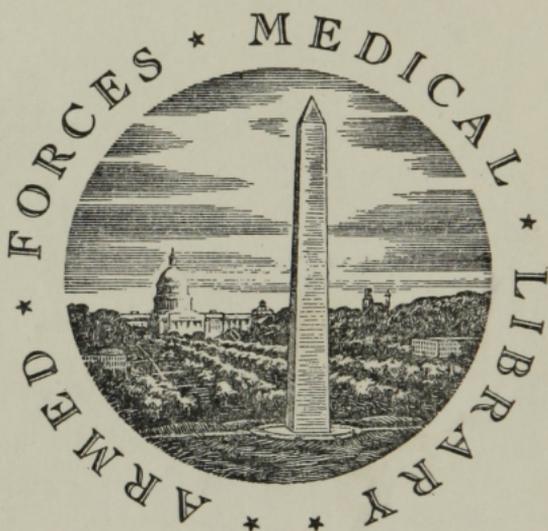


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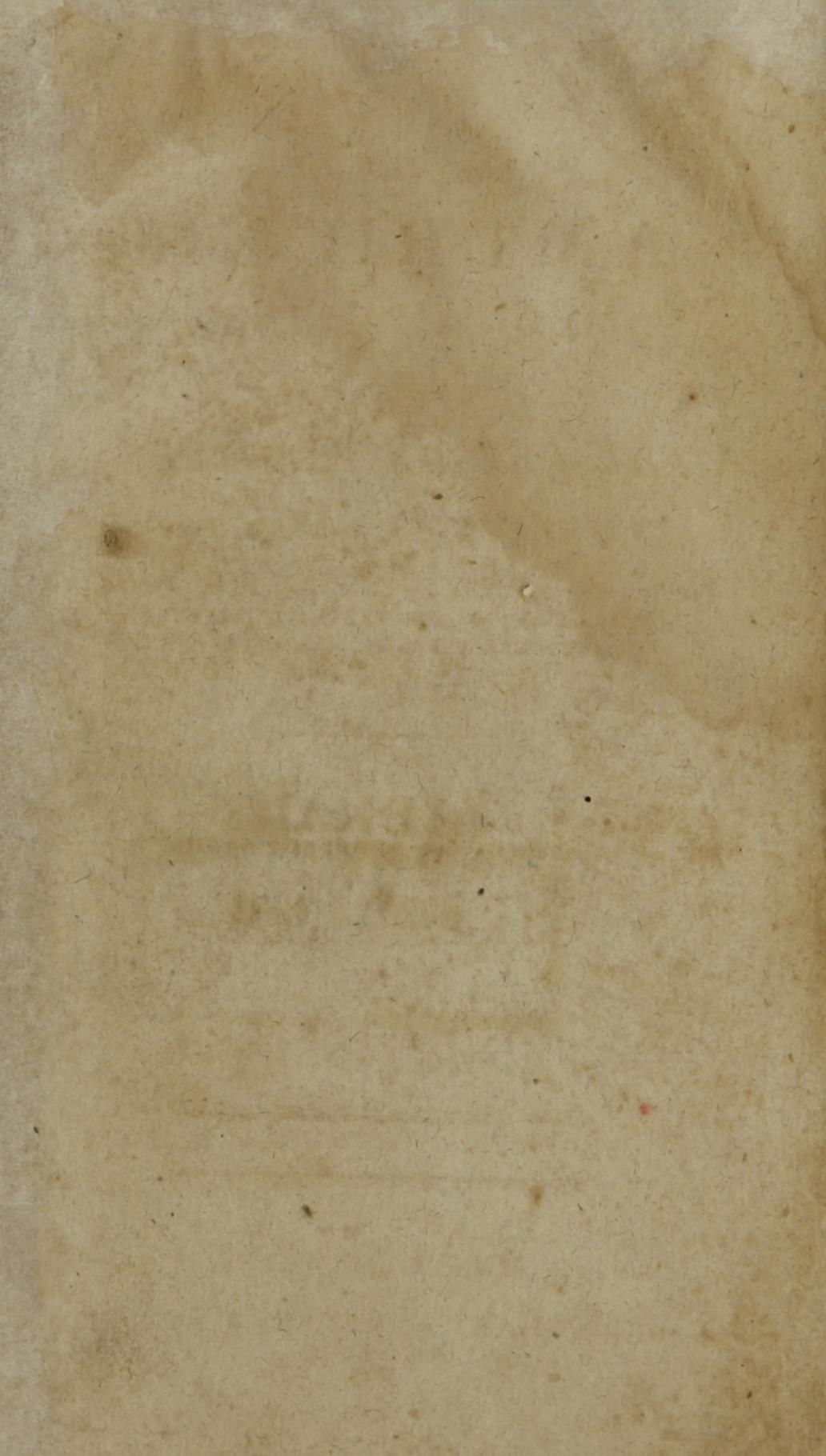
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THE
AMERICAN
MEDICAL GUIDE
FOR
THE USE OF FAMILIES,
IN TWO PARTS,

PART 1st. A *MATERIA MEDICA*. BEING
A TREATISE ON ALL THE MOST USEFUL
ARTICLES USED AS MEDICINE,
INCLUDING THOSE WHICH
ARE THE PRODUCE OF
OUR OWN COUN-
TRY.

PART. 2d *THERAPEUTICS*, OR, THE ART
OF CURING THE VARIOUS DISEASES
OF THE HUMAN BODY.

TO WHICH IS ADDED

A short description of the constituent parts of
THE HUMAN BODY,

BY THOMAS W. RUBLE. M. D.

RICHMOND, (KY.)

PRINTED BY E. HARRIS, FOR THE
AUTHOR.

United States of America,
District of Kentucky, Set.

BE it remembered, that on the 24th. day of December, in the year of our Lord 1810. and in the 35th. year of the independance of the United States of America, Thomas W. Ruble of the said District, hath deposited in this office the title of a book, the right wherof he claims as author in the words and figures following, (to wit)

**THE AMERICAN MEDICAL GUIDE,
FOR THE USE OF FAMILIES,** in two parts,

Part 1st. **A MATERIA MEDICA**, being a treatise on all the most usefull articles used as medicine, including those which are the produce of our own country.

Part 2d. **THERAPEUTICS**, or, the art of curing the various diseases of the human body, to which is added, a short description of the constituent parts of the Human Body. By **THOMAS W. RUBLE, M. D.**—In conformity to the act of congress of the United States, entitled “an act for the encouragement of learning by securing the copies of Maps, Charts, and Books, to the authors and proprietors of such copies during the term therein mentioned,” and also to “an act intituled an act, supplementary to an act entitled an act, for the encouragement of learning by securing the copies of maps, charts, and books, to the authors and proprietors of such copies during the time therein mentioned, and extending the benefits therof to the arts of designing, engraving, and etching, historical & other prints.

*John H. Hannah, clk.
District of Kentucky.*

APOLOGY.

UPON presenting the public with a new treatise on medicine it may be necessary to make some apology:—The great number of medical books with which every book store abound, might be thought sufficient; while the profession of originality will not be sufficient to render it acceptable with a discerning public; it will be thought at least, that the subject must be pretty well exhausted, both of matter and variety of form; but, on the contrary, it will be acknowledged, by every candid physician at least, that, the multiplication of facts, by an attentive observer, cannot but be acceptable to the faculty themselves: but I would not be thought to intend an insult upon the gentlemen of the profession by an insinuation, that the present work, in the humble, didactic style in which it is couched, will be in any wise an acceptable morsel to their more refined palates; it was never intended for them, but for another description of readers, among whom, by a practice of many years, I know that a great deal of ignorance, and even superstitious error still prevail, and with whom I know it will meet with a more favourable reception, however correct, or competent those extant may be considered by some.

Every author, and editor, in presenting the public with a new work, or a new edition of an old work, is certainly governed in a measure by one common motive, viz. profit; but I trust that it was not the primary object with me: I first conceived the idea from the following circumstance; In practice, I have discovered, that, the want of an acquaintance with the different drugs of the shops, and even many which are the produce of our own country, with the proper method of administration, and management, was the greatest difficulty that private practitioners meet with, and in most families in which I have administered medicine, I have found more trouble in prescribing the mode of exhibiting and managing the various articles, and reconciling them to them, than a little,

but after a few times attendance, I have generally reconciled the family to the use of some of the most powerfull drugs of the shops, at the very name of which they would at first shuder; for in the course of my practice, I have ever endeavoured to justify my prescriptions, rather than conceal them, and from this mode of conduct, many families now deal out opium, mercury, tartar, &c. with a liberal hand, that once would have turned pale at the very name. I have therefore in my treatises on the materia medica, endeavoured to render the mode of administering medicine, and the management as familiar as possible. In this, I think I may challenge the world for to produce a work now extant as full as it ought to be, and I know that I once should have considered, such a work of inestimable value.

As to the curative part, I trust, I shall be excused for offering to the public at the same time, with the former, the best mode of practice which my experience would enable me, in a form and language which I intended, at least, should come down to the capacity of every man, whose education and understanding should enable him to derive any benefit from the use of letters—And as to my mode of practice, I shall only observe, that it is one which I have culled from the writings of authors, both ancient and modern, and more particularly my own experience and observation.

It might be thought unpardonable in an author, to detract from the merit of other authors altho it might be with a view to obviate the charge of arrogance, but I cannot avoid a remark or two, upon that head, merely to shew why I do not consider the authorities extant, competent in point of merit.—It will be remembered that all those authors are foreigners, or received their education, and whose practice have been in large maritime cities, where diseases materially differ from those of the interior parts of a large continent, and where drugist shops, are as plenty as, grist mills are in many parts of this country; most of he people, into whose hands this little work will fall,

are the inhabitants, of a yet desart country in comparison to those ; many of whom must ride fifty or an hundred miles, before they can find, either a drug-ist shop, or a regular physician—From what has been said, I hope at least, to be pardoned for intruding so far upon the public, as to solicit the perusal of the following work, and then they will decide according to its merit.

THE AUTHOR.

December 2d, 1810.

P R E F A C E.

IT has been several years since I first had a work upon the following plan in contemplation, the embarrassments in which, the project was involved frequently, induced me to abandon the idea.—The importance of becoming an author, the difficulty with which a work would be accomplished by one, who had not been in the habit of writing for the press, the multiplicity of other engagements, but above all an incompetency to form a system of rules of practice to please even myself;—but, another reflection would still arise, that I was, or at least thought I was able at present to furnish a work, that would be highly useful to my countrymen, and to delay it until I should be able to furnish a work free from imperfection, might in fact amount to a denial of the work, under any shape.—I at length embarked in the work, and now present it to the public, in a much more imperfect state, than I intended, the whole has gone immediately from under my hand to the compositor's case, who has often stood by and waited for a sheet, while I was in the mean time engaged in other business, and seldom ever had time to write a sheet at a time, but from reviewing the work I can assure the public, that it contains my sentiments in general, much more correct than could be expected from the hasty manner in which, it has been penned; and in the mean time, I have the consolation to hope that I may at some future period be able, to present the public with another edition, as the present impression is but small, provided it should meet with as favourable a reception as my vanity prompts me to hope for.—In the former part, I mentioned in part, my object in the form of that part, which treats on the various articles of medicine.—I have now to observe, that my list is much shorter than that of any other extant; but it contains all the most useful, both of the shops, and the produce of our own country, and such as I have in the course of my practice, considered as essentially necessary;—as to my ar-

arrangement, both of drugs and diseases, I must acknowledge, that it is unsatisfactory, but it being a point of little importance in a treatise intended, only for private practice, I hope to be excused, and in truth, I am unable to hold nosology, as so very essential to practice.—I have added a short sketch, of anatomy or a short description of the constituent parts of the human body, as it appears to me, impossible to understand medical language, or the diseases upon which it treats, without some knowledge of the parts concerned, but in this, I have not thought it necessary to treat of the more minute parts, but merely to give some idea of the principal parts, essential to the due organization of an animal body.

There is an omission, which, it may not be improper to supply in this place.—The title to some of the classes of medicine are not familiar as I could wish, a purgative, and an emetic will be easily understood by every one, but an astringent, tonic, or stimulant, are not so familiar; astringents are such medicinal substances as taste rough in the mouth as alum, some barks, &c.—such substances, when applied to animal matter, in a dead state, condenses, and renders the parts more solid and less liable to putrifaction, as in the tanning of leather, and we suppose their effect upon living animal matter, to be in a measure the same, and by that means strengthens the solid, and gives tone to the softer parts, bitters are supposed to have the same effect, and are called tonics, but it appears to me that it would have been, as well to have included all medicine of a similar effect under the same head.

I have placed stimulants as the common title of all the rest, for I could not see any advantage in distinguishing them according to the different modes in which they excite action, or the different parts upon which they act, as by producing sweat urine, saliva, &c. to conclude upon this head, in a work intended for private practice, it is unnecessary, or at least of little consequence.

I for some time had it in view to subjoin a glossa-

ty, but upon reviewing the work, I considered it unnecessary, for altho many technical terms, have unavoidably occurred, I have generally subjoined an explanation, and altho this may not be found always to be the case, it will be found only in the small scraps of metaphysical reasoning, which is unimportant to the plain reader.

In the course of the work, I have frequently employed the word quack, and altho a very common one, it is not so very well understood, and is some times used to the injury of the public. A quack is a person who makes a babling profession of any art or science without duly qualifying himself for the discharge of the duties of such profession, and of all impostors, those in medicine are the most criminal;— A taylor may spoil his customers cloth, a blacksmith may burn his employers iron, in both cases the damages are trival and easily ascertained, and they cannot do much damage before they will be detected— But, in a man making a profession of physic or surgery, an imposition is a crime of the deepest dye, the life of those who may employ him depends upon his skill, if his mode of treatment should be inert, altho not directly injurious, yet he deceives his patient and prevents the calling in the aid of a better, and it is truly a pitty, but that some criteria could be devised by which the public might be able to decide with more safety and propriety upon the pretensions of persons making a profession of so important a calling. But on the other hand, so far from being criminal, it is truly laudable, in those whose circumstances will admit of it, to keep by them an assortment of medicine, and in the mean time, it is their duty, to bestow as many of their leisure hours as possible upon the study of medicine; by this course a man may in a short time come to derive infinite advantage to himself and family, and without injuring himself, be of great service to his more indigent neighbours, this is more especially applicable to the thinly inhabited parts of the United States where regular physicians of merit are scarcely to be found.

OF PURGATIVES

JALAP.

This is one of the stronger purgatives, and is entirely safe—the dose for an adult is about half a drachm—nothing more is necessary than to wet it with water or spirits to render it fit to swallow. It is best not to eat any thing for an hour or two after taking it, or until it begins to work; and after its operation is over, warm soup, or the like, is best for the first meal. It has become a very common practice to join Calomel with it; 25 grains of Jalap and 8 or 10 of Calomel, is a common dose for an adult. From the adhesive property of the Calomel, it is probable that it is not carried off during the operation of the Jalap; and therefore it might be prudent not to take any large quantity of any thing cold into the stomach for 24 hours after taking it.

This purgative, especially with calomel, has become very much into use in fevers of almost every description, but sometimes very improperly; it, however answers tolerably well in pure bilious or intermittent or remittent fevers; in which it should always given on the day before the barks.

It is the best purgative in the cure of the venereal disease, old ulcers &c. in these cases a dose ought to be given every ninth day for three or four times, and once a fortnight afterwards until the cure is finished: such a course is also proper in the cure of tetterous eruptions, tinea cappitis (scald-head) and other obstinate cutaneous diseases, such diseases are very apt to make their appearance at times for some time after they have been cured.

PURGATIVES.

or some other more formidable disease some times attack the patient, as a fever, rheumatism or the like; in such cases a dose or two of Jalap will be the best remedy, this is especially the case in sore legs of a long standing.

GLAUBER'S SALT.

This is a mild and pretty brisk purge; but as a purge, it does little more than emptying the bowels. From one to two ounces is generally necessary.— There can scarcely a case happen in which there is any danger to be apprehended in the use of the salts. The cases in which they are especially proper, are in all fluxes of the belly. In diseases of this kind, it is best to give the salts in small doses; I usually divide a common dose, as an ounce or table spoonfull, into six or eight parts, and give them at intervals of from half an hour to an hour apart, until the stools become watery, but that quantity is not always necessary.

These diseases depend upon a tendency to putrefaction in the mucus lining of the bowels; by its antiseptic powers, it checks that disposition; and as a purgative, it carries off whatever may be offensive, or from its taint may keep up the disease. The first process toward putrefaction in animal matter, is the evolution or formation of infinite numbers of animalculæ and such is found to be the state of the stools of Dysenteric patients.— I generally give the salts in the morning and, opiates at night.—asttringents are improper in the first stages of this disease, and until the salts have been used for some time.

In cholera infantum or a purging and vomiting of children, the same course is proper. Salts is always improper when used to obviate costiveness as it never fails to increase the evil.

PURGATIVES.

3

CASTOR OIL.

This is a very mild and safe yet, brisk purge; the dose for an adult is various, from 1 to 2 ounces, half an ounce, or a common table spoonfull is a small dose—there is no danger in an over dose, as in this case the oil will pass through the bowels unaltered. Its principle use is in cholic with costiveness, and in other inactive states of the bowels. It has a very peculiar property which renders it highly proper in these cases, which is, by frequent use the dose may be lessened.

The seeds (palmacrystal) will answer every purpose of the oil—from 4 to 10 seeds is generally necessary. Their operation is more rough than the pure oil.

CREAM OF TARTAR.

This is a mild laxative, and is most commonly used to prevent costiveness where a person is confined to bed by disease, half an ounce or more is necessary as a purge—for keeping the bowels regular, a common tea-spoonfull twice or three times a day, or oftener, is necessary.

It is one of the best medicines for carrying off the water in dropsy, especially that species called Anasarca, which is when the water is collected in the cellular membrane, or in the flesh, as it is said among the vulgar, which begins by a swelling of the legs. For this purpose it is best to purge once every 4 or 5 days pretty briskly with it, and give two or three tea-spoonfulls every day in the interval—For strengthening the system, iron, barks, &c. In using all saline purgatives, it is the best to give plenty of cool water. The Cream of Tartar is very hard to dissolve, but may be taken into the mouth and washed down with water.

CALOMEL.

CALOMEL.

This mercurial is a purgative, and one of the most valuable; it is slow, but is thought to carry off bile better than most other purgatives; but I am not certain that this opinion is well founded. I have given Jalap both with and without it in bilious diseases, but never was able to perceive the difference, except given in such a maner as to affect the glandular system.

In some cholics, and frequently in fevers, a violent vomiting attends, owing to an inverted motion of the stomach and bowels. It frequently happens that no other purgative will stay on the stomach—in this case calomel is the only thing to be depended upon; for it can be thrown into the stomach by mixing it with a little sugar, honey, or molasses. It is extremely hard to be reject by vomiting, and by exciting the stomach and intestines into their natural action, removes the complaint. It is also proper as a laxative, or rather purgative, in slow or nervous fevers, attended with torper. As a vermifuge, or medicine for destroying worms in children, it is excellent but in cases not attended with fever, it is better to mix it with some preparation of iron; as the filings or rust, &c. If the dose be sufficiently large, it will purge pretty well in 8 or 10 hours. A dose should be given about three or four nights, one after another without intemission—it is best to give it at night, and give a gentle purge in the morning after every other dose to prevent it from affecting the mouth and gums—for this purpose castor oil is one of the best, but jalap will answer the purpose very well.

It will require from 8 to 10, or 12, grains of calomel as a purge for an adult. For a child two years old, one third as much as an adult, and more or less according to the age and strength of the child.

PURGATIVES.

5

MAYAPPLE ROOT.

This is in use as a purgative by many quacks and empirics ; but it is only a safe and useful purgative in the hands of a skillful person. There is but one season of the year proper for digging it, which is in the fall after the top is dead ; in the spring it is too corrosive and nauseating, and proves an emetic instead of a purgative. It should be dried in a shade when well dried, ground fine and kept in a close vessel. The dose in powder is 20 grains, or 15 grains of the powder and 8 grains of calomel, or a tea spoon full of cream of tartar. It is said to answer every intention of jalap.

RHEUBARB.

This is a gentle purgative, and requires a large dose to operate briskly as such ; from 30 to 40 grains is generally necessary. I have seldom employed it of late years as a purgative, but some times as a strengthening laxative, in cases of female weakness. Its use in Dysentery I entirely discard, as being founded upon erroneous principles.

WHITE WALNUT.

An extract made of the inner bark or root is a tolerable purgative. It ought to be made by boiling in barass, or rather an earthen vessel, and boiled down in a very gentle heat—From 10 to 20 or 30 grains is generally necessary. It answers in a measure the same intentions as jalap.

ALOES.

There is three sorts of this drug; but those called Hepatic and Socotorine, only is used in medicine for man, the other is given as a purge to horses.

Aloes is a slow purge, and never produce watery stools; but from 5 to 10 or 15 grains, empty the bowels; but it acts chiefly on the rectum or lower end of the intestinal canal.

It is a useful purgative joined with calomel, 3 grains of the former, and 5 or 6 of the latter, in obstructed menstruation, in women of weak watery habits--it ought to be given about 24 hours before the usual time of menstruation, or if that be unknown, two or three days before the full of the moon; and smaller doses, as two grains of each twice a week during the interval. It may be made into pills of a grain of calomel and two grains of aloes; and used instead of Anderson's pills.

Aloes is highly improper in hot bilious habits, or persons with black hair, black eyes, lean visage, and all persons inclined to piles, as the large use of them will induce a disposition to that disease in almost every person; but in fat or corpulent persons, especially women of costive habits, and free from Hæmorrhoidal complaints, especially where there is a swelling of the legs, &c. it is a very useful laxative.

EMETICS.

TARTAR EMETIC.

This is the only drug which I have employed for some years as an emetic, having from many years experience found it so certain and safe, and to answer every intention or purpose to be expected from medicines of that class, that I have entirely neglected almost all others. The celebrated ipecacuanha I have entirely neglected. My method of practice with it I believe differs considerably from that of any other physician of my acquaintance, and from that circumstance, I shall be more particular in treating upon it.

As an emetic, or puke, my method of managing it is this: I put from 3 to 5 grains of tartar into 10, 12, or 15 spoonfulls of cold water, and give 3 or 4 at first, and after waiting half an hour, give one or two more, and repeat it every fifteen or twenty minutes for twice or three times, by which time at least a motion is to be expected; but if it should not come on, I give half a pint, or a moderate draught, of water about blood warm, which, if the patient be kept pretty warm, will seldom fail to bring on a motion; and in all cases I increase its operation by giving warm water, and moderate it by cool. If its operation comes on in an hour or an hour and a half, it is soon enough, and it is not necessary to give water either cold or warm, but with an intention of increasing or diminishing its action.

Much is said about the danger of taking any thing cold into the stomach for a long time after taking tartar, but from either observation or theory I am unable to say wherein the danger consists.—It is however possible, or even probable, that to take a large quantity of any thing cold into the stomach suddenly when it is warm and charged with it, might be dangerous by bringing on a cramp, and many instances are reported to have been within the knowledge of every reporter; but I well know from many years experience that two or three spoon-fulls of cool water may be taken at any time with safety and often with advantage, and in all cases, cool water taken in small quantities at two or three minutes interval is one of the best methods of moderating its operation, and is more agreeable than salt soups and especially in fevers.

The only case in which I have ever experienced any difficulty in the management of tartar, was in nervous women, in whom it is very apt to induce pains and spasms, in which case, warm teas, aromatics &c. will give relief.

Full vomiting is always to be preferred to purging in fevers of every kind, and in croup or hives in children.

It would be very difficult if not impossible to point out all the diseases and the different stages of disease in which vomiting in a greater, or less degree is proper.—it is certainly proper in the first stages of all fevers, and it is frequently necessary to repeat it at intervals for several days—Head aches is frequently caused by a feverish state of the body and an inactive state of the stomach; nothing removes this more certain than a good dose of tartar.

After an intermittent or remittent fever has been imperfectly cured, a hot liver and hard spleen frequently remains; a full vomit repeated once or twice is the best remedy.

EMETICS:

In croup, it is an almost infallible remedy when assisted with bleeding and warm bathing &c.

Full vomiting (from the violent exertion which it occasions) is frequently improper in pleurisies & other inflammations of the breast: but even in these diseases it is of the utmost service given in small doses, as from a quarter to half a grain every 15 or 20 minutes, either dissolved in water, or in pills. As a febrifuge, or cooling medicine in fevers, there is perhaps nothing equal to it; it has (with me) almost superseded the use of nitre and the other neutral salts as a cooling medicine given as above. It is likewise of service in Influenza, or common colds and coughs. In these cases, and especially in fevers, where sweating is necessary, 10 or 15 drops of liquid laudanum with every dose is proper. It is one of the most useful medicines in obstinate chronic colics—in cases of this kind, after a full puke, give a third or half a grain in a pill, twice or 3 times a day, with two or three grains of some preparation of iron, as the rust or filings, and a little flour to give it a consistence; after using it a few days, the dose may be increased from time to time; and after the disease has abated, it may be omitted a week at a time, and then repeated again a few days.

Before we quit this subject it may not be improper to observe that Antimony, upon which the medical powers of the tartar intirely depends, has generally been treated by medical writers under that title, and a vast number of preparations have been prepared by the chemists and kept in the shops under different names, and were more or less active according as the metaline part was in a condition to become active in the stomach.

The crude antimony of the shops, being combined with sulphur, is not in a state to be acted upon and therefore unfit to be employed as a medicine.

What I have now to observe is, that after giving many of them a fair trial during a considerable prac-

tice, I do not consider any of them equal to the tartarized antimony, or emetic tartar, and from the success which I have had with it in such a number of diseases I have been ready to conclude it to be one of the most universal remedies with which we are acquainted.

Since I have been in Kentucky I have found it of great service in some scorbutic complaints which are very common in this country especially among children, some times under the form of an itch which is most common in winter and spring; I have also met with another kind in which red spots appear over every part of the body, at first resembling measles but soon blisters and become ulcerous; these cases were cured by giving it in small doses two or three times a day sufficient to induce some sickness and even vomiting at times—I have also given it in the venereal disease during the mercurial course with evident advantage; I first began with the sulphur precipitatum but generly employ the tartar.

IPECACUANHA.

This drug I have entirely neglected for some years, as I could see no advantages which it possesses over Tartar.

The common Indian physic, or Bowman's root, may make a very good substitute—the method of using which, is this: make a strong decoction by boiling the root in water—take half a gill at a time, fifteen or twenty minutes apart, until it begins to work, after which nothing more is necessary. If given in powder, 20 or 30 grains of the bark of the root, dried and powdered, is necessary; and it is also necessary to drink warm water to hasten its operation. It is proper to observe that after a drastic purge or puke, it is proper to take some good soup, seasoned to the taste, for the first meal.

TONICS.

PERUVIAN BARK.

There are three kinds of this bark imported from South America—the red, the yellow, and the pale. I am of opinion, that there is a greater difference in the color than in their powers as a medicine. The red is said to be the best, but the yellow is most in use. The first disease in which it is of use is fevers, of several kinds. It is a sovereign remedy in intermittent fevers, (agues) if rightly managed; two ounces is generally sufficient to cure an ague; but if not rightly managed, a pound may be given without any advantage; and it may be always observed as a rule that if it fails curing or preventing the return of the fever on the first or second trial, it is needless to repeat it.

The method of curing an ague, is as follows: The barks must be given on the day that the ague is expected; on the day preceding, it is proper to give a dose of tartar or jalap: begin to give the barks about two hours before the time that the ague is expected, to a grown person, give half a drachm, or a large tea spoon full every 15 or 20 minutes, until the time the ague was expected is fully past an hour or two; wet the bark with cold water, and add 10 or 15 drops of laudanum to every other dose, observing to keep warm enough to keep up a little moisture upon the forehead—exercise is of great advantage, where the patient is able to bear it, otherwise it is necessary to keep warm by the fire or otherwise, and if the forehead become obstinately dry at any time, the bark may be discontinued as it will answer no good purpose at that time, but if a moisture can be

Farrington

TONICS.

kept up until the time of the expected fit of the ague is past an hour or two the intervals between the doses may be longer, and if the return of the fever be intirely prevented, it will be necessary to take about three doses on the succeeding day, morning noon and night, and two on the second and one on the third: this course will be sufficient to secure a person against a relapse for three or four weeks even in those unaccustomed to situations exposed to the matter which produce those fevers.

To what has been said it may not be improper to repeat, first, that the patient be in a proper state to take the bark when he begin, which is known by his being easily put into a sweat, or at least a moisture raised upon his forehead by exercise or warmth. 2d. that the bark be taken in due time, that is, an hour or two before the expected ague or fever. 3d that it be taken in sufficient quantity, and that it be assisted with laudanum which also prevents it from griping or runing off by stool. 4thly that it be taken in smaller quantities a few days longer to strengthen the system and prevent a relapse.

The next case in which the bark is considered a remedy is a remittent fever, or what is vulgarly called a dumb ague.—It is allways best to turn such fevers into pure intermittent if possible by puking, purging, bleeding &c. before the bark is employed, but if after the use of these a plentiful sweat should not be obtained, if any moisture can be brought on it will be proper to try the bark during the time, or as long as any moisture can be kept up, but if the forehead become obstinately dry, the barks may be discontinued as in that case they will do more harm than good; it is to be observed that wine or good cyder is allways proper when the bark is.

The bark is generally given in nervous or slow fevers, but in these its use is more difficult: in these fevers opium and blisters are the proper remedies; but the bark in doses of half a drachm three or four times in the day with wine &c. will be of benefit.

In putrid fevers, or in fevers attended with any symptoms of putridity, such as purple spots or blisters about the knees &c. the bark is of the utmost importance, and should be given freely with wine, good cyder, &c.

The bark is much depended upon in some cases of mortification, but in this it requires some caution, for if great pain and fever attend, the bark will be injurious: but if there is but little fever it is proper to give the bark freely as it will prevent the putrid matter from affecting the system, and especially the stomach.

The bark is one of the principal remedies in fluor albus (whites) in women, 20 or 30 grains three or four times a day with elixir vitriol and balsam copaiya, cerecloth, &c.

The bark is a disagreeable drug to most people, and it being necessary to take it in large quantities, frequently prevent people from taking enough to effect a cure—They are always best given in substance, and are less bitter wet with cold water than spirits or wine, and when the stomach has been very weak I have found it necessary to conceal the taste intirely, for this purpose I have frequently made it up into pills by adding some flour and making it into paste of a proper consistence for forming pills, rolling them well in flour. take two, three or more into the mouth and wash them down with large draughts of water, or rather buttermilk.

It is proper to mention that it is the best to give the bark in substance in most cases, but in weakness or such diseases as require strengthening medicine, the bark may be given in spirits and make a tolerable agreeable bitter; for this purpose an ounce or more may be put to a quart of spirits and a few bits of orange peel added: of this a table spoon full may be taken two or three times in the day especially when the stomach is most empty.

COLUMBO, THE ROOT.

This drug has not been in use or even known in Europe or America but fifty or sixty years, and has hitherto been imported from some of the East-India islands—The species of plant to which it belongs is entirely unknown.

We have a plant growing in many parts of Kentucky the root of which possesses precisely the same sensible properties—The root in its green state very much resembles a parsnip but is more tender, the stalk is smooth, and of a purple color, and grows from six to eight feet high, the leaves are long, thick, and smooth, and come out of the stalk four in a place; toward the top it puts out a number of branches which are set with a pale purple flower.

It appears that the root may be found in different states of strength, the root of the young plant before it bears seed, dug in the fall after the leaves are dead, or in the spring as soon as the leaves begin to appear is in a good state, but after it puts up a stalk and bears seed, the root is then spongy and unfit for use until the next season when the large part decays and the smaller roots remain sound but bear no top; these roots are best.

It is a strong bitter, and when green it has a considerable degree of aromatic with it—when dug it should be cut small and strung on thread and hung in an airy apartment, for if it is not dried speedily it will mould and spoil.

As far as I have had an opportunity of trying it I have found it to be in no wise different from the imported, except in its strength, for I believe it is seldom as strong, which I suppose to be owing to the difference in climate, the imported growing near the equinoctial.

The medical powers of this root is that of bitters in general and it is one of the most agreeable.

Given in a dose of half a drachm in the same manner as the peruvian bark it will seldom fail to

cure the fevers in which the bark is proper.

It is also esteemed useful in vomiting and other diseases of the stomach proceeding from debility.

When it was first brought into use in Holiand it was considered as a remedy in Dysentery, but like Rheubarb and many other articles it has long since ceased to be employed in that disease, except by the ignorant.

ALDER BARK.

This shrub grows in abundance about branches and in wet grounds in almost every part of the Atlantic States, and in some parts of Kentucky.—Its blossoms are a long, round body resembling some kinds of worms, and possesses the same powers as the bark but are weaker.

The bark I have used as a substitute for the peruvian, and believe it to be superior to the dogwood or any other of our domestic barks in fevers.

It is also of service in some cutaneous diseases, as also, boils &c.—in old and obstinate ulcers, as those in the legs, it will dispose them to heal kindly, which it must do by increasing the strength of the system in general—It may be given in substance, as half a drachm or more at a dose, or it may be taken in decoction, half a pint of a strong tea may be taken two or three times a day.

IRON.

This is a most valuable medicine in many diseases there has formerly been a great many preparations of this metal kept in the shops under different titles importing different medical powers, such as “crocus-martis astringents” and “crocus-martis apperients” i. e. binding, and opening safron of iron, but such distinctions are now obsolete—I have for several

years kept but three or four preparations by me—the Tincture Martis, Rust, and an extract.

The tincture is made by dissolving the scales found about the smith's anvil-block in the spirit of sea-salt, and then adding an equal weight of pure spirits.—This is a tolerable agreeable medicine, and at the same time very effectual—The dose for an adult is 15, or 20 drops in a gill of water three times in the day.

I have frequently cured the ague in very small children with it by giving 6 or 8 drops of it in cool water sweetened with white sugar, every fifteen or 20 minutes instead of the barks, and observing the same rules.

The filings, if fine, is a very good preparation for worms in children with big bellies and pale countenances, for this purpose, about four or five grains may be given to a child of that many years old, given every morning for several days together—The Rust (Rubigo Ferri) ground very fine and given in doses a little larger will answer this purpose very well—how it would answer in agues, I cannot tell, but suppose that its action on the stomach would not be sufficiently strong.

An excellent dry preparation of iron is made thus: Take any quantity of clean iron filings; put to it an equal weight of cream of tartar, to which add any quantity of cyder or even water, keep it pretty warm or even hot until it becomes dry, repeat the process two or three times, when dry it may be ground fine and then is not a disagreeable medicine to take; mixed with sugar, children of any age will take it—Or by adding a little honey, or flour to it, it may be made into pills; without the addition of some tough substance it will crumble to pieces when dry. I have frequently added the extract of rhubarb, gentian, or columbo to it which not only gives them strength, but is an addition to its medical powers: this is a very active preparation of iron, and by observing the rules directed for the barks will seldom fail to cure agues, and especially if of a long standing.

In doses of fifteen grains or a scruple it will generally purge pretty briskly, but in the cure of chronic diseases, as weakness, dropsies, cachexy, chlorosis or green sickness in girls owing to a retention of the menses, or an obstruction of that discharge, as also, in Hysterical, Hypochondrical, and a long train of diseases depending upon debility, it is to be given in smaller doses as from five to ten grains twice a day and continued for a sufficient length of time, and it may be observed also, that it is proper to begin with a dose large enough to induce a little sickness, and after two or three days it will not have that effect.—To conclude, the effect of this drug under every form is in a measure the same, it invigorates the system, increases the circulation of the blood, and improves the appetite.

Copperas or Green vitriol, is a very good preparation of iron, and may be given in safety—the dose may be from 4 to 10 grains or more, two or three times a day.

DOGWOOD BARK.

The medical powers of this bark appears to me to differ very little from the oak, but from its being more bitter it would be thought a greater tonic by some. I have attempted the cure of intermitten fevers with it and have been successful in some—I have tried it twice in myself, and succeeded in preventing the fever, but in both cases it returned in five or six days with equal violence. From hence I conclude that it is in no wise to be depended upon when the peruvian bark is to be had, notwithstanding some are of a different opinion.

It, however, is an antiseptic, and I have found it of service in putrid fevers, and it may be possible that my bad success with it might be owing to my not taking a sufficient quantity, it being extremely nauseating.

OAK BARK.

It is probable that there is but little difference in the medical powers of the different kinds of oak bark, but I have generally made choice of two, the white oak, and the chesnut oak; the latter is much the strongest, but the white oak is more agreeable, I have cured agues with it, but think it best to join columbo, gentian or some other good bitter with it—but its most valuable properties is as a stomachic, in weakness of the stomach and bowels, from which proceed indigestion, acidity, heart-burns, colics, dysentery, head-ach &c. as a preventative of these diseases, I do not know of any thing better: the best and most agreeable maner of using it in these cases is to chew it and swallow the juice—Another most valuable property it has is, that it will cure the scurvy in the gums and preserve the teeth, those usefull instruments of pleasure, profit, and beauty, sound to the greatest age; I have known cases where the teeth had been very much damaged by scurvy, become sound and clean, by washing them every day with a weak spirit of vitriol, and then using the bark as above, but to have that effect it must be continued for several months.—The young twigs will answer the same purpose and are more agreeable to chew—by frequent use, both chewing and swallowing, the teeth will be preserved and the diseases of the stomach prevented or cured. It would be well for parents to inculcate upon their children the propriety of this practice at an early period—by habit it becomes agreeable and no inconveniency; and they are much easier acquired when young than old.

Any person inclined to doubt the effect of the oak bark in preserving the teeth, will remember what a power it possesses in preserving animal matter from putrefaction, as in tannig.—All bitters and astringents possess the same powers in a greater or less degree.

ASTRINGENTS AS TONICS.

LOG WOOD.

This is an astringent of tolerable strength; the only use made of it as a medicine is in fluxes and other lax states of the belly; but from experience I am not able to place that confidence in astringents in those diseases that most people do; I have been disappointed too often to repeat after others, it however may be of service in some cases after the inflammatory stage is over, especially in children—for children it may be made into a tea, which they will take very well, and there is little danger of their taking too much.

GALLS.

This is an excrescence growing upon a kind of oak from the wound of an insect where it deposits its egg which may be found in it.

They are a powerful astringent, but they are seldom given inwardly, their principal use is in the form of an ointment in piles and falling down of the annus and uterus, but in the two last cases it is the best in decoction.

The best method of making them into an ointment is to break them small and boil them well, then strain the water through a cloth, and add a quantity of hog's lard; then boil down untill the water is out, taking care toward the last not to burn it; minding also to stir it well.

ASTRINGENTS.

ALUM.

This has frequently been used as a medicine in some diseases, particularly Hemorrhages, or involuntary discharges of blood, especially in female complaints of that kind, but in most if not all the cases which I have met with opium has proved the most effectual remedy—As to those hemorrhagic said to be owing to an active cause, I judge cold to be the most effectual remedy.

It is one of the best gargles to cleanse the mouth and throat in fevers, and in inflammations of those parts, but it is considered better in a decoction of oak bark.

It is also of great service to those who are subject to a bad breath, also in sore mouth, it, in these cases should be kept in the mouth an hour or two at a time two or three times in the day.

In sore eyes it is equal, if not preferable to white vitriol or sugar of lead: for this purpose four or five grains should be dissolved in an ounce of water, and the eyes wet with it twice a day.

BLUE VITRIOL.

This I have frequently employed in intermittent fevers—it is to be dissolved in Whiskey or other spirits; a grain to the ounce, or 16 grains to the quart; an adult may take from 30 to 60 drops, or a tea spoon full instead of the bark, and is equally certain to cure. I generally employ it when the bark has failed. It is excellent in agues, in children, who will seldom take the bark, while they will take the blue vitriol freely, as it has but very little taste but of spirit; from 8 to 12 drops is a dose for a child of two years old, and in proportion for older or younger. In the exhibition of medicine for the cure of an ague,

it is difficult to assign the dose, or the distance of time between the doses; this must depend, in a measure, upon the judgment of the physician, which is to be understood from the effects of the medicine, and whether it be the bark, blue vitriol, tartar emetic, columbo, &c. be used, it is always necessary to give the medicine in doses sufficient to induce some sensible effect upon the stomach, and to keep up a moisture upon the forehead at least.

