buttercups.

The bruised root applied to the skin produces a deep and thorough blister. Good where a lasting blister is wanted, in diseases of the joints, and old deep-seated pains. Where

eruptions strike in it may be applied to redden the skin without blistering.

RHODODENDRON MAXIMUM. *Willdenow.*

Rose-Bay-Laurel, Mountain-Laurel.

Stimulant, bitter tonic and anodyne; good in old rheumatic pains.

RHUS TOXICODENDRON. *Linne.*

Poison-Oak, Mercury.

Better let alone than used by the common people. Highly poisonous. Physicians may give it in palsies.

RICINUS COMMUNIS. *Linne.*

Palma Christi.

Castor-oil is expressed from the kernel of the fruit.

ROSA DAMASCENA. *Aiton.*

Damask-Rose.

Infusion of the flowers are purgative.

ROSA GALLICA. *Linne.*

Red-Rose.

The flowers are a pleasant astringent. Good for inflamed eyes and sore mouth.

RUMEX OBTUSIFOLIUS. *Linne.*

Broad-leaved-Dock.

The powder or decoction of the root is purgative. The root beaten with lard, or in decoction, is celebrated for curing salt rheum.

SABBATIA ANGULARIS. *Pursh.**American Centaury.*

An infusion or decoction is essentially serviceable in chronic weakness of the stomach, in low fevers, and wherever a pure tonic is needed.

SALIX ERIOCEPHALA. *Michaux.**Swamp, Rose, or Puss-Willow.*

Decoction in milk good in the secondary stages of the bowel complaints of children. Strong decoction good in canker, ulcerous sore throat, diarrhœa. Tops bitter and tonic, useful in agues.

SALIX VITICELLINA. *Linne.**Common Yellow-Willow.*

Good bitter tonic in agues, and in chronic weakness of the stomach.

SAMBUCUS CANADENSIS. *Linne.**Common Elder.*

The flowers are laxative for children. Juice of the berries made into a rob, answers the same purpose. The pulp of the bark makes a good ointment for burns and irritable sores. The bark is purgative.

SAMBUCUS PUBENS. *Michaux.**Mountain-Elder.*

A decoction of the tops vomits and moves the bowels, and increases urine.

SANGUINARIA CANADENSIS. *Linne.**Blood-Root, Puccoon.*

Infusion and tincture are emetic; in smaller doses they promote fluid secretions, check the frequency of the pulse, remove obstructions, assist digestion, and restore healthy motion to the liver, stomach and bowels. It relieves coughs, and loosens phlegm. Dose to puke, fifteen or twenty grains of the powder. To make a tincture, cut in small pieces the recent root, half fill a vial of it, and the rest of the vessel fill with spirits or wine. Dose, a tea-spoonful for an adult, once in three or four hours to produce a tonic effect, and often repeated, or by the table-spoonful to puke.

This is a good ingredient in stomachic bitters.

It is said the natives use it to cure bites of serpents. Cures croup if given freely in season.

SANICULA MARILANDICA. *Linne.**Black-Snakeroot, Sanicle.*

Infusion, warm cordial; stimulant, and promotes perspiration and other secretions.

SATUREJA HORTENSIS. *Linne.**Savory of the Gardens.*

Infusion warmest and most stimulating of the garden herbs.

SCUTELLARIA INTEGRIFOLIA. *Linne.**Scull-Cap.*

This beautiful plant is a very pure and highly intense bitter. Substitute for quassia.

SENECIO VULGARIS. *Linne.**Groundsel.*

Strong infusion, good vomit. The bruised leaves good applied to boils; substance good for worms.

SMILAX ROTUNDIFOLIA. *Linne.**Green-brier, Devil's-guts.*

Infusion is useful drank after a course of mercury, and in eruptive diseases, and in chronic rheumatism.

SOLANUM NIGRUM. *Linne.**Night-shade, Black Night-shade.*

Infusion, (half an ounce to a pint of water,) drank freely, relieves stoppage of urine, good in old scrofulous ulcers and tumors. The berries enter into an ointment of the common people, which is used to relieve painful tumors.

SOLIDAGO ODORA. *Aiton.**Golden-rod, Sweet-scented Golden-rod.*

Infusion a pleasant diluting beverage in fevers.

