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A TREATISE

ON

DOMESTIC MEDICNE

AND

KINDRED SUBJECTS:

EMBRACING

ANATOMICAL AND PHYSIOLOGICAL SKETCHES

OF THE

HUMAN BODY.

BY WILLIAM MATTHEWS, M. D.

"Many shall run to and fro, and knowledge shall be increased."

INDIANAPOLIS:
PRINTED BY JOHN D. DEFREES.
1848.

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PREFACE.

The design of the present volume is to offer to the public, in a compact and inexpensive, but, it is hoped, not unintelligible form, an outline of the Anatomy and Physiology of the Human Body, and of the Principles and Practice of Medicine, in a familiar style, suited to the capacities of those without previous instruction upon these vitally interesting subjects. The work makes no pretension to be considered a complete Treatise on these subjects, but is intended to be useful and interesting, as far as it goes, to those for whose benefit and instruction it was begun.

It has been my constant aim to avoid prolixity, and, at the same time, impart useful information upon subjects, which, if we except our immortal destiny, more immediately affect our happiness than all others. For what one among us can be happy and enjoy the good things of time, while the machinery of his own body is sinking under the ponderous burden of Disease?

That any work, bearing the title of "Domestic Medicine," will ever, in any community, wholly supersede the necessity of Physicians, I do not indulge the remotest hope; but I know of no good reason why the intelligent Farmer or Mechanic should, all his life, remain ignorant of the simplest and most common-sense principles of Medical Science; or why he should be constrained to call in the family Physician for every trifling ailment. Besides, a little instruction in the

rudiments of Medical Literature, never fails to make better nurses for the sick—and a good nurse is often worth half-a-dozen doctors. And moreover, such instruction as I trust this small volume imparts, is well calculated to warrant and defend the public against the impositions of unprincipled Quacks, who go about seeking whom they may devour.

With these Prefatory remarks I send the work abroad, bespeaking, in the meantime, for it a careful perusal.

WILLIAM MATTHEWS.

EBERLE, PUTNAM CO., IA., *Oct.*, 1848.

INTRODUCTION.

"Man is mortal." "From dust he is, and to dust he shall ruturn," is the solemn declaration of scripture; and his whole history, from the creation to the present time, verifies its correctness. No one has ever, (if we except a miraculous instance or two,) escaped the withering pangs of mortality,

But, notwithstanding the fact of man's mortality — of the certainty of the death which awaits him sooner or later, yet he has reason to console himself, and to glory in his existence. For the same authority which warns him of death, also declares that, though he die, yet shall he live again. Nor shall his future existence be embittered with perplexities and curses, with pains and sorrows, with separations and deaths; but he shall FOREVER LIVE, and that too, where "there shall be no more death, neither sorrow nor crying, neither shall there be any more pain: for the former things are passed away." Such are some of the consolations of christianity. What glorious, inexpressible comfort has that christian Sage, whose silvery locks tell of three score years and ten, and who has borne all the burdens of life, what comfort has he not, I say, when his tottering frame warns him of his near dissolution, in remembering the gracious words of Holy Writ, that "all that are in their graves shall hear His voice and shall come forth?"

Now, although reflections like these are calculated to afford us the greatest comfort, to buoy us up in our transit through

life, and inspire within us "a longing after immortality," a hope reaching beyond the dark dungeon of death, yet to be happy in life, and to enjoy the good things of this world, presuppose the enjoyment of good health. We are so constituted that pain and pleasure are incompatible; and, as it is one of the instincts of our nature, in common with the brute creation, to prolong our existence indefinitely, we are naturally led to enquire into the best means calculated to avoid the former, and secure the latter. As might be expected, therefore, history informs us that from the remotest periods of which we have correct authentic records, mankind have busied themselves in attempts to discover those means by which to ward off disease, and to cure themselves when afflicted by it. Thus, we have every reason to believe, that the treatment of disease is coeval with man. But at that remote period of time, the simplest means only must have been used; those only that attending circumstances suggested, and which, perhaps, did little else than amuse the patient, while nature cured the disease. The Science of Medicine, as the correct understanding of disease and the most approved means for its eradication from the human system, is now generally styled, is a progressive science. It had its origin in the earlier and ruder ages of the world, *in necessity*, and, from that time to the present, observations and experience have continually added to it, new resources have been discovered for enriching it, and thousands of men, among the brightest ornaments that have ever graced the world, have devoted their lives to its study. In every civilized country upon the globe, medical literature is cultivated; and at no time heretofore has it attracted more deserved attention than now. In Europe it is taught as one of the higher branches of human instruction; and, I am happy to say, that in this country there are many very excellent institutions for imparting its principles to those desiring to acquaint themselves therewith. But all cannot be physicians. All have not the education, the time, or the means to

be such. Therefore it is that a few have turned their attention to this, and made it a *profession*—devoting years to the acquisition of its *principles*, before entering on its *practice*. These persons, thus qualified, investigate the diseases of their neigbbors, and prescribe medicines for the removal of the same. When these persons have attended a Medical College, have been examined by its Faculty, and found deserving the title, they are furnished with a Diploma, setting forth their qualifications to practice medicine, &c. They are then entitled to the distinction of M. D.—Doctor of Medicine.

Before closing this introduction, I feel it a duty to speak of the *Quackery* which is practiced upon the unsuspecting public all over the world, (unless, indeed, prohibited by law,) but, perhaps more extensively in the Western States. And, as I shall not excuse any, I shall speak, in the first place, of the quacks found in the "Regular Faculty," and then, secondly, of the ignoble creatures infesting every clime, who assume some distinctive title, beyond that of "Doctor." In the "Regular Faculty" the public have no test of any ones qualifications to practice medicine, but the degree of M. D., conferred by medical colleges; yet there are those of eminence and distinction in medical science, who have not taken this degree. Such are recognized, by good physicians, as medical men, and are permitted to consultations with them. There are others, however, who have studied very little, who have heard no Medical Lectures, and who have very limited common school education. These, beginning practice without qualification, should not receive the sanction of the profession. They are dangerous characters. Their weapons are of the most formidable kind; for assuming to be *regular physicians*, they do not hesitate to use all the active medicines, and resort to all the delicate appliances of those better informed. But, being unable to investigate the nature of the disease with which they have to do, they go ignorantly to work, not unfrequently frustrating the re-

sources of nature — and thus, precipitating their victims into an untimely grave. Our country, I regret to say, has too many Doctors of this sort in it. Uninformed upon all subjects, and without education, how should they be expected to know anything of one of the most profound and intricate sciences taught in the world? I sincerely pity them, and earnestly hope, that they may not be slow in either abandoning a station so awfully responsible, or better qualify themselves for filling it honorably. There is scarcely any one, unless he be a natural dolt, that cannot, in the course of a few years, prepare himself in such a manner, as to be, at least, a respectable member of the profession—one of the noblest stations to which man aspires. I repeat I do sincerely hope, that ere long, by proper coercive means, these professional parasites may be driven from their assumed positions to others which they are better qualified to fill, or forced to qualify themselves for honorable membership in that prematurely entered into.

I have next to speak of the second class of Quacks, to which I above alluded. I care not what name these may assume. They are all Quacks from the high-sounding title of the modern "Eclectics" down to the vulgar epithet of this ancient co-adjutor—*The Water Doctor*. They are all Quacks, I say, and for this simple reason: they are either inexcusably ignorant, or they are designing villains; most usually, it must be confessed, they combine both of these detestable qualities. If they are ignorant, let them not attempt to stay the hand of death, by senselessly and unmeaningly tampering with human life: if designing, they deserve the contempt of all well meaning people. That they are Quacks will further appear, when the names under which they stalk around are considered. A Botanic Doctor rejects, either as useless or injurious, all mineral medicines. Now, in doing this he shows himself to be *a one idea man:* for the experience of the medical profession, for centuries, has sanctioned and almost sanctified their administration in certain diseases,

when judiciously prescribed. The Botanic physician rejects this experience, and to bolster up his exclusive system, he hesitates not to excite all the prejudices of the vulgar part of community against the use of those mineral compounds, the beneficial influence of which, when judiciously prescribed, are known to every honorable practitioner. He will assert that minerals are injurious, poisonous to the human system. So, many of them are, if given injudiciously. But he neglects to mention that in the vegetable kingdom, and among some of the articles which he daily uses as medicines, there are some of the most virulent poisons found upon the face of the earth; that in one fourth of a drop, or of a grain, of certain vegetable medicines, there lurks the elements of death! On the contrary, the "Regular Faculty" reject none of those agents which observation and experience have showed to be beneficial in the treatment of disease. They resort to every and all means and devices within their reach, with whose properties and qualities they are acquainted; and, if the circumstances of the case under management, seems to warrant their administration, without stopping to enquire from what kingdom of nature they have have been derived, they unhesitatingly give them. But I need not extend this notice of impostors further, nor would I have alluded to them at all, had not the importance attached to them a very injurious effect upon the best interests of mankind—health. They deserve no notice themselves: it is their erroneous doctrines that demand attention. The public are uninformed on medical subjects, and it is this fact, which enables Empirics to impose upon them. I have therefore, to warn my readers against permitting themselves to be imposed upon by these miserable creatures.

The arrangement which I shall follow, in the present volume, will be, first to treat of General Anatomy; secondly, of General Physiology. These are subjects, a general knowledge of which, is of the highest importance to the understanding of that which is to follow. Thirdly, I design speaking of

Health and Disease—defining and contrasting these two conditions. Fourthly, Diet, Exercise, Clothing &c., will demand our attention. The fifth Chapter will be devoted to the classification of Diseases; the sixth will treat of Fevers; the seventh, of Inflamations, and the eighth of anti-inflamatory disorders. These three last Chapters will of necessity be very general; but I do not think much space necessary to elucidate the general characteristics of Diseases. All that my readers have a right to look for, in this part of the work, is the commonest symptoms, phenomena &c, of diseased conditions. I am not writing for the profession, but for the masses—the public at large. And if any of these desire a more thorough knowledge of medicine than the present treatise will afford, I refer them to the numerous excellent works of the Faculty.

The ninth Chapter will be devoted to the consideration of the specific, contagious, or catching diseases, while the tenth will be consumed in speaking of a few diseases not included in either of the preceding Chapters. In the eleventh Chapter some hints in reference to General Surgery will be offered. The twelth and closing Chapter, will be devoted to an account of the medicines to which reference has been made in the work. Some concluding remarks will be appended.

The style of the work will necessarily be of the commoner kind. Written as a book of *instruction* for the public, it would seem out of place to assume a fine style, and rigidly adhere to the rules of composition designed as scholastic treatises. My aim is, to instruct my readers in one of the noblest sciences; and, in attempting to accomplish this purpose, it shall be my constant endeavor to avoid those high-sounding phrases and technical terms which almost uniformily offend the senses of persons not accustomed to their use. With these remarks, I pass to other matters.

CHAPTER I.

ON GENERAL ANATOMY.

Anatomy is the science of organization. What ever *has been* in possession of life, is a fit substance for anatomical investigation. Hence vegetable, as well as animal, organization admits of anatomical examination. Nature here, however, makes the division into the two great classes:—Animal and Vegetable Anatomy. Animal Anatomy is subdivided, usually, into the Anatomy of the Human Body, and the Anatomy of Inferior animals. The last is called Comparative Anatomy, because it is chiefly useful in analogical comparisons between the conformations of brute beasts and man.

There are two modes by which Anatomy is studied. The first, and least advantageous method, is that by verbal description. Persons thoroughly acquainted with the structure of the human body, have written full descriptions of it; these are studied by others. But knowledge thus acquired is like that obtained from descriptive Geography—a pretty good notion may be got of a far off country from a correct writer's description of it; yet he who has visited that country, and examined its climate, its soil, its hills and valleys, its rivers and meandering brooks, must necessairly obtain a much more accurate knowledge of its scenery. So with Anatomy. He who contents himself with reading what others say of the structure of the human body, can, at most, gain but a meager idea of the science of Anatomy. But he who examines it

for himself, guided by competent instructors, lays open to view every hidden and secret contrivance of the human machine; reducing some parts; magnifying others, and tracing every nerve, artery and vein to their origin in the respective organs from which they arise, must soon, if observing, become a master in Anatomy. This last mode is termed *practical* Anatomy, and is chiefly conducted by the actual dissection of the dead bodies of men and women.

Upon examination the Human body is found to be composed of numerous structures, "fitly framed together," making one wonderful whole. These divisions, by anatomists, have received the appellation of systems. The first of these systems, demanding our attention, is the Bony—styled in technical phraseology, the *Osseous system.* There are in the human body, about 250 bones. The uses of the bones are various—some form cases for enclosing delicate structures, as the skull bones; others serve as levers to which muscles are attached for locomotion or moving the body in various directions, as those of the arms and legs; others again answer for masticating or chewing the food, as the teeth, &c. The whole system of the bones, however, may be regarded as the frame work of the Human machine, upon and within which every other structure is placed. Beginning with the head we discover it is composed of numerous bones, so united together as to form a case, in which is lodged that delicate organ, the Brain; exteriorly, when covered with other structures, they give form and expression to the countenance, and serve as fixed points for the fastening of muscles. They also form cases for containing the organs of vision and hearing,—the eye and the internal ear. Passing on downward from the head, we next come to examine the back bone, or spine. This may be said, in truth, to extend from the bottom or base of the skull, to the bottom of the hip bones, and, thus considered, consists of about 26 pieces. These being joined together, unitedly form a canal, or tube, extending their whole length through which a prolongation or continuation of the brain is carried. Next to be noticed are the Ribs, 24 in num-

ber, 12 on either side. These are fastened to the back bone, and 14 of them, 7 on either side, are attached to a broad, flat bone in front, called the breast bone; the remaining 10, 5 on either side, have no firm attachment in front, and they are, therefore, denominated the short or floating ribs. At the lower end of the spine, and serving as a base upon which the head and all that has already been described rest, are the hip or haunch bones—two in number. These are fastened posteriorly, or behind to the last bones of the back, and being reflected in such a manner as to form a considerable basin or cavity, they are united to each other in front, immediately above the division of the body into the lower extremities. A correct understanding of these two last bones is of indispensible utility to the practitioner of midwifery; but much laborious study is necessary to obtain an accurate knowledge respecting their shapes and structure. On the exterior or outsides of these hip bones, are two cup like depressions, one on either side. These are for the reception of the upper end or head of the thigh bones; and as they form a complete ball and socket joint, they afford to the thigh bones the greatest possible facility of motion in every direction. Tracing the thigh bones down to the knee joint, we find here one of the most perfect examples of hinge-joint, in its connection with the leg or shin bone—allowing motion only backwards and forwards. The leg has two bones—the shin and the splint bone; the latter of which, however, being placed upon the outside of the leg, answers little other purpose than that of a splint, (as its name implies) in strengthening the principle one. To the lower end of the leg bones are attached the group of bones, numbering seven, forming the instep; and to these again are attached the bones of the foot, to which, in turn, are added on, the first joint of the toes, to these the second, &c. But these are too intricate to admit of accurate description in a work like this. I can, therefore, but allude to them.

Going back to the superior portions of the body, and immediately on the back part of the chest, held in their places

by powerful muscles, are resting the shoulder or blade bones, one on either side. The collar bones are fastened to these and to the breast bone in such a manner as to prevent the former from approaching the latter. Attached to the blade or shoulder bone in a similar manner to the attachment between the thigh and hip—affording perfect freedom of motion in all directions, we find the upper arm bones, one on either side. Following these down to the elbow, we have another instance of a hinge-joint, in their attachment with the bones of the fore arm. The fore arm contains two bones, and these are interesting from the fact that one of them goes to help form the elbow joint, while the hand, or wrist, is attached to the other, thus giving to the hand the rotatory motion so useful in almost every movement which it performs. The wrist bones, as well as those of the hand and fingers, are so similar in the general conformation to those of the instep and foot, that I shall dismiss them without further notice, and with them I shall, for the present, dismiss the *bony system.*

The bones are united together in various ways, the most common of which, however, is by strong bands, called *Ligaments.* When a dead body is divested of every thing but the bones and ligaments, the ligaments preserve, in a great measure, the bones in their natural situation. Being thus circumstanced they constitute the *natural skeleton* of the anatomist, in contradistinction of those divested of their ligaments, but held together by wire fastening, called the *artificial skeletons.* The ligaments, then, we reckon as the *Ligamentous system.*

Next in order comes up for consideration, *the muscular system.* The muscles are properly the instruments of motion, and by their actions upon the bony system all the offices of locomotion are performed; the human body is transported from place to place, and whatever requires mobility is affected. The number of muscles are very numerous—amounting in the aggregate to several hundred. But before entering further upon the muscular system it is proper to define, definitely, the meaning of the word muscle. Every one knows

what a bone is; but very vague notions are generally entertained respecting the meaning of the word "muscle." It may be stated, in general, that all fleshy substances partake of the nature of muscles. But to separate the fleshy masses, as nature has done, into their respective portions, and trace them from their origins to their attachments, is a matter of some nicety. For example, taking the fore-arm for examination, it appears to be chiefly composed (the soft part of it) of fleshy matter; but upon more close inspection, this fleshy matter is seen to be divided into very many separate bundles; each of these bundles has a separate origin *above*—arising as it were out of the bone, and a separate attachment *below*, where it is inserted into another bone than that from which it arises.—Now, this bundle of fibres—for every muscle is composed of fibres, or thread like substances gathered into bundles, have the power of contracting or shortening themselves, by an act of the will, as we shall presently see. Now it is obvious that if they are fixed immoveably at the one end, while they are free at their attachment, when they contract or shorten themselves, the bones to which they are attached have necessarily to yield; and thus it is that motion is communicated to any part of the system—the bones serving as levers. I regret that my limits will not allow me to enter into any thing like a minute description of this interesting system. I must only refer to it as a whole. Then, summing up the whole muscular system, it may be stated in general terms, that its office is that of motion. As has been already mentioned, I repeat, that every motion of the human body owes its immediate origin to muscular action; the more powerful muscular actions, as well as those of the more delicate sort—as of winking, swallowing, speech, &c., are effected solely by muscular contractions. Through the influence of muscular contractions the blood is carried to the remotest parts of the body, and again returned to the heart. Breathing is carried on by certain muscles; and the wastes of the body are expelled from it through their respective outlets by others;—the

food is conveyed into the stomach, digested and expelled from the general system, by the wonderful action of muscles.