The blue vitriol makes an excellent wash for old ulcers, especially for horses with scratches, warts, fistula, &c. for this purpose, put an ounce to a quart of chamber lie, or an ointment may be made of it by grinding it very fine and mixing it with lard and oil of turpentine, or turpentine itself, which is better. Verdigris in an ointment answers the same purpose.

LEAD.

This is seldom, if ever, used internally of late years. The sugar of lead is the only preparation deserving notice, and this is principally used as a wash, or ointment, for sore eyes, old ulcers and eruptions, to dry and heal them up. It is a very good application in St. Anthony's fire, or the rose, but should not be applied until the patient be bled and purged; and then a scruple dissolved in a pint of water, and a linen wet with it from time to time and applied over the part affected. It is also used as an injection in gonorrhoeas, or gleet, in the venereal disease—about the same strength.

White lead in powder is one of the best applications to galding and excoriations in children, or persons who from disease are subject to galding, by lying, sitting, &c.

To make an ointment of either, grind them fine and mix them well with the common ointment.

ASTRINGENTS.

LIME WATER.

This is made use of inwardly—for the gravel there is not a better medicine.

Put half a pound of fresh burnt lime into a gallon or a gallon and a half of water—keep it well stopped up in a jug or bottle; of this, half a pint may be taken twice or three times a day. There is so much difference in the strength of lime, that there is but little certainty in any rule; the best method is to take twice or three times a day half a pint or a pint that tastes pretty rough or strong, but not so strong as to be disagreeable.

But the safest method is to make what may be called carbonated lime, thus: Put any quantity of strong lime water into a pewter or earthen dish, and set it in a tub of beer in a distillery, when the beer is working, and after standing there a day or two, the lime will all fall to the bottom in a fine white flour; pour off the water and dry the powder, and keep it for use. Care should be taken that none of the beer work up into it, as that would spoil the whole. It must be set so low as to be below the mouth of the tub, otherwise the carbon that rises from the beer would not get into the dish. Of this powder, a table spoon full may be taken three or four times a day—it has little or no taste, and no quantity of it will be injurious, while it is an excellent medicine in that disease. Heart burn, head-achs, colics, and any other disease that proceeds from sourness in the stomach and bowels, is cured by it. It may be given to infants at any age, and will cure belly-achs and many other diseases to which they are subject.

Lime water, as directed to be made above, and used so strong as to taste pretty rough, is one of the best applications in white swellings and old ulcers, and especially where the bone is naked or affected with rottenness—it should be thrown in with a syringe, so as to wash the bottom out well twice a day until the rottenness casts off and the ulcer heals.

It is almost the only thing that is necessary in the

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cure of old ulcers in the legs—wash the ulcer twice a day with the lime water, and fill it up with lint, and apply a plaister over it, then take a strap of strong linen long enough to wrap up the greater part of the leg; it should be about two inches or not so much in width; begin below the ulcer and wrap it up, letting the bandage lap over every time. Sometimes it is necessary to wrap the whole foot and up to the knee, as tight as it can well be drawn—this is necessary when the foot and leg is swelled; the bandage will feel awkward a few days, but by use it will be no inconvenience; it ought to be continued a considerable time after it is healed; as it would be good to continue it until all the lived or liver color is pressed back and gone, and the skin of its natural color.—To annoint the part with an ointment made of sugar of lead will be proper.

MAGNESIA ALBA.

This is a fine drug, kept in the shops, very much the nature of the carbonated lime; its principal use is to destroy acidity (sourness) in the stomach and bowels; it has but little taste, and is never injurious, given in any quantity. Many diseases proceeds from the ailment, or food, souring in the first passages, and especially in children and little infants.—When there is any suspicion that that may be the case, the magnesia should be tried, as it will never do any harm, and often much good—it may be given in milk, or any other substance which the child can swallow in the form of pap.

STIMULANTS.

MERCURY.

There are a great many preparations of this drug kept in shops, but I have never found use for more than six, which are the following: Calomel, ointment, corrosive sublimate, the blue pills, red precipitate, and yellow mercury, usually called turpeth mineral.

CALOMEL.

This is a very mild mercurial; it operates as a gentle purgative, (see purgatives,) and from the small quantity it takes, and its being almost tasteless, is a valuable medicine, especially in the disease of children—for a child of two years old, from 3 to 6 grains will generally answer the intention of a purge for worms; I generally give a dose in a bit of sugar, or any other substance with which it may be mixed, which ought to be of some consistence, as it will not dissolve in water or any thing of the kind, and if put into any thin substance, it will immediately sink to the bottom. When I give it for worms, (for which it is one of the best remedies) I generally give enough to purge, every night for 3 or four nights, giving a purge of castor oil or jalap every other morning after the first, to prevent its affecting the system too much. It will be proper to give the child or patient no large quantity of any thing cold at a time, during the course, and for a few days after; and also, a person that has made use of any quantity of any mercurial, ought to avoid getting wet or very cold for some time afterwards: and if at any time it should affect the mouth much, it should be carried off by a purge.

Vomiting, from whatever cause it may proceed, very frequently depends upon an inverted motion of the stomach and intestines, which is frequently so violent that no other purgative will be retained long enough to have any effect, but to increase the evil.— Calomel, from its weight and extreme fineness, if once taken into the stomach cannot be thrown back again, and will then induce the natural action of the bowels downward, accordingly, I have found it an effectual remedy, especially if attended with costiveness, in which case it ought to be given in a pretty large dose, as ten or fifteen grains, and if it should affect the gums it may be carried off by other purgatives: when given in cases of vomiting it should be given with sugar or something which will part with it easily when taken into the stomach lest it should be thrown up again.

Calomel, and the mercurial ointment, has been much employed of late years in fever, but I have never employed them except the calomel as a purgative, but it is probable that mercurials may be of service in slow, or nervous fever.

As a mercurial calomel is a very mild, and yet effectual preparation and is proper in all cases where a mercurial course is necessary, as in the cure of the venereal disease, which we shall take for an example in which the following rules are to be observed. In the first place that it be given in due quantity, secondly that it be continued a sufficient length of time and fourthly, that a proper regimen be observed during the course:—Upon the first head it may be observed, that the quantity must always be determined by its effect, which we are to understand from its effect on the mouth, I judge it always to be necessary to keep up a slight soreness of the gums, which will be attended with some increase of spittle: in people who have not been accustomed to it, from one to two grains in a pill every night will be sufficient; but in venereal cases, or other diseases of the surface, and frequently in other cases, I make use of the mercurial ointment at the same time; but never depend upon

less than a grain every night: and if it affect the mouth too much, a gentle purge will check its progress: but in persons who have taken much mercury the quantity must be encreased until the desired effect is produced—I once had an old lecher who put himself under me for cure, he had taken large quantities without being cured; I gave him 25 grains of calomel every night for several times without any effect, after waiting a few days I gave him eight grains of turpeth mineral, or yellow mercury, it puked, purged, and salivated him well; another dose a week after had the same effect, it salivated him for three weeks when he left me and got well without any further trouble.—From the above case and subsequent observations, I am of the opinion that where the system has become accustomed to mercurials that it will not answer as well as some of the stronger preparations.

As to the length of time that it may be necessary to continue a mercurial course, it will depend so much upon circumstances that it might be somewhat difficult to determine a prior, but I should suppose 25 days for the shortest, and 45 or 50 the longest—but there is so much depends upon the last article of our enquiries that we shall refer to that head.

Upon the regimen to be observed so much depend that the course may not only be inefficacious but may be highly injurious, or even dangerous—It is necessary in the first place to keep very warm and dry; by getting wet and cold, or even wet in the warmest weather, many have lost their health forever, and in all cases, during a mercurial course it is always necessary to keep as warm as agreeable, or so warm as to keep a little moisture upon the forehead, would be still better: it is also improper to take any large quantity of any thing cold into the stomach at a time. It was formerly the practice to keep a person during a mercurial course intirely upon warm drinks and diet, with sarsaparilla, china root &c. but from a considerable practice, I can venture to think it improper and I never debar my patients, in any case from cold

water, but permit them to take it in small quantities as often as they may need it—but without keeping regularly warm, all other prescriptions are in vain.

During a mercurial course it is necessary to pay some little attention to diet—on this point the physicians formerly went to too great an extreme; the only rule to be observed is this, eat temperately of light diet, such as fresh beef, fowl, soups &c. seasoned with salt to suit the taste, butter-milk, and other sour milk is a very proper diet; bacon, butter, cheese &c. keep up the heat and strength of the system too much. Purging at intervals of from seven to fifteen days is also proper. I have also thought that I have derived benefit from the use of tartar emetic during a mercurial course, moderate exercise in a warm air is also proper.

BLUE MERCURIAL PILL.

Take quick-silver, one ounce, honey about two spoon-fulls, rub them in a mortar untill they are perfectly incorporated into a blue mass, and untill the globules intirely disappear; add wheat flour enough to make it of a proper consistence for forming pills, of this make 100 pills—Of these from one to three may be taken in the day, to be regulated according to the effect.

This is a very mild, yet efficacious mercurial; I have thought it less irritating to the system than some others, and have for that reason generally employed it as an alterative in some nervous affections, as some kind of epileptic fits, cramps &c. as in these diseases the system is generally in such an irritable state that mercurials seldom fail to increase the complaint for some time after the commencement of a mercurial course.

MERCURIAL OINTMENT.

Take of quick-silver one ounce, rub it with an equal weight, or less of turpentine in a mortar until well incorporated, add four ounces of sheeps suet or a mixture of hogs lard and tallow.

This is a most valuable mercurial, a drachm rubbed into the thighs arms &c. every night will soon salivate—It is one of the best remedies in ringworms and tetterous eruptions, ; it is of service in some indolent tumours that do not supurate well.

CORROSIVE SUBLIMATE.

This is a very strong mercurial, and too rough to be given except well diluted, or incorporated with some other substance—It may be dissolved in spirits about 16 grains to the quart, of which a table spoonfull may be taken three times a day, and more or less according to circumstances—Another method of exhibition is in pills, but it is very difficult to make it into pills, as it soon renders every thing friable that it is mixed with. In pills from a quarter, to one third of a grain may be taken two or three times a day, but there are many who can scarcely bear that quantity.

There are some medical writers who suppose it is not so effectual in the venereal disease as some other, but with me it has proved infallible, but it is much in use among quack pretenders who being ignorant of the rules necessary to be observed during the course have failed.

The corrosive sublimate makes a very good wash for some old ulcers called phagedænic, from which a water formerly kept in the shops was called: it was made by dissolving about 15 grains of the corrosive sublimate in a quart of weak lime water—The ulcer so called, and in which it was thought most proper was a corrosive ulcer which was of too moist a nature, with loose flesh.

RED PRECIPITATE

Red precipitate is seldom used internally, but may be given in safety in rather larger doses than the corrosive sublimate, but it must be ground very fine and made into pills, as it is hard to dissolve.

But the principal use made of red precipitate is as an escharotic for destroying fungous or proud flesh in ulcers, and for cleansing ill conditioned sores—

A powder was formerly kept in the shops called *pulvis angelicus*, made by grinding equal parts of burnt alum and red precipitate together. It also makes an excellent ointment for the itch, ringworms and tetters eruptions, and other similar diseases of the skin.

YELLOW MERCURY.

This is a very powerful mercurial, and seldom employed but in venereal cases where other mercurials have been employed without effecting a cure, and by that means the system becomes so accustomed to it as scarcely to be affected by the milder preparations, this is then proper; given from 5. to 8, or 10 grains, it vomits and purges, and then salivates: two or three doses a week a part is sufficient in any case.

Those who would wish to be suddenly cured may try it, and especially if they have any discharge from the uterus or urinary passage, in these cases it has been thought the most effectual of any, but from the roughness of its operation it is seldom used except in strong robust persons.

OPIUM.

Opium is one of the most valuable medicines, and deserves a volume, or at least much more than the limits of this work will permit me to say at present, and therefore shall merely give what my own experience will enable me.

Upon the direct effects of this drug there is a difference in opinion: Dr. Cullen calls it a sedative, and supposes it immediately decreases the sensibility of the system; while Dr. Darwin, Brown and others hold that it increases the sensibility of the system, and the latter opinion is now generally adopted and when we come to examine into the cause of this difference, it is easily accounted for; it is not our business to inquire into the mode of its operation but the proper mode of management:—Every day's experience proves it to be one of the most suddenly powerful stimulants with which we are acquainted, and therefore its first effect is an increase of sensorial power or strength and vivacity, directly opposite to the old opinion among physicians, and still remaining among the people in common; who still suppose it to have no other effect than merely to stupefy and benumb the senses, and thereby induce sleep, but on the contrary, the first effect observed after taking a full dose of opium is similar to that of spirits, it induces a pleasant serenity of mind, renders a person cheerful and lively, easing all pain and soothing all care and trouble; after a length of time a disposition to sleep comes on, which is sound and pleasant, a person wakes free from care and pain, after the sleep goes off, if the dose was sufficiently large, some nausea is felt at the stomach, which is removed by a little spirits—These are its effects in health, we are now to examine its effects in disease.

In all languid states of the system with small pulse it is proper; in all inflammatory diseases with a full pulse and dry skin, and high color, as in the first stages of almost all fevers, it is improper, increasing the heat and preventing sleep: but after the inflama-

tory stage is gone off, and the pulse has become small and hard, opium is then a remedy: it will always be found of service when in small doses, it gives ease; in inflammatory diseases it will increase the heat of the body and give no ease, neither will it induce sleep but in large doses, and then the sleep will not be sound but interrupted; but if it can be so managed as to produce sweat, it will then be of service in any case; the best method is to give it with tartar emetic in small doses; from one third to half a grain of the tartar and nearly as much opium in a pill: or, instead of the opium, ten or 15 drops of laudanum.

When the strength is exhausted by fever, with restlessness & watching, it is weakness prevents sleep, or is even the cause of delirium; opium will give immediate relief, and often effect a cure: upon taking a dose of opium, the patient becomes easy, his delirium goes off, he at first becomes more wakeful, a sweat breaks out, and after a due time he falls into a pleasant and refreshing sleep, wakes better, his appetite returns and he is soon well; but when a patient is hot and dry, wants cool air, cool water, acids &c. a large draught of cold water will often answer the same purpose in a measure, that opium will in the case above stated.

In slow or nervous fever (Typhus) it is one of the best remedies, the patient is drowsy and dull owing to an inactive state of the system and especially if a twitching and trembling, with a loss of the voluntary motions, as the use of the hands and difficulty of pronounciation: opium by rousing the system into action causes a flow of sensorial power, and enables the system to overcome the disease.

The solution of fever, often, if not always depends upon an increased energy of the brain, and a change in the state of the fluids by the due circulation of the blood, at some period after the fever has wasted the excitability of the system. Opium possesses the power of increasing that energy in a high degree.

Dr. Brown of Edinburgh says that opium cures fifteen head-achs out of twenty; this is nearer the

truth than many would suppose at first: a pain in the head is often occasioned by an in active state of the stomach; a glass of spirits, or a dose of opium, or a full meal of strong diet removes the complaint.

In locked jaw, opium and wine is esteemed the only remedy—This disease in all the cases which I have had an opportunity of observing, appeared to be brought on by pain and irritation; opium takes off both pain and irritation, & thereby cures the disease.

It ought in this disease to be given in large quantities and it is to be observed that patients in this disease will bear much more than in health: when the patient cannot take it by the mouth, it will answer equally well in glyster, but it requires double the quantity that it does by the mouth.

Infants can bear but a very small quantity of it— for a child under a fortnight old, from half a drop to a drop is a dose—It may be given to them in safety as soon as they are born; to a living child in a premature birth it is of great advantage for a day or two: from one fourth to one third of a drop may be given two or three times a day, which may be easily done by dropping any certain number of drops of breast milk, as ten or fifteen, and then drop a drop of laudanum into it, and after stirring it well, drop out any portion or part that may be thought proper.

It is often of service in vomiting, especially in children: it is also of great service when attended with a lax.

In all kinds of nervous affections it is among the best of remedies; there is one very painful one to which delicate women are very subject, called among the good women the weed, which it immediately removes; it is also of great service in hysterical and hypochondrical complaints.—It is of the utmost importance in dysentery, in which it ought to be given in pretty large doses every evening and the bowels emptied the next morning with G. salt (see salts)—it not only relieves the pain and griping; but frequently removes the disease suddenly, but if not car-

ried off by a gentle purge it seldom fails to increase the heat and fever.

In all painful states from wounds, or whatever cause, except inflammation, opium is of advantage in preventing fever from irritation, which is often troublesome and sometimes dangerous.

It is the most certain medicine to prevent abortion—a very dangerous case, which often happens between the first and third month of pregnancy, attended with a violent flooding, which frequently carries off the unfortunate woman when the case is unknown; and it is a misfortune that not one midwife in ten knows any thing about the cause. In this case opium is proper, and will generally stop, or abate, the discharge; but if it should fail, the certain cure, is by a manual or instrumental operation.

It is the most powerful and proper remedy in hemorrhages, or discharges of blood, from whatever cause, especially in those to which women are so liable.

It is said there are hemorrhages owing to an active cause in which opium might be improper; but these cases, are much more rare; for in nine cases out of ten, such discharges depend upon the weakness of the arterial system, for if the quantity of blood be too great the arteries are unable to empty themselves sufficiently, and are therefore upon a constant strain, and of course liable to be ruptured—opium, by increasing the strength, removes both the cause and effect; and I have not yet met with the case in which it has failed, whether the discharge be from the lungs, stomach, nose, annus, uterus or kidneys, but in some cases, cold may also be of service.

Another case at least deserves to be mentioned, which is what is called, after pains—many women suffer much more from them than they do in labor. Some physicians suppose these pains to be owing to blood coagulated in the uterus, &c. and that those pains are necessary for its expulsion. Surely such men never thought, or if they did, they were incapa-

ble of deriving any advantage from thinking. Nothing is more common than for large coagula to be discharged without any pain whatever; and it may also be observed, that such coagulum is seldomer discharged in those cases than when there is no pain. The true cause is irritation, and is most commonly met with in women of delicate and nervous habits. Opium is of the utmost advantage, and although a quantity sufficient to give intire relief would induce too much intoxication and injure the stomach, yet it may be given freely and enough to render the pains weak and more tolerable, and repeated every three or four hours, as occasion may require.

The exhibition of opium to the unaccustomed, is at first difficult, and requires caution—the dose being so various according to circumstances and the difference in patients, that it requires more experience and skill than any other article in the whole materia medica. It is necessary sometimes to begin with a large dose, and afterwards lessen it; in other cases it may be proper to begin with a smaller, and enlarge it as occasion may require.

The smallest dose supposed to be dangerous to an adult in a common state of health, is about 4 grains; but I have never found it necessary to give more than from one to two grains at a dose, but in robust persons in great pain from wounds or the like, I have given more; in locked jaw, mania, or the like, more may be necessary. I have met with a few cases in which the smallest doses would increase pain, and which would not give way to the largest: the most remarkable, was in a case of suppurative rheumatism, in which there was a painful and lax state of the bowels with delirium.

Like spirits, tobacco, and other substances called narcotics, by frequent use the system becomes accustomed to its stimulus, and refuses to obey without an increase of the quantity. I knew a woman who had used an ounce in a week. The best form of exhibition is in pills, either by itself or with other substances suited to produce the desired effect—as half

a grain of opium and as much tartar emetic, in a pill, is a powerful medicine to produce sweat—this will answer the purpose of a powder usually kept in the shops, under the name of Dover's powder. This has been much esteemed in acute rheumatism, but the pill above will answer the same purpose. The method of managing it in this disease is this: After bleeding, and a purge if costive, give a dose either in a pill or powder, and keep the patient warm between two blankets, give but little drink until the sweat begins to come out, after which he may take a little warm tea. The dose must be repeated once an hour, or as often as the patient can bear without inducing sleep or vomiting, of which there is little danger, if he sweat well—this ought to be continued ten or twelve hours at least, and the patient should be put into dry warm clothes and permitted to eat and sleep.

The most common form of using opium is in tincture, called laudanum, which may be prepared thus: Put one ounce of opium into a pint of good proof brandy or rum, keep it in a moderate heat for two or three days, shaking it at times and then strain it. Of this, if well made, a drachm contains about 3 grains of opium, and from 30 to 60 drops is a dose, but more or less according to circumstances; always observe that a second dose may be regulated by the effects of the first.

To conclude this subject, with those who become acquainted with it, it becomes an universal remedy, it cures the sick, comforts the afflicted, gives a cheerful serenity to the mind, and soothes all care whether in disease or health. People who are unacquainted with it can tell a thousand frightful tales about the mischief it has done, and the dangers of using it, and suppose if the wind should happen to change to another point of the compass while a person is sleeping, he can never wake again.

HEMLOCK.

This is a poisonous plant, possessing considerable powers, but is not a native of the United States. An extract of it is imported from Europe, and in different conditions. Sometimes it loses its powers, either in preparing or keeping; but when good, it has been found a valuable remedy in certain diseases of the skin and glands, both given inwardly and applied outwardly. When given inwardly it is proper to give it in a dose of one or two grains, and increase the dose a grain at a time, until it produces some sickness or sensible effect, and even after that to gradually increase the dose, for, like all other medicines of the kind, as the system becomes accustomed to it, it will require a greater quantity to produce the same effect as it did at first, and always upon beginning to use a second parcel, or the first of any parcel, to begin with small doses until the strength is discovered.

The principal use is in cancerous or schirous diseases. [see cancer and schirous.] It is proper to use it both inwardly and in poultice in all hardened glands. [see anatomy.] The way to use it in poultice, is to make a soft poultice of corn or other meal, and first moisten the extract and spread it, thin over it, and apply it hot and continue to renew it twice a day for weeks, or until a cure is obtained.— It is proper to anoint the tumor, before applying the poultice, with mercurial ointment.

JAMESTOWN WEED, (STRAMONIUM.)

This is now a native of our own country, and grows in rich or manured land about almost every plantation, from long experience I have found it a most valuable medicine, as applied externally. I have never ventured upon it inwardly, but am strongly in the opinion that it would be equally safe and an-

answer every purpose of the Hemlock. I have taken the seeds in a small quantity, and find their sensible effects to differ very little from the hemlock. The seed in poultice answers every purpose that the leaves do, and from their being easier preserved, are to be preferred. They ought to be ground or beat fine, and kept stopt up in a bottle, and will then keep any length of time and always be ready for use. They are to be spread upon a poultice in the same manner as the hemlock. The green leaves by being wrapt in other leaves, as cabbage, and covered in hot embers, become soft and make an excellent poultice, and possess all the powers of any part of the plant.

There are several diseases in which I have employed the jamestown. The first I shall mention is schirrus and cancer. While yet in an occult state, that is, before the skin is broken, for after a cancer becomes an open ulcer, there is no remedy but extirpation: but many hardened glands may be brought to supurate kindly by the use of jamestown and mercurial ointment. In all diseases of the glands, it is proper to anoint the gland or part with mercurial ointment, and apply a poultice as above, renewing it twice a day, and continue it for weeks, or until all the hardness is gone.

There is a kind of boil or bubo which comes under the arm or jaw, or in the groins, which continue for a long time, the jamestown poultice will either resolve or supurate these in a short time, and make them heal kindly.

There is another disease which is a species of boil that make much employment for cancer quacks, but which in reality have nothing cancerous in them. They come about the joints, the neck and spine, and other parts where there is no fat—they begin like a boil and are very painful, they do not supurate well and have a tough white matter in them which can scarcely be got out; they generally rise in several small heads, and continue to spread, are red or livid, hard, very sore and painful. The patient frequently gets alarmed, supposes it is a cancer and applies to

some good woman or other person whom they suppose to be a judge from having had such a cancer, who pronounce it a cancer—they immediately hie away to a cancer curer, who applies his wet fire, ratsbane, bluestone, &c. to it, and kills a large portion of the flesh and membranes, which at length separate, except some fibres of nerves or tendons—these are supposed to be the roots, and are tore out at great length with their nippers or tongs, &c. inflicting the most exquisite torment upon the patient, enough to extort shrieks from the hardest Indian warrior. After this operation is over a few days, the young flesh begins to put out in every part of the wound. This is frequently thought by the infernal ignoramus to be more cancerous flesh, and the cruel process has to be gone through again and again, until the suffering wretch suffers more torment than a thousand deaths, until at length despairing, he quits his doctor and applies to one whose method of cure is more mild, one who by some charm, or invisible immaterial or incomprehensible medical agent, promises him a sudden and certain cure. He touches it with the hand of the seventh son of the seventh son, or he applies his magical straws to it, or whispers some pious ejaculation over it, and bids his wondering patient return home and be well; all he has to do, is to apply a little lint or a mild ointment to it, and according to his faith, so it is unto him, and so after perhaps the loss of a limb or two he is cured by the divine conjurer. This is the usual termination. There are also two other little tumors, usually called cancer warts, blister cancers, &c. which in fact have nothing cancerous in them, and will usually go off without the use of any means whatever. In all these cases and many more of the kind, the jamestown poultice, duely persisted in, will infallibly perform a cure.

SPANISH FLIES.

This drug is seldom used except in plaisters to produce blisters. To enumerate all the diseased states in which blistering is proper, would be a tedious task; but it may be proper to make some general remarks before we enter into particulars.

There are many substances which will raise a blister when applied to the skin, but whether there is any known that would answer the purpose as well, or not, is uncertain. I cannot attribute the beneficial effects of cantharides altogether to the discharge by blister, for it appears to me there is a portion of the active matter taken up and carried into the circulation, and thereby excites the system into action, and hence they are of great advantage in the last stages of the slow or nervous fever, attended with torpor, sleepiness and insensibility, as a difficulty in speaking and the other voluntary motions. I have seldom found them of much service in the first stages of fevers; if after evacuation by bleeding, puking and purging, head ache, pain in the back and shoulders, &c. should remain, blistering will then be proper. In case of head ach, apply the blister on the lower part of the neck, or where it joins the shoulders. For a pain in the back, apply it to the lower part of the small.

Blistering is one of the most useful remedies in chronic rheumatism. In this case they ought to be applied to or as near the part affected as may be; they ought to be large and kept open as long as can well be done, or repeated, for weeks, or longer if the disease should require it, and in the mean time bleeding and purging, with cream of tartar frequently employed; and when the disease is removed, or the symptoms in a measure abated, bark, columbo, or the bitters, iron, &c. should be plentifully given.

In most diseases of the head, as sore eyes, blindness, deafness, and pain in the head of any kind, blistering gives relief.

In pleurisies or inflammation of the breast, blister.

ing over the part affected will always give relief, and if the pain should shift to another part, a blister should again be applied over the part. If the pain affect only a small space, the blister may be small, as two inches square, but if the whole breast be affected, it should be large in proportion; and if it be a bastard pleurisy, or an inflammation of the lungs, the blister ought to be applied on the middle of the breast, and pretty large, and kept open until the disease be removed. The same is to be observed in croup or hives—if the disease be violent or does not go off immediately upon bleeding, vomiting, warm bathing, &c. Blistering is also of use in quinsies and inflammations of the tongue, jaws, &c. and should be applied high on the breast or on the back of the neck. In many cases of delirium, in madness, or a state of distraction, blisters applied to the back of the neck, are proper. In hydrocephalus, or a dropsy of the brain, and in phrensy, or an inflammation of the brain, blistering in a like manner is among the best of remedies.

The method of making a blistering plaister, is simply to grind the flies fine, and sprinkle them upon a piece of linen covered over with paste or common plaister, wet it with vinegar and apply it to the part. Wet a cloth, folded 3 or 4 double, with vinegar, and apply over it to keep it moist. It is commonly proper to lay a quantity of tow over the plaister, which will hold it to its place the better. And in ten or twelve hours it may be taken off—take off the blister, which is sometimes filled with a jelly, which should also be taken off, and a colwart or cabbage leaf, softened by laying it over hot embers, applied over the part, and renewed twice a day. When cabbage leaves cannot be had, a very small quantity of the finest flies may be dusted through a piece of muslin over a plaister and applied—if some flies be mixed with tallow and applied, it will keep up a discharge, or even common plaister may answer the purpose.

TURPENTINE, AND ITS OIL.

This medicine has formerly been supposed to possess various powers according to the tree that produced it; but this distinction is very much laid aside; and Dr. Cullen is of the opinion, that the balsams scarcely possess any power worth notice different from the turpentine.

Their principal effects are as strengtheners in weakness of the back or joints, and in the urinary and genital organs there is scarcely any thing that equals it. The thiner kinds are the best. It is of great advantage in weak joints or back, to apply it in a cere cloth. For this purpose it is necessary to boil it some time in water to take off some of the acrimony and give it a proper consistence—spread it on thick linen or soft leather, apply it warm and wear it until it falls off of itself.

The oil of turpentine is a valuable remedy in some species of rheumatism, especially that called sciatic and lumbago, but it is especially useful when the pain is fixed in the hip or other joints; it is necessary to take it in large quantity and continue it for a considerable length of time. It is necessary to begin with 10 or 15 drops in a glass of spirits, and enlarge the dose as far as it can be without heating the urine. By this method, about twenty years ago, I cured myself of a sciatic, of considerable standing; and I have frequently known it cure after contractions had come on, and the limb shrunk. In fine, I have never known it fail when duely persisted in; and especially if a purge of jalap was taken once in 15 or 20 days.

BALSAM COPAIVA.

The balsam copaiva differs very little in its medicinal powers from turpentine. It is often of service

in gleet in men, and in the fluor albus in women; but if the discharge be colored, especially green or yellow, it will be injurious. In these diseases, twelve or fifteen drops, once or twice a day, will be proper; but even that quantity may bring on a heat and difficulty in making urine, but some will bear double that quantity without any inconvenience.

Dr. Cullen says it is of service in hemorrhoidal complaints, given from twenty to forty drops mixed with sugar, once or twice a day.

There is a variety of balsams produced by different trees, but their medical virtues are considered by Cullen and others as differing but very little.

There is a small knob or hill high up on the Kenaway or new river, that has a species of fir growing upon it. On the body of the tree, and larger branches, there are a great many vesicles, or blisters, which contain a very pure balsam, which is collected and sold at a dollar per gill. From what experience I have had, it appears to answer the same purpose that the copaiba balsam does. It is much celebrated among the country people for healing fresh wounds, ulcers, &c. an error that it is extremely hard to beat them out of.

ASSAFOETIDA.

The medical powers of this gum is very well known by almost every good house wife, in hysterical and hypochondrical cases; from this circumstance it will be the less necessary to say much; it is not only one of the best remedies in these diseases, but in all other nervous complaints. It is also of service in some affections of the lungs attended with a dry cough, colics and other diseases of the stomach and bowels. It is thought best given dissolved in spirits—a tea spoon full of strong tincture may be given once or twice a day in a cup of sage tea—in sub-

stance it may be given from 3 to 6 or more grains, once or twice a day.

CASTOR, OR BEAVER STONE,

Is one of the most valuable drugs of the class; it is of great service in female weakness, especially when attended with nervous affections. It requires but little skill in the use of it—from ten to twenty or thirty grains may be given, once or twice a day; or it may be given in tincture, made by putting an ounce cut small into a pint of good brandy, of which a tea spoon full may be given twice a day in a cup of tea.

GUM GUAIAACUM.

This gum was once much employed in the cure of the venereal, but it is now almost entirely neglected in that disease, and the only disease that it is much esteemed in is chronic rheumatism, but even in this I have never found it of much advantage; but in some cases I have thought it beneficial, when assisted by purgatives, blistering and barks.

The best method of using it, is to take it in substance from 10 to 15 or 20 grains, twice or three times a day, or dissolved in strong spirits, as the first shots of brandy, twenty or thirty drops or more in a cup of tea or milk, twice or three times a day.

SNAKE ROOT.

There are two kinds of this root, the black and the senaka, but their medical powers appear to me to be precisely the same.

Much has of late been said about the power of this

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drug in the croup or hives, a very fatal disease among children. Dr. Archer and Dr. Barton of Philadelphia recommend it very much, but from the great affinity of this disease to that of pleurisy and pneumonic inflammation, I am much inclined to think it no better calculated for the cure of hives than of pleurisy, and that its reputation will soon fall in the one as it long ago has in the other. However, it may be a remedy, but I must, until better informed by experience, consider it as a doubtful one.

The moist hives and pleurisy are highly inflammatory diseases, in which, stimulants are always doubtful remedies, and I consider the snake root as a stimulant medicine, and therefore, I know that unless it excite plentiful sweating, it will prove injurious.— However, there is a species of hives or croup, in which there is no matter appearing loose on the lungs, but the patient continues hoarse, and the cough, if any, dry; in this case I should judge it to be a remedy well suited to the intention of cure. The method of using it is to put an ounce into a quart of water, boil it till half gone, and give a spoon full every hour. For more on this disease, see tartar emetic, bleeding, spanish flies, &c.

There is one observation which I would wish to introduce here, and that is, physicians ought never to recommend a new medicine until experience had convinced them that it was equal to any to be had.

 CAMPHIRE.

Upon the direct effects of camphire on the system, authors disagree as much as they do upon opium—the one suppose it to be a stimulant, the other a sedative; but the sensible effects when applied to the most sensible parts of the system, prove it to be a stimulant, and that like all other drugs of that class, it indirectly may prove a sedative, but its

powers are not very considerable, except in large doses, as from twenty to thirty grains.

It has been employed in many diseases, but those only in which it promises to be useful are few. In putrid fever there is little doubt but that it is of service—it is well known to be a powerful antiseptic—it is also of use joined with opium in nervous fever; in these cases it should be given dry, because when dissolved in spirits it is too hot and stimulant.

Dr. Cullen supposes it may be of use in nervous diseases, and says that given in a pretty large dose at night, it has been known to prevent an epileptic fit that was expected. But after all that has been said about it by other writers, I have never been able to esteem it a very valuable medicine, except externally, and even then its effects were only to be attributed to its volatility in carrying off the heat of the part, and therefore its effects cannot be expected to be permanent. Its effects in fainting, head ach, &c. I need not mention, as that is within the knowledge of every good wife.

CINNAMON.

This is more used as an aromatic for its agreeableness than as a medicine; but as a medicine, it is often of service as in water brash, and other cold watery diseases of the stomach and system generally, as cachexy, chlorosis, and after the water is carried off in dropsies, it warms and strengthens the stomach and system in general.

SASSAFRAS.

After the cinnamon, I have thought proper to give this a place, notwithstanding it has, with a long list of other articles formerly kept in the shops, been in-

tirely neglected in modern practice; I merely introduce it to remove some errors which prevail—it is thought by the vulgar to render the blood too thin and weak, while on the contrary, in weak watery habits, used as a tea, it has a considerable effect in promoting the circulation and consequent generation of the blood. It is to be observed that there are two kinds, the male and the female—the male is only fit for use—the bark of the root, and the root itself is the best—they may easily be distinguished by chewing, the female is weak and mucilaginous, the other is warm, pungent, with some astringency.—This makes an excellent tea, and was formerly exported from America to Europe in large quantities for that purpose.

SAL AMONIAC.

This is not much used as an internal medicine, but I have thought it one of the best neutral salts in cases of fever—it may be given from five to ten grains or more, every half hour—it requires to be given in honey or molasses, as it is exceeding pungent. It is a very convenient and sufficiently powerful caustic, for touching venereal warts, polipuses in the nose, or any other soft and moist tumours—it also makes an excellent wash for old ulcers, which are foul and smell bad.

HARTSHORN.

Spirit and Salt of Hartshorn.—These stimulant drugs are of use in a variety of diseases, but principally externally and in smelling bottles. They are proper in fevers, of the slow or nervous kind, attended with torpor—ten or fifteen grains of the salts may be given in a little molasses or honey, two or three

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times in the day ; or, which is better, 25 or 30 drops of the spirit, may be given in a cup of warm wine, or other sweet whey, three or four times, half an hour or less apart, and keeping the patient warm, is one of the most powerful means known to produce sweat. It is one of the most powerful solvents of animal matter known, and hence in contusions it takes out the blackness and swelling. From a drachm to a drachm and a half, combined with an ounce of any animal oil, by rubbing them well together, makes a very useful application to parts affected with rheumatism, if not inflamed.

FOXGLOVE.

This is a plant very common in Britain. It is esteemed a powerful diurectic, but it is also an emetic. It is chiefly used in dropsies, especially of the breast. It has also been thought of use in consumptions.

The best method of using it, as directed by Dr. E. Darwin, is this: Put four ounces into a pint of proof spirits and as much water; after keeping it warm 24 hours, press and strain the tincture; but this is wasting the drug, and it costs something with us—I have therefore made nearly an equal quantity by adding fresh quantities of spirit and evaporating it in a moderate heat to the consistence of honey, and then adding it to other spirits. Dr. Darwin supposes it necessary to keep the tincture of an equal strength, and that with the strongest tincture, thus made, it is proper to begin with about 30 drops 3 times a day, and increase the quantity until it has the desired effect, or produces some nausea or sickness at the stomach. Used in this manner it will generally carry off a watery swelling in the limbs in a short time, but cannot evacuate the water if lodged in any of the cavities of the body. It is almost the only remedy depended upon in a dropsy of the breast.

NITRE, OR SALT-PETRE.

This salt is used in several diseases, but I can scarcely think it entitled to much credit, except in dropsies called anasarca, which is a swelling of the feet, legs, &c. in this disease it will generally carry off the water in a short time if taken in doses of from 15 to 30 grains, or as much as the stomach will easily bear. As the water is carried off by nitre, it is always necessary to strengthen the system against a relapse with iron, bitters, &c. as the swelling will seldom fail to return again without the use of some strengthening medicine, which is not so apt to be the case, when the water is carried off by the crystals or cream of tartar.

Nitre is also frequently used in fevers of an inflammatory kind, but it is a disagreeable medicine, and in no wise answers the purpose as well as tartar emetic, except it be to procure sleep in burning fevers, where opium is improper. For this purpose, I have mixed from a scruple to half a drachm with about half the yolk of an egg, and given it to be swallowed undissolved—after entering the stomach it immediately begins to dissolve, cooling the stomach, and thereby induces sleep, if the dose be sufficiently large, and very frequently it induces sweat also.—I have frequently observed the same effect from a draught of cool water, especially where the patient had been kept upon warm drink, as the ignorant are very apt to do.

It is thought to be an excellent remedy for foundered horses, and such as cannot make water easily when rode or worked hard.

WHITE VITRIOL.

The principal use of this article is an emetic, or an ophthalmic in sore eyes. As an emetic it is given from 6 to 30 grains, to empty the stomach when poison or an overportion of spirits, &c. are taken—it operates suddenly and without violence, and its operation is over immediately.

As an ophthalmic, or in sore eyes, it may be used in solution, or ointment—in solution about four grains to the ounce of water will be strong enough, but it may be made stronger or weaker at pleasure—in ointment about a drachm to 2 ounces of the simple ointment will answer the purpose—grind it very fine and mix them well together—anoint the edges of the eye-lids at night.

It is also used in gleet or fluor albus, as an injection, and upon the first commencement of a gonorrhoea in venereal cases, or after the virulence is subdued, if a gleet remains, it is proper—the vitriol in proportion of a drach to eight ounces or half pint of water, and thrown up the urinary passage in men or vagina in women—a common syringe full two or three times a day.

ARSENIC.

This substance, although considered one of the strongest poisons, is recommended as an useful medicine by some; but is only of real use as a caustic.

CERUSE, OR WHITE LEAD.

This possesses no medical powers internally, but it is of great use in galdings in children and aged and helpless people in some diseases—nothing is necessary but to dust it through a piece of book-muslin upon the part.

PREPARATIONS.

COMMON CAUSTIC.

A caustic is a burning application, intended to destroy or eat away flesh, for opening tumors or destroying cancers, wens, &c.

The best method of preparing the common strong caustic is as follows: Pour a quantity of good lime water into about twice as much strong lie, boil it down until dry, increase the heat until it runs thin like oil, pour it out upon a smooth stone or iron plate, and while hot cut it into small long pieces and keep them in a vial well stopped.

When it is used to open an abscess or wen, or to destroy a cancerous tumour, cut a hole through a piece of thin leather as large as the place you mean to destroy: on one side spread sticking plaister; apply it warm to the part; place a suitable piece or pieces of your caustic in the hole, cover it with another bit of plaister, let it remain on 8, 10, or 12 hours, according to the depth you would wish it to penetrate.