SPIGELIA MARILANDICA. *Willdenow.**Carolina-pink, Indian-pink.*

A strong infusion drank at evening till a slight intoxicating effect is produced, and followed by calomel and rhubarb, destroys worms. Given to children in small doses at intervals, relieves pain in the bowels, stops puking in irritable stomachs, and checks the slow remittent fever which usually precedes dropsy in the head.

SPIRÆA TOMENTOSA. *Linne.**Hard-hack, Downy-meadow-sweet.*

The leaves in infusion, make a delicate, yet effectual astringent; excellent in relaxed bowels, thrush, ulcers of the mouth; a fine extract is prepared from the leaves,

which retains the medical virtues of the plant in perfection; a fine remedy for bleedings from the stomach and bowels, and in short wherever an astringent is wanted.

STATICE LIMONIUM. *Linne.*

Marsh Rosemary.

The roots of this plant are powerfully astringent; decoction is good in ulcerous sore throat. Good against thrush and canker, and in malignant quinsies.

STILLINGIA SYLVATICA. *Linne.*

Yaw-weed, Cock-up-hat.

Purgative, promotes fluid secretions, good in dropsy, yaw, and venereal complaints.

SYMPLOCARPUS FÆTIDA. *Saslibury.*

Skunk Cabbage.

The root is a pungent antispasmodic in colics, and griping of the bowels. Seeds good in asthma and hysterical complaints. Leaves bruised relieves painful swellings, whitlows, &c.

TANACETUM VULGARE. *Linne.*

Tansey.

Aromatic, tonic. Removes obstructions, relieves hysterical affections. Expressed juice postpones agues, should be drank a wine-glass full a few minutes before the attack.

TEPHROSIA VIRGINIANA. *Persoon.*

Goat-tree, Cat-gut.

Root in decoction destroys worms.

TRILLIUM ERECTUM. *Linne.**Trillium, Birth-root.*

Good in bleeding. It is said the natives use it, *ad partum accelerandum.*

TRIOSTIUM PERFOLIATUM. *Linne.**Fever-wort, Wild-Gentian, Bastard Ipecac.*

Bark of the root vomits and purges like jalap, and in the same doses. In smaller doses removes obstructions of the liver. Tonic in scrofula, in yet smaller doses.

ULMUS FULVA. *Michaux.**Red-Elm, Slippery-Elm.*

Mucilaginous, and slightly astringent.

URASPERMUM CLAYTONI. *Nuttall.**Sweet-Cicely.*

The root is mucilaginous and starchy, and has an agreeable fennel-like odour. It is recommended to relieve the secondary stages of coughs, hoarseness, etc. In all probability an essential oil, similar to that from *solidago odora*, might be obtained from it.

VERATRUM VIRIDE. *Aiton.**Green-Hellebore.*

Ointment and decoction cure the itch and other eruptions, but is apt to excoriate tender parts; violent poison taken internally.

VERBENA HASTATA. *Linne.**Blue-Flowered-Vervain, (large.)*

Strong decoction is purgative, and in large doses vomits.

VIOLA PEDATA.

Parsley-leaved Violet.

Strong decoction; good in catarrhs, and affections of the lungs; given in larges quantities, vomits.

ZANTHORIZA APIIFOLIA. *L'Heritier.**Shrub-Yellow-Root.*

A strong pleasant bitter; sits easy on the stomach.

ZANTHOXYLUM RAMIFLORUM. *Michaux.**Prickly-Ash.*

Warm pungent aromatic in substance or tincture; water does not extract the virtues at all. Good in chronic rheumatism, and in other diseases where guaiacum is proper. A good ingredient in bitters.

APPENDIX.

OF WATER.

[Taken from Thompson's London Dispensatory.]

WATER is an agent of great importance, independent of the part it sustains in the magnificent operations of nature. Its efficacy in the cure of diseases is indubitable; yet it is not admitted into the list of *materia medica*, or any of the *British Pharmacopœias*, either in the state in which it is most commonly found, or that in which it holds in solution, substances from which it receives new properties, and is rendered capable of producing important changes in the animal economy. In the first state it is denominated COMMON WATER; in the second, MINERAL WATER; and under both of these forms, it is necessary that its qualities and effects should be known and well understood.