That whole arrangement of the human organization concerned in the nourishment or nutrition of the body—in digestion, and in carrying into the body whatever is intended for its support, and conveying from it the useless or effete matters, I shall denominate the *Digestive System.* But I must be very brief in my notice of this system; as I shall have to speak of many separate structures individually, I can devote but a few lines to each. These I shall notice in order, begining with, 1. The Mouth. This, considered as a part of the Digestive System, is a cavity for the reception and mastication of food, designed for the nutrition of the body Chewed and mixed with the saliva or spittle, which is furnished by some little bodies, (called glands,) lodged in the cheeks and about the tougue, it is by muscular contraction carried into 2. The Gullet or Swallow. And through this it is conveyed into 3. *The Stomach.* This is the great reservoir of digestion, and is situated immediately below the breast bone, in the cavity of the abdomen—the abdomen being separated from the chest by a transverse band, properly a muscle, called the *Diaphragm*, because it *divides* these two apartments. The Stomach is a muscular bag, the food being introduced into which, undergoes important changes, which fits it for others to be afterwards described. The changes which are effected on the food in the stomach are chiefly attributable to the solvent power of the *gastric juice*—a fluid which is prepared in and poured out from the inner coats of the stomach itself. This gastric juice is one of the most powerfully dissolving liquids known; being in some animals sufficiently strong to dissolve the hardest bones. (It is owing to the small amount of this very curious liquid contained in the calf's stomach, that it has the property of curdling new milk, and changing it into cheese). The food, after remaining in the stomach, until its solution is effected, (in a healthy state, from one to five or six hours,) is by the stomach's action carried through a small valvular—like opening (which from its office being analagous to

that of a door or gate has, in technical language, got the name of "pylorus,") into 4, *The Intestines* or bowels, in which other changes are to take place. As the food is passed into the intestines it is a homogeneous pulpy matter, and is called *Chyme;* but getting in the manner already intimated into the intestinal tube, it meets with juices or liquids which convert it into an opaque milky-like fluid that is called *Chyle.* The most important of the fluids referred to here, is that from the Liver, which has received the name of Bile. Others of less importance have an influence in preparing the chyle, but these are not so well understood. Now, in the condition of *Chyle*, the elements of nutrition are to be found, ready fitted to be taken up and thrown into the blood, and thus conducted to every part of the body to administer to its wants, and to supply it with fresh materials, in place of those that, from age and change, are no longer useful.

For the purpose of conducting chyle, now fitted to supply the wants of the system, into the blood, we find innumerable little tubes, insinuating themselves through the intestinal walls, and, by a process of vitality, selecting from the chyle only such materials as the body needs for nutritive purposes. These little tubes, after leaving the outer surface of the intestines, form numerous unions, one with another, until, ultimately, they form one or two considerable sized canals or ducts, which empty their contents into the veins; and thus, is the food which we take into our stomachs, by various contrivances, being transformed from one substance to another, until at length, reaching the blood, it is continually commingled with it; and, after other changes, to be indicated by and by, it is converted into the various fabrics of which the human body is composed—as muscle, bone, nerve, &c., &c. The little tubes concerned in absorbing, or taking up the chyle, are called *Lacteals*, because they are found filled with a fluid, resembling milk, the Latin name for which is, *Lac.* Remaining behind as a residual matter, which the Lacteals do not carry into the blood, is left the fecal substance, which, being carried downwards by the spontaneous movements

of the bowels, reaches the anus, and by a muscular effort is expelled therefrom.

5. *The Liver*, being concerned in digesting the food, next demands brief notice. It is situated in the right side; under the points of the short ribs. It is divided into several lobes, but these have one office in common to perform; that of manufacturing bile. Numerous tubes collect this bile and convey it, as already intimated, into the intestines, just below the stomach. It is, therefore, an erroneous opinion to suppose that bile is always found in the stomach. On the contrary, it is perhaps, very seldom found there, unless the action of these organs is, in some measure, inverted. Thus it is, that frequent and powerful efforts at vomiting almost always result in the ejection of bile from the stomach—it being carried backwards or upwards into this organ by the inverted action of vomiting. The gall-bladder is a mere pouch or receptacle for containing bile, when more is generated than the system has immediate use for.

6. *The Spleen or Milt* is found situated in the opposite (the left,) side from that of the Liver. Its shape in the human body is quite similar to that seen in inferior animals. The office which it performs in the animal Economy is not certainly known. The Spleen is however, of minor importance; for it has been repeatedly removed from dogs and other animals, without inducing death, or even serious inconvenience. My own opinion is, that it is in some way connected with the nutritive process. I might notice much more minutely these interesting organs, but my limits will not permit me to do so. The whole length of the digestive apparatus, counting from the mouth to the anus, is not far from six times that of the body.

The Nervous System is that assemblage of matter contained within the skull, prolonged throughout the whole length of the spine or back-bone, and from these points, reflected to every part of the body. That matter of a soft consistence and whitish color, contained in the cavity of the skull is, as every one knows, called the brain: a continuation of this

down the spine, or back-bone, is called the spinal marrow; while the divisions sent off to every part of the body, from both these sources are called the nerves. These nerves are the instruments of sensation, or feeling; the paths, so to speak, along which our desires are conveyed, *out from us*, and the channels to carry *back to the brain* impressions made upon their extremities. But to be more definite, I shall make a division of this system, 1. of the Brain: All the nervous matter contained within the skull receives the name of Brain.—Here, in the Brain, man's noblest nature has its seat; here his thoughts are manufactured, his emotions reside, and his propensities have their origin. It is the part of man, when finely educated, that assimilates him to Angels, and inspires him with those hopes of immortality for which he has been noted in all conditions, in savage, as well as civilized life. Although the Brain is the immediate source of thought, and the seat of intellect, yet it is not, (the whole of it,) necessarily sensitive. Persons, as have also inferior animals, have sufficiently often recovered, even enjoyed good health, after having lost a considerable amount of Brain, to establish beyond cavil the fact, that death is not the necessary result of the removal of a certain amount of this organ. The Brain is, beyond doubt, the seat of the intellect, and it presides over, and judges of the condition of the whole man. It sends off to the eyes a part of its substance, and, impressions being made upon this, through the very curious contrivances of the eye, and conveyed back to the Brain, this last organ it is that sees, and not the eye itself. The ear is likewise nothing but a mechanical contrivance, very interesting and curious, indeed, for collecting sounds and conveying them to the Brain along a nervous channel; and the Brain hears. So, too, with the nose. It collects odors, and, through its connections with the Brain, transmits them to this organ to discriminate their qualities. Taste and Touch are very analagous. We are erroneously said to feel with our fingers and taste with our tongues; but, the truth is, the Brain performs both these offices, through its nervous communications with the exter-

nal world. Pain has, also, its true seat in the Brain; for if the nerve sent to an injured part is cut in two or tied between the wound and the Brain, all pain is immediately suspended. Thus we have the best reason for believing that the very essence of vitality or life, resides in the Brain, and traverses the nervous filaments, sent off from it. Now what this essence consists in, is more than human genius has divined. It is as inexplicable as Electricity or Lightning, identical with which some consider it. We may examine its effects, but cannot ascend to its cause. It is life; and life, as well as not, may be looked upon as an emanation from Deity. This life, whether a result of organic laws, or superior to them, may, it cannot be doubted, be immortalized.—But this is a subject which it is improper for me to discuss in this place. That we now live, and enjoy a conscious existence, and that we shall "again live after worms destroy this body," is, perhaps, enough for us to know, and all, most probably, that we ever shall know while sojourning in this "vale of tears." I cannot, consistently, pass this opportunity by, without an allusion to the doctrine of *Phrenology*. Phrenology assumes that the Brain is a very complex organ, both as it respects its structure and functions; that it is anatomically and practically compound; that every Faculty of the mind has its seat and duplication in the Brain; and that the whole number of distinct departments of the Brain, enjoying, as it were, a separate existence, amount to some thirty or forty—in short, to use a familiar comparison, that within the skull is a great work-house for manufacturing thoughts, emotions, propensities, &c. Now, although, I am not a full believer in Phrenology, carried to the extent to which its modern votaries have carried it, yet there are many reasons for assenting to its *general principles*. We know that the Brain sees, that it hears,—that there are two organs or seats of action brought into action in both these processes. So, we *infer* that, being in possession of the faculty of reverencing superior objects, it, too, has a separate physical existence in the Brain. The same may be said of other faculties, as that of memory, a de-

sire to gain wealth, &c., &c. These, Phrenologists state, all have distinct seats; and thus the general conformation of the bones of the head are influenced by the shape of the Brain, they suggesting the possibility of locating these, and of weighing their respective strengths. It will be seen from this brief statement that Phrenology is not utterly destitute of reason; and thousands can testify to the great exactitude with which its practical advocates read the characters of men from "the make of their bones."

2. The Spinal Marrow is, as has already been mentioned, nothing but an extension of the Brain; indeed, it may be looked upon as a great central nerve,—forming a medium of connection between the Brain and the proper nervous ramifications, which originate from it. These last constitute the terminal divisions of the nervous system.

3. *The Spinal Nerves.* They pass off from the Spinal Marrow, and are double both in form, and in office—having two roots and performing two offices. Along one of these roots and divisions, our wishes are sent *from* the brain—first traversing the Spinal Marrow itself, and then taking the course of the nerve,—to the extremest muscles; and thus are their contractions determined at will. While along the second division, impressions, as of touch, pleasurable or painful, made upon the surface of the body, are carried up to the Brain.—The nervous system then, it will be perceived, holds the highest place in the Animal Economy. Some, with much reason, consider it the system to which all the other divisions of the body are subservient, and are built up around it for its maintenance. Be this as it may, it is the temple and sanctuary of the soul, and it is, therefore, of primary importance.

The Circulatory System, has next to be noticed briefly. By this system I mean the circulation of the blood and the organs by which it is carried on. Now the heart, as most people know, is the great central organ of circulation, and may very aptly be compared to a force pump for propelling the blood to the remotest parts of the body. It is a curious living apparatus, and is worthy of the minutest examination, but I

cannot bestow more than a general notice upon it here It is a double organ, and for the sake of illustration, I propose speaking of it as two distinct hearts. These are divided completely, from each other, by a membranous septum, or wall.

First of the *right heart*. From this arises a very large blood-vessel, called the pulmonary, or Lung Artery. This Artery is sent to the lungs (or lights) and is divided and ramified over the whole surface, until division seems to be no longer possible in consequence of the extreme tenuity to which each branch thus formed, is reduced. These minute branches are then collected gradually into the beginning of the veins, which, after a time, like the small streams from a hill-country, coalesce into three or four channels. These are the pulmonary or lung veins and pass immediately to the left heart. Both the arteries and the veins carry blood—the former *from* the heart, the latter *to* the heart. But before proceeding further, it is necessary to state that the *right heart* is filled with blood from a very large vein that collects the blood from all parts of the body, and finds its way to this organ, along in front of the Spine. Thus supplied, *the quality* of the blood is of such a nature as to, so to speak, provoke the heart to contract or close upon itself. Now by a curious valvular arrangement, while the blood is prevented from flowing back into the vein through which it is transmitted, it is forced into the pulmonary or Lung Artery; this as already mentioned is divided and ramified in the Lungs; the blood, during the act of breathing is, through its very delicate covering, exposed to the air; certain poisonous principles which have been generated, during its passage through the body, are thrown off, while others, necessary for its purification are taken from the air. Being purified in this manner, the blood is returned through the three or four veins already alluded to; to the other or *left heart*.—Here in the *left heart* we find the arrangement very similar to that of the right. Valves prevent the blood from flowing backward into the pulmonary veins; *the quality* of the blood stimulates this cavity in like manner, to contraction, and the

blood is propelled with a powerful force along a very large Artery, that is distributed to every part of the body. "In like manner to that which we have seen the veins of the Lungs originate, this Artery terminates in veins, which, passing on back towards the heart, while they increase in size they decrease in number, until they ultimately empty themselves into one great vein, which is in immediate communication with the *right heart*, as before remarked. To recapitulate: The blood from the whole body, is conveyed in a large venous trunk, to the *right heart*. Being impure, and therefore, unfit to be sent as nutriment (for blood is the food of the body,) to the body, it is driven through the Lungs, exposed to the air during the act of breathing, parts with certain noxious principles, takes from the air those necessary to its purification, and is then returned, through the pulmonary veins, to the other—*the left heart*. This heart sends it to every part of the body; all the organs are fed and nourished in its course; it is rendered thus unsuited for further use; but being collected by the veins, it is conducted back to the right heart, receiving in its passage fresh materials from the digestive process, already referred to, when it is again subjected to the same rounds. It has been stated, that from the time the blood leaves the right heart until it is returned to it again, there scarcely elapses to exceed two or three minutes of time.

In its course the blood is continually parting with certain of its elements. Thus the *Kidneys*, two organs situated one upon either side of the Spine, are furnished with a very large amount of blood, from which they secrete or take away, certain noxious principles held in a state of solution in a large amount of water. Along little ducts or tubes, one for each kidney, this water, holding, as just stated, in solution hurtful ingredients, is carried down to the urinary bladder, occupying a situation at the bottom and front part of the belly.—The bladder answers no other useful purpose than that of a receptacle for containing the urine, a greater or shorter time, according to circumstances, and, in this way, avoiding the unpleasant continual dribbling that would otherwise follow.

The skin is another source by which the blood is altered in its character. Sweat is a familiar phenomenon to every one; but all do not know that at all times, and under almost all circumstances, an exhalation of watery particles is taking place from the entire surface of the human body; yet such is the fact. The naked body of any healthy person, as seen through a microscope, seems to be completely enveloped in a cloud of fog or vapor. Any one can convince himself of the truth of this statement, by placing the ball of a finger very close to a perfectly clean and dry looking glass, when, after a few seconds, a cloud of minute drops will appear at the point indicated.

Having in this manner, examined in a very general notice, some of the more prominent structures of the human body, I, in the next place, pass on to a more exact consideration of the offices which they perform in a state of activity and health. Before entering, however, on Chapter 2nd I must beg leave to say a few words in description of the lungs or lights. These are two spungy bodies, filling up, in a great measure, the cavity of the chest—the heart occupying a position in their centre. The cavity for containing the lungs is a completely closed sack,—having no communication with the atmosphere. The chest in which they are lodged is separated from the abdomen or belly by the transverse muscle—the Diaphragm. The act of breathing is wholly effected by mechanical laws. By the actions of the muscles concerned in respiration or breathing, the capacity of the chest is enlarged, and the air rushes down the wind-pipe to fill up the space thus formed. Again, the muscles act, and the capacity of the chest is forcibly reduced to its natural size, in consequence of the expulsion of the air from it. But of this subject, further hereafter.

CHAPTER II.

ON GENERAL PHYSIOLOGY.

ANATOMY, it will be remembered, is defined to be the science of Organization. The Anatomist takes the dead body, and by dissection and other means, examines its various organs, *in a quiescent state.* On the contrary, Physiology is the Science of Life. The Physiologist takes the living body, and, with all the lights which Anatomy furnishes him, examines it, *in a state of activity.* He looks *into* man, while yet alive and in the enjoyment of good health, and beholds how "wonderfully and fearfully he is made." A correct understanding of the functions or offices of every structure is of the utmost importance to the Physician. Nor is it possible for him to act understandingly in his attempts to repair their aberrations from health, without such knowledge. As reasonable, almost, would it be, to imagine, one destitute of every principle of mechanics, to be able to repair a delicate watch, when out of order, as to suppose one ignorant of the laws of Physiology, competent to treat diseases.

For taking a general view of Human Physiology, the best division, perhaps, that can be made, is into, 1st the head; 2nd the chest, and 3d the abdomen. It is proper to premise, however, before entering upon this subject, that, in the brief anatomical sketch given, I have been obliged to anticipate the offices of the structure then described, and what follows is therefore, to some extent, a repetition of the same.

1. *The Head.* The Brains and the organs of the several senses have their seats here. The Head, as was formerly suggested, has complete dominion over the various move-

ments of the body. It may be, with much truth, called the home of man. Here, secure in his temple, and wrapped in the solitude of his own greatness, he sends forth his thoughts, desires, and affections; and, at his will, his physical nature makes them manifest to our senses Of the physiology of our senses, and the action of the Brain in the evolution of intellectual manifestations, we are, in a great measure, totally ignorant. For example, at pleasure, I can flex or bend my arm; but in what manner the Brain and nerves produce, or are made to produce the effect, I cannot tell. The effects of these operations are familiar to every one, but whence, and in what manner, *the cause* is brought into action, the profoundest philosopher is in the dark. He knows, indeed, that our intellectual natures have their seat in the Brain and nervous system, and this is almost all he does know about them, other than as he witnesses their manifestations.