There is a liquid caustic used by some under the name of *wet fire*, made thus: Take ashes of *ash bark*, make a lie, boil it down till dry, put it into a bottle and put wild potatoes to it. The potash imbibes the moisture from the potatoes and forms a liquid solution, which is to be poured off and kept for use.—Liquids are always unhandy caustics, they penetrate but slowly to what the caustic in a dry solid state does.

There is another caustic very proper in some cases, known to the ancients by the name of *Pulvis Angelicus*, made by rubbing burnt alum and red precipitate together; it is very proper for dressing the ulcer after the extirpation of a cancer with arsenic,

and for taking out the skin which covers a wen after its contents are taken out, and many other purposes of the kind.

LUNAR CAUSTIC

Take silver in thin plates, or rather filings, one ounce, aquafortis two ounces; keep them in a moderate heat in a glass vessel untill the silver is dissolved; increase the heat untill the matter become dry; put it into a large crucible, increase the heat untill the matter become thin like oil, which it will do before it become red—pour it into an iron or clay mould, or on a smooth iron or stone and cut it into small neat pieces while hot; keep them well stoped in a glass.—Copper or other metals will answer the same purpose, but are more subject to liquify.

EMPLAISTERS, (SALVES.)

Plaisters are various according to the intention—we have selected a few forms, being as many as we considered necessary.

A common plaister, proper for dressing wounds, ulcers, &c. for keeping out the air and cold, is made thus: Take of bees wax and mutton suet, of each three pounds, of yellow rosin one pound, melt them together and strain it while hot.

The following is the first preparation necessary towards making a very useful plaister, called sticking plaister, proper for holding on dressings, &c. it is what was formerly called Deachylon, and is only of use as a base for other plaisters, or to keep a part warm and defend it from the air: Take of litharage one part, of olive or sweet oil two parts, boil

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them together until the litharage is dissolved. In this process it is necessary to add a little hot water at times, to keep the oil from burning black—it must be kept stirring until done—it must not be made so hot as to fly about upon putting in the water.

 STICKING PLAISTER.

Take of the above plaister of litharage five parts, and of the best white rosin one, melt them together. This plaister is used for keeping on other dressings, and keeping the lips of wounds together instead of sewing them, and for drawing, or rather holding the sides of ulcers in, during their cure.

There is a mercurial plaister, directed by dispensatory writers, but I think it a superfluous waste of mercury, as every intention may be answered by anointing the part with mercurial ointment, and covering it with a common plaister or poultice,

 ELM.

The red or slippery elm may properly be mentioned in this place. It is the bark that is used as a plaister or dressing in wounds, burns, &c. it ought to be scraped or rasped very fine, and steeped in water either warm or cold so as to form a viscid smooth plaister, and is then applied to wounds, burns, &c. but is the most proper in burns. I have employed it in wounds sometimes, but do not esteem it very much, as it keeps the wound too moist and close and will prevent it from healing. I have frequently employed it in form of tent in gun-shot wounds, and esteem it much better than the tent made with lint and cerate, being easily introduced and drawn. It ought to be beat somewhat soft and soaked in water until covered with gum.

BLISTERING PLAISTER.

A plaister for raising blisters is frequently kept in the shops, but this is an unnecessary waste of flies—cover a cloth with any common cerate or plaister, or even paste, and sprinkle the flies over it,

SUGAR OF LEAD OINTMENT.

Take of sugar of lead two drachms, white bees wax, two ounces, of olive or other soft oil half a pint; rub the sugar of lead previously with some of the oil, then add the rest of the wax and oil melted together and stir it until cold. This is an excellent medicine in chaps and excoriations.

ISSUE OINTMENT.

It is frequently of great benefit to keep a blister running for a length of time, and the usual method of cabbage leaves is insufficient and inconvenient—the following ointment is intended for this purpose: Take of rosinous ointment seven parts, cantharides one part, grind the flies very fine, dust them through a search, and mix them well together.

ROSIN OINTMENT.

Take of hog's lard eight parts, white rosin five parts, yellow wax two parts, melt and mix them well together. This is used for cleansing and healing wounds and ulcers. Add spirits of turpentine sufficient to make a soft ointment, and it makes one of the best dressings for burns.

LINIMENTS.

Of these there are many directed by dispensatory writers—they are intended to give ease, by applying externally, and consist of spirits, camphire, opium and soap. The following is an excellent one for resolving tumours upon the joints, soft wens, bruises, &c. Take of castile or other good soap one ounce, camphire half an ounce, spirits of turpentine a table spoon full, whiskey or other spirits half a pint, vinegar half a pint, keep it warm and shake it at times for a day or two. Anoint the parts affected twice a day, or wet a cloth with it and apply.

CARBONATED LIME.

I have treated of lime, page 22, where I also gave some directions for preparing the carbonated lime, but upon reviewing that article, I have thought some other observations necessary.

Carbon is one of the most plentiful substances in nature; in combination with lime, it makes up nearly half the weight of good lime-stone, marble, &c. which it loses in burning. Charcoal is almost pure carbon; when drove off from these substances by burning, it unites with oxygen, and becomes an acid, or sour air—large quantities of it are constantly found floating in the air, hence if lime water be set in an open vessel, so that the air can come to it freely, it unites with the lime and forms a crust over it, which being broke falls to the bottom, and another will soon be formed. This crust is pure carbonated lime, and may be ground fine and answer the purposes mentioned, under the title in the preceding pages. It may be prepared in a shorter time, as mentioned, page 22, but if it be not stirred frequently, it will be formed in a crust and will not proceed so fast, but if agitated it will fall in a fine powder.

WEIGHTS AND MEASURES.

TROY WEIGHT.

Pounds.	ounces.	drachms.	scruples.	grains.
1	12	96	288	5760
	1	8	24	480
		1	3	60
			1	20

LIQUID MEASURE.

Gallon.	pints.	ounces.	drachms.	cub. in.
1	8	128	1024	231
	1	16	128	28.875
		1	8	1.8047
			1	0.2256

The exhibition of medicine to the unaccustomed by drachms, scruples, grains, &c. at first is somewhat difficult. It is impossible for a physician at all times to carry his scales and weights about him, and it would increase the demand very much if every person who should find it necessary to exhibit medicine should purchase a set; but in fact there are few drugs which require so much nicity, and those which do, may be divided into small parts with sufficient exactness by mixing a grain, or a certain number of grains, with any other substance, and dividing it again. In order to speedily acquire the habit of giving out doses of medicine without weighing, put up a dose nicely weighed in a paper—let it be a middle dose for an adult. By frequently observing it and making trials, a person will in a very short time be able to give a dose of most drugs without weighing. e. g. of tartar emetic put up 3 grains, of jalap put up 20, of calomel put up 5. &c. and such drugs as are to be given in pills, and to be continued for some time, take as much as you wish to make up. e. g.

100 grains of calomel is to be made in pills containing one grain each—after making it up into a stiff paste with flour, fit for forming pills, roll it out into a long roll, cut it into four pieces, roll them again into smaller rolls like a pipe stem, divide in the middle and so on, make pills.

When you are about to exhibit medicine to a strong robust person, it is easy to make the dose a little larger, and to a weaker, smaller. Such things as are soluble, as tartar emetic, it is easy to give a certain quantity at a dose—if it be a 4th or a 10th of a grain, by putting a certain number of spoonfulls of water to every grain, and giving as many as you would wish to give parts of a grain at a dose.

The same rule must be observed in the exhibition of liquids—a drop from a two ounce vial of spiritous tincture, as tincture of opium, weighs about half a grain—a common tea spoon holds about 60 drops, and it must be a very small one that does not hold 45.—To ascertain the proper dose for children of different ages, is also somewhat difficult to the unaccustomed. For a child of three years old, one third as much as for an adult, is generally a proper dose.

It is an opinion among the ignorant that a child cannot bear some medicine, as tartar, jalap, &c. this is an error, they bear them as easy, if not more so, than adults. I have given tartar to children of every age, without any bad consequence whatever. There is some nicety required in the administration of opium to infants—to a child under 10 or 12 days old, it is not always safe to give a drop, especially to new born infants, from one fourth to half a drop is enough, which may be given them by dropping one drop of laudanum into 3 or 10 drops of breast milk, and then dropping out 2, 4 or 6 drops, as may be thought proper.

The best form of exhibiting emetics is in solution in water, as their effects upwards are more certain, but if it is intended that their operation should not be very sudden but more permanent, they may be given in a pill or powder, and in a larger dose.

WEIGHTS AND MEASURES.

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The following is a standard for doses, from the American dispensatory.

Grains.

	from 5	to 15
Aloes		
Bears foot	10	20
Castor	10	20
Peruvian bark	20	120
Columbo	10	20
Jalap	20	30
extract	10	20
Verdigris	1-8	1-2
Blue vitriol	1-2	1
Stramonium	1	5
Digitalis	1-2	3
Iron filings	3	10
Steel dust	1	5
Gum guaiacum	10	20
Red precipitate	1-2	
Corrosive sublimate	1-8	1-2
Cinnamon	5	20
Camphire	3	20
Magnesia	10	20
Mu k	5	20
Opium	1-2	2
Seneka, pulv.	2	60
Soap	10	30
Rhubarb	10	40
Sugar of lead	1-2	5

drops.

	from 10	to 40
Muriatic acid, or spirit of sea salt,		
Aquafortis	5	20
weak	10	40
Spirit of vitriol	15	30
Tincture of columbo	20	30
Tincture of digitalis	10	40
Tincture of iron	10	20
Tincture of gum guaiacum	40	
Tincture of opium	20	40
Tincture of cantharides	10	30

Ether, (nitre)	-	-	-	-	10	20
Ether, (sulphur)	-	-	-	-	20	60
Oil of turpentine	-	-	-	-	10	30

Ounces.

Lime water	-	-	-	-	4	12
Seneka, in decoction	-	-	-	-	1	2
Castor oil	-	-	-	-	1-2	1
Antimonial wine	-	-	-	-	1-3	1

These are the doses for adults from 20 to 60 years of age—they may be varied for children according to the following table :

	Age.	Proportion.
Months,	2	1-15th
	7	1-12
	14	1-8
	28	1-5
Years,	3	1-4
	5	1-3
	7	1-2
	14	2-3
	63	11-12
	77	5-6
	100	4-6

Sixty drops of water, one hundred of spirits, or one hundred and twenty of pure spirits, make a drachm by measure—480 drops of water make an ounce—so that if a person wish to give any certain portion of any soluble substance in solution, as tartar emetic, &c. it may easily be done by attention to the above rule.

REGIMEN.

Physicians in all ages have placed considerable stress upon diet, drink, &c. in sickness, and it is true that it is frequently necessary to pay some attention to the mode of living more than what the appetite will suggest; but I am clear in the opinion that many have carried it to such an extent that they have done more harm than good by it. In prescribing regimen there are but two objects in question, which is according to the intention to be answered—the first is in those diseases which Dr. Brown calls the sthenic diathesis, or that state of the body in which there is too much strength, heat, or increased action of the body, as in all inflammatory diseases, wounds or ulcers, where there is too great a discharge of matter: the other he calls the asthenic diathesis, or that state of the body in which there is a want of strength and action. For the former state, light diet or even starving with cold water, cool air, bleeding, purging and vomiting, being all means of reducing the heat and action of the system, are proper. In the asthenic, or disease with weakness, in which there are ulcers or wounds, they are dry, &c. the contrary regimen is proper, as strong nourishing diet, heat, &c.

Through the following work we shall often have occasion to prescribe the regimen in the cure of diseases, and in order to avoid the necessity of repeating the various articles of diet which belong to the cold or hot regimen, I shall point out some of the most proper articles and forms of diet which belong to each; and it may be observed that where the regimen is not prescribed in the method of cure, that it is unnecessary to pay any attention to the diet, as any alteration from the usual mode of living is unnecessary.

All kinds of fruit, either raw or dressed in any form, belong to the cooling regimen, and are also to

be considered even as medicine, as they are of great service in keeping the bowels lax. Panada is a very good diet, and may be varied to suit the appetite. One of the best forms is to boil good light wheat bread in water and add a little sweetening, and if agreeable, a little vinegar, cyder, or even wine may be added; but if much fever, or any inflammatory symptoms be present, the cyder and wine are not so proper. In fever it often happens that the patient has no appetite for many days, and without proper treatment sometimes for weeks—the friends are alarmed and suppose the patient must perish or suffer, but in this they err, it is seldom proper to force food upon the sick against their will—in these cases, buttermilk is one of the most valuable things that can be given—it serves as drink, and will support the patient, and often is as strong a diet as is proper—being acid, it is a cooling medicine and always sits easy upon the stomach—if sweet milk be made a little sour with vinegar, it will answer very well, but it does not sit so easy on the stomach, and where the patient is taking medicine it will be more apt to prevent it from having effect, and it is also harder of digestion. When light diet is directed, fresh meat, as chicken, veal, or even beef, with fresh meat soups, will be proper, but in that case the meals ought to be more moderate than usual—pork or fat mutton may in this case afford too much nourishment. This kind of diet is especially proper in the cure of the venereal disease, or any other where a mercurial course is necessary, or in the cure of old and obstinate ulcers, as in the legs, &c.—in this regimen, it is proper to season with salt to suit the appetite, but avoid spices, spirits, &c. After a spell of fever, or other sickness, when the appetite returns, it frequently returns suddenly and strong, and I have often seen a patient crave broiled beef, steak, or ham, the first thing, and I have never known any bad consequences follow the indulging them in whatever they may desire, but they ought not at first to fully gratify their appetite, but eat a little at a time

and oftener. Cool drink, as water, buttermilk, &c. is always proper—nothing is more injurious and weakening than to keep a person upon hot drinks.—Butter is one of the strongest diets, and is always hard of digestion, and therefore improper in sickness.

There is little that can be said upon the other, or strengthening regimen—a person's appetite is as good a guide as any, but it may be observed that good soup is one of the best forms of diet; and it may always be made a rule, that where bark, wine, or opium is proper, the strengthening regimen is also proper, or that no diet which affords sufficient nourishment in moderate quantity will be injurious.

A most egregious error still prevails among the good women and much mischief is often done by it, viz. keeping child-bed women too hot and upon warm drink, as tea, water &c. A woman after delivery ought to alter as little from her usual mode of living as possible; those accustomed to the air ought still to have fresh air, their drink should be cool, but in smaller quantities, as a gill at a time, and that as often as they may want it, her diet should be nourishing from the first, nothing tends to weaken more than warm drinks.

BLEEDING.

Bleeding is an operation that requires more care than skill in the performance, but requires as much skill as any other medical prescription to know when it is proper. It is a remedy employed by the ignorant upon all occasions, being one that is within their power at any time, it seldom does much harm, and is often of service; but in some cases it proves injurious, by inducing debility and protracting the cure. The doctrine of plethora, or a redundance of thick strong blood being a cause of disease, is very much laid aside among physicians. The pulse with a skillful physician, may be a good criterion to decide as to the propriety of bleeding, but for my part I have seldom thought proper to depend upon it altogether.

In inflammatory diseases, during the first stages, the pulse is full, quick, and hard—this among physicians is almost universally considered as an indication of the propriety of bleeding, but where the disease be fever, and that known to be of the bilious kind, bleeding is not only often unnecessary but improper, as it prolongs the disease—such is the case in most of fevers in this country. Where plentiful bleeding has been employed in fevers in this country, the disease has never failed to be protracted, if it has not proved fatal. I seldom bleed until I have first employed other remedies—if I fail to remove the fever, and the pulse remain quick and hard, however small it may be, I then judge bleeding proper; if bleeding at first fails to give relief, it will be unnecessary, if not improper to repeat it often. It is not the drawing off the bad blood that is of service in diseases, neither is it lessening the quantity because the system is too full, but it is because the strength of the arterial system is not able to propel the blood with sufficient velocity, in consequence of the loss of strength: or, as in highly inflammatory fevers, the increased action upon the mass of blood

induces too much heat, which in its turn serves to increase the irritability of the system, and is one cause of the increased action. To lessen the quantity of blood, is a means of lessening the irritation in a duplicate ratio—hence it is found to be one of the most powerful means of removing inflammation, whether local or general.

Before the circulation of the blood was discovered, physicians supposed that the different veins terminated in the different parts of the body, as the cephalæa in the head, &c. hence blood was to be drawn from the different parts of the body according to the seat of the disease, and they supposed bleeding to have a tendency to draw the disease toward the part where the operation was performed. But these opinions, which were evidently founded in ignorance, are nearly laid aside—it is now known that every drop of blood in the body passes through the heart, at least three hundred times every day, or six or seven hundred times in every twenty-four hours—hence it is easily seen that it is entirely immaterial what part of the body blood is drawn from—the arm is the most convenient, the skin is thinner and the veins larger.

There are arteries and tendons that lie close under the veins in some parts of the body—an artery is known by its pulsation, which is frequent in the bend of the arm. In bleeding where a pulse is felt, great care is required not to cut into the artery, as it may be very difficult to stop the blood—where a tendon is near it, it is known by its hardness, and the injuring it ought to be avoided.

Another evil frequently happens for the want of care and sometimes for the want of judgment, even in physicians, which is not cutting the orifice directly into the vein, but by drawing the skin downwards with the left thumb the orifice in the skin will be above as soon as it is let at liberty, and if the orifice should be small the blood will fill up the cells in the cellular membrane, and is very frequently attended with bad and sometimes fatal consequences. When this happens to any extent and becomes black and

painful, an incision made into the part is one of the best remedies, and the next best is to apply a linnen wet with spirits of hartshorn, two or three times in the day.

It would be difficult to give directions for holding the lancet, but it may be observed, that if the lancet is held too low behind it is very uncertain or difficult to open a neat orifice—the incision in the skin will be long in proportion to that in the vein—if it is held too steep, it may pass through the vein too far, and be apt to injure the parts below; but if neither tendons nor arteries be in the way, it will do no injury. It is always best to make the incision with a pretty quick stroke.

I have sometimes met with cases in fevers, pleurisies, &c. in which the vital principle was so far exhausted, that the circulation had nearly stopped in the extremities—the blood thick and heavy, so that it was extremely difficult to draw off a sufficient quantity; while bleeding is one of the best remedies. In this case blood may be drawn from the jugular veins with ease and entire safety—the blood returns from the head to the heart with more force than it does from the extremities. In children, when the veins are small and the child fat, it is often very difficult to draw blood—in this case it may be drawn from the jugular also.

PART SECOND.

ON THE CAUSE, DISTINGUISHING SYMPTOMS AND
PROPER METHOD OF CURING DISEASES.

FEVERS.

Those diseases wherein there is an increased heat of the system, the pulse is quicker than in health.— There is an interruption of some of the natural functions, especially of the secretions of sweat, and of moisture upon the internal surfaces, as the mouth and stomach. Diseases attended with these symptoms, are various, but may be considered of two distinct classes—the one a primary disease, the other a symptom of some other. We shall first consider those of a primary kind, with their causes, distinguishing symptoms and proper method of cure.

Medical writers in treating of the cause of diseases, have divided the cause into two classes, the remote, and proximate. The remote cause is the foreign matter or power that when applied to the body produces the proximate cause of disease, or that action or state of the living solids which are called diseased. The remote cause of intermittent fevers, is now known to be some effluvia that arises from stagnant water or wet grounds in a warm season, and now known under the indefinite names of marsh effluvia & miasmatta—what the precise nature of that matter is, has not been ascertained, but it has generally been supposed to be the production of vegetable matter in a state of putrifaction, but from a number of facts which I have observed since I have been in Kentucky, I am clear in the opinion that it is simple

hydrogene, or the base of water in combination with caloric or the matter of heat; and I have thought it probable, that the solution of vegetable and perhaps animal matter too, may be necessary to furnish caloric to effect a decomposition of water, while the caloric that made a part of the substance of the vegetable enters into combination with the hydrogene and gives it the gaseous form. This gas or air has a strong smell resembling putrid fish—this smell is very common about stagnant water, marshes, &c. especially in the evening or at night. Lavoisier says that it is but one thirteenth part as heavy as common atmospheric air, and of course it soon rises into the upper regions—it is highly inflammable, and may there take fire and form those meteors so commonly seen shooting in every direction at night. From a number of observations which I made on the Ohio, a few miles above the rapids, during a very sickly season, I collected a number of facts which go to prove that the matter which produce those fevers is much lighter than common air, and has some, if not all, the properties of hydrogene gas, and we know nothing about the properties of any other gas or matter which arises from either stagnant waters or vegetable or animal matters during the putriferous process, I therefore conclude that hydrogene when applied to the human body produces those diseases called intermittent fevers, and perhaps most other forms of the same disease. To explain all the phenomena attending, or consequent upon the proximate or immediate cause of that state of the body called fever, may be difficult, but I think the most of them may be explained to a degree of certainty. The ingenious investigation of Dr. E. Darwin has thrown much light upon the subject, but in order to render his theory entirely new and consistent he has gone into error, by attributing every phenomenon to certain modes of animal actions, entirely distinct from chemical and mechanical process; while I should suppose that it would require a good deal of philosophy to enable a man to believe that such a mass of fluids

and solids as an human body, in such a high degree of temperature, that when deprived of life so soon runs into a state of putrefaction, should not in any degree be liable to that process while living; or that the paroxisms of an intermittent fever depend intirely upon a mere libration between an extreme of debility or exhaustion & an accumulation of sensorial power. Without attempting a refutation of the above theories, would hope to be pardoned for my presumption in attempting another solution of those mysterious phenomena that may differ from them in some points.

Hydrogene and caloric, or if you will have it in plain English, the basis of water and heat, are the only two agents in the putrefactive process, and a very small quantity of water with a proper degree of heat, is sufficient to break down by that process the structure of all bodies at all subject to it. Hence I conclude that hydrogene gas is the very essence, or rather the active power, in the putrefactive process, and if this be right, when taken into the lungs it may be absorbed and carried into the circulation, and so far change the state of the fluids as to act as a stimulant to the sanguiferious system. I have been long of the opinion, that the first sensible effect of this matter upon the system, was that of a stimulant. If a large quantity be taken in suddenly by a person unaccustomed to it, it excites the system into action and causes a flow of strength and spirits, or in Dr. Darwin's language, of sensorial power, which may be so great as to be observed by the patient himself, or those about him—he supposes himself in an uncommon high state of health—this lasts with him but a short time, perhaps not over twenty-four or thirtysix hours, before he begins to feel his spirits sink, he feels a soreness and lassitude, sometimes a chill succeeds, followed by a fever, with all its concomitant phenomena.

In the first place, the effuvia when mixed with the blood, either directly proves a stimulant or by changing the state of the fluids by a commencement of, or a tendency to, the putrifactive process, proves

a stimulant to the heart and arteries. The continual application of this stimulus, increases the action of the sanguiferous system, and is the cause of the increased heat, which in its turn increases the sensibility—the violence of this process at length exhausts the irritability—a state of quiescence or inactivity comes on, or the actions at least become weaker, lassitude is then perceptible—during this state of quiescence, the circulation is slow but the pulse is still quick and small—the blood now experiences a considerable change, both in its appearance and quality, for the want of due oxygenation it becomes thick and black, the arterial system is unable to acquire a sufficient stock of irritability, or sensorial power, to render it capable of being roused into due action again, hence the pulse becomes small and hard, their motion is like the steps of a weak man under a heavy burden, he steps short and quick, but take off a part of his load and his steps will be longer and slower—take off a part of the load of blood by bleeding and the arteries are then able to empty themselves more completely, of course the pulse is fuller and softer, but there being no change effected as yet in the state of the blood, the fever or heat and increased action of the system still remains. If the blood be examined when cold, it will be found that the gluten separates from the red globules, which for the want of oxygene are dark and fall to the bottom; or if the putrefactive process has gone a little farther, the blood appears mixed red and black, and will not form a coagulum—livid spots appear about the joints, a foetid cadaverious smell is perceived, with every symptom of putridity. But says Dr. Darwin, if the putrefactive process was to take place, air would be evolved, and sudden death would be the consequence. But I have never seen an instance of blood throwing out air, or at least enough to cause ebullition, though I have seen it in a state of putrefaction; but it is in the complete death and putrefaction of the solids that this air is seen. I think it unnecessary to insist any farther upon the

possibility or even the probability of the putrefactive process affecting the whole system during life, as there has been instances enough of its proceeding so far before death, that the corps as soon as the breath was out has been found so putrid as to barely hold together until it could be disposed of; while even before the breath was gone the foetor was intolerable. This appears to be the course of the disease where the stroke was sufficiently violent; but when it is lighter, or owing to some state of the system, after the first precursory symptoms are past, and the state of lassitude comes on and has continued for some time, there is an increase of sensibility, there is a sense of soreness felt in the muscles of the abdomen and in the the thighs, shortly after, the blood recedes to the heart and large vessels. The cause of this recession of the blood and high sense of cold when the body is actually as warm as usual, and that in the warmest weather, is not easily explained. It appears to me that the system perceiving the presence of some injury in the distant part of the sensitive organs, the blood and nervous fluids, or spirits, recede to the central parts as if by a law of the animal economy, intended in certain emergencies to render the surface less sensible of injury, as in surprise. It appears to me that the cold stage commences with an increased state of irritation from the predisposition to fever, hence the recession of the spirit of animation. The inactive state of the vessels on the surface, admitting of an accumulation of the sensorial power of irritability in the extremities of the nerves and sensible parts on and near the surface, with an accumulation of the spirit of animation in the prime sensorium, both combining to throw the system into violent action, this violent action is the cause of the increased heat of the body, which together constitute fever.

We shall now endeavour to explain the remaining phenomena attending the paroxism of an intermitent fever, which are the state of the secretions of urine, sweat, &c.

The urine during the interval differs very little from a state of health, and during the cold stage it is pale and in small quantity, and without sediment—during the hot stage it becomes high coloured, but still deposits no sediment—after the sweating stage comes on, the urine continues high coloured, but begins to deposit a sediment, and continues to do so for some time after, until it regains its natural color. During the cold stage there is scarcely any perceptible moisture thrown out from the surface, which may be discovered by holding a glass or any cold polished body near the surface—it is the same during the hot stage, but previous to the commencement of the sweating stage, the moisture begins to arise and soon comes out in such profusion that the heat of the body is not generated fast enough to give it the gaseous form, and hence the surface and cloths are wet.

Now it appears to me that there is something lodged in some part of the system, which acting like an yeast, produces, or communicates a taint to the whole mass, and is the cause of another paroxism.

I suppose this poisonous or putrid leven, or whatever it may be called, to be lodged in the glands, and those which are soft are distend with it, or by it, as the spleen, liver, &c.

It only remains upon this head for me to answer some objections which have been urged against this theory of fever, as far as it may be considered a modification of the old doctrine of a morbid lentor and putridity with its expulsion, and in doing this I cannot afford to enter into a minute discussion of the various objections which may have been started, but there are one or two which deserve notice—I have already mentioned one, which is, that one concurrent circumstance always attendant upon the putrefaction of animal matter, is the evolution of a gas, or air. It appears to me that there must be a complete solution of the parts before the gaseous matters could be set at liberty so as to assume that form, and as I observed above, I never saw a visible gas thrown out from blood in a state of putrefaction; but there

is no doubt but the foetor which always attends the putrid process in animal matter after it arrives at a certain point is a gaseous matter, but I hope that no person will venture to assert that this gas is thrown out in sufficient quantity to induce an ebullition in the very first moments that the putrid process commences, or that the air or gas so visible in the mortification of animal solids arises from the living parts in a state of putridity, while yet half alive. The putrid process in a living body may differ materially from that of a dead one, but although we are not able to explain satisfactorily the cause of that difference, it is not a sufficient reason for doubting the existence of it, it may be owing to its slow progress, being kept back or modified by the action of the system.

I observed above, that I thought it probable that the miasmata, or rather hydrogen gas, was the remote cause of all fevers of a primary nature, and I might say from yellow fever, or plague, to the slightest cases of bilious fever, and the difference is owing to either a difference in the state of the body or the state of the gas, and other circumstances. There is also a great difference in the type of those fevers, although they may be epidemical, owing to the state of the body and to the difference in situation. In those who live in high and dry countries, especially in free-stone, the inflammatory symptoms run higher, are cured by depletion only, and seldom ever require the bark, wine, or opium; but in lower situations, as in the neighborhood of rivers, ponds, marshes, &c. almost every case inclines to the remittent or intermittent kind. In higher situations in limestone countries, and generally towards the interior parts of large continents, the nervous and putrid symptoms are more common, especially in wet seasons. It may also be remarked that those who live at the source of contagion, as on the banks of rivers, ponds, &c. and especially in southern countries, become after two or three years residence almost proof against it, and if a very dry season should happen, or any other cause unfavourable to health in those

situations, the fever is but light, an indisposition is generally felt a few days, a chill comes on, and fever follows of the pure intermittent or remittent type.

SYMPTOMS AND METHOD OF CURE IN FEVERS.

The fevers so common in this country, and all over the continent, and which is the effect of effluvia mentioned above, varies its form, and is either a continual fever, remittent, or intermittent. A continual fever is the most common form, in its first stages at least, and the symptoms vary only in degree. As the usual precursory symptoms are seldom taken much notice of, I shall not notice them in this place. When the fever is fully formed, there is a pain in the head and back, and frequently in every part of the body—a sense of something like a flame, frequently flies up the spine to the head—the skin is dry and hotter than usual, the pulse is in general quicker and harder—sometimes the pulse is small from the first, but more commonly not until the fever has continued for some time—the patient is generally drouthy and desires cold water—if the fever be the pure intermittent kind, in its first stages, water has a disagreeable taste, as if mixed with soap; but if that be the case, it soon changes into its proper form. Sometimes the above symptoms are so slight that the patient will keep about for days, or even weeks—in others the attack is sudden and violent. If the attack be slight or rather slow, the fever generally soon shows symptoms of putridity, or is attended with nervous affections, and scarcely ever has any intermission.

These are the symptoms common in the western countries, and sometimes in the Atlantic states where agues are common, but in the higher parts of the Atlantic states, and especially in the free-stone countries, the only symptom is of the pure inflammatory

FEVER.

kind, scarcely ever terminate in agues, except upon large rivers, or very large ponds or marshes.

Treatment.—The treatment will be various according to the symptoms. If the patient was full of blood before the attack and his pulse is hard, bleeding will be necessary, then a vomit with tartar emetic, and after the operation is over give plenty of cool drinks—begin with small quantities and increase it. During the operation, keep the patient warm, and for some time after, let him gradually cool and keep as cool as he may desire, and let him take as much cool water as he may wish, and cool air also. In the next place it will be necessary to keep the bowels regular—for this purpose, cream of tartar is the best, or tartar emetic; if the fever continues high until next morning, it will be proper to give tartar emetic in small doses in cool water for several hours—for this purpose, dissolve four or five grains in three times as many spoon-fulls of water, and give one at a time, half an hour apart—this will scarcely fail to loosen the belly and abate the fever. Towards the evening of the second day, if the pulse should continue quick and hard, complexion high and surface dry, it will be necessary to bleed again. This course will seldom ever fail to bring on a remission, if not an entire intermission in 24 or 48 hours, after which it must be treated as such.

It may be necessary to observe that it is always proper to keep the patient as quiet as possible—if he has any appetite the cooling regimen should be observed.

It has become a very common practice to purge with calomel and jalap, but I think the practice improper; it may answer in pure miasmatic, or rather hydrogenic, fevers; that is, where the fever is known to proceed from that cause, and that it will readily run into that form, or upon the first attack in other fevers; but after the fever has continued a few days it is improper, as it weakens a person much more than a puke, and never has as good an effect in breaking the fever.

Whenever the fever terminates in an intermittent or remittent fever, it is to be cured with the bark, wine and opium, (which see) but in doing which never neglect to observe the following rules: If a remittent fever, (dumb ague) begin to give the bark in the morning when the patient is most free from fever, and even not then unless some moisture can be perceived upon the forehead. Continue to give it at intervals of half an hour or more apart; if it oppress the stomach, opium may be given. If the forehead becomes dry, and the fever begins to rise, decline giving bark, &c. for that time; and endeavour on the next morning to break the fever more completely by another puke, and on the third day the bark, columbo, or some preparation of iron, may be tried again, with opium and plenty of acids, blisters, &c. and in the mean time, if any symptoms of putridity should appear, give 15 or 20 grains of camphire, ground up with white sugar, three or four times in the day, and continue the bark and wine or good old cyder—tartar emetic in small doses three or four times through the day will also be of advantage.

In a pure intermittent fever or ague, observe the following rules:

Let the time of accession be known—give a dose of tartar, or rather puke with tartar, on the day before you intend to give the bark—begin to give the bark two hours before the cold stage is expected—give it in large doses, as from one to two drachms, from hslf an hour to an hour apart, according to the size of the dose and other circumstances—after the second or third dose, give ten or fifteen drops of laudanum with every dose, or every other, as the case may require—the laudanum will assist the operation of the bark, and prevent it from griping or running off by stool—continue to give it until the time of accession of the cold stage is past an hour or two, when the doses may be both less, and less frequent. On the day following, give about three doses, morn-

ing, noon, and night—the next two, and the third one.

It may be further observed, that the forehead be moist during the whole course, for if any fever be present, or rise, it will be not only in vain to give the bark, but injurious. This course, if rightly managed, will never fail to cure an ague, and so as to prevent the return, except in those who from a high and healthy situation have settled in an unhealthy one—in such it will be apt to return three or four times during the first season, but is always easier cured at the first attack.

There is one or two observations which may be proper before we quit intermittent fevers. A hard tumid spleen frequently remains after the ague is cured, and is frequently painful, and as long as it remains, the patient cannot be said to be well—his complexion will generally be bad. In this case, if it should remain any time after cure, it will be proper to puke with tartar once or twice, or a mercurial purge, as jalap and calomel, may answer, and anoint the part well with strong mercurial ointment—rub it in well every night, and if something hot be applied it will still be better. It is the same with hot liver, which frequently remains if the cure has not been well conducted. After purging, iron, bark, &c.

It is generally believed among the vulgar, that the ague may be cured in almost every instance by charms, and a thousand other insignificant tricks.—The whole mystery in this, is, that in some slight cases, or where the system has nearly overcome the disease and it has become one of Dr. Darwin's cases of mere libration between two extremes, or rather it has become habitual, while the first cause has gone off, a strong impression made upon the mind, especially at or just before the time of an expected paroxysm, will support the energies of the brain and prevent the fit; but this will not answer in infants, because their minds cannot be impressed with a sense of horror; neither will it answer in a person of a sound judgment, who is unable to believe in the agency of

angels, devils, ghosts, hobgoblins, witches, vampyrs, and a long catalogue of invisible, immaterial, medical physical agents, that never had any other existence but in the imagination of the credulous ignorant.

TYPHUS.

The next state of fever which I shall take notice of, is, what among physicians is called Typhus—it is sometimes called the slow fever, nervous fever, &c. it is called Typhus from a Greek word signifying stupor—slow fever from its slow or gradual progress—nervous, when any nervous affections attends it, as involuntary motions, such as a twitching of the limbs, &c. Sometimes the patient goes about, as mentioned above, for a considerable length of time, and in some cases until within a day or two of death symptoms of putridity always attend in this case, while the febrile symptoms never run high, but are constantly present. In other cases the attack is more violent, but soon puts on the nervous appearance, with stupor, a loss of voluntary motion, a difficulty of pronounciation, a trembling of the hands with an inability to use them, deafness and blindness generally attend, when the pupils of the eyes will be found larger than usual, being all symptoms of great debility.

Blistering the extremities is one of the first remedies to be employed—opium is the next, and should be so managed as to produce some moisture, but without much heat. Calomel is a proper laxative if costive, and may be of service as a stimulant to the system generally—the tincture of iron made with the spirit of sea salt, is also of service. The elixir of vitriol should be given with all the water the patient drinks. In this fever the patient seldom has any appetite for food, and must be supported by butter-milk, good whey, vinegar, cyder, wine and even spirits is proper—In this state of fever camphire is also ex-

cellent. The intention of cure should be directed to the following objects: First, to excite the torpid insensible system into stronger action—second, to keep the bowels lax, and to prevent putridity both in the bowels and system generally—and third, to support the patient by some drink that may afford nourishment; also, by cordials, as wine, &c. In this state of fever I have never yet lost a patient, except one, and that was through the niggardly penurious disposition of her father, although I have often seen persons in it unable to pronounce a single word distinctly, or to raise a hand to their head, but it requires more care and attention than any other state of fever. The physician should attend to the exhibition of every dose until there is an evident change for the better, which generally will take place under proper treatment in a day or two at most.

After a person recovers from a low state of fever, he should be very careful to live regular for some time—eat and drink moderately—be careful of extremes of either heat or cold, and use moderate exercise until they recover strength.

SCARLET FEVER.

From the small number of cases of this kind which I have met with, I am unable to say any thing from experience, I shall therefore merely extract what I consider proper from Cullen, who says it is not a common disease. He says it makes its appearance about the beginning of winter, and continues through that season. It commences with the usual symptoms of fever—it most resembles the attack of the malignant sore throat, and measles, but in this there is no cough or catarrhal symptoms; but early in the disease there is some uneasiness felt in the throat, some inflammation of the tonsils, with some sloughs, which are whiter than in the malignant sore throat—

upon the third or fourth day a scarlet eruption appears upon the skin, which remains for three or four days after its first appearance, when it goes off with a separation of the cutticle, with an abatement of the fever, some ulceration appears on one or both tonsils, which soon heal, a swelling of the body like a dropsy, frequently follow, but soon goes off.

Dr. Cullen prescribes what is called the antiphlogistic treatment, viz. bleeding and a gentle puke, avoiding both cold and heat. Mild astringent gargles will be proper, as those made with allum, honey, bark, &c.

To carry off the swelling, if any should come on, a few doses of salt-petre is better than purges, as they do not weaken the patient.

The only cases of this disease which have fell under my care were women in chilbed, and I judged being kept too hot was the cause.

PHRENSY, OR AN INFLAMMATION OF THE BRAIN.

Phrensy, as a primary disease, is said to be a rare occurrence, but it is supposed to be frequently a symptom of some other.

The symptoms are, a high fever with violent head-ach, a redness of the face and eyes, the patient cannot bear either light or noise, a constant watching and delirium, even to fury. The most suddenly violent case I ever saw was in a girl of about eight or nine years old; she had been subject to attacks of it at times—the first symptoms of attack was with a violent head-ach on Saturday morning—I saw her, on Sunday evening, there was great pain in the head with drowsiness, the circulation had nearly ceased in the extremities, so that blood could not be drawn—she died on Monday. This is the only case of phrensy of a primary kind which I have met with for several years; but what is called a symptomatic phrensy, is more common, but is scarcely to be distinguished from the other but by the other symptoms attending it.

The treatment must be those of common inflammation, as plentifully bleeding, small doses of tartar emetic, a large blister applied to the back of the neck, or if the case be violent, shaving the head and applying cool water or vinegar, or even blistering the head is recommended; but there is scarcely any thing abates inflammation more than bleeding and slight vomiting; gentle purging with calomel assisted by glysters will also be proper.—The patient should be kept as quiet as possible and his room darkened.

If the disease prove obstinate, bleeding should be repeated, with small doses of tartar emetic, until the symptoms abate—buttermilk or whey will be proper, and is the only diet necessary.

PNEUMONIC INFLAMMATION, USUALLY CALLED PLEURISY.

Physicians have distinguished inflammations of the breast into two kinds—the one they call a bastard pleurisy, and the other simply pleurisy. It is called pleurisy from its affecting the pleura, a membrane lining the inside of the breast—in it the pain is acute and is generally fixed in some part of the breast.—In the perineumonic notha, or bastard pleurisy, the pain is more deeply seated, and affects the back and shoulders as well as the breast. A common pleurisy is a disease that cannot be mistaken—it is a highly inflammatory disease, and is always attended with the usual symptoms of an inflamitory fever, and in most points it is to be treated as such. The bastard pleurisy is an inflammation of the substance of the lungs, and is more dangerous, though less painful—in it the pulse is full, quick and hard at first, but after some time they become softer and slow, as in health, or even more so, but are generally irregular.