I. COMMON WATER.

The usual appearance of water is too well known to require description. It retains its fluidity under the ordinary pressure of the atmosphere, and at any degree of temperature between 32 and 212°, Fah.; but under 32°, it crystalizes and becomes solid, and is changed into ice; and above 212°, assumes an aeriform character, or becomes steam, expanding to 1698 times its ordinary bulk. One cubic inch of pure water at 60°, and under a pressure of the atmosphere indicated by 30° of the barometer, weighs 252,422 grains, one thirty-third of a grain less than two hundred fifty-two grains and an half.

Although water is almost universally diffused over the surface of the earth, yet it is not found perfectly pure in any place; which is owing to its great solvent powers, ena-

bling it to take up a portion of many things, with which it must come in contact in its natural state. These impregnations, however, are not sufficient in general to give it any very sensible taste or odour, or render it unfit for the ordinary purposes of life; and it is in this state that common water is usually obtained. Common water varies considerably according to the source whence it is derived, and other circumstances; but all the varieties may be reduced under the three following heads:—

1. Rain Water—*Aqua pluvialis*,
2. Spring Water—*Aqua fontana*,
3. River Water—*Aqua fluvialis*.

1. RAIN WATER is the purest kind of natural water; but, it nevertheless contains in solution, in every 100 cubic inches, 3 1-2 cubic inches of air, rather more oxygenous than common atmospherical air, and about one cubic inch of carbonic acid gas, (*fixed air*,) besides minute portions of carbonate of lime and muriate of lime. Its specific gravity scarcely differs from that of distilled water; and after precipitating the muriate of lime, by dropping into it a little barytic water, and exposing it to the atmosphere until the precipitate be totally deposited, it is sufficiently pure for most pharmaceutical purposes. When rain water, however, is collected in towns, or from the roofs of houses, it contain a small portion of sulphate of lime, soot, and other impurities, and requires to be boiled and filtered before dropping in the barytic water.

Snow water, when nearly melted, is destitute of air, which is the reason that fish cannot live in it: but when allowed to remain for some time exposed to the atmosphere, it does not differ in its qualities from rain water.

2. SPRING WATER, if it has not filtered through a very soluble soil, is almost as pure as rain water. The best springs are those which rise through sand or gravel, at a small depth. It generally contains, besides the above-mentioned ingredients, a small portion of muriate of soda, (*common salt*.)

Well or pump water, which is spring water obtained by digging to a considerable depth, is by no means so pure. It is commonly distinguished by a property named hard-

ness, implying an incapability of dissolving soap*; which is owing to its containing many earthy salts, the principle of which is sulphate of lime, (*plaster of Paris.*) It also contains more carbonic acid gas than common spring water. Many of the foreign ingredients contained in hard-water are simply suspended in it; for pump water is rendered softer and purer by only passing it through a filtering stone.

The best method of freeing hard water of its earthy salts, is first to boil it; then, after it has cooled, to drop into it an alkaline carbonate, (*pearlash or the like*;) and lastly to filter it. It cannot be employed for pharmaceutical purposes.

3. RIVER WATER, when the stream is rapid, and runs over a pebbly or siliceous channel, is as pure as the softer spring water; but when the current is slow, and the bed clayey, it approaches nearer to the nature of well water, and frequently contains putrified vegetable and animal matters, as is generally the case in the water of lakes and marshes.

Such are the foreign ingredients contained in *common water*. Boiling frees it from air and gases, and precipitates many of the earthy salts; but distillation in glass vessels frees it entirely from them, and it is obtained almost perfectly pure, transparent, colourless, insipid, and inodorous.

The varieties of water above enumerated may be almost indiscriminately employed as diluents, the small proportion of foreign ingredients they contain occasioning no difference in their diluent properties. When the quantity of sulphate of lime and aluminous matter, however, is very considerable, as is the case in many pump waters, there is some reason for concluding that deleterious effects may arise from the use of the water; although it may be doubted whether the scrofulous and glandular swellings, peculiar to some populous towns, can be justly ascribed to this cause. Even a few of the waters which are regarded as mineral waters, owe more to the diluent property of the

* Soap when agitated with hard water is decomposed; the alkali (*ley*) of the soap uniting with the acid of the earthy salts, while the oil and earths combine and form new and nearly insoluble soap, which swim in a curdy form on the surface of the water.

water for their efficacy, than to the impregnations they contain. The diluting power of water is much modified by temperature; warm or tepid water being a much better diluent than cold water.