2. *The Chest.* In this cavity many very important processes are in a constant state of activity. Here, the heart is found, propelling, with a force almost incredible, the blood, first through the Lungs for the purpose of its purification; 2nd, and after receiving it from these organs, purified and prepared for the nutriment of the body, to every part of the body, to the wants of which it every where ministers. The Lungs too, are organs, without the kindly offices performed by which, we could not exist but for a moment. The windpipe, which has a valvular opening, partly under the control of the will, serves the purpose of bringing their internal surfaces in immediate contact with the atmospheric air which we breathe. A surface is thus exposed during every act of respiration or breathing, of several square feet. Over this entire surface all the blood sent to the Lungs, (and this is all of the blood,) is spread, and almost completely exposed to the atmospheric air;—for nothing supervenes between it and the air but the most delicate vessels, of the extremest tenuity possible. Through the coats of these extreme vessels changes, absolutely indispensable to health, or even life, are habitually taking place. A gas, or in other words, an invisible air,

generated in the course of the circulation, and carried to these organs dissolved in the blood, is here liberated, while oxygen gas, the life-giving principle of the atmosphere, is abstracted from this element, and intimately incorporated with the circulating fluid. The poisonous gas, here referred to, is identical with that found in old wells, and known as "*the choke damps*." It is generated during the process of decay of almost every organic substance, whether exterior to, or within the living body; and, being considerably heavier than the atmospheric air, it settles to the lowest places, unless driven off by currents of wind. Crowded and illy ventillated rooms are, therefore, unhealthy; and this fact is of the greatest practical importance to be remembered. Persons in crowded assemblies, collected in closed apartments, not unfrequently fall down, as if dead, but these, instead of being bled, if carried into pure air, speedily regain their senses and strength. If the quantity of the poison, however, retained or respired into the system be very great, or if the individual be subjected to its influence too long, death is inevitable; nor do the resources of medicine offer one solitary antidote for these deplorable cases.

It is, therefore, of the utmost importance to health, that the Lungs have perfect play and freedom of action. They must be considered as the great depurating or purifying agents of the human body,—serving the double purpose of exhaling or liberating from the blood a most deadly poison, and of re supplying its place with that health-giving and vivifying principle, circulating in the atmosphere, known to Chemists by the name of *Oxygen gas*. Deprived of a due supply of Oxygen gas combustion cannot go on; a fire will grow feeble and soon be extinguished. So, with the human body.—Deny to it a requisite amount of this principle, and it grows pale, the individual becomes languid and sickly; disease begins to prey on his enfeebled organs; he is tormented with dyspepsia; has short and hurried breathing, and soon, death extinguishes the wan and feeble flame of life. Of what vast importance, then, that the Lungs be maintained in a state of

the fullest activity, that the Chest, in which these organs are lodged, be left free, unconfined and untrammeled, as Nature made it! But Fashion, the Demon of human health, and one of the gods of this world, has interdicted the observance of these admonitions. It has so blinded the eyes of its votaries, and deadened their sensibilities, as to pervert their taste, make them submissive to the most onerous burdens, and render them insensible to the rich blessing of health. Not satisfied with the shape which God has given the human chest, it strives to alter it, and by perseverance and painful eduction, triumphantly proclaims, *it is done.* In its natural condition the chest resembles a cone—a familiar example of which, is a sugar-loaf—with its base *below;* but, when Fashion has finished its work, the thing is reversed;—the base is *above.*—Thus, the bottom lobes of the Lungs are compressed; the transmission of air is impeded, both in its ingress to, and egress from them; and the heart is trammeled and confined in its motions. It would be not less abused, while a thousand times less injurious, to bridle the tongue, and restrain it in its freedom of action, by bandaging the mouth, than it is to cramp and confine the Lungs and heart, by unnaturally forcing upon them the case in which they move,—the Chest—by powerful mechanical contrivances. Certain nations, history informs us, apply compresses to the foot while young and growing, for the purpose of preventing it from attaining its natural size, and rendering it beautiful; while the Christian American, denouncing the Pagan absurdity, applies the compresses and bandages to his—no, not exactly his, but *her* waist—for this practice, in this country, is confined almost wholly to the female sex,—for the purpose of rendering it beautiful. But females are not all guilty of a practice so at war with common sense. It is found only, in the highest state of perfection, among the wealthy and *upper ten-thousand* class. And these charitable creatures, moving in the higher, more civilized and enlightened circles of life, are not unfrequently heard lamenting and bewailing the poor drunkard's fate. Now this is too much like picking *motes* from their

brethren's eyes, while *beams* rest in their own. For, while the intemperate man wastes his life in drunkeness and rioting, the fashionable (and misshaped religious) female's is, in a less tumultuous manner, driven from its tenement of clay, by the gradual encroachments of relentless Fashion! Nor are the structures within the Chest the only sufferers in this suicidal warfare. The stomach, together with all the abdominal viscera, and its contents. But of this I must defer, for the present, to speak, and pass to

3. *The Abdomen*, or Belly, which is bounded by the Diaphragm muscle, intervening between, and separating the Chest from this cavity; below, by the basin formed by the hip-bones; in front and on the sides, by strong muscles; and behind, by the spine or back-bone. In this cavity, as we have already seen, are many very important organizations. Here we find the principal structures concerned in digesting and fitting our food for the wants of the system. Here we see the nutritious particles of whatever we eat, picked up, so to speak, while yet floating in the homogeneous mass contained in the intestinal tube, carried by appropriate vessels and poured into the blood. Here the Liver manufactures its bile, and, through its proper tube, empties it into the bowels. In short, the structures contained in the abdominal cavity are to animal life, what roots and soil are to vegetable subsistence. A shrub can maintain its vitality for a very short time only, indeed, if its roots be cut off. The soil in which they are planted supplies them with materials of nutrition; they select and appropriate these materials to the wants of the particular growth. Nor does the analogy between a vegetable and an animal stop here; for the leaves of the former perform the same office, precisely, which is performed by the lungs of the latter. Every one is aware, that it is utterly out of the question for a vegetable to flourish and maintain a vigorous existence, unless supplied with an appropriate soil, genial warmth and free air. So with animal life. A vigorous and healthy constitution, presupposes a plentiful supply of wholesome food, and a perfectly sound condition of the ap-

paratus concerned in its elimination. Deviations, in either the quantity or quality of the one, or aberrations from health, in the other, are, inevitably followed by results equal to the causes to which they are to be referred. Nor is too much food less injurious to health, than too little. A vegetable, as is well known, may, by an excess of manure, (its appropriate food,) be forced into an unnatural and diseased growth; and thus, thwart the very design in its bestowment. So with the body of man. Too much, too poor, too little, or too rich food, taken into the digestive apparatus, may all prove sources of disease. Indeed, in the stomach and bowels are to be found almost nine-tenths of the sources of all diseases. No person, acquainted with the physiology of digestion, will wonder at this statement, or think it extravagant, when he looks around him, and considers the thousand and one causes to which these organs are daily and hourly exposed, calculated to impair their functions. Intemperance, both in eating and drinking, may be mentioned as the most common among these causes. Others might be enumerated at pleasure: as swallowing the food without chewing; too great a quantity of tea or coffee, or, indeed, of any kind of fluid, taken at meal-time; irregularities in eating; the strong savory dishes, so common now a-days; sweetmeats and preserves, &c., &c., all of which, at least when unduly indulged in, can hardly fail inbecoming sources of mischief to the tender tissues of the stomach and bowels. But as I design, in the course of this treatise to give an account of indigestion, its causes and treatment for the present I shall refer to certain mechanical impediments, which are not unfrequent causes of imperfect digestion. The most common one of these is, undoubtedly, that already referred to, and consists in pinching in and cramping the Chest, by the various appliances which Fashion has invented. It is obvious, the stomach being situated immediately below the breast-bone, and partly encompassed by the short or floating ribs, that the violent compression, which Fashion habitually imposes upon these parts, must interfere with the natural play and functions of this organ, thrusting

it lower and lower into the abdominal cavity. And, being forced to take an unnatural position here, other structures, scarcely less important than itself, are injuriously imposed upon, as a secondary consequence. The mere statement of such a fact is all that I shall say on this subject at the present time ; but I hope, sincerely, the suggestions may not be entirely lost, in reclaiming, from the strong arm of relentless Fashion, at least a few of its devotees.

As mere appendages to the body, the Legs and Arms, with their terminals, the Feet and Hands may be mentioned. But these are to be viewed only in the light of mechanical contrivances, and in no way indispensable, with the divisions already noticed. With the foregoing remarks, then, I dismiss the subject of this Chapter.

CHAPTER III.

ON THE CONDITIONS OF HEALTH AND DISEASE.

1—*Of Health.* That condition of the body in which every part of the living machinery is in a sound state, and every function or office of the different organs is carried on with the utmost regularity, *is perfect health.* Although the slightest variation from the definition here given is not perfect health, yet, when those variations are so slight as to elude observation, they are not taken into account, and the individual is said *to be well.* Born with the seeds of mortality already germinating within us, and habitually exposed to noxious agents on every hand, it is, I presume, but seldom, that even the more robust amongst us, enjoy a perfect immunity from the effects of those agencies. It is well to remark, however, that slight and transient disturbances of many of the functions of the body must not be mistaken for diseased states. For example, the cheeks of a timid individual, unaccustomed to genteel society, are, upon entering suddenly into a ball-room, reddened, and seen to glow with an unnatural blush. This reddening of the cheeks, so far from implying a disordered state of the body, not unfrequently denotes the most delicate health, and should be regarded as a mere fluctuation or fluttering of the spirits within. To maintain, constantly, during our natural lives, a state of perfect health, is a desideratum that mankind have long striven to maintain; but, for the very obvious reasons above suggested, it appears most likely that all their efforts will forever prove unavailing; and they will, therefore, often be found in its opposite—that of

2—*Disease.* The definition of this term has been anticipated. It is the opposite of that of health, and is, correctly

defined, any alteration from it. Every derangement of the functions of the different organs of the human body, from the slightest cold to the most terrible cholera, constitutes disease; and it is between these two extremes that the whole catalogue of human ailments lie. Believing that a short space of the present chapter might not be uninterestingly occupied in inquiring into the general causes of disease, I shall accordingly enter briefly upon their investigation. Amongst the more common causes, giving rise to disordered states of the body, are, as has already been intimated, to be reckoned errors in diet. (*a*) Too much food, by over-loading the stomach, and burdening it with more labor than it can perform, is a very frequent cause of general disorder. (*b*) Insufficient mastication or chewing, by allowing hard substances to pass into the stomach, frequently induces disorder of the stomach, and through it, of other functions. (*c*) Improper food, or such as is insufficient to supply the wants of the body, it is obvious might prove injurious. (*d*) Sudden changes from warm to cold often impart a shock to the different functions, and may, if the cold be long continued, prove of very serious import. This is, perhaps, of external agencies, the one to which more disorders can be traced than to all others. (*e*) The influence which inscrutable conditions of the atmosphere, at certain seasons of the year, exert on the health of the body. To this cause must chiefly be attributed those agues, fevers and fluxes, so rife during our autumns in the West. (*f*) Specific contagions, by which is meant, the ability which certain diseases possess of communication from one person to another, when brought within the sphere of their action. Small-pox, measles, hooping-cough, &c., are examples of this class of causes. (*g*) To the causes now enumerated, there may be added, with propriety, *hereditary taints*—that is, the tenacity with which some diseases cling to family connections,—passing, with lamentable fatality, down from father to son—from generation to generation; being stamped in the same manner upon the constitutions of the children, as the parents' features are upon their offspring. Through this last means we have

transmitted to our race many of the most formidable and fatal maladies to which we are obnoxious. Scrofula, with consumption, &c., may not unfrequently be traced to an origin of this kind; and such transmissions, not being exactly the disease itself, are called *predispositions*. Many other causes of diseases might be interestingly enumerated, but as the most common have been given, I propose, in the next place, to speak of the nature of diseases. The scientific physician is expected to know something more about an individual, than that he is sick. He must understand the nature of his sickness; the part or parts suffering derangement; the precise condition upon which the derangement depends; the symptoms or signs of those conditions; the course, termination, &c., which is likely to ensue. All these things he is expected to understand, before he is prepared to offer succor. Now, it is the tendency of many diseases to cure themselves, or rather to be cured by the unaided efforts of the constitution; and this is one of the wisest designs of Beneficence. If every slight affection wandered off, farther and farther from health, into a more serious one, instead of a tendency it has of returning into one less serious, and into ultimate health, wo would be to humanity! But it is not so. In almost all disorders, the observing physician must witness nature's plastic hand at work, making gentle, but well directed efforts to repair those breaches which have, by intemperance or otherwise, been made in the bodily organs. Wherefore, it is, that the medical man's duty does not always allow him to interfere with those natural forces, put in motion by a higher power than he possesses, in which he beholds every pang pointing to one thing, the restoration to health. The physician must examine the case thoroughly, comprehend it completely, note the course it is about to run, accurately weigh and estimate the natural forces in action tending to bring about a crisis, before he enters upon its treatment, or decides to commit it to the constitutional forces. Having the requisite knowledge to attain to these ends, and forbearing to be officious, where officiousness would prove

injurious, he is duly qualified to understand the nature of disease; and, provided he has acquainted himself with the properties, medical virtues, &c., of those drugs used as remedial agents, he is prepared to practise medicine on scientific principles. As I design recurring to this subject again in the chapter on inflammatory, anti-inflammatory, &c. diseases, I shall desist from its further consideration at the present time.

CHAPTER IV.

ON DIET, EXERCISE, SLEEP, CLOTHING, BATHING, &c., AS MEANS OF AVOIDING SICKNESS, AND ALSO OF RESTORING INVALIDS TO HEALTH.

These are subjects, a right understanding of which, and a correct appreciation of their value, are of more importance to the generality of my readers than any and all other subjects contained in the present volume. Every one, I am sure, must be able, after carefully considering what is said here on these subjects, to understandingly apply those wholesome rules which are to be laid down. It is a mistaken notion, into which some medical gentlemen have fallen, to suppose that the intelligent public, though possessing very limited education, are unable to appreciate physiological laws, and apply them advantageously in warding off diseases, and in curing those diseases, when afflicted by them. If public lecturers, ministers of the gospel, &c., were occasionally to allude to subjects connected with health, and explain, in a plain and comprehensive manner, those beautiful and sublime laws upon which it depends, their services to the public would be greatly enhanced; and, although out of place here, I must express my regret that so many persons engaged in ministerial duties are so profoundly ignorant, not only of the common laws of physiology,—the laws which govern and regulate themselves as living intelligent beings; but also, of the principles of the simplest sciences. They know how to squabble with those of a somewhat different faith from themselves; how to get to heaven themselves, and send those of an opposite belief to the doleful regions of eternal night, which their disordered imaginations have conjured up; and

this is about all they do know! To meliorate the distresses, the pains and miseries of humanity, to inform the understandings, and educate the thinking, the benevolent, and reverential faculties of the mind,—these are subjects that they regard as not coming within the sphere of their business. But the time is coming—not far off, I hope,—when a different state of things will dawn upon us. Education every where more is than ever before, being generally diffused; narrow hearted bigotry is yielding to a more genial system of moral ethics, whose wide spread pinions over hover no special sect, but embrace under their balmy shades every discription of hu man misery, in whatever clime! But to return from this digression, I first pass to the consideration

1—*Of Diet.* The definition of this word means simply those substances which, when taken into the body, nourish and support it. Diet is as indispensable to life as wood or fuel is to combustion, and has, not inappropriately been compared with it. Those substances which will not support the life of the body, are to be regarded as either poisonous, medicines, or inert. Diet or food, on the contrary, maintains life by ministering to the wants of the body—tending to preserve it in its natural condition. (*a*) As to the *quality* of diet, much indeed might be written, but after all, a few general suggestions are all that can be very profitably applied in practice. Man, when regarded as an animal, holds a place intermediate between those creatures that subsist alone upon vegetables, and those that live entirely upon flesh. His whole conformation goes to establish the truth of the statement here made; and, notwithstanding I may incur the risk of having it disputed by a certain class of men, who assume to be *Reformers*, but who, indeed, on this subject, deserve to be considered Fanatics, I but reiterate that for which almost every truly scientific man contends. Then, animal flesh or meat, I do not hesitate to put down as proper diet for individuals in the enjoyment of health. And even under certain circumstances of disease, I am of the opinion that a due amount of it is far preferable to an exclusive vegetable diet. Already closely

analagous in composition to the substances of which our own bodies are composed, it, other things being equal, does not require the same efforts of the stomach to prepare it for entering the body, as vegetable matters do. It is true, that more than the wants of the body require, especially of the fatty parts, is not an unfrequent cause of injury to the individual so partaking; but this is intemperance—the abuse of a thing, and of itself, must not be construed into an objection to its use altogether. The same kind of an objection might be urged to the blandest vegetable substance. Closely allied in composition to the flesh of animals is the well known substance, milk. Upon this fluid the young of the whole quadruped race, during a certain period of their lives, have, in a great measure, to depend for subsistence. Without it few, if any, of them could be reared. Alone, without the interposition of any other kind of food, man may support a long life upon this, generally supposed to be, simple, natural product. And I have little doubt, but that were many of the feebler of our race entirely confined to it as a diet, while their comforts would be enhanced, their lives would be greatly prolonged. Instead of milk being a simple fluid, it is, on the contrary, one of the most complex substances with which we are acquainted; and contains all the elements of nutrition, necessary to maintain, indefinitely, the life of the stoutest man. It must be confessed, however, that although milk is most highly nutritious, and adapted nicely to the wants of the young, yet it will not invariably agree with the digestive apparatus of every adult, when intermingled with other food. Milk, when introduced into a healthy stomach, is always, previous to being digested, speedily coagulated, curdled, or, in other words, is first converted into cheese. Now the inner coat of the calf's stomach,—which in its dried state affords the rennet—contains a sufficiently large amount of the *gastric juice*, the active agent in this process of coagulation, whether in or out of the body, to act much more energetically than is found to be the case with that of the full grown cow; and hence it is, that dairy-men make use of the former.