The cause of pleurisy is generally cold applied to the body, but I suppose more particularly to the lungs. The substance of the lungs I believe to be insensible to either cold or heat, and perhaps inflammation of the substance of the lungs would scarcely give any pain if the membranes were not affected.—Young people full of blood and vigour are the most subject to this disease, especially those who live in high and airy situations, or countries, especially in northern climates.

The treatment of this disease is the same as other inflammations—plentifull bleeding, a blister applied over the part pained; but if the inflammation be general, as in a bastard pleurisy, it may be applied to each side of the breast, or to the back below the shoulder blades. Tartar emetic in small doses is one of the most powerful means of abating inflammation, whether local or general; full vomiting is considered

improper, as the violent exertions increase the pain and may be dangerous; but if in exhibiting the tartar as above, a motion or two should be induced, it will be no disadvantage. After bleeding, &c. I have sometimes given opium combined with tartar, as in dovers powder, or half a grain of each in a pill—this will generally be found profitable when there is torpor, or a drowsy disposition with delirium, after the disease has continued for some time; but if the first or second dose should not produce a general sweat, it will be improper to continue it any farther. Opium, snake-root, and all other stimulants, are injurious in inflammatory diseases, except they can be made to produce sweat without much heat. Particular attention should be paid to the state of the bowels from the first, for if not kept lax, or emptied once in twenty-four or forty-eight hours at farthest, a putrid lax is apt to come on, which will prove very injurious. Hot applications to the pained part will sometimes give ease, but are not as good as blisters. If the pain should change its place after blistering, a blister should be applied again over the pain. Large draughts of any thing cold it is said is improper, as it may increase the pain, but I have been in the habit of allowing small draughts of cool water, and have never observed any bad consequences to result from it.

As plentiful bleeding is one of the best remedies in this disease, it may not be improper to introduce an observation here which should have been under the head of bleeding:—Some in prescribing copious bleeding direct it untill fainting come on, but it is well known that many persons will faint at the sight of blood, while others will scarcely faint while they have any blood left. Fainting in bleeding depends almost universally upon the mind and if a person can be diverted to any other object during the operation, and for a few minutes after, not one in twenty would ever faint.

In applying blisters in case of pleurisy in women they should be applied behind the breasts on the ribs,

as it would be not only disagreeable, but less effectual upon or between the breasts.

OF QUINSIES.

Medical writers distinguish five kinds of quinsies or inflammations of that kind, but there are but three or four which deserve to be distinguished in practice.

The first is an inflammation of the tonsils or almonds of the ears, but is seldom confined to the glands alone. The second kind is the malignant sore throat, or french measles—The third is called the croup, and bold hives—The fourth is the mumps.

A common quinsy or inflammation of the throat is seldom dangerous except in children, but if attended with hoarseness and a foul tongue, there may be some danger, and especially in children—Bleeding in the first place is necessary, and then a puke, and afterwards keep the bowels lax by glysters or gentle purgatives, and if the inflammation be great, and the tongue should swell a blister will be proper, it should be applied either to the back of the neck or breast and the bleeding should be repeated—In slight cases it may be sufficient to keep the parts warm by a flannel cloth, or a poultice may be applied to the neck at night—To frequently wash the mouth and throat with a strong decoction of oak bark and alum is of the utmost importance and should by no means be omitted especially if there should be any white spots or ulcers upon the tongue or tonsils.

MALIGNANT SORE-THROAT

This is said to be a contagious disease, but with what propriety I am not prepared to say, but I am convinced that the number of contagions are not so large as has generally been supposed; I have never seen, an instance that afforded any circumstance that might lead to such a conclu-

sion: it is very common for one or two in a family to have the disease about the same time, while half of those exposed to the contagion did not take it.

The first symptoms of this disease are generally a fever, pain in the head, anxiety, a slight swelling of the throat with some stiffness in the neck, hoarseness with a soreness of the throat, the fauces are of a dark red color, spots soon appear which increasing soon cover the parts about, the tongue become foul and the breath bad, if the bowels be not emptied by salts or some other purgative in the first two or three days a dysentery or putrid lax generally comes on, there is generally an efflorescence or eruption of small pimples over the body, a small irregular pulse with marks of putridity frequently attend, the patient is frequently delirious and comatose but unable to sleep sound.

In this disease there is a strong tendency to putridity, a fetid breath with a dark livid color upon the fauces are fatal symptoms, which is said some times to happen by the third day, and generally before the seventh.

There is a good deal of nicety required in the management of this disease, and my experience in it does not warrant my being very positive upon that head—Bleeding is generally forbid, but I am inclined to think bleeding in a measure proper; I think bleeding seldom immediately injurious by inducing debility in the first stages of diseases or before a person has been reduced by disease, but where a disease is not suddenly dangerous as in most cases of fevers in this country a person recovers much sooner when bleeding has not been freely employed than where it has; but in all violent inflammatory diseases, altho symptoms of debilit may be apparent early in the disease, if the pulse be hard, however small, moderate bleeding should be employed; the quantity should always be regulated according to circumstances; the quantity of blood in the veins cannot diminish suddenly, and all that may be present in an over proportion to the strength of the arteries will be injurious, taking off a part will not increase debility but on the

contrary it will relieve the system and save some expenditure of sensorial power, it may however be proper to employ bleeding with caution by drawing off but a small quantity at a time. The sovereign febrifuge, emetic tartar should not be omitted but should be given as soon as possible so as to move the patient both up and down—To prevent the tendency to putrefaction give camphire and alum in a bolus two or three times a day with a little honey to render it fit to swallow, also cool water and cream of tartar.

The mouth and throat should frequently be washed with the decoction of oak bark and alum.

Medical writers prescribe the bark in large quantities, but in substance it is very difficult to swallow in this disease, especialy in children; but the same signs should indicate the use of the bark in this as in other cases viz. a moisture upon the forehead or a disposition to sweat, for this purpose opium with tartar and camphire may be tried; if the patient cannot swallow the bark or any other drug which may be thought proper, it will answer in glyster, either in substance or in decoction

A blister may be applied to the back of the neck; or if the glands be tumefied about the neck, they should be blistered, or a blister upon the breast may answer as well, and they should be kept open until the symptoms abate.

It is often difficult to get children to take medicine that is as disagreeable as the bark, but in that case it is said the bark answers equally well in glyster.—It may always be observed that a drug given in glyster, should be given in double quantity.

MEASLES.

This is one of the contagious diseases which a person is subject to take but once. It is said to appear in January, as an epidemic, and to go off about summer, but may happen at any time. It always commences with more or less fever, and in about four

days the eruption begins to make its appearance—it is always attended with hoarsness and a dry cough—the eyes are inflamed and give out tears—the patient is generally drowsy—the eruption resembles the scarlet fever, but the pimples and desquamation is not so considerable. The affection of the lungs I conceive to be the most dangerous part of the disease—if a person be careful to avoid heat and live upon weak diet, there is seldom any danger. I know from sad experience the bad consequence of taking cold. I had the measles at about 23 years of age—rode five or six miles out and home again on the day the eruption made its appearance—my fever was but slight before—there was a snow on the ground, which had a yellowish appearance to me—my fever and cough became very high for several days—the measly spots continued to make their appearance whenever I was warm for several weeks—a very troublesome dry cough continued for two years after. I made use of some few medicines and my cough went off; but what was equally bad, my hands which had been subject to be hot and dry in the palms, as also the hollows of my feet, now was attacked with a most intolerable itching, and upon rubbing became very painful—this would continue for a few days, when it would go off with a desquamation of the cutticle, which would become dry and hard, and in a week or two peel off with some appearances of tetterous eruptions, and at intervals of from two to three or six months; it continues to do so yet, and I am now in my 45th year, but the itching and pain has ceased to attend it for many years, yet am still subject to cough upon very slight cold, and am seldom free from it. I may venture to state as a melancholy truth that three-fourths of the human race shorten their days and render themselves unhealthy through life by improper conduct.

The reader will pardon this digression, upon reflecting that if it does not afford him instruction it may be a caution.

From the rare occurrence of measles, I have not

had an opportunity of learning much from experience, but shall state what I judge the most proper treatment, in which I find it necessary to deviate but little from former writers.

If the fever should run high bleed, and give cooling laxatives, for which cream of tartar, or tartar e. properly managed will be proper; but I suppose that if a proper regimen was observed there would seldom be much need of medicine, except for the cough—A person should live upon light diet, use moderate exercise, be carefull to avoid any extreme of either heat or cold, but especially cold, cool drink or diet will not be injurious but it might be proper to avoid taking any large quantity at a time—It is not only necessary to observe these rules untill the disease has disappeared from the surface but for some time after as a person is not free from the disease for two or three weeks afterwards, which may be known by the measly spots appearing upon getting very waarm.

The cough will be most certainly relieved by opium, and to avoid any increase of fever, it should be combined with tartar e. opium alone for a time impedes the secretion of moisture in the lungs, stomach and mouth while nothing promotes it more than tartar. I generally employ opium in this maner in pneu-
monic inflammation where the cough was troublesome, and always with advantage.

SMALL POX,

This is a disease which I have little knowledge of from experience, but it appears that when the pock is distinct it requires but little medicine or attention but if it be confluent it will require both—In the distinct the pustles are fewer and distinct from each other and surrounded by a red circle. In the confluent the pustles run into each other and the areola or circle is less distinct, especially on the face which is some times covered: this kind is alway dangerous & frequently fatal, I shall therefore give some directions for the treatment.

Whenever a person from being exposed to the contagion or from the usual symptoms shall judge that he has taken the small pox, he should be carefull to keep quite cool, and to take a purge, and take cream of tartar in all his drink; if the febrile symptoms run high a bleeding will also be proper; if convulsions should precede the eruption, which is often the case in children, laudanum will be the best remedy, if when the eruption appears it should be distinct, nothing more will be necessary but to avoid heat and to live light—But if the pimples upon the face are numerous, when they are not distinct, but are in clusters or run into each other, and especially if the fever does not abate upon the fifth day, it will require great care and attention.

The bowels must be kept regular or rather loose by flour of sulphur and cream of tartar—If any symptoms of putridity appear which may be known by the matter in the pustle not puting on the appearance of pus, or becoming yellow, it continues thin, and white or of a brown color, there are dark spots over the body with watery blisters, the skin under them is of a purple or livid color, the urine is sometimes bloody, the fever which had subsided in a measure at the time of the eruption returns again, but with an increase of debility. In this case the bark and wine are to be given in large quantity, if the patient cannot swallow the bark in substance it may be given in decoction, or in glyster, an opiate to be given every day; blisters are also advised; the mouth to be kept clean with gargles; but a preventative is always better than a cure, and we now know of one both certain and safe, and in the power of every person, and which it is the duty of every parent, guardian and master of a family to employ. Altho the small pox may seldom visit us we ought never to consider ourselves intiraly secure while liable to the contagion, for we know not how soon we may be visited again so long as it is in any part of the world, but by a little care and attention it may be shut out from among mankind by the kine pox.

KINE POX.

This is one of the most extraordinary discoveries that ever hapened in the science of medicine ; what change a disease can effect in an animal which will prevent the same disease is a mysterious problem—but how one disease should prevent another, is still more incomprehensible ; but it is enough that we know the truth of the fact—The following is an abridgement of the history of the disease as given by Dr. Jener and others.

The kine pock proceeded, in the first instance from a disease called the grease in horses : in the dairy counties in England the men and women promiscuously milk the cows together ; it was observed that the men being careless in washing their hands after dressing the horses heels affected the cows teats with a disease, which in its turn was communicated to the women, and it was also observed that those persons would not take the small-pox. From these circumstances Dr. Jenner was induced to make an experiment by inoculating with some of the matter from a cow, the experiment succeeded, the discovery was made, committees were appointed by medical societies to enquire into the truth of the report ; their experiments furnished a complete confirmation of the fact, which continues to receive additional confirmation by thousands of instances in both Europe and America.

In inoculating with the kine-pox, nothing more is necessary, than to make a slight incission in the arm on the outside about half way between the shoulder and elbow ; it ought not to be so deep as to cause it to bleed, but if it should bleed freely, it will be proper to let it stop before the matter is applied. The proper time for taking the matter from a pustule for inoculation is at any time after it rises until the matter begins to turn white which is generally from the fifth to the tenth or fifteenth day : the pustule gener-

ally begins to rise about the fifth day, and the fever about the ninth, but it is said there has been instances of the pustule not making its appearance before the tenth or twelfth day and then succeeding well. The success of the inoculation is known by the following signs :—At some period, commonly about the ninety-sixth hour a clear pustule begins to rise, with some inflammation around, the middle is sunk or rather it does not rise, and is black, it continues to spread until the fifteenth or eighteenth day, still spreading by blisters rising around the edge. Although the pustule for some time has the appearance of a blister it seldom has much water in it ; at the time, or even before the fever becomes general the glands under the arm become inflamed and sore ; on the ninth day the fever becomes general some times attended with considerable pain in the head & back, but in others the fever is scarcely perceptible, except a person should use exercise, when a soreness in the joints and glands will be perceived : the fever begins to abate in two or three days, but may easily be perceived to be present in a degree by exercise or drinking spirits, for some time longer. It will always be prudent to live light, if the fever runs high, and particularly to avoid extremes of both heat and cold.

In small children, we must often judge from the appearance and progress of the pustule, as there is seldom much appearance of indisposition in them.

It is said that there has been instances of persons having gone through the disease twice, but it is not common ; the place inoculated will commonly inflame considerably for three or four days and then go off. In persons who have never had either the kine or small pox, there is a great difference, some will take it upon the first trial, while others will scarcely take it at all ; in such it is necessary to repeat it until it does take effect, and in all cases it is proper to repeat it until the proper symptoms enumerated above take place.—The matter of kine-pox is very difficult to preserve any length of time, the

best method is to wet a number of threads with the matter, and as soon as dry put them into a quill with as little air as possible and seal it tight with wax.

INFLAMMATION OF THE STOMACH.

The inflammations of the stomach is of two kinds, the one is a more violent and acute disease, the other is of a more cronic form. In the first the substance of the stomach is inflamed, and there is a considerable fever attends it. In the second, the inflammation is more confined to the internal surface, and is seldom attended with much fever, and the pain is less acute. The symptoms of both are nearly the same, but differ in the degree of violence.—There is a pain in the stomach with vomiting; scarcely any thing can be taken into the stomach without increasing the pain and vomiting, a hickup frequently attends it, the pulse is generally small and hard with a great loss of strength.

In the latter, or what is called an erythematic inflammation, the symptoms are not always sufficient to give notice of the disease, but some times a soreness of the mouth and throat attend, if in this case there is any pain felt in the stomach upon taking into it any thing acrid, an inflammation may be suspected.

In the phlemonic inflammation of the stomach, scarcely any medicine will be retained, small quantities of cool water with a few drops of spirit of vitriol may be tried, but bleeding freely is the principal remedy to be depended upon, and ought to be repeated according to circumstances, a blister four or five inches square should be applied over the stomach, and the patient kept loose in the bowels by glysters. The diet, whenever the patient is able to bear any, must be light and soft, as thickened milk panado &c. If the disease be of the erythematic kind, which may some times be known by a vomiting, with some soreness of the mouth, with a quicker pulse than in health, small and hard; some times the inflammation is said to change its place and pass

through the whole length of the intestines like the thrush.

Some bleeding may also be proper, but I conceive the disease to be caused by an acrid or corrosive humour, which should be destroyed or corrected by borax, a weak lime water, or sugar of lead in small quantities, alum also may answer.

INFLAMMATION OF THE INTESTINES.

The inflammation of the bowels is called enteritis. The inflammation of the bowels may be known by the following symptoms, there is always a considerable fever attends, there is a pain, and frequently a tumefaction of the bowels, costiveness usually attend and some times vomiting, the pain is some times felt in one part of the belly, but most commonly over the whole abdomen. Among the many causes assigned by physicians, I consider two as certain, and dangerous, one is worms, and the other is the sudden stoppage of a lax, especially when the lax attended a fever.—Of the first, I some years past saw a girl of about eight or nine years old; the abdomen was very much swelled hard and exceeding painful and could not bear any pressure, calomel and cream of tartar was given in small repeated doses, blisters and poultices were applied, a supuration at length took place between the peritonaeum and muscles of the abdomen, which was discharged by an incision upon the navel, and for several days considerable portions of fat came away—she recovered—I have known several cases, but never saw any as bad.—Of the other kind I have known several cases and one proved fatal—It was in a woman of about forty years of age, who had laboured under an intermittent fever for eight or nine months, was much emaciated, had a violent cough with frequent discharges of large quantities of blood from the lungs, which was always very dark, a violent looseness and tenesmus attended; she was also hysterical and her paroxysm irregular, generally twice in 24 hours and

at irregular periods.—She took the bark on Wednesday, which stoped the fever and lax, she remained well, but without a stool until the Sunday following when a pain in the bowels came on with a swelling, I saw her on Tuesday, but her case was hopeless, she died about eight or nine days after.

Persons recovering from fever, always ought to take care to keep the bowels regular for some time afterwards with cream of tartar and flour of sulphur.

The same after recovering from a dysentery, or other laxes.—The disease is generally to be treated precisely as the inflammation of the stomach, but in this there is an opportunity of exhibiting medicine as a cooling laxative, there is nothing better then cream of tartar, which should be given in small quantities, blistering the abdomen over the naval, or the part pained, will also be proper—the blister should be five or six inches square.

INFLAMMATION OF THE LIVER.

An inflammation of the liver is called Hepatitis, it is a very common disease in Kentucky and is often the consequence of fever, being imperfectly cured, or improperly managed. It is said there is two kinds, the one acute and the other chronic, but I am inclined to believe that the acute would always terminate in the chronic, if not removed by medicine; that viscus is not very sensible, and there are but few membranes about it, and a slight inflammation will scarcely be perceptible, and may exist a long time without being understood—I once had it for two or three weeks myself, and scarcely suspected it; it was owing to my curing an ague imperfectly, I was sensible of some degree of fever, my urine was high coloured, appetite bad, a bitter, disagreeable taste in my mouth, some stiffness and uneasiness in the right hypochondrium and shoulder and even that side of my head and face.—I took a dose of tartar e. the bile was thrown up in large quantities of a salt taste like a brine, and so hot as to almost scald the mouth;

I have met with a number of cases of the kind,—the usual symptoms are a pain in the right side—the liver is generally enlarged and may be felt just below the ribs ; if the disease be violent, a pain is felt under the clavicle; and the shoulder, a dry cough generally attends it, but not always ; the patient can lie easier upon that side than in any other position, a slight discolouration of the skin is mentioned by some writers ; heikup some times attend, and a discharge of blood from some part of the body is very common in the the advanced stages.

The treatment, in general, the same as other inflammations, one, two, or perhaps three bleedings may be necessary if the case is violent, If it is the crisis or remains of fever, and acute and not of a long standing, an emetic will be proper, with blisters over the part ; but if it has assumed a more chronic form after bleeding and a mercurial purge, give calomel every night, anoint the part well every night with strong mercurial ointment, if a salivation should arise too fast give a gentle purge at times and abate the quantity of mercury. It is necessary to keep up this course for three or four weeks, by which time it will generally go off ; if the disease be violent, a supuration some times takes place ; when any danger of that is apprehended, it will be proper for the patient to lie as much and quiet upon the right side as he can well bear, in order that an adhesion of the liver may take place, as inflamed membrane, will soon adhere if they lie together, and then if an abscess should be formed, it will generally make its way through the external parts and may be opened and healed like another abscess.

It is thought necessary by some to give bark, iron, &c. after the inflammation goes off to strengthen the system, against a relapse ; but I am inclined to think it unnecessary, unless considerable dibility should be present.

INFLAMMATION OF THE KIDNIES.

This inflammation called also nephritis, is usually attended with a dull pain in the back, but I know it may exist in a high degree when there is no stone without giving much pain.

In the year 1800, I went into the water in the bottom of a mill-dam, after the water was drawn off, when I was very warm, and staid in it three or four minuets above my waist,—on the next morning I had a considerable fever, my urine resembled butter milk, the inflammation run very high for a week or ten days with a discharge of blood and pus; in a few weeks I had recovered, but some weakness remained—about the first of January I was very much exposed to a cold sleet by riding five or six miles in a bad night; I was immediately after seized with the same disease, which brought on a virulent gonorrhoea with a discharge of bloody urine and puss.—I recovered in about six months, but was very stiff in the back for two years or more.

It will always be proper to distinguish between an idiopathic inflammation and that occasioned by a stone. I think they may pretty certainly be distinguished by the following sings:—if it be occasioned by a stone, the pain is violent, while there is but little fever in the system generally; a numbness and pain runs down the thigh affected, which I believe not to be the case when there is no gravel or stone—in the inflammation proper there is no difficulty in making water, and the quantity is as usual, but attended with pain and heat in the urethra. In the other case great sickness and vomiting frequently attend, occasioned by the great irritation and pain.

The treatment of the two, I conceive ought to be different:—a large dose of opium ought to be given and then bleeding, and the patient put into a warm bath where a stone is judged to be present. The opium will not only be improper, but injurious in the other case—in the idiopathic—purging pretty brisk-

ly with cream of tartar, will be proper, as also bleeding, and if the disease prove obstinate, it should be repeated from time to time; the diet should be light in both cases, as vinegar, milk, & butter-milk or soups. I found great benefit from lying altogether upon the floor.—I think, that the inflammation, if it continues long, extends down the ureters and affects the urinary and genitals—in that case, a slight mercurial course will be found of advantage, with the spirit of vitriol.

OF FLUXES.

DYSENTERY.

Authors have distinguished a variety of diseases under the title of fluxes, Sauvage enumerates thirty-six, and subdivide them into many more; but I can see no propriety in distinguishing more than two or three; dysentery, or bloody flux, diarrhoea, or a continual looseness. lientery or a looseness without pain or griping, in which the aliment generally passes off undigested.—The first is the subject of our present chapter.

The symptoms of this disease is two well known to need any description—it was formerly, and is yet considered by some a highly contagious disease, but I have been of a contrary opinion for many years, as nothing is more common than for one or two in a family to have it and the rest remain well. It is epidemic and owing to some invisible cause and as incomprehensible as the cause of influenza, or the famous miasmatta; but it is entirely immaterial what is the remote cause, unless it would lead to a more successful method of cure.

From observations, I am of the opinion that it is owing to a tendency to putrefaction in the mucus membranes lining the bowels, which in some cases appears very evident from the fetid stools and tender state of the lining, which is often discharged in considerable pieces. If the stool be black, it shews a higher state of the disease, and it is attended with fever in the first stages, and if the disease be violent the pulse will shew that the fever is general; it may then be necessary to bleed.

I have for many years confined my prescriptions in this disease to very few medicines, and the management is very simple; although the griping be great, the bowels are not always found in a loose state; but the excrements is generally discharged in hard globules.

In the first place it is proper to empty the bowels

by a purge; for this purpose, there is none equal to salts; this not only empties the bowels, but it is a cooling antiseptic, and prevents the putrefaction from progressing. The salt should be given in small doses, half an hour or an hour apart; and if the disease be violent, it should be given in sufficient quantity to make the stools watery, which may take five or six hours. The continual application of the salt to the bowels is much more effectual than to give a full dose at a time. The salt given in this manner is often sufficient to cure a flux when the disease is not very violent, and sometimes without purging. This course should be given every morning, and after the second day, if the disease continue, give a grain of opium in a pill at night, and salt enough to empty the bowels the next day. Astringents have almost almost always been prescribed by physicians after evacuation, but I have never been able to derive much benefit from them, at least, their effects are always doubtful, and I seldom have recourse to them, perhaps because I have not met with a case in ten years in which the other remedies above failed.

DIARRHOEA.

The same medicine and the same rules are to be employed and observed in diarrhoea, or common lax, but this is frequently more obstinate than dysentary, and in it I have found astringents of more service.— People are apt to pay but little attention to a lax if it is not attended with pain, or some disagreeable symptoms, but this is wrong, as by becoming habitual it will be more difficult to cure, and especially in aged people.

LIENTERY.

A lientery is nothing more than a brisk lax without pain or griping, and is probably owing to the

FLUXES.

same cause, and I see but little propriety in distinguishing them, as the method of cure is the same.

Tenesmus, or a violent inclination and pressure at stool without being able to void any thing except a little mucus, very commonly attends both diarrhoea and lientery, and is the most troublesome symptom; it is the most effectually removed by opium, especially in glyster. Astringents, as alum, logwood, oak-bark, &c. are often of service also; but it must be acknowledged that the most powerful remedies often fail in curing it, and especially after it has been of a long standing.

CHOLERA MORBUS.

This is a violent attack of vomiting and purging; the contents of the stomach are generally acid, but after the stomach has been emptied the discharge is generally bile. It occurs in the warm seasons in cold countries; but in the warmer climates at any season. It sometimes proves suddenly fatal; but if less violent, it may last for some length of time, but it seldom terminates favorably without the assistance of medicine. It is not, I believe, so common a disease in America as in Europe—perhaps owing to the inhabitants living more uniformly upon strong diet, animal food, &c. The first medicine to be employed is alkalies, as magnesia alba, chalk, lime, &c.—if it should not moderate the symptoms, or even put a stop to them, elixir of vitriol and opium—the opium should be given in doses of from half a grain to a grain at a time, an hour or longer apart; if it will not stay upon the stomach, double the quantity may be given in glyster—from 60 to an hundred drops of laudanum may be put into a gill of warm water, and thrown up. Medical writers generally direct plenty of diluents, or watery liquors, to be taken with a view of washing out the bile which proves a stimulus to the stomach and bowels—a thin gruel or the like is recommended. It is necessary to make use of

RHEUMATISM.

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opium for some time after, but I should rather depend upon lime, magnesia, white oak bark and other strengtheners—a small quantity of the tincture of iron will be proper.

RHEUMATISM.

The rheumatism is one of the most common diseases to which mankind is subject, as there is scarcely one in five but is troubled with it more or less, while the pathology of it is one of the most obscure of any disease; that it can so suddenly be transferred from place to place appears inexplicable, but if we knew a certain method of cure it would be immaterial whether we understood either the remote or proximate cause, or not; but this is not the case, for it would be considered as an evidence of quackery in a physician who should say he could cure it at all times.

Physicians have considered it of two kinds, and called the one acute, the other chronic, but I think improperly—the one they call an inflammatory disease, the other not; but I am not able to make this distinction—the acute rheumatism is nothing but a violent attack of the same disease, but it must be acknowledged that there is such a difference in the state and appearance of the disease, that I know of no symptom that is constantly attendant upon it, but pain and soreness. I have seen violent attacks of rheumatism without any inflammation or swelling appearing; in other cases of the most chronic form I have seen considerable swelling and even inflammation, while there is one circumstance which attends rheumatism of the most chronic form that always attend inflammation, heat almost universally increases the pain while cold diminishes it.

The first state of rheumatism I shall mention, is the purely acute or inflammatory attack—it is generally brought on by going into the water, a cold cellar, or any other way becoming suddenly cold when

very hot, or in some cases without such previous heating. It is attended with high fever, a quick strong pulse, great pain in every joint or over the whole body, the large joints generally swell and appear inflamed, but this swelling and inflammation does not always appear visible, and the patient cannot bear to be moved without giving the greatest pain—if not properly treated it puts on a pure chronic form.

If attended with fever, and especially with inflammation, bleeding will be necessary according to circumstances, then sweat with opium and tartar emetic half a grain of each, given at intervals of from half an hour to an hour and an half as directed under opium, (see opium) if it should not intirely remove the pain and soreness, it will be proper to give a grain of calomel and as much opium in a pill every night.

There is something difficult to account for in some cases. I once met with a case in a lad of about 13 years of age who could not bear the smallest particle of opium, and his pain was increased in proportion to the quantity—a high fever and delirium attended with inflammation and gangrene in the feet—a supuration took place in one which left the os calcis (heel bone) bare—he had a constant delirium—I gave him tartar emetic in considerable doses, but without any effect—his bowels were evidently affected with rheumatism, while no part of the body was free from it. A supuration is not a common thing, but there is sometimes a collection of a transparent or yellowish substance of the consistence of the glare of an egg takes place near the joints which make ulcers very difficult to heal—such should be washed with tolerable strong lime water and sprinkled with bark.

If the attack of rheumatism be moderate and confined to a part with soreness and pain, bathing it with cold water two or three times a day will remove it in most cases in a short time. Blistering is also a very good remedy—the blister should be applied over the part and kept open as long as it can. It frequently affects the back of the neck and head, and

even the brain or the membranes within the cranium. This is always a dangerous case and ought to be removed as quick as possible— I once had a patient who had been affected in this maner upwards of twelve months. by blistering the back, and back of the neck, and keeping the blisters open for four or five weeks, opium, calomel, guaiacum &c. were employed, as also bleeding purging &c. he remained well, except some little stiffness in his neck, for about six months, when he died suddenly without pain, as by a stroke of the appoplexy. He could always hear something crack in his head upon walking.

After removing a rheumatism, whether acute or chronic, it is proper to give bark, iron, and other strengtheners, for some time after, to strengthen the system and prevent a relapse.

When it affects the small of the back, it is called lumbago—if it affects the hipjoint it is called sciatica. In the lumbago the same treatment is proper that is in any other part of the body. When it affects the hip or any other joint the oil of turpentine is a valuable remedy, but rest is of equal service.

It appears to me that the rheumatism is particularly confined to the membranes and muscles, but that it sometimes affects the ligament and lubricating gland of a joint, and in this case it is that the spirit of turpentine is most especially useful.

I had a sciatic about the year 1793, which became very troublesome—I made use of about half a pint of oil of turpentine in about two months, which entirely removed it; but before it left me it would sometimes be in my knee, and at times would be some inconvenience for several years, but oil of turpentine would always remove it. When my knee would be free from pain and soreness, it would usually crack upon walking—it has left my knee for several years, but the lower end of the fibula, or little bone of the leg, has been a little sore for years, and sometimes the external part of the foot has been sore, or even painful, but bathing with cold water once or twice will always remove the pain, at least

it is always most painful when hot. I might fill a volume with the variety of cases and forms under which I have observed the disease, and the various means which I have employed—frequently with success, but some baffled my skill entirely. By a proper attention to what has been said, any person may be able to give relief in most cases, especially in the first stages.

GOUT.

Of this disease I have but little knowledge from experience, and had it not been a disease handed down by a hereditary taint, it is probable we should know but little of it in the the United States, but among the luxurious and idle.

Writers assign a variety of causes of the gout, and some apparently contrary; they also differ in the method of cure. Dr. Darwin, with most other writers, prescribe light diet and exercise, and abstinence from spirits and wine; while Dr. Brown prescribes high living and plenty of generous wine.

Dr. Cullen says an indolent sedentary life, a full diet of animal food, and the large use of wine, &c. are some of the causes: another set of causes he supposes are such as from that state induce debility; among which he enumerates the following: excess in venery, intemperance in the use of spirits, intemperance in eating, intense study, night watching, excessive evacuations, the ceasing from the usual labour, the sudden change from a very full to a very spare diet, the large use of acids and ascessants, and cold applied to the lower parts.

It is divided by medical writers into three or four kinds—the one they call regular—it is an inflammation that appears in the joints, and after continuing for a time, goes off, leaving the person in a better state of health. 2d. Atonic, which appears to arise from a gouty taint in the system, but does not put on any regular form. 3d. Retrocedant—when after

some slight affection of the joints, it recedes and affects some of the viscera, and when it attacks any of the viscera first, it is called misplaced.

Whenever a person of between thirty or forty years of age has reason to believe that he is liable to be attacked by the gout from a hereditary taint, or from any other cause, he may expect the following symptoms as a signal for the attack :

Head-ach, stupor and numbness, a pricking or tingling in the thighs and legs, loss of appetite, which frequently returns more keen preceding the attack, the attack generally commences in the morning and commonly toward the spring time of the year, a pain is felt in the great toe or ball of the foot—the other symptoms much resemble an intermittent fever, as a cold, hot, and sweating stage ensues.

In persons subject to gout, there are frequently formed chalky substances upon the bones, and especially about the smaller joints of the hand.

Physicians in all ages have found so much difficulty in the treatment of the gout, that it is much like chronic rheumatism, and some other, a reproof to the faculty.

The indication of cure says Cullen, are two, viz. When the fit is off, to prevent the return—when the disease is on, to moderate the violence of the disease and shorten the paroxism as far as can be done with safety.

The first intention is to be answered by the following rules : constant exercise, low diet, &c. is thought often to secure a person, notwithstanding a hereditary taint. The exercise necessary, is regular labor, moderate but continued, through life.

Query. Was it ever intended by the hand that formed us that we should wallow in luxury and idleness?

After the disease has become habitual, walking hard will bring it on.

As to diet, the same author, I think, supposes that it is necessary to observe the low regimen in the prime of life, for if the constitution has been dispo-

ed to the disease by intemperance, in the decline of life, too low a regimen may bring on a state of debility, and be the cause of gout — milk he supposes one of the best aliments—when this diet is proper, spirituous liquors, whether fermented or distilled, are improper. It will be observed that sudden changes from one extreme to another are always improper; and in those accustomed to high living, an entire change in the mode of living from one extreme to another, is pernicious; and such changes must be estimated as proper or improper according to their effects.

Infinite has been the medicine and prescriptions, both by quacks and physicians, for the cure of the gout, but none have ever supported its reputation long, for, altho the disease is some times cured by the force of medicine, it generally must take a year or two, and after all for the want of a knowlege of the proper treatment according to the nature of the case from the infinite variety of concomitant circumstances, other diseases are frequently induced which frequently prove fatal. But from the rare occurrence of the disease in the United States, and the probability that those who may be so unfortunate as to inherit the disease from their ancestors, also inherit the patrimony with it that may enable them to have the benefit of professinal aid, I shall therefore prescribe no farther, but recommend it to such of my countrymen as may not think fit to submit to low diet and exercise alone to consult other writers.

ERYSIPELAS, ST. ANTHONY'S FIRE.

This is an inflammation upon the surface, most commonly upon the face, but often upon the legs, and may happen upon any other part of the body. It is commonly preceded by fever, which generally attends it as long as it continues to spread. The skin appears inflamed and shining, of rather a yellow colour, small blisters soon appear which continue to spread for some time, and it is sometimes attended with delirium.

Bleed and give a purge of G. salt or cream of tartar. If the inflammation and fever be great, an emetic in the first place would be best, and then keep the belly loose with flour of sulphur and cream of tartar, and the bleeding may be repeated if necessary. The cooling regimen should be observed.

Meal applied externally, is directed by writers, but with what view I cannot tell. What I consider most rational, and which has always succeeded well with me, is cold water—the part may be bathed with it, or clothes wet and applied frequently, or renewed as they become warm; and after sufficient evacuation as above, a solution of sugar of lead may be applied—a drachm to the pint.

NETTLE-RASH.

From the vague account which I find in authors of this disease, I do not know that I am acquainted with it, but I have frequently met with a disease which I suppose may be it. From my own feelings under it I do not take it to be so mild a disease as it is generally described to be; although I have never known any person to die with it, I have known them frequently suffer very much.

It begins with an itching on different parts of the body, frequently over every part except the hands and face, which are seldom affected with it. It at first appears like the spots in the measles, but soon

rise up in eminences, especially if scratched—after continuing a few days it goes off. The disease is not always so mild, it is sometimes attended with pain in the back and hips, and a colic with violent paroxisms at intervals of a few minutes. When the disease goes off, it generally leaves a swelling of the scrotum in men; and I knew one man very much injured by it,

The best and only remedy that I ever could find in it, is an emetic—a full dose of tartar emetic has never failed giving immediate relief in any case that has come within my knowledge.

INFLUENZA, CATARRH, OR COLD.

What is usually called a cold is too common a complaint to need any description. It is generally termed a catarrh when a cough and expectoration of mucus attend. Sometimes the head is more affected than the lungs, with a discharge of thin acrid matter from one or both nostrils, it is then called corriza. When the complaint is very general it is called influenza, which I think a proper title, and that, that of cold ought to be rejected, as I believe it to be seldom the real cause, but that it is owing to, or caused by, something that floats in the atmosphere, and that it is in no wise contagious.

I found my opinion chiefly upon the following circumstances: They are universally a general complaint throughout the country at the same time, beginning upon the north and proceeding to the south, and that at a time when there is no perceptible change in the state of the atmosphere, either from cold to heat or heat to cold; and on the contrary, when the most sudden and violent changes happen, no such disease takes place. It may be not only possible, but even probable, that a similar disease may be induced by cold under some circumstances; but rheumatic affections and some other complaint are the consequence of cold. It appears to me that in

sound person without any predisposition to disease, cold will induce no such disease. Whatever may be the cause of the disease is immaterial, unless our knowledge of the cause might enable us to avoid it, or lead to some knowledge of the method of cure.— The disease appears to be an inflammation of the superficies of the vessels of the head, or lungs, or both, and is communicated to the system in a greater or less degree, according to the violence of the symptoms.

The treatment is to be the same as other inflammatory diseases. When it may be deemed necessary, rest, light diet, and plenty of drink, either cold or warm, at going to bed. If more should be necessary, bleed, and if more, an emetic. If the head be affected with pain, or the breast, apply blisters.

When the influenza prevailed in the fall of 1807, many persons by exposing themselves to cold and hardships through the winter after brought on pneumonic inflammations, which in a number of cases were attended with rheumatic affections of the breast, head, &c. in which, after the inflammatory symptoms were removed by the usual means, I found bark of great service.

CROUP.

This is a very common disease among children under six or eight years of age, and sometimes older, or even adults, but that is seldom. It is seldom if ever that very young children, or before they are weaned, have it. It appears to me that there are two kinds, the one moist and acute, and the other, although an acute disease, comes on more gradual and lasts much longer.

In the first there is every symptom of an inflammation of the lungs, with a great quantity of tough phlegm, which can scarcely be coughed up, attended with pain and soreness of the breast. In the other a hoarseness is the first symptom that gives notice of

the disease, which will often last for several days.— In both cases they appear evidently to strangle for the want of breath. In the last case the child will run about as usual and often appear cheerful while it is able to go, but in the former they always shew symptoms of distress, especially upon coughing or motion.

In the moist kind, bleed and give a gentle puke of tartar emetic in small quantities, and be sure to keep the child warm. Bathing, or putting the child into a warm bath up to the chin, is of great service; after it has been in the bath for a little time, the heat of the water may be increased by adding hot water until it raises the whole to the heat of the blood, which is more than they can bear at first. If the bleeding, &c. should not entirely relieve the child, a blister should be applied to the breast, and small repeated doses of tartar given, and the blister kept open. The same treatment is proper in the other case, or dry croup; but in this there is a membrane of a strong mucus, lining the inside of the wind pipe, which sometimes extends down the smaller branches into the lungs—in this, small repeated doses of spirits of hartshorn should be given in a little tea or water, and a bottle with a good quantity frequently held to the nose. I never was able to discover much benefit derived from blistering in this. I believe there are but few cases that would require any thing more than a puke, and bleeding if employed in time. Great care should be taken to prevent the child from taking cold for several days afterwards, as they seldom ever recover again if they relapse.

HEMORRHAGES.

BLEEDING AT THE NOSE.

This discharge may be owing to a variety of causes, as great heat and strong pressure of the blood upon the vessels in the head. This is a common cause in young people, of a sanguine temperament. It frequently happens in inflammation of the liver, in fevers, and many other diseased states of the body.

When it happens in young people, if the discharge be not profuse, it requires but little attention; but if the discharge be so great as to weaken or endanger a person, it will be proper to use means to put a stop to it.

If the pulse be small and hard, and astringents fail, and the person has no fever, laudanum may be tried—give a moderate dose, and after waiting half an hour, and the pulse should become no fuller and softer, some more may be given—if the discharge continue, the lower extremities should be put into water as warm as the patient can bear it, and cold water, or any other cold substance, held in the mouth against the roof. There are few cases but what may be stopped by the use of cold and astringents—blue vitriol, coperas, or alum, dissolved in water and thrown up the nose, will seldom fail to stop the bleeding. It requires some caution in the application of cold to the head, especially if the patient be very hot, as happens in harvest fields. I have known persons ruined for life by it, by bringing on a rheumatic affection of the neck and spine, which proved incurable.