The medicinal properties of water as a diluent were well known to the ancients; and cold water, used as a drink in fevers, was a principal remedy with the Father of physic in these complaints. The temperature of 60° is the proper degree, when it is intended that nature should produce its diluent effects without the aid of heat. Under 45° , it produces a sedative and astringent effect; above 80° and under 100° , it relaxes the fibres of the stomach, and is apt to induce nausea, particularly when bulk is added to this range of temperature; but, at a higher temperature, the stimulus of heat, in the same manner as the addition of other stimulants, prevents that effect. Simple water may supercede the use of all other diluents; but animal and vegetable infusions are generally employed, or toast and water, which is more agreeable to most palates, and is an excellent diluent in fevers and inflammatory diseases. The temperature of water as a diluent should be regulated by the nature of the disease; in internal bleedings the temperature should not exceed 45° , but it may be 60° in fevers; unless in the cold stage of the paroxysm of fever, when the thirst should be allayed by tepid or rain water, and other bland fluids; and the same precaution is necessary when the sweat has become general or profuse. In cases of redundant bile, by drinking half a pint of tepid water every morning before breakfast, and taking immediately afterwards, moderate exercise; the acrid bile is diluted, and its passage through the bowels assisted, without the irritation, which in its undiluted state it always excites; and it produces the same benefit in cholera morbus in the commencement of the disease, the stomach being rendered by it more fit to receive opiates and other remedies. Some medicines, as sudorifics, diuretics, and emetics, scarcely produce their effects, unless their operations be assisted by copious dilution with water or watery fluids.

Water is also an external remedy of great importance,

but its effects are much modified by the degree of temperature of which it is applied.

COLD WATER, of a temperature under 70° , gives the sensation of cold to the skin, and is applied under the form of *bath or affusions*. The cold bath is water of any temperature from 42° to 85° of Fahrenheit. When the body is immersed in it, it first induces the sensation of cold, excites shivering, renders the skin pale, and contracts it so as to produce the papillous appearances denominated goose-skin, (*cold pimples*,) the respiration at the same time is quickened and rendered irregular, producing sobbings, and the pulse is diminished in force and velocity, but it is also rendered firm and more regular. If the immersion be not long continued, reaction takes place not long after coming out of the bath, a glow or agreeable sensation of heat is felt over the whole body; the tone or vigour of the muscles are increased, a buoyancy of spirit and aptitude for action succeeds, and a sense of general refreshment is felt by the bather. The protraction, however, of the immersion for a considerable space of time, particularly if the temperature of the bath be under 50° , is not followed by this reaction, but the cold water operates as a powerful sedative; the action of the heart and arteries becomes languid, the pulse ceases at the wrist, the animal heat is rapidly diminished, and a sensation of coldness at the stomach is felt, which is succeeded by faintness, delirium, torpor and death. Sometimes these unpleasant effects are experienced in some degree, even when the immersion is not protracted, at the temperature of the bath not under 60° ; in which case cold bathing proves always hurtful, and ought not to be repeated; but when contrary effects are experienced, it is found to be useful in many diseases of debility, particularly in scrofula, if the water be impregnated with salt, or sea bathing be resorted to.

The debilitated, however, in whom the use of sea bathing produces these effects, when it is employed before breakfast, are not always affected in the same manner when it is used after breakfast, or when the stomach is full; but on the contrary receive the same benefit from it as those with whom it agrees at all times. The use of cold water as a

general bath, is never employed with a view to its sedative effects; but for this purpose it is partially applied, either by the immersion of the affected parts, or by means of cloths dipped in very cold water, and laid over or near the feet.

It is used as a remedy in active uterine bleedings, burns and scalds, and in local inflammations, even when arising from general disease, as gout and acute rheumatism, when the surface of the pained part appears red and inflamed.