From the foregoing remarks under this head, then, it will be perceived that I am much in favor of milk as being not only a palatable, but a highly nutritious beverage, adopted with very few exceptions, to the wants of every human being ; of course, it is to cow's milk that I refer.

Vegetables form the chief bulk of the food usually used by man ; and with respect to their bland and hurtful, to their nutritive and inert properties, many comparisons might be instituted. Many vegetable substances are actively poisonous, many nearly inert—that is, possess little other properties than simple water ; while between these extremes we find those natural products, the successful cultivation of which forms so considerable a part of husbandry, and which are almost universally used as food for man. Among the various vegetable products used as food for man, the grains undoubtedly stand pre-eminent. Of the various grains, wheat has the first rank, and, if we were to consult western taste, we would have to give corn the second place. Be this as it may, however, the difference between the different grains, in use as food, with respect to their nutritive and wholesome qualities, is but slight, and one may, without much detriment, often be substituted for another. They are all, chemically speaking, closely related. They all contain, as their bulkiest materials, starch and a tough elastic sort of substance, called *gluten*. Besides these two compound elements—for they each contain in themselves several simple elements,—these grains contain certain mineral salts, such as potass lime, &c., without a due supply of which the human body would dwindle and fall into a state of decay.

Bread has been styled the staff of life, and it surely deserves the name. When rightly made it is not only among the most palatable substances, but it is also, one of the most substantial articles of food. It should always be thoroughly baked, and certainly ought never to be highly seasoned, but, on the contrary, it should be rendered light and porous by the appropriate means in so common use every where. Nor should it be eaten burning hot from the oven. Bread made

from the meal of corn, if rightly seasoned and baked, is undoubtedly both wholesome and nutritious with many individuals, yet, I think, that some persons of delicate organization cannot very well digest it; why, I will not here undertake to say.

Both sweet and Irish potatos, beans, peas, &c., are, to some extent, in composition akin to the grains, and may, therefore, frequently enter into our diet without the fear of incurring the risk of injurious consequences. Parsnips, carrots, turnips, cabbage, &c., although amenable to the digestive apparatus of those of strong constitutions, are not always innoxious to individuals, whose stomachs have suffered impairment. In their use, therefore, more caution is necessary to be observed than in the use of the first mentioned articles. After all, however, more injury is sustained in consequence of imperfect cookery, and gluttonous eating, than in the qualities of the many articles of diet in common use. A very little of the richest and most indigestible article of diet, may, almost always, be taken with impunity, by persons whose digestive systems are extremely feeble, whereas a great quantity, even of the blandest food, not unfrequently is the source of much mischief to those whose digestion is esteemed unusually good. With regard to most of the fruits in common use by our people, when ripe, and eaten in moderation, they are to be considered wholesome. But unripe fruits, the swallowing of their seeds and skins, are perhaps, among the most fruitful causes of the disease of those children that are permitted to have a plentiful supply of such crude substances of diet. Then, to sum up the whole matter, I suggest, as good and wholesome rules of diet: 1. Food nutritious and wholesome. 2. Perfect cookery. 3. The avoidance of gluttony.

2—*Of Exercise.* Man was never made to be idle. The world in which he lives affords him ample scope for the habitual exercise of all his functions, both physical and intellectual, and the circumstances which surround him every where, are of such a nature as to call imperatively upon him to be up and doing while it is called to-day. His whole life should

be likened to a gentle stream, wending its way to the fathomless Ocean. While unobstructed in its passage, its crystal waters, interspersed with here and there lovely ripples, flow gently onward, cleansing and purifying themselves as they move along, but hindered, obstructed in their way, they rapidly lose their vitality, and speedily become putrid and stinking. So with man. Originally designed by his Creator to procure his food and raiment "by the sweat of his brow," and to exercise those noble thinking powers which he alone, of all created things, enjoys, when those incentives are, by the singular absurdities of society, taken from him, he has the aspect of a gloomy wilderness, decaying of its own solitude. God never designed, I repeat, man to be idle, or he would not have required him to labor, either to supply his physical wants or to cultivate his nobler powers—those of his mind. And what a perversion it is that men have created, making those unnatural distinctions, into *laborers* and *gentlemen*, *lords* and *serfs*, *masters* and *slaves!* Every one should labor with his own hand, or he should not eat; nor has God given to any man the natural right to call his brother his slave—"Have we not all one Father—hath not one God created us?" But to the sin of idleness, Jehovah has not left a penalty unattached. He has said that "in the sweat of thy brow thou shall eat bread;" and he who attempts to gainsay this emphatic declaration, is sure to receive a just recompense of reward: "For many and sore are the punishments of idleness." It leads its votaries captive down the declivity of time, and often thrusts them, unawares, into the depths of degradation and ruin; it encourages vice, allows time to put it into successful operation, and gives ample scope to the lowest passions. Let idleness then be discarded, and let every one, in accordance with the Divine injunction, live by the sweat of his brow.

The beneficial influences of exercise are so numerous and diverse that I can only notice a few of them. Aside from its moral bearing on society, it promotes digestion, invigorates every part of the human body, expands the intellectual

faculties, and renders the individual healthful and happy. Exclude the light entirely from an eye, and ere long it will have lost the power of perceiving the colors and shapes of bodies; confine an arm in a sling, and its muscles will become flaccid, and dwindle to almost nothing. But let every part perform the function for which it was created, and the whole man will be sound. The mind to think, and the body to put its thoughts into action. It must be confessed, however, that too much exercise either of the mind or body, heavy laborious, and too long continued, no less than a want of it, is injurious. A happy medium is a proper ground.

3—*Of Sleep.* If exercise is indispensable to the well being of man, the same must be said of its opposite, repose or sleep. We are so constituted that a certain amount of absolute rest is necessary to calm and quiet the excitement which hours of activity have brought up. This absolute rest is sound and unconscious sleep. Whenever our slumbers are disturbed by dreams and starts, our repose has not been perfect; some of our faculties have been active, whilst others have been totally unconscious. Thus we are said to dream: dreaming being merely a wakeful state of the faculties of imagination, whilst those of reflection are in a state of unconsciousness, and do not, therefore, act as restraints to the mind's movements. Sleep is very much the creature of habit: some persons sleep half or two thirds of their time; other require but a few hours, daily. Bonaparte, it is said, slept but four or five hours of the twenty-four, and no one enjoyed more vigorous health than he did. I have a distant relation, a gentleman of the most industrious and active habits, who allows himself but about five hours a day for sleep, though he is near seventy years of age. Such persons, it is proper to know, have acquired these habits by education—by self denial. To enjoy sweet repose—"Tired nature's sweet restorer, balmy sleep," as the poet has beautifully expressed it, generally presupposes an exemption from any bodily pain or suffering, and a good and quiet conscience, void of offence towards God and man. These are prerequisites that all should

study to possess;—the first by the observance of those physiological laws, the principal among which I have already briefly pointed out,—the second, by doing unto others that which they would have others do unto them.

4—*Of Clothing*. Man's intellect, in many cases, is intended to supply, secondarily, what nature, with her own hands, at once bestows upon inferior animals. Thus, those animals that inhabit high latitudes of extreme cold, have usually not only thick skins, but these are protected by the thickest and finest furs imaginable; while those of a more southerly habitation are, in a great measure, destitute of both these protective agencies. Man, on the contrary, was intended to inhabit all latitudes—all climates—to stem the burning rays of a topical sun, and contend with the icebergs of the poles! Now in some measure the difficulties of these extremes of heat and cold he overcomes by clothing. The Russians and Greenlanders wrap themselves up during their long winters in skins and furs, while he of the equatorial regions, clothes himself merely in conformity to the rules of decency,—knowing as he does "good and evil." A few suggestion as respects clothing may not be amiss. Children, during early infancy and during almost all seasons of this western country, where there are sudden changes of temperature, should be, in some measure, protected against those changes by soft flannel clothing. After they have attained however, the age of a few months, it is well to treat them less tenderly in this respect, that they may become inured to atmospheric vicissitudes. Old people, too, in consequence of a tendency they have to maintain but a low degree of animal heat, should generally wear soft warm clothing. Those, however, of stout robust constitutions may, as well as not, be rather thinly than thickly clothed. Invalids, and those afflicted with old chronic complaints, should be sedulously protected against the influences of cold. Shoes and stockings are indispensable during our cold winters. A good rule to be observed in the *making* of clothing and shoes or boots, is to avoid tightness—not to pinch and cramp any part of the body,—especially of young

and growing persons. Fashions should be disregarded, and comfort and convenience consulted. It is a ruinous,—a wicked fashion, which subjects us, not only to inconvenience; but I have already alluded to this subject in the chapter on physiology. Women are sometimes in the habit of clothing themselves warmly, except upon going out on a visit, when, even during the coldest weather, they exchange their heavy garments for the thinest and lightest articles. Such a practice many times leads to the worst consequences, and many persons sacrifice their health or even lives thus foolishly. Care, therefore, ought to be observed in cold weather, in adopting such measures, as they may be very grave in their consequences, indeed.

5—*Of Bathing*. The observance of cleanliness demands of every individual the occasional ablution of the body with water, and no less does health demand the same observance. The skin is an immense organ, the office or function of which is to extricate or set free from the body, in the form of watery vapor and sweat, certain effete matters that, were they allowed to remain in the blood, would produce a bad state of health. Now, by occasional bathing, the skin is not only kept white and clean, but its numerous pores or little orifices are kept open and their action maintained in a state of health. There are two plans of bathing—the one in cold and the other in warm water. The first frequently has advantages over the latter, and may often be very beneficially practised. In weakly and debilitated subjects, however, the warmer bath is the safer mode, and should, therefore, be preferred with such persons. Of water as a curative agent in many diseased conditions of the body, I shall not speak further than to say that, when judiciously prescribed, it may not unfrequently be used to great advantage. Nevertheless I must express my disapprobation of the course which certain quacks are at this day pursuing with this agent. It is quackery to attempt to cure all diseases by the same means, and he who makes pretensions of this kind deserves the hearty condemnation of every scientific physician.

CHAPTER V.

CLASSIFICATION OF DISEASES.

Nosology is a term used by physicians to express the arrangement of diseases into classes, orders, &c. Many very ingenious arrangements of this kind have been invented by different individuals; but for reasons obvious to every intelligent physician of this day, they have, in a great measure, fallen into disuse. Indeed, nosological arrangements must necessarily always remain imperfect, and this imperfection in classification sometimes proves very ruinous in practice. For example: Dr. Cullen classes Dyspepsia under the head of nervous diseases; but modern practitioners well know that the most inveterate cases of dyspepsia are associated with an inflammatory condition of the stomach, and consequently that the plan of treatment proper for nervous diseases is calculated to aggravate, instead of palliate the disorder. Such arrangements have, therefore, been generally laid aside, and a more rational and common sense classification, in nowise calculated to mislead the young practitioner, has been adopted. Dr. Cullen lays down in his arrangement, no less than four classes, and twenty orders, including one hundred and forty-nine diseases.

The most natural, as well as most useful, classification of diseases is, perhaps, into four classes. The first includes all Fevers, except those to be included under the fourth. The second, Inflammatory diseases in general. The third, Anti-Inflammatory diseases. The fourth class includes those Specific diseases that are propagated by contagion. The diseases of this class may be either inflammatory or febrile.—

Now names may be multiplied, at pleasure, to diseased conditions under any of the above heads. But multiplications of this sort are not very useful, and in a general view of disease like the present, they should be avoided. A physician being called to treat a case of sickness, examines the case to ascertain whether or not he has to do with fever, with inflammation or not; or whether a specific contagion. These points being settled, he then has laid down the rules of practice that are to guide him in the treatment of the case.

For the reasons, then, which have just been suggested, I shall in the four succeeding chapters, treat, first of Fevers in general, giving a very brief outline of their natures, symptoms, causes, and the best means within the reach of those unacquainted with medical science, for their management and relief. The second class will come up for consideration next; and as it is my object to present a very general view of the diseases termed inflammatory, I shall not enter at great length upon any one disease of this class, but shall speak in terms which will, with few exceptions, apply to the whole class. The third class, embracing anti-inflammatory diseases, will be brought forward, and some general rules given in relation to the best mode of managing the most common affections of this class. Class fourth, as already intimated, embraces all those affections, conveyed from one person to another by contagion, and producing their like, from that, among the most formidable of all diseases, small pox, to itch, scarcely deserving notice. But it will not, I hope, be expected that I can treat in the compass of a few pages any thing like minutely, of all embraced under the four foregoing heads. On the contrary, my remarks must be very general, and it, therefore, behooves me to make them plain, instructive and practicable.

CHAPTER VI.

OF FEVERS IN GENERAL.

Class First.—"What is Fever?" is a perplexing question, and one not very well defined by physicians themselves. It is a common notion that heat, a dry, hot skin, headache, restlessness, thirst, &c., are symptoms which clearly indicate the existence of fever; and so they do. But their entire absence does not necessarily imply the non-existence of fever. An individual may have an unnaturally cold skin, he may be free from pain, have no thirst nor much restlessness, and yet be laboring under a dangerous fever. Fever, perhaps, is pretty well defined when we say it affects the general system, deranging more generally than almost any other disease, the functions of the entire body. There are two kinds of Fever, radically different from each other, and a correct understanding of this fact, more than any thing else, perhaps, contributes to give the physician an advantage over the miserable pretender. The term fever, strictly speaking, should be confined to those constitutional diseases in which it is the first and most prominent symptom. But we find fever almost invariably associated with all inflammations of any considerable extent. Now here the distinction is to be drawn. This latter fever is clearly referable, for its cause, to the primary inflammation. It is, indeed, a consequence of that inflammation. Cure the inflammation, and you cure the fever by taking away its cause. The same is not the fact, however, with genuine fever. Here the fever is the primary disease,—the first link in the chain of morbid action. Inflammation may, and indeed generally does, spring up in the

course of a fever, provided it be permitted to run its course; but the inflammation here, I grant you, is not the cause of the fever, but the consequence of it. And although the cause of the original disease may be amenable to appropriate treatment, yet if its consequence—inflammation—is not obviated, the patient may perish thereof. It will be readily perceived then, that the nicest discrimination is absolutely necessary in the accurate investigation of this class of diseases; and that upon a correct understanding of the precise condition present, much must depend in the management of the same.

The causes of Fever are somewhat various; but the most common and fruitful of these, so far as the west is concerned, at least, is undoubtedly, warm weather followed by the rotting and decaying of vegetable matters, conjoined with moisture. Hence it is that fevers are more rife during warm and moist autumns, than under any other circumstances.—There are other causes, however, which, in concert with the foregoing, materially increase the first mentioned. Such are sudden changes of the atmosphere, too suddenly cooling the body when over-heated, and last, but not least, errors in diet —"gormandizing."

Of the nature of Fever I need say but little. It is a disease that depraves the blood, and consequently through it infects the whole body. Its consequences—inflammations—as already intimated, are to be, in the majority of instances, more dreaded than the primary fever itself. The question is with the physicians, has the patient simple fever, or is his fever complicated with inflammation? The most frequent of these inflammatory complications is, by far, in this country at least, that of inflammation of the inner coat, or lining of the stomach and bowels; and it is from this cause perhaps, oftener than from any other, that our fevers destroy life. Having now said a sufficiency under the head of general fevers, I shall next proceed to notice individually, a few of the more common species of our western fevers. And here I shall study brevity, and endeavor to make my remarks as practicable and plain as may be.

SECTION I. *Of Intermittent Fever*,—vulgarly called *Ague and Fever*, *Chills and Fever*, &c. This is one of the most common diseases of our western country, and it must be confessed, more than any other perplexing to the physician and tedious to the patient. Autumn is the time it most commonly makes its attack, but it is not very uncommon in the spring, and I have occasionally seen new cases of the disease occur in the dead of winter. It is a common disease in almost all the low and marshy districts of the western country; it is also very common along all our water courses and low sandy bottoms. Upon the high rolling lands, remote from rivers and marshes, it is rarely seen. These facts, with others which might be stated, establish, beyond cavil, that the cause of the disease is generated in localities such as have just been indicated; and as it is infinitely more common during the hot months of autumn, when the luxuriant vegetation is in a state of decay, it has been inferred that the cause of intermittent fever is generally owing to a poison, which has got the name of miasm, and which requires, for its generation, a combination of circumstances, such as I have mentioned. While I do not doubt the correctness of the view here given, in the main, still I know there are certain facts which go to invalidate its universal applicability to all cases of Ague and Fever: and other causes of the disease are, therefore, to be sought,—but of these I design not to speak at present. *The symptoms, or signs, of the Ague and Fever* are so well known, when well marked, by the people of the west, that a description is scarcely called for; yet some, perhaps, are not acquainted with the manner in which it works so perfectly.