That such discharges are critical and ought not to be checked is generally an error—the pulse and other circumstances will always shew the propriety or impropriety of such discharges. I have never seen any of those hemorrhages called active, or owing to

an active cause, except there was a spasmodic state of the arterial system; and it appears to me that if such active hemorrhages did ever take place, that the discharge must soon remove the cause, and the discharge cease of course. If there should be any irregularity in the pulse, it may be judged to be owing to that cause. I have heard of cases where, when the discharge was stopped at the nose, it would take place by some other outlet, or the patient died from a rupture of some of the larger vessels—if such a case ever did take place, it must be owing to that cause; and in that case, opium and the foetids would have been the proper remedy; and from my frequent success with it, I place my chief dependence in it, as the last resort at least.

BLOOD FROM THE LUNGS,

OR HEMOPTHISIS.

This is a disease in which I have had an opportunity to try but few medicines, but I have met with some. Those which were symptomatic I do not consider as proper in this place, but the cases which I mean are where the disease was primary and was supposed the presages of a phthisis pulmonalis, or a consumption of the lungs. Two cases were cured, or got well, under the use of a glass of new milk and whiskey once or twice a day, after medicine had been tried in vain—in both cases spirits had been forbidden, but whether the cure was to be ascribed to the spirits in that form or not, I cannot say—it was the prescription of a French physician. Bleeding and astringents are prescribed with gentle exercise, as riding in a carriage, or a voyage at sea, &c. The internal remedies directed by medical writers are, astringents and gentle laxatives—of astringents, alum may be considered as one of the best, which may be taken in small doses, as 5 or 6 grains, and frequently repeated.

PILES, OR HEMORHOIDS,

This disease is usually classed with hemorrhages, but it is not always attended with a discharge of blood—they frequently remain a long time, and are painful tumours without any discharge of blood—in others they become schirous and hard—in others, excrescences grow from the verge of the annus, like warts or the comb of a cock, and is hard and painful—in others the annus is hard and breaks in chops, forming painful ulcers. These several diseases are distinguished by medical and surgical writers by various names.

When there is a distention of the blood vessels about the annus without any discharge, it is called blind piles, and if it break and bleed, open piles.—When any excrescence or new body is formed, it is called according to their figure, as ficus, a fig, condilomata, a knuckle, warts, &c. The tumour is either internal or external.

A very erroneous opinion prevails among the people, and was formerly propagated by some physicians, that the hemorrhoidal discharge was an effort of nature to relieve the system from some other disease, or a redundance of blood, called plethory; and as an evidence of the correctness of the opinion, patients frequently assert they feel much relieved when such discharge takes place. The truth of the case is this: the disease is owing either to an obstruction of the blood by the hemorrhoidal veins, by costiveness, pregnancy, or debility; this obstruction brings on a diseased state, which is removed in a measure whenever the blood is discharged; and from some experience in practice, I am clear in the opinion, that whenever a person permits the disease to become habitual, they are surrendering their health and future happiness to a most troublesome and disagreeable disease, which often renders the unfortunate victim of error a misery to himself and all about him; while I believe there is scarcely a case ever happens but might be easily removed or pre-

vented by a little care at first. As costiveness is a frequent cause, a person should never permit themselves to be subject to it; but more especially if they perceive any uneasiness about the annus. Many persons, especially women, are in the habit of using Anderson's pills, and other aloetics, to keep the bowels lax, but it is a highly improper medicine for that purpose in most persons, as it is a very heating drug—they should be continued no longer than absolutely necessary.

As a laxative, or medicine for keeping the bowels in order, there is nothing equal to flour of sulphur and cream of tartar—they may be used together or separate—the flour of sulphur is the most proper by itself in the piles, as they keep the bowels lax without irritation; and if the patient has been subject to the discharge, it will be necessary to bleed about three or four days before the full of the moon, until he shall find himself free from the complaint, and in the mean time live upon such diet as has a tendency to keep the bowels loose, such as soups, sallads, ripe fruit either dried or green, fat meats, &c.

The external remedies in the common piles, where the tumours are soft, are astringents, of which an ointment directed under oak bark is one of the best—if the tumour be within the annus, a strong decoction of oak bark and alum should be thrown up once or twice a day. The sugar of lead ointment will answer very well; or a weak solution of blue vitriol, white vitriol, alum, coperas, all are good. If the tumours be hard, or like warts, they should be anointed with a strong mercurial ointment every night, and if they do not give way to it, the jamestown poultice applied and kept on all night, will seldom fail to resolve the tumours—sometimes they will give way to no medicine, but must be extirpated, either by rubbing with the caustic or by the knife, or in some cases by tying a strong thread around the basis.—Before any means be employed to remove any tumour by extirpation, care should be taken that it be no part of the gut that protrudes.

It frequently happens that ulcers are formed about the annus by diseases of this kind, especially the internal piles—they frequently come on without giving much notice—they make a small hole near the verge of the annus, not much larger than a pin hole, thro' which a thin humour is discharged, which will stain linen, otherwise it might be thought only a sweating of the parts; after continuing some time it causes an itching and excoriation, and little excrescences and papulae arise—they frequently become calous and so hard that a probe can scarcely be passed in—they frequently make their way into the rectum, bladder, or among the muscles of the thigh, &c. In this, as in other cases of the piles, we are advised by some of the ancients, to permit the discharge to continue, as salutary, except it become painful or troublesome; but this I think an error; every unnatural discharge, if continued, is injurious to the constitution, and ought to be stopped immediately. These ulcers are generally very difficult to cure, but if an opening can be made into them, they may generally be cured by throwing a strong lime water into them about twice a day with a good syringe. The ancients generally passed a strong thread through them and into the gut, and by tying it tight, soon cut it open into the gut, and then by proper dressing healed them up; but they may generally be healed as above—the only difficulty is making a sufficient opening into it, and washing the ulcer to the bottom. If the person be otherwise unhealthy, the peruvian or alder bark may be given, and if upon the healing up of the ulcer, any complaint should come on, a purge of cream of tartar, or even salts, may answer the purpose; and if after a purge any pain or irritation should come on, a glyster with laudanum will be proper.

DIABETES.

This disease is an increased discharge of urine, which is sweet and has been found to contain sugar—it commonly comes on gradually and appears in general to disorder the system but very little—thirst and an uncommon appetite frequently attends—weakness comes on, and at length a fever puts an end to the patient.

The true cause of this disease is unknown, and I believe it to be a rare disease in the United States, so rare that I have not met with a case in fifteen years.

Dr. Cullen had met with but few cases and they proved fatal, and he declines giving any opinion as to the proper method of cure, but some other medical writers recommend medicine, and it is said that the disease has been frequently cured.

Dr. Gilly, relates several cases of persons cured by the use of the nitric acid, or aquafortis, as follows: Take nitric acid a drachm and an half, barley water half a pint, simple syrup two ounces, mix them together, four large table spoon fulls may be taken in the day with the same quantity of water.—Others recommend the bark, lime water, opium, &c.

INCONTINUANCE OF URINE.

This disease may be owing to several causes, but the most common, is caused by weakness in aged people, and is often a symptom of other diseases, and is sometimes the fruits of excess in drinking spirits—it sometimes attends the advanced state of pregnancy. When debility or weakness is the cause, it will be much relieved, and if the patient be not very old sometimes cured, by frequently bathing the back and urinary passage with cold water, especially before going to bed at night. Also, strengthening medicine, as bark, iron, &c. Some recommend blisters to the back, as also, tincture of cantharades.

The disease sometimes defies the power of medicine and a palliative is all that can be expected—for this purpose a sponge may be fixed and worn constantly, which will be found of service.

When pregnancy is the cause, to lie in bed as much as possible will give relief.

DROPSY.

Dropsy is a collection of water in some part of the body—if in the adipose membrane it is called anasarca, if in the belly it is called ascites, if in the breast it is called hydrathorax, if in the head hydrocephalus.

Anasarca swellings most commonly begin in the feet and legs, which look pale and shining, when pressed with the finger a pit is left which soon fills up again—the water leaves the feet in a great measure in the night and the face and upper parts of the body are found swelled in the morning, but falls to the lower parts again through the day.

The causes of this disease are various—whatever weakens the circulation of the blood may be a cause, but it is more commonly a symptom of some other than a primary disease—it often attends a consumption, an inflammation of the liver, pregnancy, and a variety of other diseased states of the system—it frequently happens after a recovery from a low state of fever—it is seldom attended with much danger, and will frequently go off of itself when slight; but if the swelling be great and of a long standing it will always require medicine.

Strong purges have most commonly been employed to carry off the water, but very improperly, for they are very weakening, and although they evacuate the water, it will soon return again.

Salt-petre given in doses of from ten to twenty grains three or four times a day, will in general carry the water off very soon, and then it is necessary to give some preparation of iron and bitters to pre-

vent a return—cream of tartar will also, taken in doses of from two scruples to a drachm three times a day, evacuate the water in a week or two, and it is not so apt to return as when carried off by nitre—strengtheners are always necessary after the water has been evacuated.

A variety of other means have been recommended and employed by physicians for the cure of dropsy, as abstinence from water, drinking plenty of water, sweating, laced stockings and bandages, friction, &c. but the means directed above have never failed with me, and I scarcely pay any attention to regimens during the cure. I have often known it cured before it had been of long standing, or very considerable, with iron only, or iron and bitters.

The disease called cachexy is a kind of dropsy, which is not always attended with swellings—the blood is very thin and watery—iron, bitters, &c. together, never fail to cure this.

There is a great difference in countries in this disease. In limestone countries, a cachexy is seldom seen—on the east side of the blue ridge it is a very common disease, so much so that I have known neighborhoods that a third of the people looked like the dead, and that in as high and apparently healthy as any part of the world. A person not well cured of an ague scarcely ever recover their complexion again in the eastern states. The disease is scarcely known in Kentucky and most of the western countries; however hard or long a spell of ague a person may have, they generally recover their complexion immediately.

I have not met with a case of chlorisis, or green sickness, in girls in Kentucky.

ASCITES.

This is a dropsy of the belly, generally in the cavity, but sometimes between the peritonacum and muscles, sometimes it consists of bladders of water

arising from some of the internal parts, frequently the ovari in women. From the swelling and weight of the belly, a dropsy may be distinguished from what is called a tympanitis, being wind only—(a disease I never saw.) In a general dropsy, or anasarca, the lower part of the belly frequently swells and gives rise to a collection between the peritonaeum and muscles, &c. it may always be distinguished from a collection of water in the cavity by pressing upon it with the finger—if in the adipose membrane it will form a pit, which will fill up again. It is said that an acites may be distinguished by a fluctuation, but this I think an error, for the bowels only will be heard and felt to fluxtuate as much, or more so, than in ascites.

If the collection of water be in the ovari, which sometimes happens, it may be cured by extracting the diseased part, which may be done by a handy surgeon with little danger.

In a common ascites, or collection of water in the cavity of the abdomen, there is scarcely any cure—all that can be done is to draw off the water by tapping, called paracentesis, which is very simple and may be performed by any person after seeing it once performed. I was well acquainted with a man who performed it upon his wife, at first, at intervals of a few months, and at last once a month or oftener.—There is an account in Chesselden's anatomy, of a woman that lived from fifty to eighty, by frequent tapping. This being the only remedy differing from the cure of anasarca, which always ought to be tried first, I shall say no more upon it, as a person possessing some knowledge of the position of the muscles of the abdomen and other parts concerned, ought to be called upon to perform the operation, after which any handy person may do it in safety. Nothing more is necessary than to make an incision through the skin and some of the membranes about three inches in a direct line below the navel, and

then force an instrument called a Trochar* into the hollow, and then drawing out the steel, leaving the canule in. As the water is drawn off, the belly should be swathed tight, otherwise the patient will be apt to faint. The bandage should be kept on a few days, until the abdomen contract.

* *A Trochar is a silver case, about the size of a goose-quill, with a steel thing like a bodkin in it, with a three square point.*

DROPSY OF THE BREAST.

The collection of water may be in different situations about the breast, but it is very difficult to distinguished them. There are two only in which a cure is to be expected, and not always in them. When the water is in the cellular texture of the lungs and parts about, there is a hope that it may be evacuated—when it is in the cavity of the breast, it may be discharged by tapping as in the ascites. It sometimes accompanies anasarca, but frequently without it. This disease is sometimes attended with a weight and anxiety about the lower part of the breast and a difficulty of breathing, especially when the patient first lies down. It is somewhat difficult to distinguish it from an asthma. I have in some instances seen anasarca swellings about the neck and sternum, but from the small space between the ribs it can scarcely be perceptible there.

Dr. Darwin esteems the tincture of digitalis as one of the best remedies—thirty or forty drops from a two ounce phial may be given twice a day, and in the mean time some tonic, as tincture of iron or bark and opium at night. Another means of evacuating the water is by sweating either in a hot tub or room, or by medicine—25 or 30 drops of the spirits of hartshorn, given in half a pint of wine whey warm, and repeated every half hour for two or three times, will generally bring out a profuse sweat.

If all medicine fail, and there should be evident signs of a collection of water in the hollow of the breast, on either side an opening may be made with little danger, by any handy person—it should be made rather forward than behind on that side the water is judged to be in, and within an inch of the termination of the ribs in the cartilage that connects them. The muscles and skin should be drawn down when the incision is made, so that when the water is drawn off, it may slip up and shut up the passage into the hollow—it should be made two or three inches long and as close as may be to the edge of the rib below, as an artery lies near the lower edge of the other. These operations ought never to be attempted by any person but a cautious physician, when such may be had, but for the want of such, any handy person may perform it.

DROPSY OF THE HEAD,

This is a disease to which children are more subject than grown persons, but scarcely any age is exempt from it. Dr. Rush thinks that most cases supposed to be a worm fever, is a dropsy of the head. Certain it is that children are more liable to collections of water in the head than grown persons, but I suppose it is often a symptom only of fever or some other disease—if it happen in children, a fever is the most common symptom—a dilation of the pupils of the eyes always attends it in adults, frequently drowsiness and stupor—it sometimes is the cause of madness or distraction, and there has been instances of the disease being removed by the trepan, but it is not every case that will admit of it, as the water is sometimes formed in the ventricles of the brain, and there would be too much danger attending a puncture into the pia mater, or membrane which immediately invest the brain, but if between the dura mater and skull, it would be entirely safe to discharge it with the trepan, or if under the duramater

it might be discharged by an expert and skillful surgeon. I have seen several cases, one in a young man of about 22 years of age—the attack commenced with fever, which abated upon the use of the ordinary means in two or three days—the patient remained drowsy and in a torpid state, so much so that he appeared to be almost deaf and blind, and would scarcely take notice of any thing that was said to him—he would walk about the house, but would stumble over any thing in the way—the pupils of his eyes were very much dilated.—his father refused to permit blisters or any further application, as he supposed him so far recovered as to be safe, but he died in a few days.

In children the disease is more easily discovered, as the sutures in the head being less perfect, they admit of a distention.

In the treatment, mercury is much recommended. Calomel to be given inwardly, and the mercurial ointment applied externally—blisters also applied to the back of the head and neck are proper, as also purging frequently with cream of tartar in large doses; if all these fail, and the person be an adult, or even six or eight years old, a skillful surgeon should be called for, and when every symptom shew a collection of water to be present in some part of the head, the trepan should be employed—there is little or no danger attends it in the hands of a skillful operator.

In all the cases in children where I have suspected the disease, calomel and brisk purging has succeeded.

RICKETS.

Rickets in children has generally been classed by authors with dropsy or intumescence, but as it is a very rare disease in the United States, and the remedies are but few that are worth employing, I shall say but little upon it. It is supposed to be hereditary, or at least the predisposition to it is more common

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in some families than in others. It seldom makes its appearance in children under nine months old or after two years.

The first symptoms are a softness of the flesh and the child becomes leaner, the head appears too large in proportion for the rest of the body, and the sutures are in general found too open, they cut teeth but slow, the ribs become flat or like a dog's, while the breast bone is pushed up, the joints are enlarged and the bones appear soft, the belly is too large, and the appetite generally good, but the belly too loose, the child is usually more acute and sensible than natural for its age, but sometimes the reverse.

In what few cases I have met with, the disease was imperfect, or at least, the symptoms mild in their degree.

In the cure I have never attempted to employ any thing but cold bathing and electricity, which have always succeeded—in the worst cases that I ever met with these remedies alone effected a cure in three or four months. A few gentle shocks should be passed from the extremities through the head about twice a week, and the child immersed in cool water once every morning, until it recovers its health.

SCHROPHULA, OR KINGS EVIL.

This, like the rickets, is not so common in America as it is in Europe, but it being communicated by a hereditary taint, makes its appearance sometimes, and probably may be produced by some accidental circumstance, but it has been so far observed to be an hereditary disease, that it is said that where a child much resembled the schrophulous parent, it was subject to the disease, while those whose features and complexion resembled the sound parent remained free and healthy.

It is said that it seldom makes its appearance in a child under two or three years old, and that it is equally rare for a person to have the first attack after

the age of puberty, but in those once subject to it, it frequently makes its appearance through life.

The disease most commonly makes its appearance in small tumours below the ear or about the neck and under the jaws, but they may also happen in any other part of the body, but most commonly affect the glands and sometimes the bones themselves. A swelling of the upper lip is a very common symptom of the disease, and there is a crack which sometimes extends up to the nose. It also affects the joints much like chronic rheumatism, but without the pain and soreness. A tumour is often formed around the joint, and notwithstanding the part may look inflamed very much, but of a more purple colour, there is in no wise a correspondent degree of pain—A kind of purulent matter is often formed which at length will make its way through the integuments—as the ulcer grows older the matter becomes less purulent, and the ulcer is exceedingly difficult to heal, and very much resembles those made by rheumatic affections of the same parts.

The disease most commonly comes on in the spring more violent, and will sometimes in a measure disappear during the latter part of the summer, and appear again the next.

In the cure of this disease, superstition and ignorant credulity has formerly had a greater share or been more frequently employed than in any other whatever; and I have now a surgical treatise in my possession, which treats largely of the cure of the evil by the touch of the king, and labours very hard to prove the fact, but like the doctrine of witches, hobgoblins and faries, it has in a great measure lost its repute, even in England.

There are several diseases which are considered to belong to this class, as white swellings, wens, &c. but as they require but little medicine, I shall not treat of them in this place, and I might have deferred the disease altogether until I had come to the surgical part of the work, for it is generally acknowledged, that there is very little can be done by medi-

cine inwardly; but in what few cases of schrophula I have met with I have been more fortunate—I have generally employed purging at intervals, and given the extract of hemlock, and applied the jamestown poultice, with mercurial ointment; but I am doubtful whether the ointment was really of service or not. Frequent cold bathing is also considered of great service. If ulcers are formed, the lime water wash is one of the best, or burnt alum may be sprinkled upon them. Gentle shocks of electricity is also a powerful remedy in removing tumours before a supuration takes place. The muriated soda has of late been employed, it is said, with considerable effect, but of this I have no knowledge—lime water may answer the same purpose, and may be given as directed under that article. Whatever medicine may be employed, it must be continued for a great length of time, or until the disease is entirely removed, otherwise it may be expected to return again.

VENEREAL DISEASE.

This disease is always communicated by infection, or the application of infectious matter to some part of the body. Some physicians suppose that it can scarcely be communicated without actual coition or some act equivalent, but this I know to be an error, as have frequently known children to contract the disease by sucking persons infected. I have known an instance of a child but two or three years of age contracting the disease by lying with a young woman that was infected—it first appeared in his feet and crept up until the whole system was affected, but in a particular degree affected the mouth and genitals, the glands, penice and prepuce was ulcerated; this circumstance shews that it is particularly a disease of those parts. I also knew another case of a male child about the same age, affected in a high degree with many large venereal excrescences about the genitals, lower belly, thighs, &c.

When the disease produces ulcers they are called chancres—when inflammation of the glands, bubos—when a discharge from the urethra in men or the vagina in women, it is called gonorrhoea—if it be a slight weeping of a thin or transparent matter, it is called a gleet—if it affects the system generally, it is called siphylis, lues venerea, pox, &c.

It is a doubt whether the disease was known to the ancients or not—the first certain account we have of it was at Naples, in the year 1493. Columbus returned to Europe from the discovery of America in March of the same year, and it has been reported and believed that his crew contracted the disease for the first time from the natives of some of the West-Indies. Whatever might be the source of the disease, it made dreadful ravages in Europe for many years after its appearance—the wretched victim was shunned and abandoned by every body—the physician approached him with extreme caution, as it was soon found that the malady defied the powers of medicine, notwithstanding their shops contained three times the number of a modern physician. But thro' the experience of later ages, and the knowledge of the proper use of mercury, every species are curable in a short time, or at least while the bones are sound, or even then, for a carious bone from a venereal cause heals with ease if the virulence is removed from the system by a proper medical course.

The first symptoms of the disease are somewhat various, and comes on at different lengths of time from the time the infection is received—frequently in men in a few hours, but sometimes several weeks; in women it generally begins with a heat in the vagina and a discharge of a hot fluid, at first colorless, but soon stains linen a yellow color, an itching of the external parts soon comes on, and the hot and acrid matter erodes the parts it falls upon.

In men a slight inflammation upon the gland's penis sometimes appear; in others no such inflammation takes place, but some heat and pain is felt in making water—it is first felt about the exit, but gra-

dually creeps up until the whole urinary passage is infected and great heat and pain is felt in making water—a thin transparent discharge is at first perceptible, which increases in quantity and changes in appearance—it becomes at first white, then yellow, and frequently at last green and even bloody; about this time a painful erection of the penis takes place at night when the patient is warm in bed, frequently with chordee which draws it down and crooked—nocturnal pains of the shoulders, head, legs, &c. begin to come on—ulcers in the palate, mouth, nose, &c.—gumata and nodes arise, which are always worse at night—the bones at length corrupt and no part escape its ravages, the whole system of both solids and fluids are corrupted, and as Wiseman says, deafness, noise in the ears, polypus, ophthalmia, fistula, lacrimalis, fierce catarrhs, colics, diarrhoea and tabes closes the scene, and leaves the patient a loathsome heap of corruption.

There is still another manner of its progress, and I have met with a great many cases of it in a few years past, in which men have no discharge or heat in urine, but violent itching with chancres, excrescences, &c. remain the only symptoms for some time—the mouth is in the next place attacked, ulcers appear scattered over different parts, and may always be distinguished from other ulcers by their cracking in different directions. This state of the disease is often attended with tetters eruptions upon different parts of the body, or like flea bites all over, or pustles arise in different places.

Sometimes I have met with the disease in the imagination only, but this is more commonly the case after a person has been cured—he supposes that he still feels the venereal pains, and will run from one physician to another until he ruins both his body and estate.

I shall now give directions for the cure, which if the bones be sound require but little skill, but a great deal of care and attention to certain rules. Dr. Cullen seems to suppose that by attention to regimen

and cleanliness, that the slighter cases will spontaneously cure of themselves, but notwithstanding my respect for that venerable author, I am unable to believe that such cases ever occur; and notwithstanding it is said that the Indians and other pretenders say they can cure a confirmed lues without mercury, I do not believe them, as I have known a number of cases where such a method of cure had been tried in vain, and although it would abate the symptoms for a time, the disease would always return with equal violence.

Upon the first attack while the disease is only superficial, it may be frequently cured by purging and astringent lotions and injections, sugar of lead, white vitriol, blue vitriol, &c. but when a person finds himself smitten and the disease begins to make its appearance, observe the following rules: If it begin with heat of urine, or appear to be in the urinary passage, or vagina in women, let the patient anoint the parts about with mercurial ointment lest any of the infection should be upon the surface—take a purge of some cooling purgative, as G. salt or cream of tartar—dissolve a drachm of sugar of lead in a pint of water and throw a syringe full up the urinary passage two or three times a day, this will seldom fail to cure a gonorrhoea in a week or two, if it be not very violent, or has not been of a long standing; but when the disease has been of a long standing, or has made its appearance on any other part of the body, a mercurial course is the only remedy, and as I have given particular directions for the management of such a course, under the title of mercury, in the preceding part of this work, I shall not repeat it here, but only observe that the patient should be careful to keep the system sensibly charged for a sufficient length of time, which should be continued for 2 or 3 weeks after the ordinary symptoms had entirely disappeared; but it may be proper to observe that it frequently happens that a gleet or thin, or rather transparent, discharge frequently remains for a long time after the cure of the venereal disease, and

is only to be cured as a common gonorrhoea or gleet without any venereal taint, (which see.) The next caution necessary, is to keep equally warm at all times, and that should be as warm as the patient can well bear without being disagreeable. A small portion of tartar emetic given at intervals through the day, especially towards the last, is a valuable auxiliary, and much better than diet drinks, guaiacum, sarsaparila, &c. which I never use.

Chancres, or other ulcers which may be hard to heal, may be washed with a solution of corrosive sublimate in sal ammoniac—a scruple of the sublimate and a drachm of the ammoniac to a quart of water—if warts or other excrescences, they should be frequently rubbed with caustic or sal ammoniac, and anointed well with a strong mercurial ointment until removed. If nodes or knots upon the bones should remain after the other symptoms have disappeared, it may be suspected that the bone is unsound, and if it should not supurate, it may be hastened with the jamestown poultice, and when open the bone should be scraped clean and frequently washed with lime water and dressed with dry lint as other diseases of the bones.

Sometimes upon the suppression of a gonorrhoea or by taking cold, an inflammation of the testicles takes place—in this case bleed and give a purge with calomel and cream of tartar—support the testicles with a bag truss, and anoint them well with mercurial ointment. Some advise bathing with cold water, but I am doubtful of the propriety of applying cold to inflamed glands, while I have never known the other course fail to check the inflammation immediately.

Another troublesome circumstance frequently happens—the glands and penis sometimes swell so that the praepuce or skin binds so hard above as to prevent the circulation of the blood and bring on a mortification—this may also happen in other accidental cases, as in children, from the spongy texture of the parts it may easily be reduced by gradual pressure if

the hand, without giving much pain, and after replaced put proper bandages around it until the inflammation goes off, and it will retain its natural position. To relieve the pain of priapismus and chordee, cold applications are the best.

It was observed above, that a gleet frequently remained after the virulence of the disease was entirely subdued, and that sometimes for a great length of time—in this case the treatment is precisely the same as in a similar disease which frequently happens without any venereal taint, and is sometimes brought on by hard straining; cold may also sometimes be considered a cause; sometimes there may inflammation attend it and the matter have the resemblance of a virulent gonorrhoea—if this be the case, bleeding and purging will be necessary, which will seldom fail to abate the violence of the disease; and after the heat, &c. are gone off, it is to be cured by the following rules whatever may have been the cause: Give ten or fifteen drops of copaiva every evening, or in its place as many drops of the oil of turpentine may answer—take the bark or other bitters—apply a cerecloth to the back, and continue it as long as it will stay on; but the principal dependence is in the copaiva or turpentine. If it should continue any time after using the above doses, the doses should be larger and increased as far as can be bore without increasing the heat of the urine too much. The disease proceeds in general from a weakness of the spermatic vessels, and must be cured by strengtheners, and of course astringent injections are of no service. Cold bathing is of great service, bathe the back and genitals every night before going to bed for some time—if it proceed from the venereal disease being imperfectly cured, it is apt to be the cause of much mischief, bringing on carnosities, or fleshy excrescences, hard to remove.

CONSUMPTION.

Consumption of the lungs, called *phthisis pulmonalis*, is in no wise a common disease in the southern parts of the United States, but as we advance farther north, cases of consumption are much more common.

I do not know that any bills of mortality have been kept in the different parts of the United States, but from my acquaintance in the middle states, I do not suppose that one-fiftieth person dies of consumption, but as we proceed northward it is a more common disease; but still less common than in Britain, where it is said that sixty thousand people die annually with consumption, and chiefly young people.—From the great prevalence of the disease in the northern climates it would appear that the intense cold of the winters must be injurious to the lungs, and at least a remote cause of the disease. The lungs are insensible to either cold or heat, and it is highly probable that if they were capable of pain from cold that they would often suffer from the continual application of cold air.

It is thought that catarrh, or a common cold, is seldom if ever a cause of consumption, but their being frequently repeated with violence may cause obstructions in the lungs, and lay the foundation for a consumption; but the most common cause appears to be a hereditary taint. Medical writers distinguish four or five kinds of consumption—organic, tubercular, membranous, catarrhal haemoptoic consumption; but perhaps the remote cause is always the same.

The first symptoms of an organic consumption, is a difficulty of breathing, upon using exercise there is a tightness across the breast, a dry cough and an inability to take in a full breath, it is often attended with costiveness, head-ache, vomiting, &c. As the disease advances the cough becomes more moist, a thin frothy mucus is coughed up of a saltish taste; frequent rigors, pains in different parts of the breast;

the abscesses which were forming in the lungs now begin to break and a purulent matter is coughed up, the patient now feels better than before while the cough was dry, and the patient often supposes himself to be upon the mend, but the continued increase of purulent matter from the lungs soon convinces him otherwise—the matter is often streaked with blood and of an offensive smell—the pulse is exceeding quick, hard and small—a constant fever in the day, but sweats at night. Sometimes one lobe of the lungs is affected only, and sometimes both. I opened a person who died of a consumption that had no affection of the right lobe, it appeared sound as usual, but the left lobe was entirely gone and the cavity filled with puss, the vessels were entirely wasted, the heart was uncommonly large, the pericardium was half an inch thick and adhered in most places to the heart, and was of a membranous or fibrous texture, as also the heart which had not the smallest appearance of a muscular texture.

When a person who may suspect an hereditary taint, or any other cause that may bring on a consumption, has the symptoms above, he ought to take means to prevent the progress. Small repeated bleeding is proper, with blisters over the breast; gentle laxatives should be frequently employed to obviate costiveness. The tincture of fox-glove should be given in doses of from 25 to 30 drops once or twice a day—a gentle puke once or twice a week will also be proper. The diet should be light, but nourishing, as soups and milk—animal food is generally improper. Flannel should be worn next to the skin, and all sudden changes from heat to cold or cold to heat avoided. Strong diet should not be taken until some time after the symptoms have gone off.

An approaching consumption may generally be cured, during the first stages, but by a little neglect it may soon be too late, which is generally the case; yet nothing is more common than to hear quack pretenders boasting of the large number of consumptions which they have cured, when in fact

they never cured one in their lives. In this country the true symptoms of consumption are very little understood among the people in common; and it is a misfortune that physicians are not always as honest and candid as they ought to be, and frequently endeavor to raise their fame for curing consumptions before they ever had an opportunity of treating a case in their lives.

There is a nervous affection of the breast that in its symptoms is very much like a consumption, from tubercles in its first stages, that is often a very troublesome disease and is sometimes cured for a consumption, but is often very difficult to remove, especially in the sedentary. Exercise is of great importance in both diseases, and in consumption is of the utmost importance.

Dr. Samuel K. Jenings of New-London, Va. whose parents, grand parents, and all his brothers and sisters died of consumption, has had several attacks—he cured himself about 4 or 5 years ago of a most violent attack by small repeated bleedings and a free use of the axe for a considerable time, which entirely removed the complaint. It is a consolation that if the disease can be kept off until a middle age of life, say 30, it seldom comes on after that time. It may be farther observed, that exercise to fatigue, or to increase the heat of the body, is improper—a journey or a sea voyage is always advised.

What is called a tuberculous consumption is scarcely to be distinguished from what is called the organic, but it is of a more chronic form—hard tubercles, like glands, are frequently found in the lungs of persons where there was no consumption suspected, and may remain for life—when they supurate and form abscesses in the lungs they are generally incurable—a paliative is all that can be expected—opium to relieve them from the cough and to procure sleep and ease may be employed—elixir vitriol is of the utmost service in checking the night sweats and to preserve the appetite.

A catarrhal consumption at first resembles a com-

mon catarrh in a measure, a tickling it is said is felt about the top of the wind-pipe, and a cough with mucus, as in the organic, which has a saltish taste at first, but turns sweet as the disease advances, and when spit in water will sink after the froth has separated from it.

A pituitous consumption will come on later in life than in others, and may, it is said, be distinguished from the others by its being attended with a more copious discharge of matter from the first, and has seldom either taste or smell.

In this disease the balsams and gums may be employed with advantage, as there is less fever than in the others—opium is of great service in removing the most troublesome symptoms.

To conclude—from the rare occurrence of the disease at all in this country, I have had but little opportunity of acquiring much knowledge by experience and observation, and find so many doubts suggested by every candid writer, of the success of every prescription, and even a difference of opinion, some prescribing contrary remedies, that I believe that if I had ever been attacked I should have depended very little upon medicine, but upon low diet and exercise, and in the mean time have employed the hemlock, tartar emetic, digitalis, &c. and this course has succeeded in the most of the cases which have fallen under my care. They have been but few that I was satisfied were phthisical, but what were too far advanced. I am inclined to think the disease to belong to, or much of the nature of schrophula, and when ulcers are formed, the air being constantly applied prevents them from healing.

There is a species of moss, called lichen islandicus, or iceland liver wort or moss, much recommended by some writers, but with which I have had no acquaintance—there are many modes of exhibiting it, prescribed by authors, some of which may be seen in Dr. Reeses medical guide. One method, which is perhaps as good as any, is, to put a table spoon full into half a pint of water or milk and boil it for a dose twice a day. [See Reeses medical guide.]

SCURVY.

With a true scurvy I am entirely unacquainted, having never seen a case of it. It is a disease only incident to sailors, soldiers, &c. owing to a confined situation and living too much upon salt meat.

Its principal symptoms are a pale countenance, weakness, tender gums, foetid breath, livid spots, &c. &c.

The cure is not to be expected from the use of medicine, but a change of diet—a vegetable and milk diet is the only remedy. Of vegetables, onions, garlic, radishes, turnips and all those herbs which are of a hot pungent nature are proper—wort is also recommended.

There are a variety of diseased states formerly supposed to belong to this class, and called land scurvy or scorbutic, but which are now denied to belong to scurvy at all; but as some of them are very common in this country, and I know of no other name for them, I have put them under that title.

They are always attended with diseases of the surface and commonly with itching—it is very common, in winter and often supposed to be the common itch, but may be known from it by its not being contagious, nor being cured by sulphur or mercurials—it will generally go off in summer of itself—it is exceedingly troublesome among children towards spring, the hands inflaming and blistering with swelling and extreme soreness and pain.

The proper remedies are antimonial and spirit or elixir of vitriol, with a milk diet. Give a dose of tartar, after which give tartar in small doses twice a day, enough to induce a little nausea, and after the sickness of the tartar is over give spirit of vitriol.—All external applications are in vain, if not injurious, before the use of the above medicines for some time; but after they have been used for a few days, bathing in cold water or salt and water may be of service, or sugar of lead may then be safe, but the internal remedies will generally cure it in a week or two without

any external application.

I have met with many cases in children and sometimes in grown persons in Kentucky, of a disease which I suppose to be of the same class, but varying in the symptoms. Sometimes an eruption or efflorescence appears over the body somewhat resembling measles, generally attended with itching, but not always—sometimes blisters arise after it has continued for some time, which soon form slight ulcers—frequently there are ulcers in the mouth and throat, which will not be cured by the common gargles.

These cases are all to be cured in the same manner as those first mentioned. Antimonial wine or tartar emetic may be made use of. The tartar will be best in pills, as the dose may be better ascertained, and the stomach will bear a larger portion.

I never knew but one or two cases prove fatal, in them there was great heat, pain and itching in the hands and feet, with swelling, large abscesses were formed which laid the bones bare. In these cases the lungs were much affected with a dry cough and difficulty of breathing.

JAUNDICE.

This disease needs no description, being known by every old woman, and always is apparent upon the surface, and is known by a yellow suffusion, especially of the eyes and nails.

It is generally, if not always, caused by a concrete substance, called a gall-stone, stopping up the passage of the bile in its way from the liver or gall bladder to the guts, which it enters a little below the stomach.

Vomiting is generally sufficient to remove the stones—a vomit of tartar may be given, and I have thought it more certainly effectual an hour or more after a dose of laudanum. There is nothing favours the descent of a stone from the kidneys more than opium, and from analogy have generally employed it

in jaundice. Some physicians seem to doubt the propriety of full or hard vomiting, especially if attended with pain in the region of the liver, which might induce a suspicion of inflammation—in this case a plentiful bleeding and the antiphlogistic effects of the tartar will always prevent any danger. If after a full vomit, &c. as above, the disease should not begin to abate in 24 or 36 hours, the next remedy to be employed is purging; for this purpose, 10 or 15 grains of calomel should be given in the morning, 15 or 20 grains of jalap given four or five hours after, and if necessary, warm fomentations to the stomach; after which, spirit of vitriol, or as some recommend, spirit of nitre, (aquafortis) to be plentifully given, which will scarcely fail to effect a cure. The opiates may also be of service at the same time.

STONE, OR GRAVEL.

It appears that a stone is sometimes, if not always, first formed in the kidneys, and the first notice of it is by its passage from thence by the ureters to the bladder, which if the stone be large is generally attended with a violent pain in the back and the hip of the side—a numbness and pain is felt down the thigh, it is frequently attended with a vomiting, sometimes bloody urine, the pain generally remits or abates at times and then comes on again.

Bleed and give a pretty large dose of laudanum, put the patient into the warm bath and rub the back, if costive, give a dose of castor oil—if the pain should not abate or entirely go off, it will be proper to repeat the bleeding according to circumstances. These means repeated will seldom fail to effect the passage of the stone to the bladder in 24 hours and often in half that time.

To prevent the increase or injury arising from a stone in the bladder, is sometimes out of the power of medicine, and even when medicine removes the painful symptoms, it is very difficult to explain upon

what principle—it is well known that there is no substance known that will dissolve the stone in the bladder that can be borne; it is also well known that a person may remain for years with a stone of a considerable size in the bladder without suffering much pain or inconveniency.

Whenever a person supposes a stone in the bladder, he should use medicine to prevent the progress of the disease. It is sometimes attended with a pain and difficulty in making water—this is generally worse when a person is costive or rides much.

Acids, alkalis and astringents, are the principal remedies employed—lime water is commonly employed, (which see) but sometimes acids answer better, and then the spirit of nitre is best. Of the astringents, uva ursæ, or bear's breech, has been principally employed, but it possesses no properties that should give it advantage over other astringents, and they have also been employed with advantage.

Instead of the nitric acid, some recommend the muriatic, or spirit of sea salt. Alkalies or acids will seldom fail to give relief, and should be taken at times as long or as often as any symptoms are perceived.

Sometimes a person having a rough stone and not very large will be subject to violent attacks by the stone falling into the neck of the bladder; such person sought to keep a curved bar in form of a catheter, either of elastic gum or metal, by them—by introducing it the stone would be pushed back, and the pain removed; but when all other remedies fail, the stone may be extracted by an operation.

NERVOUS DISEASES.

Of all the diseases to which mankind are liable, there are none more troublesome than those belonging to this class, and at the same time the treatment is equally difficult and uncertain, and it certainly requires considerable experience to enable a physician at all times to distinguish whether a disease belongs to this class or not, and when he has determined, it is equally difficult to point out the proper method of cure. Many diseases of this kind are very difficult to distinguish from other accidental diseases, but they are generally attended with a disorder either of the mental powers or of the voluntary motions.—When the mental faculties are interrupted, the patient is generally supposing himself to be laboring under some other dangerous malady—it is then called hypochondriasis or hypo, or melancholy—if in women it is commonly called hysterics. The following all belong to the class of nervous diseases:—Palsy or the loss of motion, apoplexy, epilepsy, chorea or St. Vitus dance, mania or madness, palpitation of the heart, asthma, tetanus or locked jaw, colic, hydrophobia, dyspepsia or indigestion, chin or hooping cough, and cramps.

MELANCHOLY AND HYPOCHONDRIASIS.

These diseases are nearly the same, and scarcely require any difference in the treatment; they are known by a diseased state of the imagination, the patient paying a particular attention to every little diseased feeling and usually supposes himself laboring under some dangerous disease, as consumption or decay of some kind, and are frequently under some dreadful apprehensions of death, and parting from his friends' torments, &c. When the disease is bad it is evident in the countenance and complexion, which instead of sanguine is rather livid or purple, especially about the mouth. These diseases, with

hysterics in women, are unfortunately thought by many to exist only in the imagination, and the unfortunate sufferers feel themselves insulted with unjust ridicule. In men the disease is seldom attended with much pain, but what is in a great measure imaginary, and therefore in the estimation of most men not to be pitied; but if we reflect or think rightly, we shall find that half our evils are imaginary also. In men those diseases frequently originate in their folly, and yet men of great talents and learning are frequently subject to them.