The cold affusions, or the suddenly pouring cold water over the whole surface of the body, operates as a powerful remedy, although its effects as such are of short duration. They are produced by the suddenness of the application affecting the nervous energy, and by the shock rousing the dormant sensibility, so as to induce a new action as it were of the nervous system, dissolving the spasm on the extreme vessels of the surface, carrying off a large portion of morbid heat by general evaporation, and the remainder by insensible perspiration, thence restoring the healthy action of the exhalents and the capillaries. In typhus fever this mode of applying cold water has been productive of the best effects. It should be applied in the first hot stage of the disease, if possible, and repeated every time the morbid heat returns. If the water can be impregnated with salt, so much the better; but when the disease is advanced, its temperature should not be more than 26° under the heat of the body. It often stops suddenly the disease, if it be used during the first three days, and sometimes even as late as the fifth; but after this period, it can be regarded as an useful auxiliary only, even while properly employed. In tetanus, Currie affirms, that the cold affusion also proves useful, particularly when the shock is considerable, and applied during the convulsions. It is, however, in idiopathic tetanus only that it proves useful, no advantage being obtained from using it in tetanus arising from wounds. Cold affusions, in the form of the shower bath, are advantageously employed as a stimulant and tonic in diseases of debility when no fever or increased perspiration is present. I know of no remedy so generally useful in those affections which are known by the name of nervous complaints.

WARM WATER, or of a temperature from 86° to 100° ,

gives the sensation of warmth to the body, and is applied both locally and generally, in the form of vapour, fomentation and bath. Water is found in a state of nature, combined with different quantities of caloric within the above range of temperature; the necessary degree of temperature, however, is generally obtained by artificially heating the water.

In general the application of warm water is obtained by means of baths. When the greater part of the entire body is immersed, the water constitutes properly a bath; but when half only is immersed, it is a half bath, (*semicupium*,) these may be either,

- a. The hot bath, (*balneum calidum*) from 97° to 100°.
- b. The tepid bath, (*balneum tepidum*) from 86° to 99°.
- c. The vapour bath, (*balneum vaporis*) from 103° to 130°.

The first two differ in temperature only; but the last, from the water being applied in a very minutely divided state, acts with much greater effect than the water in the liquid form. The operation of the first of these forms of applying is stimulant; it augments the action of the heart and arteries, renders the skin red, quickens respiration, and produces a copious flow of sweat; but the others, although they excite the sensation of heat, yet lessen the frequency of the pulse, relax powerfully the skin and simple solids, and diminish generally increased excitement.

Warm and vapour baths are efficaciously employed in acute rheumatism, inflammation of the abdominal viscera, (*inward parts below the midriff*,) of the kidneys, bladder and uterus: in suppressions of urine, and in spasmodic affections, particularly those to which infants are liable, arising from teething and other irritations. The general relaxation produced by their use has been taken advantage of also, for assisting the reduction of strangulated hernia (*inflamed rupture*;) as the relaxation produced gives a disposition to all the parts to regain their proper place. The tepid bath is found to be very useful in the rigidities which follow some acute diseases, as the gout and rheumatism, and according to some, the rigidities attendant on old age. Its effects in promoting the cure of eruptions (*herpetic*,)

in slight cases of leprosy, the use of it with friction is all that is required; and in all foulness of the skin it is a most important auxiliary. It has, also, been found very beneficial in cases of insanity. In general the period of immersion should not be less than twenty minutes, nor exceed one hour. The partial application of warm water as a remedy is made by means of

1. *a.* The foot bath, (*pediluvium*,)
- b.* The hip bath, (*coxæluvium*,)
- c.* The hand bath, (*manuluvium*.)

2*d.* Fomentations of vegetable decoctions; and

e. Flannel cloths rung out of boiling water, by which the moisture is applied in a state of vapour.

These partial baths are useful in the same diseases for which the general baths are employed; but are better adapted for relieving the rigidity of single joints and topical inflammation, and the hip bath has been lately found to be very beneficial in suppression of the monthly period, and for relieving the pains of cancer in utero.

For fomentations, it is the practice to employ vegetable decoctions; but the best of these can be regarded only as vehicles for retaining the heat and moisture. At all times, flannel cloths wrung out of boiling water are superior; both because the water is applied in the form of vapour, and also, while they continue as long warm they do not wet the bed and linen of the patient. The flannel cloths should be each about two yards long, with the ends sewed together; so that by means of two sticks, one being at each end, turned in opposite directions, they may be wrung much dryer, when taken out of the boiling water, than could be effected by the hands. The principal circumstance to be attended to in the applications of fomentations is the frequent removal of them in order that a steady and constant heat may be applied to the fomented part.