Previous to the attack the individual is apt to be indisposed, to have a feeling of general soreness and weariness, to suffer some impairment of appetite—in short, he is unwell. After these symptoms have continued for an uncertain space of time, the patient—for now he may have this name—feels thirsty, is restless andslight chilliness ensues;—he feels cold and hot at the same time, and presently begins to tremble

with cold. This coldness he attempts to alleviate by getting close to the fire, or being thickly covered up in bed, but all to no purpose; his teeth chatter, his limbs are convulsed—in one word, *he shakes*. It may be, he is sick at his stomach and vomits, or he may even purge violently during this cold stage of the disease, but these symptoms are rare. Convulsions are not, however, very rare during the cold stage in young and excitable children. I have seen the cold stage, in these little subjects, frequently ushered in by convulsions; and these may disguise the disease so as to lead to serious errors in treatment. The cold stage having continued, say from a few minutes to several hours, the patient begins to be warm, the shivering gradually ceases, his head begins to ache, violent pains of his back, legs, &c., are developed, he is thirsty, and his pulse, which during the cold stage was frequent, but feeble, acquires greater strength, his extremities, as well as his whole body, are dry and hot, and he is often anxious and extremely restless. The symptoms being well established, constitute what has, appropriately enough, been termed—

The Hot Stage.—The duration of this stage is uncertain; it may continue only for a very short time, but in severe cases it is apt to last for many hours, and the patient gets but little rest from the time it quits him, until he suffers another "chill." It is the duration and severity of this stage—the hot, that characterizes the mildness or severity of the disease. When it lasts only a short time, the disorder is usually trivial, but, on the other hand, if it continues for the space of many hours, the patient is greatly exhausted, and the disease is to be regarded as one of severity. However long or short the hot stage may be, it is almost invariably followed, sooner or later, by the third, or,

Sweating Stage.—With the commencement of this stage all the violent symptoms begin to abate, and with its termination, the patient, for the time being, is restored to comparative health. This third, or sweating stage, seems to be the *result* of the disease, and it is to be looked upon as a salu-

tary evacuation, tending to relieve the suffering organs.—The perspiration or sweating usually begins to show itself upon the face and forehead, and, gradually extending, it speedily covers and bathes the whole body. It may last several hours, during which time the patient often lies and sleeps profoundly. After the sweating has subsided, the patient, as already mentioned, usually feels pretty well, has an exemption from his fever and anxieties,—has what the Doctors call an *intermission*, which circumstance has given the name to the disease. This intermission is of uncertain duration, according to the type of the disorder. For example: if the disease returns daily, and the fever has been tedious, lasting for many hours,—of course, but a few hours of comparative health can be had. But if the disease returns every other, or, as is sometimes the case, every third day, then the intermission is of greater length. Why it is that the disease returns sometimes every day, sometimes every other or every third day with the utmost regularity, I nor any other person can tell. Such a fact admits of no other explication than that of saying it is one of the circumstances entering into the very constitution of the disease itself—an ultimate fact in its history.

I have thus given a brief, but I hope a plain description of what is called a paroxysm of intermittent fever—ague,—such a description as I hope may be of practical benefit to my readers. And now I have to warn them, that they are not to look, in every case of Ague, for the symptoms so regular and well marked, as those here laid down. On the contrary, much diversity is to be looked for—many deviations from the course which has been laid down—as a pattern case.

Sometimes, instead of the *shake*, we have the most trifling chill; sometimes we see little fever, although the shake may have been very perfect; sometimes there is scarcely any sweating, but in all cases there must be an *intermission*, or the disease loses its most peculiar characteristic. This is a circumstance that should not be lost sight of, and one upon which our treatment is principally to be predicated. Next I pass to

The Treatment.—This is to be conducted on general principles. I shall not propose any other means for the cure of this malady, than those most simple and most universally efficacious; first, because the disease, as seen in this country, is usually void of danger, and of difficulty in its management; and secondly, because, when the means here recommended fail of effecting a cure, the advice of a skilful physician should be solicited. If called to a patient during a paroxysm of intermittent fever, two indications present themselves. The first is to conduct the patient safely, and as comfortably as possible, to a perfect intermission; and secondly, to provide the system against a second or subseqent paroxysm. Now nature frequently fulfills the first of these indications so perfectly that interference, during this stage, is little else than culpable officiousness. If, however, there should be present much nausea and vomiting, it is well to give plentifully of warm drinks to clear the stomach, and then 15 or 20 drops of Laudanum may be given to an adult, with a prospect of much advantage. Should the cold stage be long and protracted, and very anxious symptoms be present, a warm foot bath, with mustard poultices over the breast and stomach, is apt to cut it short. It is best in most cases to avoid strong drinks—such as hot teas—or what is worse, warm juleps, as these generally aggravate the subsequent hot stage. During the hot stage, if there is much headache, pains of the back and limbs, with restlessness, and a confined state of the bowels, a full dose of salts will often be found to allay these distressing sensations. Our efforts, however, to cure the disease, are to be made during the intermission, when the system is in its natural condition,—cool, calm, and free from suffering and anxiety. A thousand and one remedies are recommended and used for this purpose; from the miserable concoctions of ignoble quacks, to the scientific and refined prescriptions of the most eminent physicians. There seems recently to have been a coincidence of action among the quacks of the whole western world, to invent a medicine, and give it the most outlandish

name, to cure permanently, this malady, and to extract from the dear sufferers exorbitant prices for the same. Many of the nostrums, it is to be remarked, answer the purpose for which they are intended very well, because their active, or medical virtue, depends upon the *Quinine* which they contain, and which is, in fact, *the remedy*—the *best ever yet discovered* for the cure of Intermittent diseases. I know the public are apt to attach some wonderful, almost magical, virtue to the patent nostrums of the quacks, but this is no evidence of their superior worth. A few years ago "Sappington's Pills" were in great vogue—as the very best medicine ever used for the cure of Ague; and the people, in preference to buying a prescription from a physician, would pay the most extravagant prices for these, although subsequent developments show that they are nothing but quinine, disguised by some inert substances. "Smyth's Tonic" is, also, undoubtedly, little else than quinine, or the extract of the Peruvian bark, which amounts to near the same thing; and the same may be said of numerous other preparations for the same purpose.

But there is a rational—a scientific mode of treating this disease, and this is the plan that the sensible physician adopts. It is proper to examine the case, to investigate the present condition of the patient. If his stomach be found filled with half digested food and vitiated bile—indicated by a thick yellowish coat of fur on the tongue, constant nausea, &c., it is well to disgorge it by an Emetic of Ipecac. But this is seldom to be recommended; for although emetics are often extremely useful in the hands of skilful physicians, yet, in other hands, they may be injurious—sometimes lamentably mischievous, in consequence of being ill-timed, or given when the stomach is highly irritable. The bowels are most frequently, in this disease, somewhat constipated or bound, and opening medicines are therefore frequently useful. A little Epsom Salts, or a dose of Castor Oil will almost always be safe, and will, at the same time, generally answer for this purpose very well. Let whatever course may be pursued,

however, having reference to the bowels, as soon as the fever has principally gone off, and after the paroxysm is over, *quinine* is to be given with a view of preventing a recurrence of the shake or chill. An adult should take, during the intermission, from 10 to 20 grains; and I prefer giving this amount in about four doses, a few hours intervening between each dose. I usually divide 12 grains into four parts, and direct one to be taken once in two, three, four or six hours, according to the expected length of the intermission. This course hardly every fails in putting a speedy stop to the disease, and the patient, in a few days, seems but little the worse for the attack. About the end of the second week, most generally, however, it is well to remark, the disease has a well known tendency to return. It is, therefore, necessary to be cautions about this time; and if the slightest symptoms of the disease show themselves, it is proper to evacuate the bowels by a little oil or salts, or some gentle pills, and to again take a few doses of the quinine, as before. This, with avoidance of exposure, of fatiguing labor, and proper attention to the rules of diet that have been laid down in a previous chapter, is, in my judgment, the very best that can be adopted for the removal of the Ague. Bitters, notwithstanding the great use made of them during convalescence from this disease, are often useless—nay, decidedly mischievous; and, as a general rule, I do not prescribe them.

Throughout the whole course of the disease, and even for weeks after apparent health has been restored, it is well to observe the most scrupulous caution about eating. No one need expect to avoid relapses of Ague, if, after the disease has been arrested, he begins immediately to indulge himself in eating crude, half ripe fruits and heavy indigestible articles of diet. Such a course never fails in impairing the functions of the stomach, already debilitated by previous disease, and through it the whole bodily functions suffer. Equitable clothing and moderate exercise are, too, to be observed. For a lack of these observances, patients with ague relapse again and again; new medicines are tried; the physician con-

demned, &c., when the patient himself is at fault. Ague should not be permitted to run on unchecked for weeks or months. Incurable diseases are frequently the consequence of a neglect to promptly arrest this affection; Dropsies, enlarged spleen (ague cake) Dyspepsia, &c., &c., are no unfrequent sequellas of neglected Intermittents.

II. *Of Congestive Fever.*—Congestive Fever is nothing but a form of the last disease treated of—Ague. The Congestive Chill—Sinking Chill as it is frequently called, is the most perfect and violently dangerous form of Congestive Fever. It makes its attack precisely like Ague. The patient is, after some days, it may be, of indisposition, seized with rigors, or slight chilliness, and these are accompanied with great anxiety, or sensation of impending sinking or smothering, his extremities, hands and feet, are cold, his pulse is sometimes very slow and distinct—at others, frequent and almost imperceptible. These symptoms, continuing to augment, a cold clammy sweat breaks out over the greater part of the body, the breathing is more laborious, until death suddenly closes the scene. This is, I repeat, perfect Congestive Fever, and demands the promptest treatment, 1. To bring about reaction and restore warmth to the extremities; and 2. To guard the patient against a second paroxysm; for after the cold stage has been replaced by the hot, it is to be expected that the disease will return in the same way as does ague. The first of these indications is to be fulfilled by applying heat to the extremities, with brisk rubbing or friction; mustard poultices should be put over the chest, to the back of the neck, and to the ankles and wrists. But if these means fail to bring up the requisite warmth of the parts, the patient should drink some warm toddy, or what is better, pepper tea; and I do not hesitate to give large doses of quinine at the same time. With the use of means of this kind, promptly applied, there are but few patients that will not rally. Now as soon as signs of returning warmth begin to manifest themselves, it is proper to discontinue the stimulants and the case is then to be conducted, during the hot stage, as

a case of simple ague. To fulfill the second indication—that is, to guard the system against a second chill, quinine is to be freely used; not less than 20 grains should be given in the course of the day to an adult. If the bowels are confined, a spoonful or two of castor oil ought to be given, but this must not interfere with the quinine—*it* must be taken, whatever other course is adopted. A skilful physician, however, I presume will be sent for, whose judgment will be adequate; but before he can be got the patient may perish, unless attended to as above directed. In some cases, such as have been just described, or in attacks less violent, the patient partially, but not wholly, rallies from the cold stage or chill. Partial warmth is restored to the extremities, the body and head are hot, violent pains of the head and limbs remain;—in short, neither the hot nor sweating stage come on. Now this is what physicians generally call Congestive Fever; and it usually requires their discrimination to treat cases of this kind. Quinine is the most useful medicine here, although it is frequently indispensable that other means be resorted to; but a proper selection of these generally requires the discriminating judgment of a medical gentleman. Then, I presume, advice will be sought.

III. *Bilious Fever*,—properly *Remittent Fever*.—This disease, in many respects, very closely resembles the Intermittent or Ague. Its course is the same, and its symptoms, in the beginning, are identical with those of Ague. Its prevalence is almost exclusively confined to the latter part of summer, and to autumn; and it is evidently the offspring, in a vast majority of instances, as is Ague, of a *miasm or poison* in the atmosphere of certain regions. In this affection, instead of a shake or distinct chill of ague, we have only the slightest sensation of coldness, generally occurring every morning, followed by a persistent fever, which, after many hours, usually suffers some abatement,—remits, but does not terminate in general profuse sweating, like ague or intermittent disease. The remission usually lasts but for a short time, the slight cold stage above pointed out coming on.

This course may continue for many days, and may, through the inherent powers of nature, come to a salutary termination. But it is not rare for all the symptoms to gradually become aggravated; the fever becoming more continuous, the remission less perfect, the different functions more deranged, the appetite entirely lost, offensive discharges from the bowels take place, a thick brownish coat is on the tongue, delirium, (craziness,) and cold clammy sweat, pulse very frequent or entirely obliterated—death closes the scene.

Bilious or Remittent Fever is a disease, which, when rightly managed, is, in this climate, very generally curable; but, if neglected, or what is infinitely worse, if mismanaged, it is one of a serious character, and not rarely of fatal termination. My advice is, therefore, that in all cases of this malady, portending to severity, a Physician's advice be requested. Purgative medicines are often improper, because the bowels are already disposed to be purged. On the contrary it is frequently advisable to give laudanum to check the inordinate action of the bowels. The stomach is sometimes very irritable, and much difficulty is encountered in quieting it—efforts at vomiting being incessant. Now, although these efforts at vomiting would seem to indicate that the stomach contains impurities which should be disgorged, it is many times exceedingly improper to administer emetic medicines; for the fact is, it is most often an inflammatory tendency in the stomach, which is the cause of its undue excitation, and not impurities, as too often imagined; and as emetics never fail to aggravate this inflammatory tendency, it is obvious that here they are improper. I have known much damage done by their injudicious use.

A matter, then, of primary importance in the treatment of this affection is to remove costiveness, if it exists, by the use of mild laxative medicines. A little castor oil will be found the safest, as well as a good medicine for this purpose. But if the bowels are too open—the patient being greatly purged—a little laudanum, 15 or 20 drops, repeated every two or three hours—should be given to check them. To allay the

irritability of the stomach, the best means are the avoidance of drinking more water than a few spoonfuls at a time; a mustard poultice applied over the stomach will sometimes be found beneficial; a few drops of laudanum—four or five—in a teaspoonful of cold water, often repeated, will prove efficacious when other means fail.

Quinine here, as well as in the preceding varieties of fever, is, however, the most powerful weapon with which to combat this disease. I am in the habit of prescribing it freely—two or three grains every two hours, as soon as the stomach and bowels are sufficiently quieted to receive it, throughout the remission, beginning as early as possible on its accession, and repeating it until the fever comes up, when it is best to discontinue the quinine, allow the patient cool air and drinks, &c. At the decline of the violence of the fever, the quinine should be again repeated, and this is generally sufficient to cure most cases. But, as already suggested, a skilful physician should be called in.

As to the patient's diet while laboring under Bilious fever, nothing should be allowed whatever of a strong or heating nature. Corn meal gruel, rice-water with a litttle milk boiled with it, weak tea or coffee with toast, and these in small quantities are amply sufficient to be used as nourishment in most febrile disorders. After the patient has recovered so as to walk about, his diet may be gradually increased; and he may take exercise, so far as compatible with his feelings, in the open air. Bitters are rarely serviceable, during convalescence from this fever, in restoring strength; but they are frequently injurious. A diet such as has just been suggested, with out-door exercise, is all that, in general, is necessary. Ague is sometimes a consequence of Bilious Fever, but as it requires the same kind of management as when a primary disease, I need add nothing further to what has been said under its proper head. Quinine must be given to arrest its course, and the constitution restored by attention to diet and the bowels.

IV. *Yellow Fever* demands from me, in this place, little

attention, other than mere mention. It is a disease of the South, and I have never seen a case of it. There are, however, in my opinion, good reasons for regarding it in every essential particular, as a Bilious Remittent Fever, aggravated by a southern Climate. The symptoms are not unlike those of an ordinary Bilious Fever, but they are greatly aggravated. Incessant vomiting is one of the worst symptoms of this terrible affection, and its arrestment a principle indication in the treatment. A deep yellow tinge, which the skin acquires in the course of the affection, and which is an evidence of very great derangement of the Liver's office, has given it its characteristic name. Calomel in enormous doses, with quinine and other adjuvants, is recommended as the best mode of treatment, but it must be confessed that Yellow Fever in its aggravated form has hitherto, in a great measure, baffled the skill of the most eminent physicians in the world.

CHAPTER VII.

OF INFLAMMATORY DISEASES.

Class Second :—By inflammatory diseases is meant all those affections in which inflammation is the seat and cause. Fever, as already stated, may result in inflammation, but in an inflammatory disease the fever is secondary, and is dependent upon the inflammation—the inflammation being the primary disorder. But what is inflammation? It is, I answer, a state of a part or parts of the living body, characterized by redness, heat, swelling, and pain.