The causes are various. Intense study upon abstruse subjects; hence divines and the religious are very subject to hypo; disappointment in love or in business, and perhaps some other causes not well understood; but whatever may be the cause the method of cure is generally the same. When the disease proceeds from disappointment in love or misfortune in business, it is then truly painful; it is extremely hard to resist the passions and act as if we had none, and I know that it requires the utmost exertions and fortitude; and if after all our prudence we should be assailed by this dire malady, which dispatches so many, or makes them do it themselves, it will be in vain to seek relief in the shop of the apothecary. Whenever a person finds himself under the necessity of grappling with misfortune, he must depend upon his own exertions—more may be done by exercise, regimen, &c. than by medicine, and I never knew it cured without.

As the disease begins in the mind only, the cure must be begun there also. One of the most common causes, as mentioned above, is intense study upon gloomy abstruse subjects, hence the honest divine is frequently subject to it, while the hypocrite will escape, that cause at least. The limits of this work will not admit my entering upon a prescription in full for such patients, and it would be a vanity to attempt an abridgment, as they, at best, would be apt to consider it as too problematical at first view, and shall only observe to such, that were they able to

form the same opinion of the great first cause, or parent of the universe as I long since have done, it would in a moment dispell all their gloomy melancholy thoughts upon that subject forever.

The next class of persons I shall mention are those who are disappointed or crossed in that powerful passion, sexual love, which is perhaps the most painful cause of this disease whatever—this passion in its gratification is the sumit of all human happiness, and on the contrary, disappointment from that quarter brings with it the keenest torment of any of which mankind are capable. To such I shall only observe, that it is a pity that any human being should suffer for one of the other sex, when there are so many thousand who possess all the charms the dear idol does, and all that is necessary to remove the old object from the mind, is to search for, and make up an acquaintance with a new one; for I know that nothing more is necessary to enamour a man with an agreeable woman than a familiar acquaintance.— This prescription will not so well suit my female patients, as custom, whether right or wrong, has debared them from the priviledge of deriving the benefit in full from the means above; but on the other hand I trust I shall have fewer patients of that sex, for it has pleased the great parent in his wisdom not to implant in the female breast that ungovernable strength of passion that he has in the male. I can scarcely believe that the custom of the man making the first advance originated in accidental custom only, but in a difference in temperament.

The above observations apply with equal propriety to those who may have lost a companion. It is not only unnecessary but improper to mourn the loss of a companion—the best remedy is to look out for another as quick as possible.

The next cause of this disease is disappointment in business. A man who is proud of the reputation of an honest man, and through misfortune fails and has a family to support, whose welfare and future prosperity entirely depends upon his conduct, a de-

sire to comply with his contracts on the one hand, and the duty of providing for the support of a family, is truly a bitter dilemma, and especially if despair of ever extricating himself from his difficulties should take place. In this situation the best remedy is to think as little as possible upon his misfortunes, and set upon some course of business and let that engage all his thoughts; but still it must be acknowledged that a desperate case is enough to kill all the pleasures possible to the human heart. In this place I cannot help but observe, that it is a pity but that some legal mode of relief could be devised which might relieve in a measure the unfortunate without giving a shelter to villainy.

In all these cases, agreeable company and entertaining conversation is a powerful remedy. Let the thoughts of his misfortunes be banished from his mind as quick as possible. It is too common a practice for men to endeavor to drown their sorrows with intoxication—this ought to be carefully avoided, and even drinking enough to raise the spirits at all, as they will be depressed as much in proportion whenever the spirit leaves them again, and by these means they inevitably destroy themselves and bring utter ruin both upon themselves and family, without a possibility of relief. In this disease people seldom think of making use of the proper remedies, but take a pleasure in solitude and ruminating upon their misfortune, and are often ready to adopt some desperate plan to relieve themselves from their miseries. But what has been said more properly applies to melancholy than hypo, for the latter often comes on without any apparent cause—the patient supposes himself laboring under some fatal malady, as consumption or some kind of decay—he has frequently a slight cough, but without an expectoration of much matter, generally what he does cough up is a tough semi-transparent mucus, but sometimes white; he has pains about the breast and shoulders. Dr. Cullen thinks that this disease depends upon a rigidity of fibre and a want of due action, but I conceive the

proximate condition of the system is but very little understood—I am convinced that the action of the arterial system is too weak, and the blood is not sufficiently oxygenated, and hence the livid, languid complexion and countenance of most of these patients; and what can the rigidity of a fibre depend upon but the continual exertion of the vital principle, which must cause a continual waste of sensorial power and hence induce relaxation.

The ancients supposed that the disease was seated in what is called the hypochondriac region, which is about the short ribs, and this opinion was not altogether erroneous, as that is the seat of the liver, spleen and stomach, and these are generally found in a diseased state, hence the dispeptic symptoms, as vomiting, &c. which often accompany that form of disease called hypo.

The proper treatment of this disease, as to exercise, &c. has been mentioned above, but as medicine is always sought for by such patients, and which is often of service in giving relief, altho it does not always effect a cure, it is best to give it a trial. Small bleedings just before the full of the moon is proper, and in the mean time some preparation of iron, the tincture I think one of the best—take calomel 20 grains, opium 15, assafoetida 20, make 24 pills, take one every day at three o'clock in the afternoon or about three or four hours after dinner, or if accustomed to eat but twice a day, an hour before dinner, as it is the best to take it upon a tolerable empty stomach—gentle laxatives to keep the bowels regular, as nothing hurts hypochondriacs more than costiveness—flour of sulphur is among the best; light, but nourishing diet—if wind or acidity, heartburn, &c. give chalk, lime water, or lime which has lost its causticity by lying in the air.

The intention of cure is to favour the free circulation of the blood as much as possible—the system will of course become strong and all the irregular motions of the nerves be removed. As to the true melancholy I have nothing to add, except what may

relate to the want of appetite which so frequently attends it, and it scarcely requires any treatment different, bitters, elixir vitriol and other stomachics will of course suggest themselves.

HYSTERICIS.

There are a variety of nervous affections, to which women are subject and are generally called hysterical, but a pure hysteric paroxysm or fit is attended with the following symptoms:—A sensation is felt of some fullness and pain in the lower part of the belly as if a round ball was there, which seems to rise upwards until it reaches the breast and throat, and seems to threaten suffocation, a stupor comes on as if fainting, the breath stops but the complexion does not alter as in fainting, but the face is rather flushed; sometimes laughing and sometimes crying attend; frequently convulsive spasms, as a jerking, throwing the limbs about, beating the breast, a rambling of the tongue frequently attend, but it may always be observed as a rule, if upon fainting the colour continues in the face, it is an hysteric fit—women between the age of puberty and thirty five or forty are most liable to it. Those of a sanguine, temperament are the most subject to it, and especially if full of blood; but the melancholic temperament is subject to hypo. It is said that men are sometimes subject to hysteric affections, and that women may be subject to the hypo. The truth of the case is, they are nervous diseases and some symptoms are common to the disease in both sex. But the disease in women is frequently owing to a different cause, and in general the disease differs very much; but some medical writers say that the hypo in women has been mistaken for the hysterics, but I can see no necessity for the distinction, as they, in a great measure require the same treatment.

In prescribing the treatment of this disease, it will be unnecessary for me to give particular directions for the uses of the various articles proper, to

remove or prevent an approaching fit. The same measures should be employed as in fainting; particularly spirits, or salt of hartshorn should be applied to the nose and cold water sprinkled on the face and breast. In attempting the cure, if the pulse be generally small and hard, or hard at all, a bleeding will be proper, especially if the patient be full of blood, after which the bark and other tonics, as iron, copperas, and blue vitriol, in small doses twice a day.—The nervous medicines should also be given, as castor, assafoetida, opium, with cold bathing, and antimonials are also of service, but above all, light diet easy of digestion, as young animals, soups, &c. with gentle exercise, cheerful company—going a journey in a carriage will be of more service than all the drugs of the shops, and I have known them often effect a cure where all other remedies fail. Particular attention should always be paid to the state of the menses, and the bowels should be kept regular with flour of sulphur or castor oil—assafoetida will also have a tendency to keep the bowels regular.

PALSEY.

The palsey is the loss of sense and motion in some part of the body, but most commonly on one side, when it is called hemiplegia; it is sometimes caused by the formation of a schirous tumour which compresses the nerves on one side, or it may be caused by a collection of a watery fluid on one side. A palsey may also be more local and confined to a particular part, and is known by the above symptoms, loss of sense and motion—it sometimes begins by an involuntary motion of the thumb or some other part of the body, but it frequently seizes a person suddenly.

In the cure of palsey as in most other nervous affections, there is a good deal of room to doubt of success, or at least a sudden cure is not to be expected. If the patient is taken suddenly and is of a sanguine complexion or appears full of blood, bleeding may be

proper—cold bathing with friction of the parts, as also flannel worn next to the skin, blisters and issues should be applied to the part affected—stimulant applications, as mustard, is supposed to be of service. The bowels should be kept regular by proper laxatives. When the disease comes on gradually, electricity is one of the most valuable remedies—a gentle shock should be passed from the foot to the hand four or five times at a time, twice a week, and if no symptom of apoplexy it may be passed through the head also.

APOPLEXY.

The first symptom of the disease is often sudden and unexpected death, but not always—the symptoms are sometimes more moderate—a loss of sense and voluntary motion, with an appearance of a profound sleep with a snoring, the pulse is slower generally, much slower while the vessels of the head and neck are much distended, the face bloated, the pupils of the eyes dilated, owing to the loss of sensation.—It is sometimes preceded by symptoms which might give the alarm, as head-ache, bleeding at the nose, redness of the eyes, noise in the ears like the ringing of bells, a numbness in the limbs, drowsiness particularly after dinner, the night mare and disturbed sleep. If an attack of the apoplexy should not prove fatal, the patient seldom escapes a paralysis, or palsy in some degree.

The cause of apoplexy, both remote and proximate, is of exceeding difficult solution; it appears however evident that the blood is forced with too great a violence upon the brain, causing a sudden compression there, and sometimes a rupture of some of the vessels of the brain.

Bleeding, if the patient appear full of blood, will be proper—a light and regular course of diet should be carefully attended to. Physicians generally direct the blood to be taken from the temporal artery or jugular vein, but this I think an almost antiquated

prejudice. Purging is also directed, but it is thought more effectual if brought on by acrid glysters, as well as strong purgatives given in divided doses.

Apoplexy is sometimes brought on by poisons, as lead, &c. when this is the case, vomiting should be excited if possible.

Upon the whole I have to acknowledge that I have very little knowledge of the disease from experience, and as it generally proves so suddenly fatal, if a person should escape the first attack he should carefully avoid the cause if possible, as anger or violent exercise—avoid all extremes, keep the head cool and take some of the nervous medicines, as castor, assafoetida, &c.

A pituitous or watery apoplexy is also mentioned by writers, but whether such effusions of serum had taken place suddenly or gradually is uncertain. I have known people to suddenly become drowsy and be subject to an irresistible torpor or sleep for a great length of time. Mercurial purges in this case would be proper, and blisters to the back of the neck, and repeated at times for some weeks or months; and it is probable that salt-petre might favour the reabsorption of the fluid.

EPILEPSY.

This is a very common disease and is of a variety of difference—sometimes the fit is attended with violent convulsions, in others it is sometimes so slight that the patient will not fall, and can remember what passes.

The cause of this disease may be various. In persons who have died of epilepsy, there has frequently some diseased appearances been observed in the brain, but they are in no wise uniform, and frequently there are no such diseased appearances to be found. Where any obstructions, indurations or effusions, as dropsy of the brain, are the cause, there is some hope of cure, but we can scarcely discover the cause until it is too late.

I generally employ the same remedies as I do for hypochondrical and hysterical affections, but where I suspect the disease to be owing to obstructions or acrimony, which is sometimes supposed to be a cause, I begin by a gentle purge, and then give the mercurial, (see blue pills) every night for four or five weeks, and then the nervous medicines, as castor, assafoetida, &c. issues are also esteemed of service. There are some persons more liable to them at night—in this case I generally give a pill of opium and camphor at night. Tincture of iron I have thought of service, as also elixir of vitriol, and other stomachics.

The disease is sometimes caused by worms, especially in children, which are then to be destroyed. A large dose of camphire twice a day with half a grain of blue vitriol with every other dose, I have known to succeed. The miscleto of the white oak has been esteemed a remedy among the vulgar, and quacks, but it appears not to answer the purpose with some candid physicians who have tried it.

From the great difference in the cause, there is reason to hope that if one remedy fails that another may succeed.

ST. VITUS DANCE.

This is a disease to which young people in general are subject. The chief symptom is an involuntary jerking and hobbling along, while the foot and arm of the same side is commonly affected. A variety of odd actions attends it, and will frequently be thought to be designed.

In the cure, a puke is recommended, and then the bark, cold bathing, iron and other strengthening medicine, as also electricity. Worms it is said is often the cause.

I was once called to a girl of about eleven years old, who was taken with a pain in the left hypochondrium, which lasted but a few minutes, some involuntary motions followed, as twitching and throwing the arms about, she soon lost her speech, and ye

was in no pain, but appeared cheerful as ever, or rather more so. It was the opinion of the neighbors that the child must be bewitched, and it was with difficulty that I could prevent them from trying their charms and amulets. I put her in a salivation ten or fifteen days, and as it went off gave her castor and flour of sulphur and tonic medicine. She entirely recovered in two or three months.

PALPITATION OF THE HEART.

This disease is not very common but frequently fatal to those once attacked with it. It is often thought to be owing to an aneurism or distention of the aorta or some of the larger vessels, but this I am inclined to think to be a symptom only, and that the disease is a truly nervous affection, and is brought on by a loss in the veins of a power to return the blood to the heart, causing an over distention of the arteries, heart and larger veins, so that the valves cannot prevent the return of the blood by the artery to the heart again, nor prevent its being forced back by the veins, and the blood drawn from a vein has the same appearance in a great degree as blood from an artery, especially when drawn from large veins, but it has not that appearance in the smaller. The veins in the extremities are scarcely as full as in health, and the extremities are generally pale and cold, the face rather bloated and has something of a dark or livid cast, with a countenance expressive of distress and anxiety, the pulse is irregular and the action of the heart so strong as to be seen and heard beating against the sides.

There may be a variety of remote causes, but the proximate cause or condition has appeared to me to be the same in all the cases which I have seen; and a person once attacked with it will generally be subject or rather liable to it for a long time, or as long as he lives. Fear or sudden surprise will cause the blood to recede from the surface of the body and be thrown in larger quantities upon the heart and large

vessels, and is attended with a loss of sensation upon the surface and an increase of stimulus upon the heart and arteries causing palpitation or even epilepsy if the cause was violent, which will be apt to return again upon every occurrence that may suddenly, or in a high degree excite the passions, whether fear, anger, love, sorrow, &c.

From some law of the animal economy upon all sudden emergencies the sensorial power of sensation and irritation is either suddenly exhausted or *that* upon which its existence depends recedes from the surface, & according to the degree of fright or anger, the surface is found more or less insensible; if the passion be very sudden and violent the surface becomes entirely insensible to any injury whatever; if the passion be anger without any mixture of surprise or fear, the complexion is that of a person strangling, but if surprise or fear the blood intirely recedes from the surface and the person is quite pale, but in both cases sensation is gone from the surface, while there is an actual increase of the energy of the brain and system in general, as it relates to action or bodily exertion. This state cannot last long, for even without any exercise the passion subsides, and a person finds himself weak & trembling. There is some predisposition in the nervous system, of some persons that upon such emergencies will bring on fainting, epilepsy, or a palpitation of the heart, that will frequently recur upon any circumstance that may induce much excitement, or the disease becomes habitual.

From what has been said it will be seen that such patients should by all possible means avoid all sudden excitement as anger, love, fear, &c. a sedentary employment is generally advised, but very improperly, as it debilitates and renders the person liable to palpitation upon the slightest exercise or exertion—that kind of occupation that will require constant regular exercise without any increase or irregularity of exertion is the most proper.

When the disease occurs, the main intention is to increase the venal absorption as much as possible, by stimulant applications to the surface, as bathing with water or spirits as hot as can be borne, with strong friction, especially of the extremities—strong mercurial ointment is also a very powerful and permanent stimulus—bleeding will also give relief, but if the blood can be brought to the surface the patient will soon recover—opium and wine in small quantities will be of service, but large doses of either will be injurious if they should not remove the disease before the operation is over.

MANIA, OR MADNESS.

It is not every maniac that is to be esteemed a madman, or that is continually furious, but every person habitually deranged belongs to this class. Mania and melancholy are so nearly allied that I am inclined to believe that melancholy, or the cause of melancholy, generally precedes mania, and may be generally considered as the remote cause. I have known but few cases of mania but what was brought on by intense study upon religious subjects; but a strong engagement of the mind upon any one subject whatever it may be, may induce insanity, especially if it be an object of fear or aversion and therefore when a person finds himself subject to study one subject too long, he should endeavour to break his mind off from it and engage himself in some other business that will engage his attention. When a mania has not been of long standing, bleeding is advised, shaving the head and bathing it with cold water is proper; keeping the belly regular by cooling purgatives is also proper, as maniacs are very subject to costiveness. Camphire has been given in large doses and it is said with good effect, Jamestown it is said has been tried and Vansweiten says, has cured it.

It is a common practice to confine mad men in a dark or strange apartment, and thought best to let strangers attend upon them.

Fear has been thought useful and has been accordingly employed, but how far it may have been useful, I am not able to say. Vomiting and purging with low diet has generally been employed, hard labour, it is said has been employed to advantage.

In this disease I have not had much opportunity of experience, and it is one of those diseases that frequently set the skill of the faculty at defiance. I have heard of one who was cured by the trepan—She had been deranged thirty years, and had frequently gone through the hands of the faculty but without a cure. Upon trepaning a considerable quantity of water was discharged and she immediately recovered. It is well known that any pressure upon the brain will cause a derangement.

A S T H M A.

This disease is known by a difficulty of breathing; some times a person will be seldom free from it, but worse at night; the patient cannot lie down, wants cool air, the fit in a measure goes off towards morning. It is often a hereditary complaint, and seldom appears very early in life, or at least not before puberty or after; it affects both sex, and Cullen says most frequently the male, but I think this is not the case in America, for as far as my observations will enable me to judge, I think there is three cases of females to one in the male.

The disease is generally considered as of two kinds, the one called moist and the other dry—some cough frequently attends the disease, but in some the cough is dry and there is seldom much coughed up; in others there is a considerable expectoration of mucus; it is then called moist; it is sometimes attended with some symptoms of fever, but generally there is no such symptoms except the urine, which is similar to that in an intermittent fever—at the commencement of the fit the urine is pale but high coloured afterwards there is almost constantly some tightness across the breast—frequently after these fits have continued

for some time they abate or entirely cease, & the patient will remain free from them for months, but after a person has been once attacked they generally are subject to it through life, and may be brought on by heat or a sudden change from cold to heat at any time.

The cure of asthma is of a piece with most other nervous diseases, attended with a great deal of uncertainty. Some general rules as to diet may be necessary, such diet as may be of a laxative nature is the best, as costiveness is always injurious to asthmatic patients. In the moist asthma I have found opium and assafoetida of great service, and have sometimes known a full dose of opium given in the evening not only prevent the fit for that night, but to put an end to the disease for that time. In the dry asthma I have generally employed tartar, either by itself or with opium, but I think it best to give it with laudanum in as large a dose as the stomach will well bear, and even if it should induce a motion or two it will be no disadvantage—this ought to be given in the evening.

Asthmatic patients, much troubled with it, soon become weak and emaciated—strengtheners will then be proper, as iron, bark, &c. cold diet and drinks generally agree with asthmatics the best, teas and coffee is generally injurious—moderate exercise is of advantage, but violent is always injurious.

Every difficulty of breathing is not to be considered as an asthma. Authors have distinguished several kinds of difficult breathing under title of dyspnoea, but as a primary disease, I know nothing about them, and therefore shall let them alone.

TETANUS, OR LOCKED JAW.

This is not a very common disease, but frequently fatal when it does happen, and I suppose would be much more so, if not cured, for although it be classed among the nervous diseases, I believe, if taken in time it might generally be cured.

The cause of this disease is said to be various, but I have known nor heard of no case but what was the effect or brought on by a wound, but it is said that cold suddenly applied to the body when very hot, is some times a cause. It is most common in hot countries and in warm seasons. If it is brought on by cold, it is said not to happen for several days after the cold has been applied, and if from a wound or puncture often not until it had healed up, or for many days after and then often when there was no pain or any symptom which might have gave a suspicion of it.

The first symptoms is generally a stiffness in the back of the neck, with some uneasiness at the root of the tongue, as the disease increases, a pain is felt at the pit of the stomach, the patient is generally soon unable to swallow any thing and then the treatment becomes more difficult, the jaw becomes so tight locked as not to be opened without great force and as great pain. In the mean time, the muscles on the back of the neck and back become convulsed and contracted, and are counteracted by those on the breast, neck, and belly, the belly is convulsed and hard, the spasms or convulsions are soon extended to every muscle in the body, and soon closes the scene in the most frightful manner to be conceived.

When the disease proceeds from a wound, a tightness about the pit of the stomach is some times the first symptom, slight spasms is perceived in the limbs if the wound was in a limb; if the jaw be moved, it is felt in the part as if the wounded part and jaw were connected—as these symptoms increase, the convulsions &c. become general, and close the scene as in other cases.

From what has been said the disease may be easily known as soon as it makes its appearance and should be immediately attended to.

Opium and wine has hitherto been considered as the principal remedies.—We are advised to give laudanum in moderate doses, but I cannot see the reason for any caution; it is a disease that admits of

no delay. I have met with two or three cases, one of which was violent—they all recovered. I gave laudanum in as large doses as I could well venture upon. In the last, which was the most violent, I gave sixty drops at a time, every hour for four or five hours, when the spasms began to abate—he continued to have some symptoms for several days, but at length recovered; he was very weak and became considerably emaciated before he entirely recovered. I am clear in the opinion that opium should be given in large doses from the first, and it will be easily seen from the above case, that a person will bear much more than in health, for although in the above case upwards of two hundred drops was given in three or four hours it induced no disposition to sleep. If the patient should be unable to swallow, it should be given in glyster in double or threble the quantity, as from one hundred to one hundred and fifty drops, and repeated according to the effect, in from one to two hours, and the use of it continued according to circumstances, until every symptom has disappeared. It has been a common practice to join wine with it, and I suppose may be proper, or at least not injurious, but I doubt wether it is necessary. It has also been a practice to anoint the patient all over with a strong mercurial ointment, but this I must beg leave to think highly improper.—The disease consists in an increased irritation, and nothing gives greater or more permanent excitement than mercury, and when used in nervous diseases, is very apt to increase the complaint for some time.—As to cold bathing, I think it also a doubtful remedy; for although cold will diminish excitement for a while, it will not prevent the rapid increase of irritability, which always takes place during a quiescent state from cold.

How to explain the operation of opium in the cure of tetanus, I am a little at a loss, but I suppose that it must act as a stimulus to the sensorium, and thereby overcomes the irregular exertion of the system, which is employed to overcome or relieve pain—

opium certainly has the property of diminishing the irritability of the system, which it must do either by acting as a stimulus or additional excitement, as all increase of excitement exhausts the excitability or irritability, which is the same thing, but it effects this in a different manner from mercury, as it never increases spasmodic affections. But enough of this; it is enough that we know its power in the disease.

Wine was mentioned as a remedy—how far serviceable it may be, I am not able to say; but certain it is, that its good effect, if any, must depend upon the alcohol or spirit which it contains, and if it be serviceable at all, other spirits must answer the purpose equally well or better; and where opium cannot be had, it would be proper to give spirits in quantity sufficient to induce intoxication, but ought not to be depended upon any longer than until opium can be obtained.

COLIC.

This disease is so called from its affecting the gut called colon, and is thought often to be occasioned by a spasmodic structure of the exit from the colon, and hence Cullen has placed it among the nervous diseases; and certain it is, that the diseases of the bowels of this description are to be considered in this light. If the irritability of the bowels be wanting, the belly becomes too slow, and hence wind and costiveness—this brings on spasms with violent pain and griping, called colic—this is sometimes attended with vomiting of bile, and is then called a bilious colic—sometimes it is attended with an inflammation of the bowels, (which see)—it is sometimes occasioned by poisonous substances, as lead, copper, &c. to which painters and those engaged in the manufacture of those metals are subject, it is then called the dry gripes, nervous colic, lead colic, &c. A stone or gravel is sometimes attended with symptoms of colic, and is then called nephritis or stone colic—if attended with none of these symptoms, it is simply

called colic, or wind colic. The bilious colic is known by the vomiting of bile, which is sometimes attended with jaundice, especially in women, and is sometimes called a hysteric colic—it is attended with great pain in the region of the colon or navel—sometimes attended with fever, thirst, &c.

In this colic, bleeding is always proper, especially if the pulse be disturbed, and the patient of a gross habit—the bowels should then be emptied with a large dose of castor oil, and if it should not have the desired effect, it should be assisted by glysters made strong with table salt after the oil &c. has had time to have put the bowels into motion—if there is no symptoms of an inflammation, 25 drops of laudanum may be given with a little mint water, or essence of pepper-mint, or rather a few drops of the oil of anise; hot applications to the belly, or the patient may be put into the hot bath. If acidity abound, which is often the case, and give out a great quantity of air, alkalines as lime, magnesia, chalk, or the like, will give a check to it. If it should be evident that inflammation is present, a blister applied over the navel, six inches square, will be proper.

In the nervous colic, the belly is drawn in, a weight or pain is felt at the pit of the stomach, with a loss of appetite, it does not come on so suddenly and violent, is often attended with a cough, especially if occasioned by the fumes of lead or copper. If the disease be violent, a vomit will be proper, and then the castor oil, and opium, with laxative glysters, and after stools are procured, opium should be given freely to allay the spasms which will still cause pain, and in the mean time the diet should be bacon or other oily meats, and ripe fruits either green or dried, bark, iron and other strengtheners should be given.

In the nephritic colic, the pain extends to the genitals and other symptoms of gravel attend—stools afford relief in other colics, but none in this—eating gives relief in this, but not in others. Turpentine in glysters are advised in this, and the alkalies, as lime, &c. with plenty of opium.

Where there is no other symptom but a redundancy of wind with a rumbling, which being expelled gives ease. Lime, chalk or magnesia, and gentle purges are also necessary—strengtheners, as white oak bark, columbo, &c. may be made use of to prevent the return.

CRAMP OF THE STOMACH.

This is often taken for a colic, and is frequently fatal. It is known by a violent pain in the region of the stomach, drawing the patient down double—it remits and returns at a few minutes interval—it is not attended with wind, and the pain does not extend downward.

Give plenty of opium, oil of anise, spirits and warm applications to the stomach. If it should not go off immediately, bleed, and apply a blister over the part.

CHIN, OR HOOPING COUGH.

This disease needs no description—children are most commonly the subjects of it—the younger the more danger. If it come on with fever and dry cough the disease is dangerous. A great discharge of matter from the lungs is unfavorable, but not so much so as a dry cough. A ceasing of the cough through cold or any other cause, is a dangerous case.

If the cough and strangling be violent, an emetic will be proper, and one of the best remedies; after which, put as much tartar to paregoric elixir as it will dissolve, and give 12 or 15 drops at a time, four or five times through the day, or add about four measures of water to one of laudanum, to an ounce vial full add eight grains of tartar emetic and sugar enough to make it sweet, of this 10 or 15 drops may be given twice a day. When the cough is dry at first and attended with fever, opium may be improper, even with tartar; then the best remedy is full vomiting, which may be repeated if necessary.

If the disease becomes habitual and continues long, either the bark or some preparation of iron should be given, and laudanum at times.

If from cold or any unknown cause the cough should stop, a puke should be given, and then a purge of calomel, and apply a blister to the breast—bleeding will also be proper, with warm bathing—great care should then be taken to prevent the child from taking cold a fresh, for if it relapse a second time, it can scarcely be saved.

CRAMP.

When cramps in the limbs become troublesome or violent, especially in young people, they require the same treatment as epileptic fits.

Pregnant women are very subject to cramps—the best remedy is to lie as much as convenient in bed, apply clothes wet with camphire in strong spirits or laudanum—laudanum may also be taken inwardly.

INCUBUS, OR NIGHT MARE.

This to some is so troublesome as to be considered as a disease—it always comes on at night or when the sleep is imperfect. It is supposed by some a stagnation of the blood, and thought that some may die with it, but I know that there is no interruption of the vital functions, as I once had an opportunity of observing a man who went to sleep upon his back in the sun at mid-day. I am convinced it is nothing more than a state of the mind during a partial sleep, and what may be the proximate condition of the system that may induce such a state of the mind I am not prepared to say, but I conceive it to be attended with no danger, but may be somewhat troublesome.

The best remedy that I know of is to eat no supper, or a light one at least, and take 25 or 30 drops of laudanum before going to bed.

ANIMAL POISONS.

HYDROPHOBIA, OR BITE OF A MAD DOG.

A great number of nostrums have been recommended in this dire malady, and said to have proved effectual, but how many deserve even a trial I am unable to say. There is a great deal of experience required to establish the infalibility of any medicine in any particular diseases, and in this there is a great deal of room for deception, owing to the uncertainty of the disease of the dog. I am now nearly 45 years old, and I have never seen but one or two dogs which I believed to be mad, but have seen many said to be so. But as such a disease is common and so fatal, it is proper whenever a person is supposed to be bit by a mad dog or other animal, to cut out or destroy the part as quick as possible, and then the most certain remedy is to put the person under a mercurial course, and continue it for four or five weeks. When the wound is in a part that cannot well be extirpated, it may answer to make one or more incisions as deep at least as the wound, and put plenty of common salt into the place.

I am very sceptical or I should believe that the disease has been frequently cured after the symptoms had come on, by a small plant, the name of which I do not know. Jacob Miller, a Tunker preacher, brought it into use on Blackwater, V. he has long since removed to Ohio, not far from Dayton—if any specific could be discovered it would be a valuable acquisition to the materia medica. I may make the same observation as to my scepticism about a miraculous stone said to be sometimes found in the possession of some fortunate Dutchman that has the divine power of extracting the poison at any time after the wound has been received before death, or perhaps afterwards, and thereby secure the patient from farther danger, and the stone has such a strong

appetite for the poison that it will adhere tightly to the part until it has got out every atom of it, but will not touch the part if there should be no poison there; and all this is as well established by testimony as that granny  was seen walking in the air with her feet upwards.

BITES OR STINGS OF POISONOUS ANIMALS.

If it be the bite of a snake, make an incision into the wounded part and apply salt. It might prevent a great deal of the danger to tie something round the limb above the part until the poison could be extracted—it should be bound so tight as to prevent the circulation of the blood.

The bite of a spider is often as bad as that of a snake, and requires the same treatment, but their teeth are not so long, and the poison is therefore easier extracted.

DISEASES OF WOMEN.

The first disease peculiar to women, takes place about the time of puberty or the state of womanhood — at this period a considerable change takes place, If from cold or the want of due exercise in the air the menstrual discharge should be kept back—the complexion fades, the strength wastes, a yellow or green cast in the face, a swelling of the feet & legs, great debility, the breathing is short and difficult upon using exercise, head ach, heart burn, eating of chalk, dirt, &c.

This disease is seldom to be met with in Kentucky, but very common in the atlantic states, especially on the east side of the Blue-ridge.

In the cure, it is in the first place necessary to take care to keep the bowels regular—aloes is one of the best for that purpsse—Anderson's pills is a very good form. If the legs and feet be much swelled, cream of tartar should be taken—some preparation of iron is then to be depended upon to strengthen the system and give the blood the necessary momentum—it has been thought by some that it is most effectual in solution and conjoined with bitters; and every old wife has her formulæ, but most of them are too nauseous to be taken to any advantsge—if a tincture be preferred, that made with spirit of salt is a very agreeable medicine, but I have seldom known any preparation fail to answer the purgiveness in sufficient quantity and persisted in a sufficient length of time.

The time of the appearance of the menses is various, but seldom under fourteen, and often not till eighteen years of age. If at any time after the appearance of maturity, a girl's health begins to decline, or she should complain of pain in the back or bowels, she should take a brisk purge—8 or 10 grains of calomel will be proper, and after three or four hours some jalap may be given, but nothing favours

the discharge more than gentle shocks of electricity passed from one foot to the other by way of the pelvis, or passed from the foot to the other arm so that the shock may be sure to pass through the abdomen; nothing is of more service than exercise—bleeding may give a temporary relief, but is one of the surest means to increase the evil, while the above course will never fail if rightly conducted.

SUPPRESSION OF THE MENSES.

After the menstrual discharge has commenced, care ought always to be taken to avoid cold during the time and a little before and after, a slight inattention may ruin the health forever, and cause sterility if not death, and menstruation is often forever after attended with great pain. It is the duty of mothers to instruct their daughters at this critical period and put them upon their guard against any imprudent exposure to cold or wet.

If the suppression or obstruction be entire, there is more hope of a cure than if it be partial and attended with pain and difficulty. Aloetics, calomel, iron & opium are the principal remedies to be depended upon—electricity is also a very powerful remedy. If the time of menstruation be unknown, give about ten grains of calomel about three days before the full of the moon, purge it off in the afternoon, or about eight or ten hours after with a little cream of tartar; at night give a good pill, as three or four grains of *assafoetida*, the next night give a grain of opium or fifty drops of laudanum with 4 or 5 grains of aloes. If this fail bringing on the discharge, give a grain of calomel and two of aloes in a pill three nights together every week until the next full moon. If the patient look pale and weakly, some preparation of iron should also be given—electricity is also of the utmost service about the time that menstruation is expected or intended to be brought on—warm bathing or putting the patient into the hot bath up to the waist is also of service—bleeding is almost univer-

sally employed, and generally gives relief for the present, but tends to confirm the disease; an unnatural discharge ought never to be substituted for a natural one, for at best it is only a paliative, and always retards the cure.

DIFFICULT MENSTRUATION.

This is a very common case, and when once brought on or confirmed, is one of the most difficult to remove, and is often the cause of barrenness; and it frequently happens that the unfortunate woman suffers every month as much as most women do in moderate labor. The same treatment is proper in it as prescribed in an obstruction, but frequently to no purpose; all that can be done is to give ease during the time; and for this purpose, heat and opium are the principal remedies—to apply clothes wet with spirits hot to the back and belly gives ease, also sitting over the steam of hot water—a tincture of gum guaiacum has been much recommended lately by its inventor, but its powers under different forms have been long known, without acquiring any reputation in diseases of that kind, and the powers of emmenagogues have almost become obsolete among modern practitioners. I am not able to give credit to such recommendations without a fair trial, or without its active powers should indicate the propriety of its use in such complaints. From the infinite number of quack nostrums that are continually hawked about, I am always suspicious.

FLOODING.

This, as a diseased state of menstruation, I must acknowledge I am but little acquainted with, except in women between 45 and 50, but that such cases do occur I have no doubt, but I have never met with them in a dangerous degree. The most of the cases which I have had an opportunity of becoming acquainted with, have been in an abortion, between the

first and third month. As to the distinction between an active and a passive menorrhagia (flooding) I think it necessary to say but little; for if I am right, in however active a state the uterine vessels may be at the commencement of hemorrhage, its continuance must soon bring on relaxation, and then if the discharge continue, it must depend upon debility or relaxation; and it would seem from the interim that is between the two states, the vessels would have time to close. If such active cause does ever exist, it must be owing to a spasmodic affection; and in what few cases which I have met with of this kind, has been in women subject to nervous paroxism.

From whatever cause it may proceed, I have ever found opium an effectual remedy. If it depends upon activity or tension, it must be of the spasmodic kind—opium is the most powerful antispasmodic we are in possession of. If upon a torpor and weakness of the vessels, opium will remove that by an increase of sensorial power; and I have never found it necessary to employ any other remedy to check the complaint for the present; but in persons subject to this complaint, I have generally observed debility and a disposition to return at times, frequently not over two weeks apart, but sometimes three. In this case iron and bitters should be employed during the intervals, with exercise, but such should avoid all violent exercise and hard straining, as also violent passion.

ABORTION.

When an abortion happens between the first and third month, it is often, or rather generally, attended with a dangerous hemorrhage, owing to a partial detachment of the placenta, or after birth, which is very difficult to expell, owing to its smallness, but may be easily separated with the finger and brought away, when if cleared away entirely the discharge immediately ceases and the danger is over. For the want of this little information, many a woman is lost.—

There is another circumstance that I have thought truly strange—writers upon midwifery generally doubt of the propriety of a manual operation, a reason for which I can by no means discover. When I was young in practice, and depended more upon the opinion of others than my own, I followed the usual method—opium I found in all cases check and often stop the discharge. I at length met with a case in which the discharge was in a measure checked, if not entirely stopped—between two and three weeks after I was called to see her, the discharge had again commenced, she had some fever, there had as I was informed been a discharge for some time which was foeted—I attempted to examine the uterus, which I found too close—I made a small scoop well polished with which I extracted the foetus and membranes in a putrid state—she recovered and did well. This circumstance taught me the impropriety of delay—I have always since extracted the contents, and in ten years practice have never met with a case but what did well, but have known bad consequences follow where it was not submitted to. However if the discharge be slight, it will be proper to put a stop to it with opiates, cold and rest; as where the breach is small a woman may go her time, but even in that case the child is apt to be small and emaciated.

Abortion at more advanced periods belong more properly to midwifery, but as they are often attended with dangerous flooding it is proper to check it if possible by opiates and astringents, cold, &c. but if it should continue so as to endanger the life of the mother, the foetus should be extracted by art, footling, in which there is no danger if performed by a skilful midwife..

It may be further proper to observe, that both in this case and a true delivery, a portion of the placenta is sometimes left behind and is always dangerous, and frequently fatal—midwives ought to be very careful of this, which may be easily known by examining the placenta and see whether it all be there, and if any be missing the midwife ought carefully to

examine and extract whatever be found, for if it be left a dangerous flooding or something as bad may be the consequence, and it may then be out of the power of art to give relief.

A few words in this place also may not be improper upon the treatment of child-bed women. Although the moderns treat both child-bed women and children in a much more rational manner than what the ancients used to do, still there are many old prejudices, ignorant and often superstitious customs, retained among midwives and nurses, but still fewer in America than in Europe.

The supposed power of the loadstone and the aetites or eagle stone in promoting labour is still held up by some midwives, but these are not of the most dangerous errors—the greatest is in the mode of treatment after delivery—as soon as put to bed, hot stews with ginger, spices, &c. are given with a liberal hand, the doors and windows are closed and all air excluded, weak diet and hot drinks is the only support. This regimen is yet the death of thousands, and it is the next thing to impossible to beat these knowing women out of the old track.

The practice of exhibiting spirits, spice, &c. either during or after labour is very pernicious. If the labour be tedious and she be fatigued, and there be no fever, a little spirits will not be improper, and the same after delivery; in the mean time she ought to deviate as little as possible from her ordinary mode of living—she ought to have as much cool water as she may desire, and if any caution be necessary, it is not to take it in a large quantity at a time—the same as to her diet, whatever her appetite may crave will be proper and safe, if the meal be not too full. I have known women from the first hour eat as usual, and never knew it injurious. Cool air ought not to be excluded, for nothing is more necessary after fatigue than cool air and cool water—every prudent person will certainly avoid cold in the extreme at such a time. It is well known that the poor who have the worst accommodations succeed as well if not better.

than the rich, and we are told that in Africa the woman immediately goes into a river or the like to wash herself and child.

I have known several instances of convulsions to follow delivery, and they also sometimes precede it. In both cases bleeding freely is the first means to be employed, and then give 40 or 50 drops of laudanum.

Another very distressing complaint often attend women after delivery, called after pains; they are seldom violent with the first child, but become worse every other after. Opium, the sovereign anodine, was formerly entirely forbid.

It is thought by some physicians to be owing to large coagula forming in the uterus, but this I know to be error, for I have scarcely ever known such coagula to be excluded where there was such pain, while on the other hand, large coagula will be discharged without pain at all. It appears to me more probable that a torpid states of the uterus is the cause, and that the pain commences in the parts about—irritable and delicate women are most subject to them.