The simplest illustration, perhaps, that can be given of inflammation is seen in cases of local injury. For example: a thorn is run into the skin on the back of the hand; very slight pricking pain is experienced in the part; a diffused redness of the part quickly ensues; the part feels hot, slight tumefaction or swelling takes place, a burning pain is felt in and about the injury. Now this is inflammation, and the attending phenomena are thus explained: The pricking pain is in consequence of the direct laceration and pushing aside of the minute nervous filaments of the injured part; the redness is owing to the undue quantity of blood, which, by a law of life, is deterimned or driven to the injured or irritated part; the heat is, in a great measure, at least, produced by the great quantity of blood circulated in the part; and the burning pain is to be explained by the swelling of the part, pressing upon the nervous ramifications. Inflammation is apt to terminate in one of four ways; First, in Resolution,—that is, after it has existed for an indefinite time, the swelling subsides, the pain, heat, and redness disappear, and the part returns to its natural condition. Of all the terminations of in-

flammation that by resolution is the most fortunate, and means, therefore, should always be used to promote it. Secondly: Inflammation may terminate in suppuration, or mattering. This is rather an effect of inflammation, than a termination. Instead of terminating by resolution, as in the first instance, the tumefaction increases until matter, or pus, as the surgeons call it, begins to be poured out in the affected part; this matter goes on accumulating, until it destroys the textures in so much as to discharge itself, or until an artificial opening is made into it. A common boil serves to illustrate this termination, very well. The third termination of inflammation is in granulation; that is, where a part has been destroyed, by suppuration, for example, the space thus formed is filled up by little granules or atoms of new growth, until the part is restored to original conformation. This is a termination, too, of inflammation that is to be encouraged, as it uniformly repairs the breach made in the affected part. The fourth termination of inflammation is, of all others, the most unfortunate and most to be dreaded: it is mortification, or the death of the part. A tumefied and painful swelling, suddenly losing its sensibility, turns purple or black, crackles when rubbed with the finger, and gives out a putrid odor,—this is mortification, and the part must inevitably perish. Now if this condition be very extensive, or the mortification be seated upon a very vital part of the body, the patient is apt to sink under it; but, on the contrary, if the mortified part be small and circumscribed, or be not fixed upon some vital part, and the constitutional power be not greatly enfeebled, the mortification is apt to be separated and fall off from the living part, and granulation fills up the void thus occasioned.

Having presented the foregoing remarks respecting the phenomena, local appearances, and terminations of inflammation, it is proper, in the next place, to allude to the constitutional symptons, which, in all cases of severity, are accompaniments of this affection. If the inflammation be trivial, seated upon some part of the body not important to the life of the individual, then I grant you, no constitutional symp-

toms may be manifest; but if the inflammation be extensive, and, especially, if it be seated upon or in some structure, whose integrity is of absolute necessity to the well-being of life, then constitutional symptoms, sometimes of a very violent character, are speedily developed, and these, in the management of such cases, are of primary importance.

The constitutional symptoms accompanying inflammation, are, in a majority of instances, in the beginning, rigors or chills, followed, after a short time, by fever,—that is, a dry hot skin, pain of the head, and frequently of the back and limbs, thirst, a deranged condition of the pulse, a white coat on the tongue, nausea, and sometimes vomiting, scanty, high colored urine, and, most often, costiveness. These are symptoms, common to extensive inflammation, but they are often considerably varied, according to the seat and magnitude of the inflammation. The causes of inflammation are very numerous. It may, as I have already several times suggested, be a result—a termination, so to speak, of Fever, proper. It is frequently the result of mechanical injury, as in the case of the thorn, above referred to. Chemical agents, such as poison, applied to, or taken into the body, often produce inflammation. Burns, as well as frost-bites, never fail to excite inflammation. Of all causes, however, productive of this affection, changes and vicissitudes of temperature are, undoubtedly, the most prolific. People residing in moist and changeable climates, are particularly prone to inflammatory affections. What amounts to near the same thing, as the last cause alluded to, is suddenly cooling the body, and remaining in a cold and chilly condition too long, soon after having taken violent exercise, or having been over-heated.

As regards the *Treatment* proper in inflammation, though admitting of a good many exceptions, there are certain general principles that are to be our chief guide. And, in this place, it is my design to speak only of those means to be used, and rules proper to be observed, in almost all inflammatory disorders, wherever situated. But I should observe, before entering on this subject, that I shall pass by, for the pre-

sent, those slight local inflammations that do not in any-wise affect the general system, and speak of those, only, that are of sufficient magnitude to excite constitutional disturbances. To combat the febrile or feverish symptoms, as a general rule, where the patient is stout and of good constitution, blood-letting stands preeminent. In many instances, indeed, it cannot, with safety to the patient, be neglected,—but it is a powerful remedy, and one, the indiscriminate use of which, cannot be too severely reprobated. And I cannot, without some misgivings, recommend to my readers a measure, which, in unprofessional hands might be, not only mischievous, but which, untimely and ignorantly put into practice, might lead to fatal consequences. I, therefore, feel strongly inclined to suggest, that in all cases, sufficiently desperate to warrant, in the opinion of the friends of the patient, a resort to the lancet, medical advice be requested. Blood-letting is not, however, even in aggravated instances of inflammation, always absolutely necessary; and we are in possession of other means, while they are almost uniformily safe, are, of themselves, very often sufficient to procure the patient much relief, and not unfrequently lead to a perfect cure. Such means, are quiet, rest, low diet, cooling drinks, and purgative medicines. These, when properly persevered in, and conjoined with the natural inherent powers of the constitution to overcome diseased action, will, I am persuaded from long observation, in a vast majority of instances prove efficient. Indeed, there is in the world, and some of them are in our country, a set of medical men, calling themselves *Homœpathic Physicians*, who in their efforts to cure disease, while they amuse their patients with inert doses of medicine, in truth, depend wholly upon rest, or exercise, as the case may be, dietetic restrictions, and upon the natural resources of the system; and their success has been a matter of astonishment to those Physicians who have been in the habit of dosing people with drugs for any and the slightest indispositions. The public are too fond of taking medicine, and are apt to attribute too much to its curative influence. Medicine, like every

thing else, is good in its place, but it is not always, and under all circumstances, good to make Apothecaries' Shops of people's stomachs!

In the management of almost every variety of inflammation, with the one exception of that of the stomach and bowels, gentle purgative medicines are more or less useful; and among these medicines, there is none, which, at the same time that it is safe in the hands of almost every one, combines more advantages than the common Epsom Salts, so generally in use. It evacuates the bowels pretty perfectly, and by making a powerful drain on the blood-vessels, empties them something in the same way that bleeding does. Next in importance to purgatives, and many times, in the slighter affections of inflammation, preferable to them, is a low diet. A patient laboring under a severe inflammatory disease, ought never, by any means, to be allowed any other nourishment than that of the simplest and least stimulating kind. Corn meal gruel, rice, and rice-water, a little toast, an Irish potato, boiled milk, &c., will prove amply sufficient in these affections, to sustain an adequate amount of strength, and they will not heat up the body, as rich soups, broths, and flesh are apt to do. In the treatment of many inflammations, rest is one among our most valuable resources. Position, too, should, as far as practicable, be attended to. The inflamed part, should, if possible, be so elevated as to be on a level, with the heart, if not raised above it. An observance of this kind cannot be too strictly attended to in inflammations of the head, and of the extremities of the body—the hands and feet.

Not designing to enter into the histories, the phenomena, and treatment of all the inflammatory disorders—deeming such a course unnecessary, after having laid down as has already been done, a general view of those subjects, I shall proceed to notice, individually, some of the more prominent affections belonging to the inflammatory class of diseases, in as concise and plain a manner as I am master of:—having first fully considered the propriety or impropriety of giving, in a domestic work, like the present, a prolix account of every

disorder, which, after all, is, with few exceptions, to be managed on those general principles just advised.

Section 1. *Of Inflammations of the Brain.* Beginning with the superior parts of the body, it is natural to consider the diseases of the head in the first place. The Brain is encased in thin solid walls, and its physiological condition, being not very well understood, the diseases peculiar to it, we would readily infer, are of difficult discrimination; and it is not uncommon, therefore, for Physicians themselves to misjudge the affections. But this is more apt to be the case in the diseases of children, in whom we often witness symptoms, strongly indicative of brain-disease, when, in truth, the brain is in a state of perfect integrity and health.

Nevertheless, there are certain symptoms that do, with considerable certainty, point out inflammation of the Brain; but these, in consequence of different structures contained within the skull when inflamed producing diseased symptoms, admit of some variation. Inflammation of the Brain is not very often an original disease, but is a frequent result of other affections; yet, however caused, and in whatever part of its structure the disease be seated, we expect to find a deep seated and persistent pain within the head; and this pain is generally accompanied by an exceedingly disagreeable throbbing sensation; the eyes, too, are, in general, painful, and the patient is, in a manner, unable to bear the light of day; they are red and watery. Sometimes a wild and raving delirium or insanity is an accompaniment of this disease, but this is not, by any means, a uniform circumstance. A frequent concomitant of this affection, is nausea and vomiting—and it is almost impossible, sometimes, to get any thing to lie on the stomach. Costiveness will most often be found to be present. The pulse is usually slow and full, beating strong; there is not very commonly, I think, any great heat of the body and extremities;—indeed, they may be unnaturally cold; but the head is always too hot. These are the most characteristic symptoms of inflammation in the head. But sometimes, it is to be remarked, the patient suffers little or no pain, has no

delirium, but, on the contrary, is all the time in a stupid or sleepy condition, from which, with difficulty he can be roused:—this condition going on increasing until, finally, the long sleep of death closes up the avenues of life.

Respecting the causes of inflammation of the head, they are numerous, and I need not narrate them very particularly. Whatever is capable of inducing inflammation, may, under favorable circumstances, excite it in the structures of the head. Cold, operating upon a system illy circumstanced to bear it, is one of these; mechanical injuries of the head,—fractures of the skull—is another. A full and plethoric constitution, gluttony, &c., &c., favor the development of this, as well as all other inflammatory affections. Having, already several times, alluded to inflammatory diseases, as a result of primary fevers, I will merely remark, in concluding this brief notice of the causes of the disease under consideration, that fever is, so far as my observation extends, by far the most common cause,—thus making the present disease, the sequel of another.

The Treatment of inflammation of the brain in robust and plethoric constitutions, and in those cases in which the disease is primary, consists in the vigorous application of those remedies and means which have been recommended, in a preceding part of this chapter, as proper in general inflammatory affections. A physician will, in cases of the above description, generally resort to active depletion by the lancet, but, as I have already intimated, I am inclined to the opinion that physicians only, should judge of the necessity of blood letting. Purgative medicines are very generally, in this affection, of essential service; and they should be prescribed in large and repeated doses, until free purging ensues. The object being to drain the system as much as may be, Epsom Salts, as they usually induce copious watery stools, should be used for this purpose, provided the stomach will retain them. If it is exceedingly irritable, mustard poultices, the foot bath, cold drinks, &c., may be prescribed, with, at least, a prospect of benefit. The head of the patient should be el-

evated, and rest upon a hard pillow, and it is a good plan to keep it constantly wet with the coldest water, while warmth is to be kept assiduously applied to the feet. The room should be darkened, as much as possible, and the strictest silence should be enjoined upon the patient's nurse; nor should the room, on any account, be suffered to be crowded by noisy visiters. By the way, this is a matter that I have not, I believe, hinted at. It is a great error, almost a wicked sin, to crowd, with unnecessary and noisy visiters, the chambers of the sick;—an error, because injurious to the sick, and a sin, because such assemblies subject families, at a time they deserve rest, to the most laborious drudgery, to wait, not upon their sick friends, but upon hosts of, too often, officious and unnecessary visiters. But, returning from this digression, I have yet to speak of the diet proper for a patient affected with disease of the kind under consideration. It should be of the simplest sort,—indeed, it is best, during the more active stage of the disease, to allow the patient little or no nourishment. A few spoonfuls of well-cooked gruel are sufficient to sustain life, and this is all that should be allowed. When inflammation supervenes as a consequence of pre-existing disease, the treatment must be modified accordingly; and it will be proper, in all cases of this kind, to call in able medical advice, for in spite of the most rational treatment, I am sorry to say, many cases of secondary inflammation of the Brain, terminate in death.

Sect.—2. *Of Quinsey.* Quinsey is an inflammation of the tonsils, two glandular bodies situated, one on each side, far back in the mouth. The symptoms which announce it are sometimes quite severe; and the disease, though not often attended with peril, occasionally destroys life. Washington, the venerable statesman, perished, I believe, of Quinsey. A chill is frequently a premonitory symptom of this affection. With or without this, however, the individual attacked experiences slight soreness of the throat, which, in a short time, is followed by an internal swelling. Now, most often, but one tonsil is inflamed, and, therefore, the swelling will be

partial and confined to the affected side, for it is the tonsil itself that is the seat of the swelling. Difficulty of swallowing and breathing are other symptoms, and, both glands being inflamed and swelled, these are symptoms of serious import, because the swelling may so block up the throat as to suffocate the sufferer, unless relieved by art. Fever of a high grade is apt to be present from the very beginning—the patient being hot and restless, without the ability, not uncommonly, to swallow a few drops of water to quench his burning thirst. Upon looking far back into the mouth, beyond the root of the tongue, the inflamed and swelled tonsil or tonsils, as the case may be, may be seen, very greatly enlarged, and usually presenting patches of a greyish mattery appearance. The danger attending the disease, in most cases, is of these glandulous bodies becoming so enlarged as to completely chink up the throat, and thereby prevent the ingress of air to the Lungs; but this does not very often happen, first, because but one is usually affected, and, secondly, because, before they attain to this size, they very commonly burst spontaneously and discharge, to the immediate relief of the patient, a large amount of very offensive matter that has collected within them. After an individual has suffered an attack of Quinsey, he is thereafter, during life, more liable to suffer returns of this affection, upon exposing himself to its causes, than those who have never had it.

The causes that most often give rise to the disease are, long exposure to cold and damp air, getting wet and remaining so until chilliness comes on, and I have, I think, seen the disease prevail in consequence of an epidemical or inscrutable condition of the atmosphere, of a like nature to that which causes fever.

Of the Treatment, I need not say much. It is a diesase that runs a rapid course, and if the inflammation is to be subdued at all and terminate in *resolution*, the promptest treatment is to be practised. With this intention active purgatives may be given in the very commencement of the attack, and the steam of warm vinegar and water must be inhaled from the

spout of a tea or coffee-pot, or the throat perseveringly gargled with warm milk and water. But these means often fail, and nothing but the formation of matter and its discharge, will relieve the patient. The persevering use of gargles, and the inhalation into the throat of the steam, should be continued, and the purgatives left off. A Physician, after the formation of matter, will often with the point of a lancet, open the abscess and let the matter out, and thus, instantly relieve the sufferer,—but a Physician alone will venture to perform the operation. When the matter is once got shut of, further treatment is, generally, unnecessary, as all the urgent symptoms immediately disappear.

Sec.—3. *Of Croup.* This affection is chiefly confined to children, and consists in an inflammation of the inner membrane or lining of the wind-pipe,—the tube leading to the lungs or lights. Like the preceding disorders, it runs a rapid course, and is always attended with danger. It occurs generally during the changeable seasons of the year, as spring and winter, and is, undoubtedly, in a vast majority of instances, the offspring of cold, acting on the delicate constitutions of children. Indeed, many times, it is preceded by a catarrh, or bad-cold.

Symptoms. The child is hoarse and has a deep, dry, and peculiar cough, perhaps for some hours, or even days before it is attacked. The attack usually comes on at night:—the child is found to be restless; it has fever and is thirsty, coughs more, emitting a whistling sound, somewhat like the interrupted noise of a flute or fife; it throws its head back in such a manner as to put the wind-pipe on the stretch. If the attack is one of severity, and the disease is allowed to go on, unchecked, the cough grows worse, the breathing becomes more and more difficult, the face and lips assume a livid or purple hue, the extremities are cold, and a clammy sweat bathes the little sufferer's face, and, death, about the third or fourth day, puts a stop to its agonies. There is a disease which closely resembles Croup, and which is, sometimes mistaken for it.—It is however, not attended with much heat, and is almost

exclusively confined to children during the time of life when they are cutting their teeth. Moreover, it comes on more suddenly, and is, in nine cases out of ten, the result of over-loading the stomach with crude and indigestible substances. But as the treatment I shall lay down is equally applicable to both these affections, I need not attempt to draw the distinction between them.

The Treatment. I shall not dwell upon the Treatment of Croup, because, after well-seated, it is a desperate disease, and requires the timely application of those heroic means, whose administration should be directed by competent Physicians. Nevertheless, in many instances, the disease may be warded off, before it gets a firm hold, by means, in the use of which no risk is to be incurred, and which every one might be able to command at any time.

In the very beginning of the disorder an emetic, followed by a purgative medicine, will hardly fail to cut it short.

For fulfilling these indications, I can recommend no better medicine than Cox's Hive Syrup, and Castor Oil. Cox's Hive Syrup is a compound Syrup of squills, and may be obtained from almost any Apothecary. I would advise those having children, to keep a vial of it continually by them. A common tea-spoonful is to be given to a child of two or three years of age, every half hour until puking is excited. After the child's stomach has become settled, it will be proper to prescribe Castor Oil as a purge. Bathing the child's whole body in warm water is a simple, and, conjoined with the directions already given, useful assistant in resolving this affection. Now the foregoing directions having been put in practice, and failing to procure relief, the advice of a competent practitioner should be solicited, for the circumstances augur an unfavorable case, and one that will probably, if long neglected, end in death.

The cause of death in Croup is generally a clogging up of the wind-pipe and other air passages, with a glairy mucus, which, not unfrequently has been seen to become organized into lining tissue. When this has happened all hope is most

often vain, for the records of medicine furnish but few instances of recovery from this terrible condition. The wind-pipe has been opened by an operation, under such hopeless circumstances, and it is said, with occasional success, but few Physicians will resort to so desperate means especially when they know, at best, they afford but a *chance*.

SEC.—4. *Of Inflammation in the Chest.* I pass, in the next place, to consider the diseases of the Chest. These comprise a numerous group, extending from the merest cold, to that most unmanageable of all diseases, Consumption; but it will not comport with the design of this work, to enter at large upon any of these. A few plain practical remarks are all that are likely to be of solid service to my readers. Physicians have of late, discovered new and valuable resources for correctly discriminating the affections peculiar to the Chest.

One of these resources is the percussion of the Chest,—that is tapping or sounding it with the tip of the fingers to ascertain, by the sound it gives out, whether this structure or part is diseased, and the form of the disease, should any exist. Another of their resources is the direct application of the ear, or of a hollow tube to the Chest, for the purpose of ascertaining the obstructions which these diseases are likely to occasion in the Lungs. But experience and much study are pre-requisites to expertness in auscultation, as this art is stiled.

(*a*) *Catarrh or Cold.* This is the most trivial, but at the same time, the most common, disease of the air passages.—It is what, at least, in the West, the people universally call a *Bad Cold*, and consists in the lowest form of inflammation, of the lining, or inner coat of the Lungs, the throat, the mucous surfaces of the nose and eyes:—the lowest form of inflammation, I say, but instead of the word inflammation, to express the same thing, medical men are in the habit of calling conditions like the one in question, *irritation;* and with them this latter term is preferable. For the present, however, I prefer impressing my reader's mind that these light colds are of an inflammatory nature, and that they are even liable to become

aggravated, and pass into the severer affections to be afterwards described.

The causes of these catarrhal affection or colds are too well known to require particularizing, especially here in the West. Every one knows that sudden changes in the state of the weather are liable to excite them; and that imprudent exposure does the same thing.

Of their Treatment, too, it is unnecessary that much be said. That invisible agent, sometimes called by medical men the Vis Medicatrix Naturæ, and recognized by every one as the Medicine or Doctor of Nature—the natural efforts of the constitution &c., is, if not foiled in its manœuvers, almost always amply sufficient to relieve the suffering system, in the course of a few days. To aid nature in her efforts, however, we must enjoin rest, an unirritating diet; and, if the bowels are any way constipated, and, more especially, if there be headache, with other febrile symptons, some Epsom Salts should be taken. I have frequently seen these colds almost completely cured, in the course of a single night, by bathing the feet well in warm water, and taking, if an adult, ten grains of Dover's powder, (see this head,) on going to bed. Every one must have seen bad colds, by a want of proper precaution, pass off into more serious affections; and for this reason if no other, I would urge the necessity of attending to them in season.

(*b*.) *Influenza*, is another disorder of the air passages, and in no way differs from the last, only in severity, and in the cause which gives rise to it. The symptoms are identical with those of catarrh, more than in influenza we generally have a troublesome cough, and, in the severe cases, considerable fever is superadded. There is, also, in influenza, much debility, and sometimes, a loss of appetite for food. Moreover, the cause of this disorder seems to be an inscrutable epidemical poison floating in the air. The disease rages more commonly during Spring and Winter, and the population of whole towns and neighborhoods are, during its prevalence in some instances, more or less under its influence. It rarely

proves fatal, but it is not uncommonly a disease of severity, and sometimes it is protracted and tedious.

The Treatment proper to be pursued in this affection is palliative, and not curative, for do what we will, it, like measles, whooping-cough &c., will run a definite course, and our efforts should, for this reason, be chiefly directed to conducting it along safely in its course. The patient should keep within doors, abstain from all stimulants, and eat nothing but the simplest farinaceous diet—such as rice, corn-meal gruel, a roasted potatoe, &c.,—with or without, milk, as he may prefer. Opening medicines should be taken from time to time, and Castor Oil upon the whole, is the best article for this purpose. In cases of considerable violence the family Physician's advice should be requested. The duration of the disease is generally from one to two weeks.

(*c.*) *Bronchitis.* Every one has heard of Bronchitis,—but few perhaps have correct notions respecting its nature. It is, like the two last disorders, a disease of the air tubes—an inflammation of their mucous or inside coat, and it differs in no essential particular from a cold, other than in point of severity. Indeed, Catarrhs often precede, and pass insensibly into Bronchitis. The inflammation in bronchitis is well marked, and constitutional symptons are apt to be present;—whereas, in colds these symptoms are altogether absent, or, if present, only in a very slight degree. There are two forms, or rather, I should say, two stages of Bronchitis—the acute, or active, and the chronic, or long seated. The latter is sometimes the consequence of the former, or acute disease, but it is oftener the result of neglected, or illy managed colds, The active or acute disease is generally ushered in with a chill, pain in the chest of a dull heavy kind, followed by a severe pain of the forehead, tightness across the chest, cough, more or less severe, attended with the expectoration or spitting up of a very tough glairy mucos which is often streaked with blood. In the active form of Bronchitis, the patient often experiences great difficulty of breathing, a sensation of impending suffocation, inability to lie in bed: and his face is generally of a purple hue, or blotched over

with dusky spots. Old and feeble persons, and little children are apt to perish with this disorder, in consequence of an inability, for want of strength, to expectorate or throw off from their Lungs the glairy viscid mucus which is constantly accumulating in them. If, however, proper treatment be used, and the patient coughs and throws from the Lungs a large quantity of this mucos, and especially, if this, after a few days, assumes rather a whitish, or pus like appearance, there may be reasonable hopes entertained for the patient's recovery. The other functions of the body are not necessarily greatly deranged during Bronchitis, but some fever is, in all cases of severity, present, and the pulse frequently varies very greatly from its natural standard.

In chronic Bronchitis the cough is, in general, the most characteristic, as well as the most troublesome sympton.—And it is a cough of this kind, that is so often mistaken for Consumption, and that enables Quacks to pratise their frauds so successfully upon a confiding public. This cough is very frequently curable, whereas that, in genuine Consumption, is hardly ever so. Quacks—I mean the more crafty and better informed of them—take advantage of this circumstance, and, if they are successful in relieving a case of this Bronchial disease, it is published to the four winds, and the certificate of Rev. Such-a-one, or Hon. Some body, is adduced to prove that Consumption *can be cured.* Chronic Bronchitis is simply a long seated, low form of inflammation, or irritation, if you will, of the inner coat of the Lungs—the Bronchi. Consumption is more than this. Appropriate medicines frequently benefit or entirely relieve the first:—unfortunately, medical men are acquainted with no medicines that will, with any certainty, produce permanent relief in the latter affection.

The causes that give rise to this disease, will, after what has been said, readily suggest themselves. Colds may lead to it, but they oftener result in the chronic than in the acute disease. The vicissitudes of temperature, which the body is often doomed to suffer, is the principal cause of the acute disorder. Public speakers, especially Ministers of the Gospel, are particularly obnoxious to the chronic form of this af-

fection, and it seems, in them, to be excited by too long and loud speaking.

Treatment. Both acute and chronic Bronchitis ought to be treated by medical men. The acute, because it is frequently a disease attended with imminent danger;—the chronic, because none but medical men, can accurately discriminate between it and Consumption, and none but they are likely to treat it correctly. Nevertheless, it may afford my readers some satisfaction to relate the treatment usually put in practice by them. In the acute disease they think proper, occasionally, to use the lancet: Calomel is often prescribed, sometimes as a purgative, but most frequently in small and repeated doses, as an anti-inflammatory agent; tartar emetic, in nauseating doses, is given to control the febrile excitement, and to act as an expectorant—that is, to assist nature in relieving the Lungs by throwing off the unnatural secretions which are constantly accumulating upon them; blisters they apply to the Chest to call, or entice, as much as possible, the inflammation from the suffering organs within. Active purgatives should generally be withheld, especially after the first few days of the disorder.

When Bronchitis has become chronic, or fixed firmly on the Lungs, the treatment is to be varied according to circumstances. Those medicines called expectorants, together with counter or external irritation to the Chest, by blisters, &c., are now our chief resources. Cox's Hive Syrup is one of the best expectorants in many instances, of the chronic form of Bronchitis. The pine Balsams—of Copaiba, Tolu, Fir, and the like, are very often of service. Sometimes, in consequence of constitutional derangements of other parts than the Lungs, other medicines of different kinds may be useful; but the foregoing are the means most to be relied on. It is to be remarked in conclusion, that, in old persons who have long labored under bronchial diseases, attended with troublesome coughing, medicines are often unavailing.

(*d.*) *Of Pneumonia, or Inflammation of the Lungs, and of Pleurisy.* These two disorders I shall consider in conjunction,

because in truth, it is seldom, indeed, that they are not both present at one and the same time—sometimes one predominating and sometimes the other. Pneumonia consists in an inflammation of the substance or body of the Lungs,—Pleurisy in an inflammation of their covering or enveloping membrane; but these two structures being in immediate contact, in ninety-nine cases out of a hundred, an inflammation beginning in the one, rapidly extends or passes into the other. The case may be a Pleurisy in the beginning—that is, may be confined to the pleura or investing membrane of the Lungs, but presently the patient spits blood, thus, clearly evincing that it, the inflammation, has passed into the substance of the Lungs themselves. So an inflammation of the Lungs, passes, almost certainly, sooner or later, to their covering,—*the pleura*, as it is called. The *Symptoms* of these affections resemble, closely, those of acute Bronchitis, and none but medical men can, in all cases, distinguish between them and the latter disorder. In Pneumonia and Pleurisy, however, the pain is apt to be much more acute, and very commonly one Lung or side of the Chest is the seat of the suffering; while in Bronchitis the whole of the Lungs suffer simultaneously. Many patients laboring under these affections cannot lie down at all, in consequence of the aggravating, the lancinating pains they suffer. The sputa or spit coughed up in Pleuro-pneumonic complaints, is not generally so glairy and tough as that of Bronchitis, and instead of being merely streaked with blood, it is intimately mixed with it, and thus rendered, in appearance, a dirty uniformly reddish looking semi-fluid mass. We refer the pain, which is sometimes inexpressibly sharp—in this compound inflammation, to the pleura or covering of the Lungs; for in the pure forms of Pneumonia the pain is trifling, being pungent rather than sharp and lancinating.

The constitutional disturbances in these inflammations are generally very considerable. Most often both Pneumonia and Pleurisy are preceded by a chill, accompanied, or soon followed by pain, usually confined to one side of the Chest,

or even to a very circumscribed spot of one side; but sometimes it is diffused over the whole of it. Cough is always an attendant of these disorders, but, in cases of a more purely pleuritic character, the patient, owing to it greatly aggravating the pain, attempts as much as possible to suppress or stifle it—smothering it, so to speak. Nausea and vomiting are not uncommon, but the bowels are often constipated; the pulse is apt to be not very frequent, but full and strong: headache too, is generally present; the urine is scant and high-colored. Now the most favorable signs of a salutary termination of the affections under present consideration, are a gradual subsidence or giving way of those constitutional symptoms, attended with a more abundant purulent or matter-like discharge from the Lungs, in the form of expectoration. The worst consequences, on the other hand, are to be apprehended when the breathing becomes more and more labored, when the constitutional symptoms are aggravated, the sputa is glairy and tough, &c.

Of the Causes that give rise to these diseases, little need be said, after having already, repeatedly alluded to them in the preceding sections of this Chapter. They are, in a vast majority of instances, identical with the common causes of inflammation—viz.: sudden vicissitudes of temperature of the body, however produced, whether by getting wet, a change of air, exposing the body to night air. Or they may be the effect of mechanical injuries inflicted upon the chest.

The treatment of both Pneumonia and Pleurisy, because they are dangerous affections, should be entrusted to medical hands only. I know not how to begin to give directions and rules by which these formidable complaints can be safely conducted by those unacquainted, in a great measure, not only with their intimate natures, but, also, with the properties and peculiar modes of action of the medicines most useful in their management. It is not to be expected that the farmer, the mechanic, or the tradesman, is sufficiently informed upon the intricate subject of disease, to incur, willingly, the responsibility that must rest upon every Practitioner of

the Healing Art. Nay, even medical men themselves, who have been out of practice for a few years, will often, only with the greatest reluctance, take upon themselves the management of a sick friend's case. It is only at the price of "eternal vigilance," in every department of medicine, that the physician need expect to triumph in his rencounters with the hydra-monster, disease, and escape the lashings of a guilty conscience,—guilty for inexcusable ignorance, or for culpable neglect. The medical man,—I mean the man who has to do with human life, must ever be a student, and the expiration of his pupilage, if he would be great and good in his profession, must be the termination of his professional life. He must, to a great extent at least, forego worldly pleasures, and deny himself those hours and days of idleness, that indolent and fashionable people so highly value. He should every day endeavor to become a wiser physician, a truer philosopher and a purer philanthropist, that he may more successfully contend with the "great destroyer," better guard the temple of science, and exercise a holier charity.

But, to return from this digression, and come to the treatment of these pleuro-pneumonic affections, I need only remark, that their management is, in a great measure, to be conducted upon the same general principles, as those laid down for the cure of bronchitis in its acute form. Blood-letting is, in a majority of instances, much better borne in pleurisy and pneumonia than in bronchitis. Calomel, too, in small and often repeated doses may, in general, be carried to a greater length in those affections, than in the latter disease. Purgatives are not to be too freely indulged in, but the tartar emetic is one of our most valuable means in resolving these deep seated inflammations. Blisters are sometimes, according to good authority, extremely useful, but I confess, I have not been well satisfied with their effects in my own practice. Indeed, they have appeared to me, in some instances at least,—especially when applied too early, to exert an injurious influence. Rest and the strictest quiet are to be scrupulously observed. And the patient's diet must be of the

simplest kind. Rice and rice-water are, during the active stage of these diseases, ample nourishment for the stoutest person.

(*e*) *Asthma* is an affection, the nature of which, I believe, is not very well understood by physicians themselves. Many children, and some adults suffer habitually with this disorder. It is periodic, coming on most commonly in paroxysms or fits, and is known by the common name of *phthisic.* It would appear to be a spasmodic or nervous disease, but many regard it to a certain extent, inflammatory; and I have, accordingly, placed it here. The smyptoms are—great difficulty of breathing, coming on suddenly and without warning. It is not necessarily attended with fever; the patient, the adult patient, cannot many times lie down, for days together confining himself to his chair; a wheezing noise is present at each effort at breathing, the pipes seeming to be almost closed up; the appetite is not often much impaired. In a few words, *the symptom* of asthma is, sudden attacks of laborious breathing, seeming to threaten life all at once. These attacks or fits, last an uncertain length of time, and they are apt to recur again and again. I see, annually, many young children affected with pure asthmatic disease, and it can often, it has appeared to me, be traced in these little subjects, to an origin in improper diet and the consequence thereof—ill digestion. In adult subjects, it is frequently difficult, or even impossible, to arrive at the cause or causes in which the disease originates. Constipation of the bowels and ill digestion, certainly favor its development, in the first place; but why it is that it returns again and again, after these conditions have been obviated, I know not. The disease is not often attended with much danger, at least to the immediate destruction of life.

The Treatment. The best that I can recommend within the reach of those for whose benefit I write, is the clearing of the stomach by an emetic, and the bowels by some gentle, though efficient purgative. Ipecacuanha (see index,) will answer to fill the first indication, and the "Aloetic Pills," (see index,)

will be found an excellent medicine for fulfilling the second. If the disease still persist, however, after the course here advised has been put in practice, then a teaspoonful of the Tincture of Lobelia, repeated every half hour till the stomach is made sick, will often be found of service. In adults, liable to repeated fits of asthma, some bitter tonics should be used to invigorate the system. In the cases of children, a few castor oil purges, will, in general, relieve them.

(*f*) *Consumption* is, as every one knows, when firmly seated on the lungs, a disease lamentably fatal,—one that all the records of medicine fail to furnish a remedy that even in a tolerable number of instances, can be depended upon, as, at most, more than mere palliatives. And what renders it infinitely more terrible, is its very common prevalence in all ranks of society. It is, however, unquestionably more frequent in the higher, more refined, and fashionable circles, than in the less artificial, more useful, and humble walks of life. Indeed, by many, and with a show of reason, too, consumption is regarded as a consequence of infractions of the laws of our being imposed upon mankind, probably, as a punishment for the wicked sin of conforming to the thousand and one of our senseless and murderous fashions and formalities of, so called, civilization. The aborigines of this country, as well as every barbarous and savage nation under the sun enjoy, I believe, almost complete exemption from the malady now in question. No cruel stays, or strong cords are ever by them used to distort their frames, cramp their lungs, and ruin their health. But on the contrary, their simple dresses and diet, the free exercise which they are accustomed to take in the open air, invigorate their bodies and inure them to the innumerable hardships, toils and privations, which their wild and romantic lives impose upon them. It is to be lamented, deeply, that learning as well as almost every useful science and invention of civilized life, has, by a perversion, truly unaccountable, come in our day, to be regarded as incompatible with the simplicity of nature. It is true, we attempt to cultivate our minds—our thinking powers—but the efforts which

we make to accomplish an end so desirable, as society is now constituted, are almost uniformly of such a character as to wound and cripple our physical energies,—the integrity of which must be preserved, if we would enjoy the vigor and force of intellect that the Creator made it possible for us, by prudence, by temperance, and by following the plain dictates of nature, to exercise. But I am again digressing—usefully, I hope.