Ever anxious to give relief from pain when called upon, I began the exhibition of opium in small quantities in the first cases I ever met with, I now give enough to render the patients's situation easy in a great measure—they will generally bear more than in health—it will answer the purpose better in glyster, from 40 to 60 or 80 drops may be given in glyster and repeated once or twice a day or as occasion may require. As soon as the woman is free from pain, or at least within 24 or 36 hours, some cream of tartar should be given and repeated to prevent costiveness from the use of the opium, but may be discontinued as soon as a stool is obtained.

The next disease to be noticed as belonging to child-bed is what is called the purperal fever. It comes on with the usual symptoms of fever, a quick pulse and dry skin, generally some wandering pains are felt in the abdomen and frequently every symptom of inflammation. The cause of this fever is not generally understood, but as a suppression of the lo-

chial discharge so frequently attends it and often precedes it, it may be considered as connected with it, either as a symptom or a cause—a fresh commencement of the lochial discharge gives relief. A very distressing lax almost always comes on sooner or later, the stools are extremely fetid and sometimes appear in a ferment like yeast, but sometimes there will be portions of hard excrement, and it may be possible that a costive state before delivery may have a share in disposing to the disease—such a state ought to be avoided by pregnant women by the use of mild laxatives, as flour of sulphur. By a proper attention to the state of the bowels before parturition, it is probable this disease might be prevented.

Different opinions have been entertained among physicians as to the proper mode of treating this disease, but I believe the following has been generally successful when employed in time :

Bleed according to the strength and other circumstances, and if necessary it should be repeated. The propriety of vomiting has been called in question by some, but I think it in this, as in most others, one of the most powerful and at the same time a safe remedy, and this was the opinion and practice of Dr. Denman. It will be proper to give it in small repeated doses until it has effect, either of puking, purging or sweating, but if the abdomen be tumid and very tender or sore, full vomiting may increase the pain, it will be therefore advisable to favor it by plenty of warm drink, and if violent, check it by a little elixir vitriol, mint water, or the like, a spoon full or two at a time, cool; but in the first stages of this disease, there is no necessity for these precautions. It may be proper if the fever should prove stubborn to repeat the tartar on the succeeding day, or what will be better, a sufficient quantity of Glaubers salt may be given in small doses to empty the bowels, or if the bowels be loose, the salts should be given until the stools become watery. If there be pain and tumor of the abdomen, and especially if

confined to one parr, a blister plaister should be applied—the diet should be light, or, the cooling regimen observed, the drink may be cool water or water and vinegar or spirit of vitriol. If the lax should prove obstinate, an opiate may be given at night and the salts repeated in the day.

A strong tendency to putridity soon takes place in this fever, and it would be thought that the bark would be proper, but it has been thought not to answer the same purpose that it does in other fevers of this description; but I think that when there is no local inflammation, as of the abdomen, &c. that the bark is proper as a strengthener against a relapse.—It frequently happens that this fever terminates by an abscess in some part of the body, which should be treated as an abscess or phlemon from any other cause. The disease is frequently attended with considerable pain and restlessness, and it is a favorable circumstance that opium is not only safe but often of service at any stage of the disease, but more especially in the advanced.

There is another extremely painful disease to which child-bed women are sometimes subject; it consists in a swelling of the leg and thigh—it comes on sooner or later, sometimes in three or four days after delivery, and may come on two or three weeks after.

The primary cause of the disease is no doubt in the uterus, or some of the parts about, but what the precise nature of that state may be, we know not, but it appears probable from the appearance of the diseased parts, that it is a diseased state of the lymphatics, perhaps from obstructions.

From the rare occurrence of the disease, and consequently the few cases I have met with, I have had little opportunity of observing the state of any one case in its commencement. According to writers the women generally become very irritable, with low spirits, some transient pain is felt in the uterus,

or the parts about—a pain sometimes is felt in the calf of the leg, but sometimes it is in the groin, running down the limb, it soon begins to swell, feels hard, and looks pale, and as the swelling advances the skin has the appearance of being stretched hard. In this disease the lochial discharge is almost always disturbed, sometimes entirely suppressed, but not always, and sometimes it is fetid. The patient in general has no power to move the limb, and is apt to faint upon the least motion. The disease will not abate or go off suddenly, and it seldom entirely leaves the limb in its natural size and appearance again, it is also a long time before it gains its usual strength. From what has been said, it will be easily known.

I shall now proceed to state what I consider the proper course or method of cure, and in this I must beg leave to differ in a measure from the ordinary mode, which I consider as too inert.

The bowels should be kept regular with cream of tartar—small doses of calomel should be given, but not sufficient to excite any salivation—the limb should be rubbed well with mercurial ointment and bathed with a strong decoction of Jamestown weed. If there be much fever or the complexion be not very pale, if the pulse be hard and quick, a light bleeding will be proper—if much pain, opium will be of service and safe; in what cases I have met with, I have found it necessary and to be of great service, and in the mean time the spirit of vitriol should be given in doses of from 15 to 20 drops four or five times a day; the drink should be cool and much heat avoided. In those cases which I have met with, the warm regimen or mode of treatment had been observed, and the patients had a great desire for cool drink, from which they had been debared.

A more powerful mode of applying the jamestown, is to grind the dry seed fine and steep them in whiskey or other spirits and apply clothes wet with it to the parts, but if any giddiness or blindness should come on, it should be discontinued a while, or for about twenty-four hours, and then applied again.—

I have known but one case in which it proved fatal, and in that a part of the placenta it was supposed was left, and when I saw her I believed the uterus to be in a dead state.

It seldom happens that the lochial discharge be entirely suppressed but it brings on an inflammation of the uterus and a fever and other diseases, and ought to be brought on again if possible—calomel in a dose sufficient to move the bowels, by the assistance of glysters, should be given, 6 or 8 grains is generally sufficient; but if it should not have the desired effect, it should be assisted by cream of tartar—the calomel should be given in the morning and the glysters and cream of tartar given in the afternoon; if the bowels are emptied by night, 25 or 30 drops of laudanum should be given at night—warm fomentations to the belly will also be of service.

A putrid lax has been mentioned as a frequent attendant on purperal fever, but it is not always attended with fever, and may be the consequence of costiveness. Child-bed women are frequently without a stool for several days, and in that case if there should be any disposition to fever, it will increase the evil or may bring on the lax. It will always be proper to avoid any thing of the kind, by giving cream of tartar in small repeated doses after the third or fourth day, and especially if any fever or uneasiness should be felt, but as it is a very common thing for women to go six or eight days without any inconveniency, no danger should be apprehended if she feel perfectly well, but small quantities of cream of tartar will nevertheless be of service, and a security against fever and lax.

Another troublesome circumstance sometimes occur and may prove dangerous to child-bed women, which is a falling down of the vagina, or as it is termed, of the womb, which may also happen, but is not so common as the other. The best remedy is to keep it back by a bandage, and some folds of cloth after bathing with oak bark and allum. Weakness is very commonly the cause, and if not the cause, is

commonly the consequence, and therefore strengthening medicines will be of service, as bark, turpentine, iron, bitters, &c.

CEASING OF THE MENSES.

Between forty-five and fifty years of age the menses generally cease, at which time women are generally troubled with excessive flooding, or some other disease, which require attention. If the discharge be immoderate, opium is the proper remedy—if any other disease, a purge will give relief. Ulcers in the legs frequently happen, and physicians often advise the not healing them up, but this I think very improper; as it is an unnatural discharge it ought to be stopped, and purging is one of the most safe and effectual means for removing it. For more on this head see ulcers.

WHITES.

This disease consists in a discharge of matter from the uterus, which is generally white—if it be considerable it is very weakening, and is attended with a pain and weakness in the back. Sometimes the discharge is hot and acrimonious, eroding the parts over which it passes—it is not always easy to distinguish it from the venereal disease, but if mild it is not attended with inflammation—the discharge is not constant; on the contrary, in the venereal disease, the discharge is constant, and after it has continued some time is always attended with heat and soreness, or itching of the external parts. Women are liable to it at all ages after the menstrual discharge takes place, but more commonly after child-bearing—pregnant women are frequently subject to it, and women about the time of cessation of the menses.

If there be any fever, a puke will be very proper, and if that should not be sufficient to remove the feverish symptoms, it may be proper to give a gentle purge at times, and after that give the spirit of vitriol

and bark, or some preparation of iron—the spirit of vitriol and bark should be given three times a day in doses of 15 or 20 drops of vitriol, and a tea spoon as full as it can be taken of the bark. The balsams, as balsam copaiva, or even common tuppentine is of great service—a cerecloth applied to the back is also very good. The balsam may be taken in doses of from 15 to 20 drops once a day. Astringent injections have sometimes been employed, but I have seldom found them necessary except where it was occasioned by the venereal taint.

The disease sometimes prove obstinate and it may take two or three months to remove it, but the patient should not be discouraged but persevere in the remedies above prescribed, and they will always succeed in time.

There is no necessity for any regulation as to diet.

DISEASES OF CHILDREN.

The first thing to be taken notice of in children is the state of the bowels—they are frequently subject to costiveness or lax. In order to enable children to take medicine early, they should be learned to eat spoon victuals as soon as they are born, as it is difficult to get children to take medicine that have not been accustomed to take spoon victuals; but the first and most natural food for a child is the mother's milk. When a child is born without any injury it will in a short time fall to sleep and sleep for several hours, it will then for the first time wake hungry, and should be put to the mother's breast; if she has no milk, the child should be fed with a little sweet milk and water sweetened with brown sugar, and put to suck the mother from that time, which will seldom fail to bring the milk in a short time. The practice of giving new born children bacon, butter, &c. for the first, is improper. The milk of the mother is at first laxative, but soon loses that property; sugar is also a laxative and innocent, and may be a substitute with other milk for that of the mother until she shall give enough. By feeding a child I do not mean that feeding should be substituted for the mother's milk, but to give them a habit of eating, so that in case of sickness they may take medicine the better. Dr. Reece thinks that nurses often injure their children by over feeding them, it being the common method of quieting them.

Children are more subject to acidity than adults, and is a common cause of their complaints. In case of diseases of the bowels, as costiveness, vomiting, lax, or wind, a little magnesia should be given in the form of pap with milk, it is entirely inoffensive—if acidity abound, it will destroy it, and if more is given than sufficient it will pass off without any injury.

A child should always be weaned from the breast gradually.

VOMITING AND LAX.

This disease is called cholera infantum by some medical writers, but with what propriety I shall not decide. Dr. Rush takes notice of it and seems to suppose it incident only to children in large towns and says carrying them into the country is the best remedy, but in Kentucky it is a very common disease and the children of no situation are exempt from it. They are sometimes attacked with it a few days after they are born, and the younger the child the greater the danger. It is not always attended with vomiting, but this sometimes is violent and continues for a great length of time. The disease prevails most in warm weather, and will sometimes continue for many months.

For the vomiting give magnesia and a few drops of laudanum, and repeat it from time to time as occasion may require—if it should prove obstinate give a few grains of calomel, a grain for every year that the child is old until four or five—a little cinnamon or mint water may also be given; these will seldom fail to stop the vomiting, but if it should not, a blister should be put upon the stomach.

When the disease consists in a lax only, salts is the best remedy—it should be given in very small doses, not sufficient to purge—it should be dissolved in a little cool water and given immediately, as the child is generally drouthy and will take it in cool water very well. Astringents should be given in the afternoon, as logwood tea, or gum kino, but the kino is more disagreeable—an opiate should be given at night, it is best in glyster—magnesia is also of service, or a weak lime water.

WORMS.

The origin of worms in an animal body is not understood—it is thought by some that green fruit and the like is the cause of worms, and that they are at least taken into the stomach with the food, but this

is mere conjecture—we know nothing about their generation—the whole creation swarms with animal life, and animate beings of an infinite variety of magnitudes—all are first formed in a state of ovum or embryo, but where or in what matter worms that live and thrive only in an animal are to be found is unknown. There are several kinds found in the human body, and it appears that a considerable number may exist without inducing any sickness or disease, but if any other disease should happen and take away the appetite, the worms will then be injurious; if they abound over-much, they are highly injurious and the cause of the death of many children. I believe children much more subject to worms in the atlantic states than in the western countries.

The signs of worms have been considered very numerous, among which are the following:—A bad breath in the morning, itching at the nose, moaning and grinding the teeth in sleep, the appetite is irregular, sometimes voracious and sometimes bad, thirst especially in the morning, the belly is sometimes too loose and at other times bound, a tumid belly and a pale countenance is a very certain sign, but sometimes children appearing the most healthy will have a great many worms.

Worms are of various kinds, but the most common is the round worm and ascarides. The round worm occupies the stomach and small guts, the ascarides, which are small white worms, are chiefly found in the rectum, or great gut, and are sometimes found in vast numbers, but chiefly in adults who live an inactive or indolent life.

The tape worm I have never seen, and of course could not support the character of a worm quack.

There are a vast number of medicines considered remedies in worm cases, while the shops abound with worm destroying lozenges; every old wife has her nostrums, many of which will answer the purpose in some cases very well, but different cases require different treatment.

Calomel is the most certain, but where there is no

fever, and especially if the child look pale and has a large belly, iron, either in filings or rust, is better, but my method is to combine the two, according to the case. If the child be florid, or of a good complexion, and especially if any fever, calomel alone is the proper remedy—it should be given alone with any proper vehicle at night, in doses of from two to four or six grains, according to the age of the child, and a purge of jalap or castor oil every other morning to carry it off, and repeated every night for several nights and days, after which iron or bitters will be proper to prevent the production of another set, which will be the case if the stomach be left weak. When the child is pale or belly large, iron itself is the best remedy that I know of, and I think the filings the best, but the rust may do very well. The dose of filings should not be quite so large as that of the rust. The iron should be given in the morning in a little sugar or honey, and it should be repeated every morning for ten or twelve days, or according to circumstances. It is a very good method to mix calomel and iron together, and then it should be given upon an empty stomach, and the child should have something to eat about an hour after. When calomel is given, it is necessary to be careful that the child drink no large quantity of any thing cold at a time, for a few days afterwards.

There are a great number of things that will carry off worms at times, as the jerusalem-oak seed, given in large quantities, bears foot, &c.—when these are employed, iron or bitters should be given afterwards to strengthen the stomach—lime water is also considered very good to cleanse the bowels and prevent the generation of worms. To a child of two years old, two table spoon-fulls of lime water in twice or three times that quantity of other water a little sweetened may be given twice a day.

For ascarides, or the little worms in adults, the flour of sulphur given in doses of half a drachm twice a day for two or three days will be proper. A strong dose of calomel, as 15 or 20 grains, will generally

carry them off; but after such doses it will be proper to be careful not to get cold, and to purge it off well to prevent it from affecting the mouth, &c.—As these worms only inhabit the rectum, they may be destroyed by glysters with pretty strong lime water, tobacco smoke, lintseed oil, a strong decoction of the Carolina pink root, assafoetida, copperas water, or any other substance which would kill them when out of the body—the glysters should be retained as long as possible.

I have thought it probable that ascarides may sometimes occasion piles, from their irritation, as I have known persons troubled with piles discharge great humbers upon using flour of sulphur.

THRUSH.

This disease is well known. It consists in a number of exudations upon the surface in the mouth, and is not uncommon for such appearances to be seen about the annus, and is then said to have gone through the child, and it is probable that the whole internal surface of the intestinal canal may be in a diseased state.

It has been thought by some to be owing to the child living too much upon vegetable food, as pap, &c. but those who never are fed but with the milk of the mother, are also subject to it.

If the child be bad, it will be necessary to give magnesia, and if costive and the magnesia should not be sufficient to lobsen the belly, it will be necessary to give a small quantity of castor oil or three or four grains of jalap, and then to wash the mouth well with a strong solution of borax; and if the disease should then be bad, or appear about the annus, cause the child to swallow two or three tea spoon-fulls of it sweetened, two or three times a day until well.

RED GUM.

Children are frequently subject to eruptions over different parts of the body which is called red gum, and is frequently thought to be the itch; it is most common about the forehead, and children of a full gross habit are more liable to it than weakly children.

Dr. Reece seems to think it often owing to improper treatment, as washing them when young with spirits, soap, &c. but however improper it may be to apply such strong stimulants to the tender skins of infants, I am not of the opinion that it is owing to that cause, but rather to too full diet, heat, &c.

A gentle purge will generally abate the eruptions, but if that be not sufficient, an emetic and a spare diet, or starving in a measure, will soon remove the complaint. A small quantity of tartar given once or twice a day, not sufficient to excite vomiting, or but very slight, will scarcely fail.

INFLAMMATION OF THE BREAST.

From observation I am inclined to believe that children are more subject to pleurisy or inflammation of those parts than adults, and that many die with it while the cause is scarcely known.

Whenever a child has a small cough, draws its breath quick with a ketch as if in misery, or cries when it coughs, an inflammation of the breast is to be suspected.

The same treatment as in a like disease in adults will be proper, viz. bleeding, blistering, nauseating doses of emetics, &c. If costive, purge with calomel; and if it should not pass off well, give a little jalap after it, and repeat according to circumstances.

SURGERY.

Those diseases which are on the surface and are to be cured chiefly by external applications or operations belong to surgery, which in Europe belong to a separate branch of the science of physic, and is practised by men making a profession of it only, but in the greater part of the United States every physician practices surgery also, and a separation of the science I think unnecessary, and that every branch of the art of removing the diseases of the human body should be understood and practised by every physician.

INFLAMMATORY TUMOURS.

Inflamations may proceed from various causes and in any part of the body. They are known by heat and pain, with redness in the skin, swelling, &c. If the inflammation lie deep among the muscles, there may be little inflammation upon the surface. There is frequently a pulsation or throbbing in the part. The inflammation sometimes begins in the periosteum, or skin that covers the bone, and destroying that form an absces, it is then called a white swelling.

A common inflammation terminates either by resolution, supuration, or gangrene. Resolution is in most cases to be preferred, but when an inflammation happen in fevers, it is called a critical termination of the fever, and generally removes it.—If it is thought proper to scatter the inflammation (as it is usually called) the best application is a poultice of corn or other meal well boiled, pretty soft and large, and applied as hot as it can well be borne. It is thought by some to be better if made with a strong decoction of oak bark or vinegar—it should be renewed twice a day or oftener. Every good wife has her formulæ to scatter and another to ripen inflammatory tumours, but such distinctions are founded in ignorance and error. Heat and moisture applied will resolve an inflamed tumour if capable of resolu-

tion, if not, it will favor the supuration. It has become a favorite practice with many physicians to apply cold and cooling applications to inflammations, such as cold water, ice, a solution of the sugar of lead, &c. but from what trials I have had of this course, I am inclined to think it doubtful—it may frequently retard the progress, and when but slight may prevent it from progressing any farther, but they will often render the tumour hard and indolent, and it will be disposed to remain so for a long time.

There is nothing that will abate local inflammation more than bleeding, purging and small repeated doses of tartar emetic. Where these means fail of resolving the tumour, a supuration may be expected, for if they be employed at all in time they will prevent gangrene. A supuration will be easily perceived by the form of the part and some part becoming more pale, but if the matter lie deep there may be no visible paleness in the skin—upon examining the part by pressing upon it with the finger some part will be found softer and give way easy and rise again like a spring or bladder full of wind—it will then be proper to open it, the best method is with a lancet or knife, and it is better to make the incision too large than too small, it should be made lengthwise with the limb or muscle, for if it be made transverse, the wound will gape wide open—if the opening be made sufficiently large it will be unnecessary to put a tent or any thing in it to keep it open—it may be dressed twice a day with a soft poultice or common plaister to keep the air out, and nothing more will be necessary.

WHITE SWELLINGS.

A common white swelling differs but little from a common inflammation, except its beginning for the most part in the periosteum, and the injury which it so generally does to the bone, but this is not always the case, for some are only among the muscles and membranes. These for the most part arise from a

diseased state of the system, and if resolved, or a supuration should be prevented, without proper medical treatment, a person is seldom healthy for a long time afterwards.

Upon the first symptoms of a white swelling, it will always be necessary to purge and give the bark, alder bark, or other tonics, as bitters, &c. and poultice as in the case of common inflammations—if it supurates, the abscess should be washed out twice every day with lime water or a solution of blue vitriol—a scruple, to the quart, of the vitriol will make a very good wash—these washes will prevent the bone from corrupting and make it heal with as much ease as the softer parts. If the bone be much corrupted or affected, as sometimes happens, as the disease frequently begins in the bone especially in the spongy heads near the joints, it then requires a great deal of skill and knowledge of the parts to manage it with safety and certainty, while manuel operations are often necessary that require more skill than the amputation of a limb, and for which few of our modern physicians are competent, and yet I have known considerable cures performed by bold quacks with caustics. The main or essential points in these are to remove the dead parts of the bone and apply lime water, lie, or a solution of blue stone to the bone to make it cast off the dead parts and heal—in doing this it will generally be necessary to lay the bone bare with caustic, in doing which it will be proper to avoid injuring the tendons, nerves or arteries—if a tendon should be destroyed, it is troublesome to digest off and may injure some part. If a large nerve be destroyed it will render some part insensible, or may cause a loss of the use of a limb, or even a mortification of the member. If an artery should be destroyed the consequences may be equally as bad or worse, and might endanger the life of the patient by a sudden hemorrhage. A person who may think proper to undertake the cure of old ulcers with carious bones that is not skilled in anatomy, should work slow and careful by applying pledgits of tow or lint

wet with lime water, blue stone, &c. to the part and wash out the ulcers with a strong syringe twice a day, and by that means may often cure the worst of ulcers of that kind where there are no dead bones involved in others so that they cannot make their escape-- a hot iron (called an actual cautery) is an excellent application to rotten bones, and is to be preferred where caustic cannot be conveniently applied, as in the mouth, &c.

ULCERS.

An ulcer is a disease of the softer parts of the body by erosion or a wasting or eating away of the parts. The cause and distinctions of ulcers are various, and the treatment must be varied according to circumstances. The most obstinate and common ulcers, except cancerous, or schrophulus, is in the legs, owing to a circumstance that ought always to be kept in view during the cure, viz. the pendulous position of the part. Whenever inflammation or disease takes place in any part of the body an obstruction of the free circulation of the blood through the part takes place, which is still further increased by the pressure of the blood in the lower extremities, and this obstruction and weakness is very apt to remain after the ulcer is healed, and the blood remaining in the smaller vessels longer than it ought, parts with its oxygene so far as to have a black appearance and gives the parts a livery color, and for the want of the oxygene the part is not so well supplied with the essential ingredients of animation, and therefore the less able to remove the cause of disease.—

A sore in the leg may as easily be cured as in any other part of the body by proper management; and it is something truly strange that physicians so frequently fail in curing them, but it seems that too many are entirely ignorant of the cause, as they very commonly seem to depend upon correctors of the peccant humors that they suppose to abound, when in fact no such humors exist.

In the cure of ulcers of the legs, there are the following things necessary to be kept in view: First, to prevent or press back the fluids that fall upon the part by proper bandage—in the next place to drain the humors or super-abundance of fluids off at times by purging; and lastly, to dress the ulcer in other respects with moderately astringent and drying applications, as lime water, sugar of lead, lint, &c.

Bandages are necessary in almost all wounds or sores in the lower extremities, and however great the swelling and inflammation be, it will be safe to repel the swelling by proper bandages. There are two methods of applying bandages, the one is with a strap of linen about an inch and a half wide, and long enough to wrap the foot and leg up quite above the diseased or swelled part; the other method is with a laced stocking; it should be made of strong linen and lace up before, the holes should not be over an inch apart, the dressing laid smooth and a piece of thin leather laid along under the lace holes to prevent the dressing from wrinkling up under it; after the dressing has been put on, and the lace in, draw it moderately tight, beginning at the toe. It will feel somewhat inconvenient at first a while, but in a few days it will become quite easy, and at last the patient will feel awkward without it.

When a bandage is used, begin to wrap at the toe if the sore be in the foot or below the ankle joint, and if above the ankle joint begin on the ankle or below the ulcer and swelling and wrap it upwards, letting it lap over every time and draw it as tight as can be borne with ease, and its tightness may be increased at each dressing until it press all the swelling and black or liver colour away—it should be continued for some time after the ulcer is entirely well.

The rest of the treatment of ulcers in the feet and legs are various according to circumstances—the lips and parts about sometimes grow hard and thick, and are then called callous and will not heal well until the hardness be destroyed with caustic. Some are too dry and others too moist—if there be no dis-

charge, or but very little, in such warm applications as a turpentine plaister. Sometimes the ulcer is too moist, or discharges a thin watery fluid instead of a good pus—bark and other strengthening medicine is then necessary. The black alder bark is excellent, both in decoction inwardly and to bathe the part in. In most cases dry lint is the best application. An easy way to make the lint is to boil tow in a clean lie, and then wash it out in fair water, dry it and card it well.

In the cure of ulcers in whatever part of the body they may happen, the following rules are to be observed: If the bones are unsound, lime water and a solution of blue vitriol are to be used alternately a week at a time. If the ulcer be too dry and appear weak and pale; the bark should be given inwardly and the ulcer washed with a solution of corrosive sublimate and sal amoniac, a scruple of each to a quart of water—if it give pain, make it weaker by adding water. If the discharge be too great, it may be suspected that the bone is unsound, if not, a light diet or even purging will be necessary. Whenever it is intended to heal up an ulcer, a purge should be given once in ten or twelve days, except the patient be weak or the ulcer be dry; in that case, a full diet, barks, or other strengthening medicines will be proper, and warm applications to the part. In dry ulcers without swelling or inflammation, bandages are not proper, but in all others, especially in the legs and feet, bandages are of more service than all the drugs beside, and it is proper if the patient is able to go about at all, to use the limb and as much exercise as he is able without much injury. A compress, or some tow or a little bolster, should be put under the bandage to make it press the ulcer pretty tight.

Women after the ceasing of the menses, are frequently subject to ulcers about the legs and ankles, which are very commonly painful and hard to heal, and it is a common notion that it is improper to heal them as they preserve the health. There is scarcely any thing more disagreeable than an ulcer, and espe-

cially as a companion for life; and it is well known that the longer an ulcer is permitted to continue, the worse and the harder to cure, while they may always be certainly and safely cured while recent, and in this case nothing more is necessary than merely to increase the natural discharge or lower the system by a purge of jalap, to which a little calomel may be joined, and this should be repeated at intervals of from nine to fifteen days until the ulcer is well, and a little before the fall of the moon for two or three months afterwards; and in all cases of ulcers that have been of any length of standing, it will be proper to purge at times for some months afterwards, but more especially if it should look like breaking out again, or if a fever or any other disorder should come on.

In the cure of ulcers from the venereal disease, the solution of corrosive sublimate and sal amoniac is the most proper wash, as also for venereal ulcers in the mouth, and is one of the most powerful remedies for ulcers in the mouth from whatever cause.

SCIRRHUS.

Scirrhus are hardened glands, and may happen in any part of the body where there are glands and are known by their hardness—they frequently begin small and increase to a considerable bulk. A true scirrhus is without sense, except it terminate in cancer, which is frequently the case. It is certain that the limits between scirrhus and cancer are but very imperfectly marked, but it is known that all scirrhus do not terminate in cancer, although they ulcerate. It frequently happens that they terminate in cancer, and it is very difficult to distinguish them from a true cancer at all times before they separate, but a scirrhus may happen upon a large portion. I once saw the whole arm, hand and the parts about the breast become scirrhus after the extirpation of a cancerous breast. The swelled leg, mentioned under the diseases of women, has very much the appear-

ance of scirrhus. Some scirrhus are of a purple or liver color, but when they are round or uneven, of a livid or lead color, with enlarged veins stretching from it in every direction, they may be called cancer, as they never fail to terminate in inveterate cancer.

This is one of those diseases to which mankind are liable that frequently set our art at defiance, but this is not always the case.

There are two medical courses that may be pursued; the first is resolution, the other is extirpation. A true or insensible scirrhus will seldom if ever resolve or supurate well, but if they are sore or painful to the touch, they may for the most part be brought to supurate well, if not disperse. For this purpose a great number of drugs have been recommended, as the hemlock, night shad, (belaedonna,) hen bane, (hyosiamus,) lauro, cerasus, digitalis, and almost all the poisonous plants and substances known. I have myself tried some of them, but I believe none possess more power than the jamestown weed (stramonium) in England called thorn apple, and as it is an indigenous plant and to be had at all times in almost if not quite every part of the United States, it is to be preferred. A poultice should be applied to the part of the green leaves, made by roasting in hot embers, or the seed ground fine and sprinkled over a poultice of corn meal and applied warm, and renewed from time to time. A tincture should be made by steeping a quantity of the seed ground in spirits and strained—of a saturated tincture a person may take from ten to fifteen drops, and the dose increased two or three drops at a time until some dizziness and blindness be perceived. I have taken this tincture in a dose of forty drops, which induced a swimming of the head, a blindness and staggering like drunkenness, with great drouth but without any sickness at the stomach; the blindness from such a dose will last for 24 hours or more; two smaller doses a day will be better than one large one. I have known the jamestown to resolve or supurate swellings of a long

standing that had every appearance of becoming cancerous, and it ought to be persisted for several weeks or even months. Where a long course of medicine is necessary, it is always best to change a medicine at times for others of the same class and where the disease should prove obstinate and cannot be removed by extirpation, hemlock or some other of the same class of plants may be substituted at times. If it supurate it should be washed out alternately with a decoction of jamestown and lime water, or the corrosive sublimate solution until healed.

The next method of treating scirrhus tumours, is by extirpation, but I should always prefer treating them at first a while as above, but if in the mean time they should increase in bulk it will be proper to extirpate them immediately; and as this ought always to be done by an expert surgeon I cannot think it necessary to give directions for the operation. However, if the tumour be small and lie shallow and free from any turgid vessels, it requires but little skill; it may be done by caustic, but much better by the knife. After extirpation if it attempt to form again in any of the neighboring parts, the jamestown should be industriously employed, and if inflammation, bleeding and purging.

CANCER.

From what has been said upon scirrhus it is not necessary to treat so full upon cancer, for as observed above, it is difficult at first to distinguish a genuine cancer from scirrhus, but there are two or three ways in which cancer first make their appearance. A genuine cancer begins in a small hard tumour in some part of the body, but most frequently in the breast of women— as it enlarges it becomes unequal—sharp burning or darting pains shoot through it—when it fixes itself to the skin it is of a purple or lead colour, the veins are enlarged around it and are crooked and largest towards the tumour—these veins and the body give it somewhat the appearance of a sea crab,

called cancer, or canker in latin, and is a proper distinguishing mark in ulcers supposed to be cancerous.

Another and the most common form of the commencement of cancer, is in a dry scab or horny pustle in the face of aged people—they are frequently the remains of ringworms, and will sometimes remain for years or for life without any injury, but if disturbed by caustic or corrosive applications, never fail to terminate in the most inveterate cancers, and are hence called *noli me tangere*, that is, touch me not, and is a very good caution against the officious meddling with quacks and quack remedies. When a cancer happen in the leg it is called *lupus*, that is a wolf, from the rapidity with which it destroys the part.

The only cure of cancer is extirpation, and which should always be done by the knife if practicable.—The vulgar notion of roots is an error—a cancer is a hard cartilagenous substance of a circumscribed surface, and there are no roots or any other cancerous substance out of that tumour, except viciated juices, and if it be entirely extirpated the wound will heal with as much ease as any other, but if the tumour was large or ulcerated, although it might not have been very large, the parts about and especially the glands in the neighborhood, are very liable to become scirrhous, and always should be checked upon the first appearance of any hardness, by the remedies prescribed under scirrhous.

If in any case the amputation of a cancer is attempted by caustic, it should be done as speedily as possible—every cancer quack has his arcanum for this purpose, the basis of which is generally white arsenic or rats bane, and is generally esteemed the best, but it leaves an ulcer that is hard to heal. The best method of applying it is thought by some, to mix it up with some substance in the form of plaister, with dock root or any other glutinous substance.—The eschar or dead part ought always to be cut out and a new plaister or quantity of the caustic applied

immediately until the tumour is destroyed, and then the ulcer should be sprinkled with red precipitate or a mixture of red precipitate and burnt alum, for one or two dressings, after which it will then dispose to heal.

There is no disease in this country in which quack imposters does more harm than in pretending to the cure of cancer. There are several little tumours that are particularly considered as cancers by the ignorant and quacks, that have nothing of cancer in them, and would almost universally get well of themselves if let alone; but the unfortunate person has a suspicion that such tumour may be a cancer—he applies to some person who has had such a cancer and has been cured by some quack, to know whether it is a cancer or not, when in fact they are both ignorant alike—it is pronounced a cancer, the cancer quack also pronounce it one, applies his caustic and soon has an ugly ulcer, lays the bones and tendons bare—the eschar separates, nerves and fibres are found strong; these are called the roots and must be drawn out, which is done by giving the most exquisite torment, like a fiend or fury he proceeds in his work until the patient is wearied and flies from him, and applies to some whose method of cure is more mild—the seventh son of the seventh son lays his sacred paw upon it and whispers some pious ejaculation over it, and bids his wondering patient depart in peace and be well, and as his faith so is it unto him, who now with the eye of faith sees the hand of the divine conjurer inflated by the abstraction of the morbid matter. Some ointment or a little lint does the work at last, and he is cured.

It is a thousand pities but such as suppose they may have a cancer would consult a physician who is famed for his honesty as well as skill before they submit themselves to be mutilated by such infernal ignoramuses. It must be acknowledged that even in consulting a physician, a person is not always able to escape imposition, for the insatiable thirst for money so frequently predominates that they are too apt

to take advantage of the ignorance and credulity of the unfortunate patients to enrich themselves ; but I think that those who will pay strict attention to the following rules will be able to escape : First, pay strict attention to the description of the cancer and scirrhus in the beginning of this chapter, as first, that a cancer scarcely ever comes on suddenly but is frequently years without doing any harm—it either comes in the form of a hard tubercle, or gland, or in a dry scab or horny excrescence on the face, &c.—Secondly, that it generally has a purple or livid colour where it affects, and that the veins are enlarged around it, at least as soon as it becomes ulcerated.—The last evidence is negative, or that which shews those diseases which are so frequently taken for cancer not to be such. The diseases which are so frequently taken to be cancers are the following : Epinictus, terminthus, carbuncle, and spongioid inflammation. Epinictus is so called in the greek from its coming in the night—it begins by a blister if it happen where the skin is thin, but if it happen about the hands where the skin is thick it arises like a horny substance, forming a wartlike substance of a liver colour, sometimes with considerable inflammation and pain. When it begins by a blister it sometimes contains a bloody water and is of a dark colour and soon rises up like a wart, and is very sore and painful—it is very common for several to happen about the same time—they are commonly called among the vulgar cancer warts or cancers, and is the most common disease treated as cancer by quacks. They will generally supurate about the base after some time and come away without the assistance of any medicine—a soft poultice will hasten the separation, and especially the jamestown. Terminthus differs very little from the former, but is less and blacker, and is called terminthus from its being of the colour of the turpentine tree—it also soon separates and heals up of itself—they both look very ugly at first a while, gleet or discharge a bloody matter and are very painful, but are entirely without danger.

Carbuncle is kind of boil, it comes on the spine, about the joints, neck, or other parts of the body where there is no fat—it has many heads but does not supurate well, the parts below being membranous are tough and do not slough away, the ulcer continues to spread and is exceedingly painful, and if not properly treated will frequently bring on a typhus fever; and death may be the consequence—this by quacks is called a frightful cancer, they apply their caustics to it and the torment suffered is inconceivable. The jamestown poultice will in a short time digest it out and it will heal kindly; but if much fever happen it will be necessary to bleed and give a purge.

POLYPUS.

Polypus is an excrescence which may happen in any part of the body, but most commonly in the nose. They are of two kinds, one is a fleshy substance of a purple or liver colour, the other is more red and painful. These are generally considered cancers by the vulgar, and sometimes make employment for quacks. The first or fleshy polypus has nothing cancerous in it, the other is of a more malignant nature, and by improper treatment might terminate in cancer.

The only remedy in most cases is extraction; they are commonly small at the bottom, and by taking good hold of them with a pair of forceps they may be twisted and drawn out by the root, but these operations in general require a good deal of skill—the red polypus should not be meddled with but by a skilful surgeon, except in its first stages, it may then be destroyed by applying a strong solution of sal amoniack to it from time to time, the other will also give way while small to the same treatment.

PTERGIUM, OR FLY WING.

This is a small three-square membrane found upon the eye, spreading from the outer or inner angle, but sometimes from other parts of the eye towards the pupil.

The common method of cure is extirpation. It may be taken up by a pair of small pointed forceps and cut off with a keen knife. The eye should be kept from the light a few days until the inflammation goes off.

ENCANTHIS.

This is an excrescence that arises in the inner corner of the eye, and is only removed by extirpation, as the above. These operations may be performed by any handy person, but great care should be taken not to wound the eye any deeper than merely to take off the filament.

PARONYCHIA.

This is what is commonly called whitlow, or joint felon. The signs are too well known to need any description. They commonly come about the fingers ends, but sometimes it comes in the palm of the hand, drawing it shut, and are sometimes thought to be a wonderful cancer by the ignorant.

When on the fingers it is a common practice to repel them by wrapping the fresh skin that is in an egg around them, which by shrinking will press back the tumour and remove the disease if applied in due time, if not, a jamestown poultice should be applied hot and renewed twice or three times a day, and when ripe it should be well opened with the lancet and washed out with a strong lime water twice a day.— They will heal up under this treatment as quick and safe as any other abscess.

The great mischief done by these little tumours, is by the matter lying upon the bone and corrupting

it, as they like white swelling always begin in the periosteum and leave the bone naked.

PTERYGION.

This is a fleshy excrescence about the nail, it is exceeding sore and painful upon the smallest touch, they frequently follow a whitlow that happens about the end of the fingers or toes, and if not cured will seldom get well of themselves, but there are many other causes, as bruises, &c.

The cure can seldom be performed without destroying the excrescence with some caustic or corrosive application. After cutting away the nail, burnt alum or red precipitate may be applied, and repeated every day for three or four days; if that be not sufficient some stronger caustic should be applied, as corrosive sublimate or a bit of common caustic, or what is less painful, a hot iron, after which the place will heal up without any further trouble.

WARTS AND CORNS.

Warts may be cured by cutting them off and rubbing the place with a piece of blue stone at times until well.

Corns may be cured by cutting out the hard part as clean as can well be done, and then sticking a piece of pretty thick soft leather over it with a hole exactly over the corn and keeping it on for a few weeks.

GANGLIONS.

Ganglions are small tumours that come upon the tendons about the joints of the wrist. They may sometimes be removed by hard pressure, or binding a plate of lead upon them, or anoint them with a liniment, (directed page 54.) If they give way to none of these means, they may be removed with the knife, by opening the skin and cutting them out at the base.

OPHTHALMIA, OR SORE EYES.

Sore eyes is a very common complaint in Kentucky—it is the worst towards the fall. If the disease happen suddenly and violent, bleed and give a dose of salts, and bathe the eyes in cold water; and after the inflammation is over, bathe with a weak solution of the sugar of lead or white vitriol, or anoint the edges of the eye lids at night with a little white ointment made of the sugar of lead.

Sometimes the disease will, without proper treatment, become habitual, and is then more difficult to cure and will require a light mercurial course, and the use of the sugar of lead ointment for a considerable length of time; it will also be of service to wash the eyes in cold water every morning—avoid sitting up late and drinking spirits, live upon light diet and persevere in the means for sometime after the eyes are well.

TETTEROUS ERUPTIONS.

There are a number of diseased states of the skin partaking of this nature from a common ringworm to that of the elephantiasis or leprosy, and there are few diseases which are transmitted more certain to posterity. They always ought to be cured upon their first appearance. A strong mercurial ointment is one of the best external applications, and should be repeated from time to time until the disease is removed, and every time it attempts to make its appearance again it should be checked immediately. For tethers, or even ringworms, when they prove obstinate, an ointment made of the corrosive sublimate by grinding very fine and mixing with some common plaister or tallow is a more powerful remedy—it should be made pretty weak or it will take off the skin and give pain. But if the disease be of a long standing, or prove violent and obstinate, a mercurial course with frequent purging will be necessary, and may require six or eight weeks to remove the

disease effectually, and towards the latter end of the course it will be necessary to make use of the tartar emetic in small doses as an alterative, as also the elixir of vitriol or nitrous acid. People ought to be very cautious and not permit these eruptions to remain long, especially old people, and more especially in the face.

SCALD HEAD.

Scald, or sore heads in children, are so much of the nature of tetter, that it is scarcely worth while to repeat the remedies. The common practice of cutting off the hair is improper, for although the head may cure up the sooner, it will be much more sure to return again after the hair grows out. Frequent purging is always to be employed in the cure of the scald or scabby head; and after it has once been cured up, if it should make its appearance again, a purge should be given and the parts anointed with the sugar of lead ointment, and repeated until well.

This disease was formerly considered as almost incurable, but by proper attention the worst cases may be cured without cutting off the hair—frequent purging with jalap, and if the eruptions have any tetterous appearance, it will be necessary to give a mercurial course, with tartar and elixir vitriol—wash the head every dressing with a lime water of half the strength of pure lime water, viz. make it as strong as it can be made and then put in an equal quantity of common water. Where lime water cannot be had, soap may do, and then anoint with the sugar of lead ointment.

BURNS AND SCALDS.

Apply as soon as possible spirit of turpentine, and repeat it as occasion may require—if spirit of turpentine should not be ready, spirits will answer, or soft soap—it should be kept warm. After the pain and smarting is over, apply a soft poultice, or anoint

it with lintseed oil—a cloth dipped in sweet cream, or if the burn be deep apply a poultice of slippery elm bark.

WOUNDS.

Wounds are to be distinguished into two kinds:—1st. wounds made with a sharp instrument—2d. contused wounds, or wounds made by a blunt weapon, as gun shot wounds.

A wound made with a sharp instrument, as an ax, a sword, &c. require but little skill in the treatment. If it open, bring it together as well as possible and fasten it so with good bandages. Nothing should be applied but soft lint—the practice of applying sugar, soot, salt, balsams, &c. is injurious—there is no balsam so good in fresh wounds as the blood. If there be no bruise, the dressing should be kept on four or five days before it is taken off; at the second or after dressings, if any part lie open it should be filled up with a dry lint and a plaister or paper laid snug over it. It was formerly a practice to stitch up wounds of any size, but this is rarely practised of late, except large wounds of the belly, &c. Instead of sewing, slips of linen may be spread with sticking plaister and laid across. If the bones be cut or wounded it requires a different treatment—if the injury to bones be great, it will be necessary to wash it out with lime water, or a weak solution of blue stone to prevent the bone from corrupting.

When there is a great discharge of blood from a wound which should appear dangerous or should continue so as to weaken the patient, and the wound be in a limb, a tight bandage should be made above the wound by a leather strap, and a stick through it to twist it tight, a piece of leather should be placed under it to prevent it from pinching the skin, and twisted so hard as to stop the blood, then wash out the wound and slacken the bandage and the open vessel may be seen—if it be an artery the blood is of a scarlet color and shoots out by spurts—the surest me-

thod is to tie a thread around it pretty tight, but this often requires instruments and a knowledge of their use ; but what will generally answer very well, is a hot iron, of a proper size and shape, but if neither of these can be used, a stupe of tow dipped in a strong solution of blue vitriol will generally succeed—copperas or alum may answer. In the management of a simple wound, there is often more damage done by improper applications than for the want of medicine. It is proper to keep them clean and to dress them with dry lint alone, except the wound should appear unhealthy.

CONTUSED WOUNDS.

Of these wounds we shall take gun-shot for an example, for the flesh is always contused, torn and dead in wounds from a ball, but not so much so from a small as a large one, and still worse from the bursting of a gun.

The main art in curing these wounds, lies in cleansing the wound at first from lint, splintered bones, or any other extraneous body that may be carried in with the ball ; also, if there be any dead or ragged parts they should be cut away smooth—wash the wound clean, and if any bone be splintered, be careful to extract all the splinters clean. The wound after washing clean should be dressed up with lint and proper bandages to keep it on. If the wound penetrate the breast, a plaister should be laid over to keep the air from passing through the wound, and the dressing taken off twice a day, and the blood and matter discharged, and the wound washed out with a decoction of oak or dogwood bark.

These wounds are more liable to mortification than any other, from the dead parts within which must of course communicate a taint, if not guarded against by frequent washing with antiseptics.—But gun-shot and other contused wounds are gener-

ally great and dangerous, and therefore a skilful surgeon should be employed.

All concussions or wounds with great force upon the head are dangerous, and often so when they appear but slight, and whenever stupor, vertigo, or delirium attend, there is always danger although the skull is not broken. From the rupture of small vessels within the cranium a collection of blood takes place and presses upon the brain, the patient becomes sleepy or dumb and sometimes delirious. This is always attended with danger, and according to the degree of the symptoms so is the danger. Sometimes these symptoms come on immediately, in others not for some time--in some cases the symptoms will hardly give suspicion of danger long before the fatal hour. Locked jaw is often the consequence of a stroke upon the head.

When the above symptoms follow a wound on the head, the patient should be bled freely and a mercurial purge given once in four or five days, and calomel given in small doses to excite a slight salivation; but if the symptoms continue violent, it will be necessary to open the cranium with the trepan, for which purpose a regular physician should be employed.

GANGRENE AND MORTIFICATION.

A gangrene is the beginning of mortification. After a violent inflammation has continued some time, it blisters and becomes pale, livid or black, it is said to be gangrene, but if the parts be quite dead it is called a mortification. I have seen a species of gangrene and mortification commence by the skin rising up like rolls of wheat dough, the parts remaining hard and tumid beneath, but gradually became softer as a compleat mortification takes place.

If there be no fever, or the fever be not high, give bark and camphire in substance—half a drachm of bark and about 15 grains of camphire, about four times in the day—scarrify the parts to the quick and

apply table salt and a poultice of corn meal over and renew it twice or three times a day. The practice was formerly to apply spirits of turpentine hot; and spirits camphorated, but every thing which gives pain should be avoided. I have always applied salt, it gives no pain—the dead parts shrink and separate from the living in a short time, leaving the living sound and clean—whenever the dead parts begin to separate it should be washed out clean at every dressing with a decoction of oak or dogwood bark and salt, but as the separation becomes more complete the salt may be discontinued, but the poultice continued until the dead parts has separated, and then wash with lime water and dress with dry lint.

BITES.

It frequently happens that men in fighting bite each others fingers, which is commonly attended with bad consequencess, and sometimes mortification. Such wounds are to be considered as contused wounds, and commonly with great injury to the bone, the periosteum being bruised, and often being destroyed leaves the bone bare.

Dress it from the first with a poultice—wash it well with lime water or a solution of blue vitriol—if the inflammation run high, bleed and give a purge, and if the pain and inflammation still continue, give small doses of tartar emetic.

FRACTURES.

When a bone is broke, the first thing is to place it together again and secure it with proper bandages to keep it in its proper position until well. When a bone is broke and the ends slip past each other, the muscles often contract and it requires considerable extension to bring the ends together again—if the muscles be strong and it cannot be placed by extension, bleeding plentifully will be of great service.—To describe every motion necessary in setting a bro-

ken bone, would far exceed the limits assigned this work; but the following rules will generally answer: Place the limb in its right position, let one man extend or stretch it lengthwise, while another place the two ends of the bone together, and then apply a bandage. The best way to make a bandage is to take a piece of seal leather, soak it, and while wet let it be put upon the limb of a sound person about the same size until nearly dry, when it is to be taken off and put upon the broken limb and kept on until it be so strong as not to need it any more. If the parts should itch, inflame or excoriate, the bandage should be loosened and the parts rubbed gently with a solution of the sugar of lead. It is a common practice to keep the limb wet with vinegar—the vinegar can have very little effect upon the bone, if it had, it would be injurious, as it would weaken it—it is also applied to sprains, but with a worse effect.—A broken bone requires no application but the bandage, and the sugar of lead lotion in the case of excoriation. I have known joints kept weak a long time by the constant use of vinegar. To strengthen a bone or joint, spirits of turpentine is the best taken inwardly, and a plaister outwardly. If pain and inflammation run very high, it may be necessary to bleed, and a spare diet will be best, on two accounts: as it will be a means of preventing inflammation, and render the inconveniency of the stool the less necessary.

It generally requires from 16 to 25 days and sometimes longer for a bone to come strong enough to move with safety.

LUXATIONS.

To reduce a luxated joint requires rather more ingenuity than a broken bone, but where there is no great force necessary, neither requires much, and both are oftener performed by handy persons than by professed surgeon.

The dislocated jaw, shoulder, elbow and hip are the most difficult.

The luxation of the lower jaw is known by its hanging down, and the patient is unable to shut his mouth. In order to reduce it, put the thumbs upon the jaw teeth and the fingers under the jaw, press the hinder part of the jaw down and raise the fore part up, and bring the foreteeth together.

SHOULDER.

The shoulder is known to be out of place by a hollow on the top and the head may be felt under the arm, and the elbow cannot be brought so close to the body as the well one.

The best way to reduce the shoulder, is for a strong man to put a girt around his shoulders and under the arm close up, and then place his hands on the shoulder against the shoulder blade and collar bone, in the mean time another person sits on the other side and holds the arm down as close to the side as may be and the hand is held forwards, when he that is to reduce it draws the head of the shoulder bone out, and at the same time pushes with his hands against the blade, &c. The intention being to raise the head of the humerus or arm bone out from the blade and at the same time to press the shoulder down into its proper place.

ELBOW.

The elbow may be put out of place two ways, backwards, and forwards. If it be luxated forward, the arm hangs out, and a knot on the inside and hollow on the outside where the elbow should be—if it be luxated to the contrary, or backward, the cavity will be on the inside and the arm crooked.

In order to set it three persons are necessary, one to hold the arm above the elbow, another the hand, these are to pull the joint apart, while a third presses on the inside of the arm, bending the elbow so as to bring the hand towards the breast. If the luxation be to the contrary, the same number of per-

sons are necessary, and the surgeon's part in setting the arm is merely to assist in guiding the joint into its proper place.

The signs and the operations for the hip is nearly the same as that of the shoulder, while the rest will be easily understood and performed by any handy person.

The reduction of the hip generally requires considerable force as well as some skill. If the hip be luxated forward, the head of the bone may be felt in the groin, or a little below, the knee will be turned outward and the leg will appear longer. If it be out backward, the toes will be turned inwards and the leg will appear shorter-

If it be out forwards, the patient should be laid on his back and a pin go into the table in his crotch, wrapped with cloth to keep it from hurting. a girt is to be put round the inside of the thigh to draw outward by; the leg should be placed in its right position, and the knee brought up toward the belly, while the head of the bone is drawn outward into its place.

If the luxation be backwards, the patient must be laid upon his belly, the thigh must be drawn down with considerable force, while the leg is bent back and held in its right position untill the joint is in.

The patient ought to keep his bed for some days untill the inflammation goes off, for if it should slip out again it will be much worse than at first.

If the muscles should be very strong and the reduction thereby rendered difficult, plentiful bleeding will always be of service.

A COMPENDIUM OF ANATOMY,

OR

A CONCISE DESCRIPTION OF THE CONSTITUENT PARTS OF THE HUMAN BODY.

IT is scarcely possible to understand Medical language, or to form any correct idea of the seat and cause of diseases without some knowledge of the seat and office of the parts concerned; I have therefore thought it necessary to subjoin a short description of the principal constituent parts of the human body, those who may wish to gain a more general knowlege may consult Cheselden, Bell, &c.

The constituent parts of the human body are, **Bones, Muscles, Tendons, Cartilages, Ligaments, Membranes, Fibres, Arteries, Veins, Glands, Lymphaeducts, Lacteals, and Nerves.**

The bones serve to give shape and strength to the body, and their form and strength is adapted with wonderfull ingenuity to the various purposes for which they are intended.

The cranium, or scull bone is composed of ten pieces, the joints are called sutures; os frontis, or forehead bone makes the fore part of the head and is joined to the bones of the face by a suture which runs across thro the sockets of the eyes, it joins two large bones which make up the greatest part of the head on each side by a suture that runs across from ear to ear; these bones are called parietalia, and are divided by a suture that runs from the front bone to the back of the head where it divides leaving another pretty large bone called occipitis, thro which the spinal marrow, or rather brain passes—there are two small rounb bones that lie immediately under the ear

and are about the size of the ear, they are called *osa temporum*, or temporal bones; the rest of the bones are small and seated in the lower and fore part of the head over the palate &c.

There are sixteen bones that belong to the face besides the lower jaw.

The bones of the trunk of the body are the spine, or the back bone, which is composed of twenty four vertebra or joints, besides the *os sacrum* and *coccygis* or termination of the back bone. seven bones compose the neck, twelve the back, and five the loins the *os sacrum* is generally five or six bones, the *coccygis* is four.

The ribs are twelve on each side, the seven upper are called the true ribs, and the five lower, are called bastard. They serve to defend the heart, lungs, stomach and liver from external injuries, and to assist in breathing: the ribs of children when young are very tender, and ought to be handled very careful: the sternum, or breast-bone is generally made up of three or more: to this the true ribs are fastened

The *ossa innominata*, or the nameless bones, are in young persons made up of three, the upper which make the hips are called *ilium* from their inclosing the small guts called in latin *ilia*; the hinder and lower part is called *ischia*, and the lower part where they meet before, are called *os pubis*.

The bones of the upper limbs are the clavicle or collar bone, scappula, or shoulder blade, the *os humeri* or upper arm bone, the radius, the large arm bone, the ulna or little arm bone. there are eight bones in the wrist called *carpi*, the four bones of the hand are called *metta carpi* &c.

The bones of the lower limbs are the *os femoris*, or thigh bone, the tibia, or greater leg bone, the fibula or little leg bone, patella or knee pan.

The foot is composed of a number of bones like the hand, the upper part of the foot is called *tarsus* and is composed of seven bones called *tarsi*; the foot is composed of 14 bone called *metatarsi*, the largest of the tarsal bones is called *astragalus*, and supports

the tibia, and is supported by the os calcis or heel bone.

Children are sometimes born with their feet turned inwards, and without proper management are cripples for life, but with right management and care may be brought to walk very well:—The only way is to make a boot or stocking of about half tanned leather, have it well soaked, put it on another small child till dry, when the feet are to be placed right and the boot laced on and kept on untill it is able to walk well, they are to be left open before and a lace put in.

Diseases of the bones. The bones are subject to disease from other causes besides breaking: The most common is occasioned by white swellings; it is doubtful whether white swellings generally begin in the bone or in the periosteum, and by destroying that corrupt the bone, but often begins in the bone enlarging it, and corroding away the inside, this most frequently happens in the jaws, it is called spina ventosa. when a white swelling happens on a hard bone the diseased part is easily made to separate, but when it happen in the spongy parts it is more difficult to cure, and it is said sometimes to cause so great a discharge as to cary off the patint in spite of all remedies, but such a case I have never seen.

Since printing the treatise on white swellings I have had two cases of that disease in the first stages, both were resolved by giving a puke, and then giving small doses of tartar at intervals of two or three hours thro the day, and applying the james-town poultice to the part.

The venereal disease, when of long standing will affect the bones with nodes and roteness, especially the harder parts. as the bones of the hands, arms, head &c. sometimes eroding the bone or raising it up in knots which become crumbly like sand.

There is a disease mentioned by writers under the name of moliter osibus, that is, softness of the bones in which the bones loose their hardness and become

soft like a cartilage, and the patient dies a miserable death, as there has been no remedy discovered.

The method of curing the diseases of the bones has been pointed out under their proper heads; the main point being in the dressing: a bone should always be dressed with dry lint, or wet with spirits or lime water only, if the bone be unsound it should be washed with lime water or a weak lie, and touched with blue stone, greasy applications always foul the bone and cause it to corrupt.

MUSCLES.

Muscles are the different portions of flesh which by contracting give the various motions to the different parts of the body, they terminate in tendons, or sinews and are connected to the bones, or passing over a joint, connect two muscles together and the size and number is suited to the different motions of the part. About the neck there are a vast number which are employed in giving motion to the head, a considerable number to the tongue, and still more to the eyes—Such as serve to close certain orifices are called sphincter muscles, such are those of the mouth, the anus, the neck of the bladder &c. they are circular and lie round the part like a ring which by contracting close the orifice.

From what has been said some idea may be formed of the muscles but from the vast number which form the body it is impossible to acquire an accurate knowledge of them in general from any limited treatises.

The muscles are endued with a high degree of sensation, and are subject to great pain in inflammation &c. There are some diseases which cause great contractions of the muscles, many nostrums are celebrated among the vulgar for curing these, as ointments &c. but the only remedy which I know of is to cure the disease upon which it depends, and then the contractions soon goes off.

TENDONS.

From what has been said above it is unnecessary to say much upon the tendons; they are the terminations of the muscles which are given that form for the more convenient insertion in the bones, and for passing over the joints; they are scarcely subject to disease except from injuries. It has been a question with some whether the tendons are sensible or not, but any person who has a wound in a tendon will perceive upon touching, or cutting, a deep pain of a peculiar kind.

CARTILAGES.

A cartilage is what is usually called gristle, they serve to cover the heads of the bones at the joints with a smooth white coat, and also to connect others together in a strong, yet flexible manner, as the ribs to the breast bone &c.

LIGAMENTS.

Ligaments are of the same substance as the sinews and serve to tie the joints together and some other purposes; there is a ligament which is inserted in the heads of the bones and help to hold them together while the joint is mostly surrounded with them, when a joint is dislocated the middle ligamen is commonly broken and makes it always easier to be put out again.

MEMBRANES.

A membrane is a thin strong substance that serve various purposes, but chiefly as a lining to the cavities and to separate parts, as the muscles which are covered with a fine membrane; they are generally of a tendinous substance: the following are some of the principal membranes.

DURA MATER,

Is a strong membrane that lines the inside of the skull and saves the life of thousands by preventing injuries to the brain when the skull is broken, it is easily separated by a stroke upon the head, but joining at the sutures passes through between the bones cannot be separated there.

PIA MATER.

Is a fine tender membrane that covers, and closely adheres to the brain, and penetrating thro it, divides it into lobes &c. A wound breaking this is always considered mortal, for however small, the brain will continually keep working out until the patient dies—Wiseman in his treatise on surgery gives an account of a man who was shot thro the head that lived seventeen days, and walked a considerable distance on the fifteenth day but died on the seventeenth howling like a dog.

PLEURA.

Is a fine, strong membrane which lines the cavity of the breast, and meeting in the middle forms the mediastinum, which divides the breast in two parts. An inflammation of this membrane is attended with considerable pain, and is called pleurisy, sometimes an inflammation of this membrane and diaphragm is attended with considerable pain in the head, and has been termed by some of the ancients, head pleurisy and hence the term head pleurisy is applied by the vulgar to every violent head ach:—The strong membrane which covers the heart is called pericardium, or heart purse.

There are several diseases of the breast besides those mentioned, inflammation frequently causes the lungs to adhere to the pleura, there is sometimes a collection of water in the cavity of the breast, and is called hydrothorax &c. &c.

PERITONAEUM.

The strong membrane which lines the cavity of the abdomen is called the peritonaeum, it also incloses and covers the parts contained.

A rupture of this membrane is a very common, troublesome, and sometimes fatal accident; in men it generally happens about two or three inches above the os pubis, and on one side, being the place where the spermatic vessels pass out—in women it is a more rare disease. When a rupture first happens it may be pretty certainly cured, but the enormous expence of five or six dollars generally deter the unfortunate patient from attempting any thing more than present relief; this in parents is unpardonable, especially when it is known that in children it can most certainly be cured.

The only certain remedy is a steel truss made with a bolster to fit snug, and press upon the part, and worn for a twelve-month or more; this will scarcely fail to perform a permanent cure, but if it should fail (which it may if not employed in time) it will be necessary to wear it constantly, and by habit it will soon come to be but little inconvenience.

OMENTUM.

The fine membrane that hangs like an apron over the guts, is called omentum, or cawl, it is connected to the stomach, spleen, diaphragm &c. It serves as a washer to prevent the attrition of the bowels against the peritonaeum.—it saves the life of many by sheathing the point of a knife when stabled.

ARTERIES AND VEINS.

Arteries are the blood vessels which convey the blood from the heart to every part of the body; they are stronger, more firm, and whiter than the veins—they begin large at the heart and branch out until they terminate in extremely fine vessels and are then

called capillaries, they then unite with the veins which receive the blood and convey it back to the heart:—The heart is the center and source of the circulation, and in all the hot blooded animals is double and carries on a double circulation as follows—

The veins meeting as they proceed from every part of the body form two large trunks which entering the heart on the right side, forming the auricle or ear, one trunk is called vena cava descendans, and the other is called vena cava ascendans—the blood passing to the heart by these, is pressed into the ventricle, or cavity of the heart, which contracting force it into the lungs by the pulmonary artery, it from thence returns to the left auricle, by the pulmonary veins and is pressed into the left ventricle, which contracting drives the blood out by the great artery, by which it is distributed to every part of the body, the aorta ascendans, (great ascending artery) leaves the heart at the upper part and ascending a short distance divides into two branches, one continuing its course upwards, is distributed to head and superior parts of the body; the other branch descending, commences aorta descendans, and is distributed in the lower parts of the body and extremities, so that there is two circulations continually going on; by one the blood merely passes through the lungs by the other it passes through every other part of the body; by the circulation through the lungs it is charged with oxygene from the air, which gives it a bright scarlet color which it loses before it returns to the heart again, hence the blood from an artery may always be distinguished from that of a vein.

The circulation of the blood was never understood untill about the year 1619 Dr Harvey discovered that it circulated as above, his discovery met with violent opposition for sometime, but by frequent experiments was established past controversy; this discovery has effected a great change in the practice of physicians, but not so suddenly as might have been expected, and such is the powerfull influence of custom that many physicians to the present day, in a

measure are governed by ancient customs which have not the least shadow of reason to support them.

The ancients, and even some modern physiologists suppose the blood to be alive, but if it possesses evidence of life more than the chyle, or aliments we eat, I know not wherein it is to be discovered; it appears to me that the blood is merely a vehicle to convey the chyle into the system and as a fluid in which the different material for the support of animation is prepared and applied—hence if blood be drawn an hour after eating a full meal, when the blood cools a milky serum will be seen upon the top, in two or three hours more this fluid becomes yellow, and in an hour or two more it entirely disappears, being applied to the various purposes of nutrition &c.

The blood when it returns from the lungs is of a bright scarlet color, and is said to contain little bubbles of air, which I suppose to be oxygen not yet incorporated, hence they are called arteries or air vessels,—the ancients used to call them the leaping veins, calling the wind pipe only an artery.

The blood by the ancients was often thought to be in fault and the cause of disease, and such is the language of the vulgar to this day (for there is scarcely an opinion among the knowing vulgar but what was held by the ancients) but this is the case in but few diseases, except as a vehicle it may carry noxious gases into the system, which even may act as a taint upon the blood it self, but whoever will attend to the sudden changes which frequently take place in the appearance of the blood, will soon be convinced that the diseases of the blood is not very permanent, or of long duration.

In pleurisy, and other diseases of the lungs, the blood, upon standing untill cold, will have the appearance of pus in it; in fevers, the gluten separates and forms a tough coat over the top, while the red part is of a darker color, and settles to the bottom.

An over quantity of blood, has been considered as a disease or the cause of disease, and is called plethora—this I think an error.

GLANDS.

The glands are what is usually called kernels, the liver, the kidneys, and the pancreas are the largest, the glands are very numerous, and found in almost every part of the body, their use is to secrete from the blood various fluids, the liver secretes the bile, the kidneys, the urine, the salivary glands the spittle &c. An artery, and a nerve supply blood and sensation, while the gland separates from the blood its proper fluid.

The liver is the largest gland, and is seated in the right hypochondrium, its office is to separate an almost incorruptible fluid called bile, or gall, which in part is deposited in the gall bladder, from which there is a duct or passage leads to the gut and enters it a few inches below the stomach; another duct proceeds from the liver and joins it before it enters the gut. Through these the bile pass, and mixing with the aliment prevent it from becoming putrid before the chyle be separated from it—The quantity of bile secreted by the liver in a given time is intirely unknown, but some suppose that a pound and an half may be secreted to every meal we eat, but this I am inclined to think too large a quantity—There is a round cord that goes from the navel to the liver which it enters at a small slit at the lower edge, this was the artery and vein which conveyed blood, to and from the child while in embryo, but now being no longer of use forms a simple cord.

The liver is supplied with blood by a vein instead of an artery, it arises from all the branches of the cœlic, (an artery that puts off just below the diaphragm and is distributed to the pancreas, spleen, stomach, liver, &c.) except those of the liver, which uniting, form a large trunk, is called vena porta, it then enters the liver and is distributed to every part, and has its blood collected and brought back to the cava by its venous branches in the liver.

This vein carries the blood into the liver like an artery, but not with that violent impulse with which

is driven by an artery; it moves slow, is black and thick, being deprived of its oxygene before it performs its office in the liver.

The diseases of the liver are, inflammation, scirrhus and an obstruction of the biliary duct producing jaundice.

Pancreas, or sweet-bread, is a very large gland seated in the back part of the body just below the diaphragm; it has a duct that enters the gut not far from that from the liver, by which it passes a large quantity of fluid to the guts which dilute the aliment. An obstruction of this duct by scirrhusities would be attended with great and obstinate costiveness.—

Kidnies the kidnies are seated in the back about the insertion of the short ribs, one a little lower than the other:— Their office is to separate the urine from the blood, which is then conducted to the bladder by the ureters, which are two small tubes, of the size of a goose quill, they enter the bladder near the neck— One of the most painfull diseases to which mankind is subject is, the descent of a stone through these to the bladder.

Renal glands. are two glands seated a small distance above the kidnies; their use is unknown, they are nearly as large in an infant as an adult, from hence it appears probable that they are only of use while in embryo—they contain a sooty black matter.

Salivary glands. are seated under the tongue, jaws &c. and a large one under each ear, called the parotid glands, they are of the kind called conglomerate, being composed of a great many small ones, (a gland composed of but one body being called conglobate) these glands secrete saliva, which they pour into the mouth by their proper ducts—a contagious disease of these glands is called the mumps.

When an obstruction happens in any of these glands a tumour is formed containing a substance very much like the white of an egg— They are very difficult to cure so as to prevent it from returning again without destroying the gland with caustic.

Tonsils, or, almonds of the ears, are two small glands, one on each side oposite the root of the tongue; they are about the size of an hazle nut, but frequently larger, they have an opening on the inside which may be seen by inspection thro which they discharge saliva—These glands are very subject to inflammation from cold, alum held in the mouth is then of service—They are also subject to a disease of a different kind, in which they gradually enlarge, the only remedy is extirpation. I once had a patient who had been troubled with this disesse for several years; from the root of the tongue half way to the tip and down the windpipe as far as I could see was covered with goblets of fat, I cut it all out as far down as I could reach, as also the tonsils, but it soon grew out again and choaked him to death.

Lymphatics Are the glands situated about the large blood vessells and in the groins and armpits-

The diseases of the glands are chiefly two, scirrhus and strumæ, or kings evil, called also schrophula

LACTEALS

Are so called from *lac*, being the name for milk in latin, from the appearance of the fluid they contain, being of a milky appearance; they begin in the small guts, and pass thro the mesentery [the inembrane which connect the guts together and tie them to the back] and then uniting become largèr, enter the receptaculum chyli, or the receptacle of the milk [from chyle, milk in greek] their office is to drink up the fluid substance of the aliment intended for the nutrition, and support of the body—The receptaculum chyli is a little sac about two thirds of an inch long and one third thick when empty, from which there is a tube, called the thoracic duct, which passing thro the diaphragm close to the back, it proceeds up behind the pleura, proceeding up, it by several turns, enters the subclavian vein on the upper and posterior part—it has a number of valves in it to prevent the chyle from passing back again.

LUNGS.

The lungs are divided in two lobes, one on each side separated by the mediastinum, which is only a continuation of the pleura.

The asperia artery, or wind pipe divides off into a vast number of little branches, and being subdivided, form an infinite number of little air cells which are inflated, or blown up at every inspiration, a quantity of moisture is thrown out, and a quantity of oxygen absorbed, and mixes with the blood and carried into the system to answer some importance purpose in the process of animation.

The lungs are very subject to disease, and particularly consumption, one of the most obstinate, and frequently fatal—I once opened a man that died of a consumption of the lungs, in whome the left lobe was intirely wasted, and what cavity there was, was intirely full of puss; the pericardium, or heart purse was half an inch thick, and adhered to the heart, both the heart and pericardium was of a white, and spongy texture, there being scarcely any appearance of muscular texture about it. It was surprising that a person should live at all in such a state: the heart is one of the most sensible parts of the body, it is highly sensible to the stimulus of the blood, the passions make a very sensible impression upon it, particularly sexual love and anger, increasing the stroke both in number and force.

ALIMENTARY CANAL.

Oesophagus, or gullet, is the begining, it is nothing different from that of brutes, and therefore needs no description.

The stomach is seated just under the diaphragm on the left side, and somewhat resembles an egg, but is longer in proportion, and crooked, hollow on the upper side like a bow where the swallow enters and the gut comes out. The orifice where the gullet enters is called cardi, and hence the disease commonly called

heart-burn or carditis, from its lying just under the heart:—The orifice where the gut comes out is called pylorus, the gut is then called duodenum, there is a valve near the mouth which prevents the alimen from returning, but in ruptures and in vomiting, it gives way, and the contents of the whole intestinal canal is rejected by the mouth.

After duodenum the gut is called jejunum, from its being found almost always empty, it is then called ilia, and lies below the navel, the jejunum lying above, and about the navel.

Cæcum or, blind gut, where it enters the colon, which is near the begining, it is not larger than a pipe stem.

Colon, is the great gut, it begins at the upper edge of the right hip bone (os ilium,) and after ascending untill just under the stomach, it then turns to the left it descends into the pelvis. Rectum, or straight gut, is a continuation of the colon down to the anus.

Mesentery, is the membrane which begining on the loins about four inches wide is extended to the whole length of the guts, which is generally about thirty foot long, it serves to hold the guts in their proper place, and for the blood vessels, lacteals &c. to pass by.

NERVOUS SYSTEM.

We now come to describe the seat and source of the vital principle; the brain and nerves.

All the parts hitherto described are assigned their proper offices in the system, and are well understood, but whether the brain and spinal marrow, is of the nature and office of a gland, and secretes some fine ethereal fluid, called animal spirits, which like a participle, or medium join an immaterial, thinking being, to the material system, or body: Or whether it is, a portion of duly organized matter, and kept in a state of sensibility, by some kind of annimo, chemical process, which is continually going on, is a doubtfull problem among metaphysicians; all we

know is, that certain processes are continually going on in the other parts of the system, and are necessary to supply the waste, and keep the different parts in a proper state for the vital functions, but if any such thing as secretion is performed the matter secreted is imperceptible to our senses, but that the brain is the source of sensation and thought is easily demonstrated by many experiments, and that, that power or property does depend upon a due organization of parts, but what the particular mode of being in the ultimate particles of that system or organised state is, we know no more than we do of the mode of existence of that being who is the original fountain, or source of all life and being, or the difference in the ultimate particles, (if such there be) of all other forms of matter.

The brain is divided by thin membranes into six parts, the two upper are hemispheres, and are called the cerebrum, the four lower called the cerebellum.

Wounds in the upper part do not always cause instantaneous death, but a wound in the lower, however small cause sudden death.

The brain appear to be composed of two parts, an outer, and an inner; the outer is called the cortical, (from cortex, bark) and the inner, the medular part—From the inner part arise a number of fine, white, soft threads, and are called nerves, and after leaving the brain become more firm and strong: there are ten pair arise from the brain within the skull, and thirty pair from the spinal marrow, those of the head are called encephalon i. e. of the head—The first of the ten pair are called the olfactory, they go to the nose and furnish the sense of smelling, the second pair crosses each other and go to the eyes, and are spread in the bottom of the eyes, forming that fine black membrane called the retina, these are called the optic nerves, and give the sense of seeing; another pair go to the ears and furnish the sense of hearing, they are called the auditory nerves, others pass to the tongue, face &c. those which leave the spinal marrow go off on each side, and are distributed to every

part of the body.

By pressing upon a nerve for some time, the part to which it gives sensation becomes numb, as in lying in a position for some time in which the nerve is compressed, the leg becomes numb, and is said to be asleep.

The nerves, altho subject to disease, seldom shew much signs after death, the diseases of the nervous system, like those of the mind, in which it is often only apparent, are invisble—The diseases of this system of vessels, or whatever they may be called, are various, and are treated of under the title of nervous diseases, which see.

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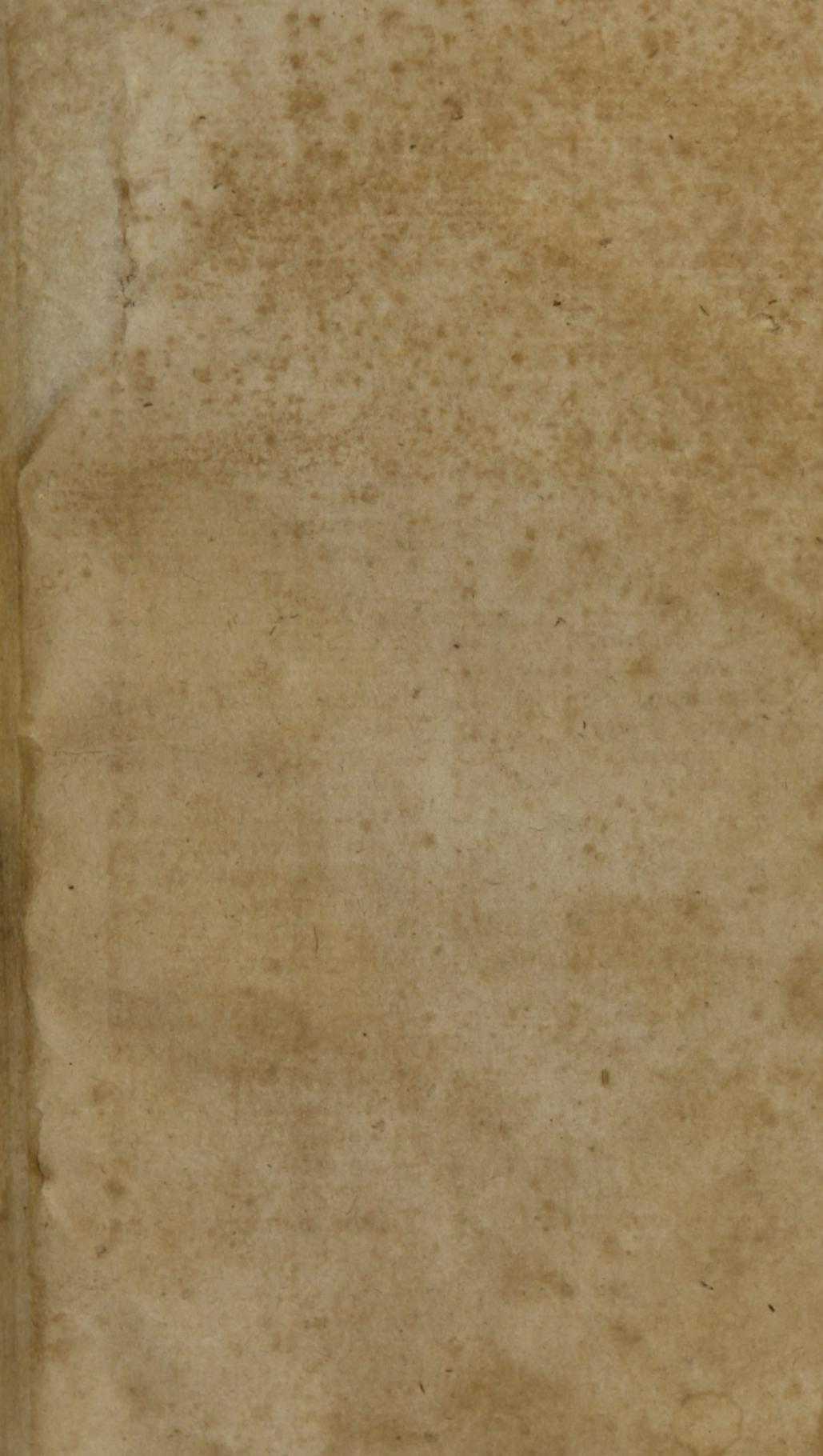
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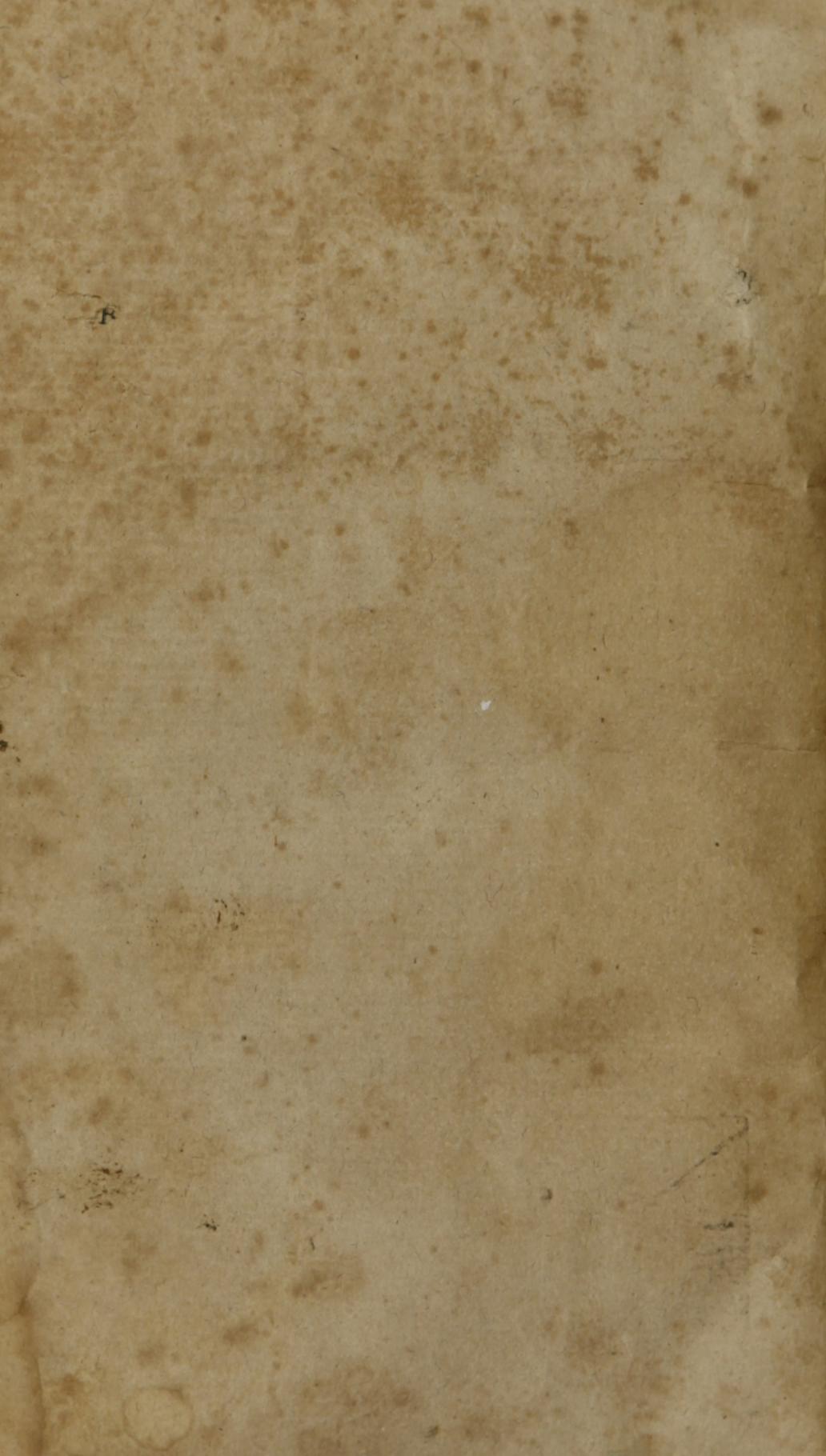
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