Consumption is sometimes lit up in the lungs by some of the varieties of the foregoing inflammations of these organs; but in all such cases, it is just to infer, that a pre-existing disposition already existed in the system to take on the peculiar disease now under investigation. This predisposition is very often *hereditary*, being handed down from generation to generation, and it is styled by professional men, the scrofulous habit, diathesis, or constitution. Now it would be difficult for me to point out, clearly, those characteristics that mark the scrofulous, or in other words, the consumptive habit of body. Scrofula or consumption is itself, I grant you, when once set up, not very difficult of detection; but the signs that announce *its approach* are not, by any means, very easy of recognition. Most authors put those persons of extreme sensibility, of thin, fair and delicate skin and features, light hair and blue eyes, down as those obnoxious, more than any others, to consumptive or scrofulous affections. But I am free to confess that, in my comparatively limited observation I have most often seen the disease in persons of an opposite description. Those of dark hair and eyes, brawny skins, and deeply marked features are the subjects, very frequently, of the disorder now in question. Consumption is not a contagious disease, although some have fancifully concluded that such is the fact. During every stage of life, from early infancy to extreme old age, it is liable to be developed in, and destroy the human body.

Consumption is, undoubtedly, during its active stage, at least an inflammatory disorder. It is proper to remark, that scrofula and consumption are terms used to designate one

and the same disease, under somewhat different forms. Thus, when it affects the glandular system,—the glands of the neck, of the armpits, groins, and especially when it attacks the cartilages, (gristles,) and bones, it gets the name of scrofula, or king's evil. And on the other hand, when the chief seat of the affection is in the lungs, it is called consumption. The former may with some propriety be styled external and the latter internal scrofula. Swelling of the glands, (kernels,) of the neck, armpits, groins, &c., evince a disposition to take an external scrofula. Now should these structures pass into suppuration, or mattering, forming thus, ugly, ill conditioned sores, which discharge a thin serum-like fluid; and especially, if constitutional symptoms, such as feebleness of strength, and wasting away of the body, show themselves, the patient will be unhesitatingly pronounced by medical men as one laboring under a scrofulous complaint. These are symptoms not to be mistaken, and they augur ill for the patient, inasmuch as he has no security that the disease may not pass speedily to his lungs. Again, we frequently have added to the signs of scrofula, a diseased state of the bones, affecting the larger joints, and constituting what is called *white swelling*. Patients laboring under this latter form of scrofula, frequently perish in consequence of the excessive irritation which it is apt to give rise to.

But scrofula is particularly prone to fall upon the lungs, and when it does this, we have a very different train of symptoms from those above narrated,—a train which constitutes the diseased condition known as consumption. Now cough, although it must not be considered the characteristic symptom of consumption, is one of the most common attendants upon it. A patient laboring under consumption has almost invariably a cough; but he has more. That peculiar predisposition already alluded to, exists in the system: a cough generally dry and hard in the early stages of the complaint, occasionly troubles the patient; there is usually some pain of one side of the chest—most often of the upper part of the left side; slight chills now and then, at rather uncertain

intervals, followed by heat, burning of the palms of the hands and soles of the feet, accompanied, occasionally, by nausea and vomiting. During these paroxysms of fever, the cheeks are apt to be splotched or have a flushed appearance. As the disease advances, the cough generally becomes more and more troublesome, and it is apt to be, towards the fatal termination, accompanied by a copious expectoration of a thick pus or water-like substance; the chills and the paroxysm of fever are more distinct, and the flesh gradually wastes away, or is *consumed*,—a circumstance which gave name to the disease, consumption. It is very common, moreover, a short time before death, for the bowels to become lax, and this circumstance, not unfrequently hurries the patient off. The duration of the disease is from a few weeks to many years; being in many instances, a slow wasting or consuming of the body, but sometimes, though rarely, rapidly fatal. Before the fatal termination of consumption, the patient is usually very greatly emaciated and enfeebled, and has after each paroxysm of fever is over, heavy and exhausting sweats. He often experiences the most acute pain in his chest. But all this time, it is proper to remark, that the appetite remains good. Worn out finally, however, by the exhausting nature of the malady, his life is gradually extinguished, like the flame of the exhausted lamp, and he sinks quietly into the arms of death, or more suddenly it may be, he is hurried off in consequence of a rupture of a blood vessel within the lungs.

The nature of consumption is now very perfectly understood. Different parts of the textures of the body are, in those of scrofulous or consumptive habits, liable to have lodged in them a deposition of a peculiar kind of semi-organized matter. These deposites, forming little hard tumors, are by medical men, styled tubercles, and the disease to which they give rise, when lodged in the lungs, is called "tubercular consumption." Now certain textures, as already intimated, are more liable to suffer deposites of the tubercular matter to take place within them, than others. Among these are the

lungs in particular,—thus originating consumption proper; and the absorbents,—the glands, &c., are the next organs most liable to be affected in this manner,—thus, giving rise to scrofula, proper. Tubercles, being in the foregoing manner deposited in the lungs, may remain for a very considerable length of time, without giving rise to any very unpleasant symptoms; but much more commonly, after a time, they excite in these organs a low degree of inflammation, the result or effect of which is, to bring the softening or reduction into a sort of putrid matter, of the tubercular tumors here referred to. And the cough, it would seem, nature institutes for the purpose of throwing off or expelling the matter thus circumstanced from the lungs. Or the tubercular matter here referred to, being lodged in other parts of the body than the lungs, although it undergoes the same process as when seated in them, the disease thus resulting is, as has been before stated, styled scrofula, and is not so immediately dangerous to the patient's life.

The Treatment. When consumption is once firmly fixed upon the lungs, *it is an incurable disease.* All treatment is then, in a vast majority of instances, perfectly unavailing, at least, if directed to the cure of the disorder. Palliatives it is proper to use to calm and quiet struggling nature, and smooth the pillow of death, but active drastic medicines, under these circumstances, only serve to distress the patient, and hurry him to the end of that course, which fate has denounced as his earthly doom. All that *the physician* will venture upon in these desperate and inevitably fatal cases, is to guard the patient against every cause liable to aggravate his disorder, to advise an unirritating, though nutritious diet, to direct exercise as far as compatible with the strength of the patient, to prescribe gentle tonics to sustain his sinking powers, and lastly, when death is making its inroads amid agonies and suffering, to devise soothing and palliative medicine for the purpose, as far as possible, of paving the rugged path to the home of the body—the grave. This is all, I repeat, that physicians will attempt to do in cases of confirmed

consumption. Quacks may attempt more, but alas, for their patients! Death already inevitable, how cruel it is to ruffle the ebbing tide of life in its comparatively quiet retreat from the turmoils of time, by ignorance or inexcusable rapacity. Rather commend the confiding patient,—I neglected to say in the proper place, that consumptives often entertain hopes of recovery, even to their last moments,—to the Great Physician of souls, than dose him on strong and improper drugs, and feed him on unwarrantable flattery.

It is during the latent stage, or in other words, in the commencement of consumption, that any reliance need be placed upon medicinal treatment—when the individual is merely threatened with the disease. Here those medicines which experience has discovered useful in scrofulous affections may be resorted to with some prospect of advantage. Sarsaparilla, wild cherry tree bark, tar, and especially iodine, are to be reckoned as among the most useful of these. In conjunction with the use of these, warm clothing, daily exercise on horseback, if practicable, a good and nourishing diet, and especially the removal to a warm and healthful climate, will be, in general, the very best course that those predisposed to consumptive attacks can adopt. At this stage or period of the disease, or rather of a threatening of it, change of climate may prove beneficial; but after it is confirmed such a change is not only useless, but, on many accounts, decidedly objectionable. The disease is thereby, after inflammatory symptoms manifest themselves, hurried to a fatal termination. Moreover, patients laboring under consumption, sent into foreign countries, suffer many privations, and cannot have around them in their last moments, kind and sympathizing friends, to minister to their wants, console them, and render their exit from time to eternity peaceful and happy. It is cruel then, I repeat, to send patients off to die in foreign countries among strangers, too often, cold and indifferent to the sufferings of others.

For the treatment of external scrofulous affections—ulcers, glandular affections, &c., when accompanied by constitu-

tional symptoms, the same general course as that above suggested, is to be advised. Tonics, in conjunction with sarsaparilla and the mineral substance, iodine, are the means most to be relied upon. A simple cold infusion of the sarsaparilla, made by steeping the roots in cold water, and perseveringly used for weeks or months at a time, is as good a mode of administering it as any other. To this infusion the iodine may be added. The ulcers themselves, though frequently ugly and ill-conditioned, demand no great deal of attention. If the constitution can be righted, these are apt to heal of their own accord. A little simple salve may be applied to them from time to time; and this will be found about as useful as the more elegant plasters, ointments, &c., so much in vogue among the quacks, as cures for scrofula or king's evil. But I need add no more, for I must presume that physicians will, in a majority of cases, be called to their management.

(*g*) *The heart* is obnoxious to certain inflammatory disorders, but as physicians themselves do not very well understand the symptoms that point them out, I deem it unnecessary to dwell upon them. Much of late has been said and written on this subject by the most eminent men of the medical profession, but as yet, I am sorry to add, no very clear and definite conclusions have been arrived at. Therefore, I pass by, altogether, this variety of inflammation; and shall in the next place, consider some of the more prominent and interesting diseases of inflammation, which affect the adjoining chamber to the chest below,—the abdomen or belly—which is, as will be remembered, separated from the chest, by a thin membranous muscular partition, called the diaphragm, skirts, or striffen.

(*a*) *Inflammation of the Abdomen in general.* The abdomen or cavity of the body below the chest, and divided from it by the diaphragm muscle, is liable to be attacked by a diffuse or general inflammation, and to produce thus one of the worst and most dangerous diseases to which man is obnoxious. This general inflammation is, almost always, confined

to the inside lining or investing membrane, which, after lining the walls of the abdominal cavity, is reflected off to cover every organ or structure of the belly, and form a bond of union between them. An inflammation, thus extensive, is apt to excite great constitutional disturbance, and is, always, attended with imminent peril to the patient's life.

The symptoms which announce the existence of this terrible inflammation are generally sufficiently characteristic to create no difficulty in its detection. It is nearly always, in its acute or active form, ushered in by a rigor or chill, which sometimes, is of great severity, but which, in other instances, is only slight. This is, sooner or later, followed by febrile symptoms, such as, heat of the surface, headache, thirst, rapid pulse, &c., accompanied with a general soreness or tenderness of the belly, especially, if pressed upon. Sometimes this soreness exists even prior to the chill referred to, and is so great that the patient can scarcely bear the weight of the bed clothes. He usually lies in the bed with his legs drawn up toward the body, so as to relax the tension of the belly. Another symptom which is almost uniformly present in the affection now in question, is tumefaction or swelling of the abdomen. This is in many cases truly enormous, and unless it can be removed, it augurs ill for the patient. It depends upon an accumulation of wind in the stomach and bowels, which they are unable to expel in consequence of the external inflammation, under which they are laboring, interfering with their normal functions. The bowels most often are constipated, but sometimes the reverse of this is the case. The tongue is covered with a white fur, and its edges and tip are usually florid or red. Headache in this as in the other severe inflammatory disorders, is apt to be present.

The common causes that produce this affection are the same with those which give rise to other species of inflamation, as cold, &c. But, in addition to the common causes, there is a cause peculiar to this disorder, which much more often excites it than any and all others put together, and which serves to complicate and render it one of the most terrible and danger-

ous of diseases. It is parturition or child-birth to which I refer. The most difficult and over-powering cases of *child-bed fever* are nothing but abdominal inflammation, excited by the disturbance and injuries this part is doomed to suffer in giving birth to the young of our species. And in consequence of the delicate condition of females at this critical time, mothers frequently fall a sacrifice to this formidable disorder.

The treatment consists in the vigorous application of those remedies that experience has sanctioned, and almost sanctified, as the most appropriate for subduing deep seated inflammations. I will mention some of them: Blood-letting stands first; calomel in union with opium, second. Blisters and warm fomentations or poultices over the abdomen are also, frequently, serviceable. These, I say, are *the remedies*, but even these sometimes fail; and for this reason, I hope my reader will not incur the responsibilty of treating abdominal inflammation, when medical aid can be procured. The diet here, as in other acute inflammations, should be little else than rice-water, or thin corn meal gruel, and the strictest quiet should be enjoyed.

(*b*) *Inflammation of the Stomach* in its acute form, affecting as it does a structure whose integrity is absolutely indispensable to life, is a momentous disease, and one that demands more than almost any other, correct management to procure its removal. Many diseases will get well without treatment, and many more, in spite of improper treatment. Of these two modes in inflammation of the stomach, that of trusting the disease wholly to the sanative powers of nature, is infinitely preferable. Ignorant officiousness in the present affection, hardly ever fails to aggravate all its symptoms, and even hurry it to a fatal termination.

The symptoms of the disease are, a burning pain of the stomach, resembling, as patients express it themselves, that of some hot substance in this organ—a continual effort at vomiting; insatiable thirst for cold water, which, when swallowed, is usually in a few minutes thrown up scalding hot; headache, heat of body, &c. The pain of inflammation of

the stomach, unlike that of colic, is aggravated when pressure is made over the abdomen. The bowels are generally bound.

Causes.—These are various; but the most common, perhaps, is errors in diet. It will be recollected that the stomach is more exposed to disturbances thus originating, than any other structure of the human body. It is a common reservoir into which good, bad, and indifferent articles are promiscuously thrusted. The blandest and most nutritious articles of nourishment, no less than the most virulent poisons, are introduced into the general system through the stomach. Impressions upon its walls are frequently the injurious consequences of this various range of offices—irritations and inflammations are extremely common among these consequences. Acute inflammation is sometimes the effect of poisons taken into the stomach; it is, also, one of the many penalties affixed to the sin of gluttony. The more chronic inflammations of the stomach constitute many cases of the disease called Dyspepsia, but for reasons which I shall then explain, I will defer the consideration of this disease to another place. Inflammation of the stomach, oftener than any other inflammatory complication, is the result of our western autumnal fevers.

The Treatment of acute inflammation of the stomach is not, in general, if taken in time, attended with great difficulty, yet many cases result unfavorably for want of prompt treatment, or what is worse, in consequence of ill treatment. Physicians frequently bleed in this complaint, both generally, from the arm,—and locally from the stomachic region, by means of cups or leeches. They give Opium combined with minute doses of Calomel, and they will not allow the patient any other nourishment than rice-water or thin corn meal gruel, and these only in very small quantities. Purgatives here are apt to be injurious, from the fact of those medicines communicating to the stomach additional irritation to that already present, which the chief aim of our efforts is to allay. This objection to purgatives, however, cannot be urged

against the use of Clysters or injections. Blisters are sometimes used. Now the foregoing is *the treatment* of inflammation of the stomach; admiting, it is true, of slight variations. When greatly varied, however, the patient's life must be endangered. Emetics are sometimes erroneously given; active purgatives to overcome costiveness, too, are sometimes prescribed; hot teas, and even spirits, old women occasionally think fit to drench the patient with, to stop the puking, but these are reprehensible. Cold water taken in small quantities, and at short intervals, is the best drink in a majority of instances.

(*c*) *Inflammation of the Bowels* is like that of the stomach, a common and, though not so dangerous as the latter affection, a very troublesome disease. It is liable to affect persons of all ages and at all seasons of the year, and it depends upon so very great a variety of circumstances, that no very definite description of it can be given in a treatise like the present. All affections of the bowels, from the most trifling diarrhœa, (or lax,) to the most distressing dysentery, or blooy flux, depends upon inflammation of the bowels. Diarrhœa, or lax, is a symptom of the lowest form of this inflammation,—it is, indeed, generally regarded as simple irritation. The symptoms of this condition are frequent, thin and watery discharges from the bowels, debility, loss of appetite, and a wasting of flesh, if the disease lasts long; little or no pain or soreness is experienced under these circumstances. Infants are particularly liable to attacks of diarrhœa, and it is a disease frequently of serious import to these little subjects. Improper articles of diet and gluttony are, in nine cases out of ten, when conjoined with warm weather, the causes of diarrhœa. Abandon or leave off the cause, and in a few days nature will generally restore the patient to health. If this direction should fail, however, a few drops of laudanum, ten to twenty, for an adult should be given and repeated until its restraining effect is obtained. Physicians, it is true, often are required to do more than what I have now directed in these bowel affections, because the disease, as it falls into their

hands, is in many instances no longer simple. Having been excited in the manner above mentioned, or in consequence of the long and intemperate use of ardent spirits, it has passed beyond the simple irritation alluded to as the most common condition, giving rise to these watery evacuations from the bowels, and is now to be looked upon as a thickened or ulcerated state of the inner coat of the intestinal structure. When this is the case the purging is persistent and hard to control, because its course is now no longer transient, but permanent, and cannot be removed except by the most correct management conjoined with time.

Respecting the bowel affections of infants, they are many times obstinate, and it is not at all uncommon for them to undermine the delicate constitutions of these little and tender subjects, and by their persistence destroy their lives. The very best treatment that can be adopted, as a general rule, applicable to the public, is to clear their bowels with a small amount of castor oil, after which an astringent medicine will, in most cases, prove beneficial. Take a table spoonful of alum, and add it to half a dozen times its bulk of loaf sugar, (the brown sugar will do,) dissolve these ingredients in half a pint of water, and boil into a thick syrup. Ginger and spice will make the syrup more pleasant. Of this syrup give an infant one or two years old half a teaspoonful every three hours until the purging is arrested. The dose may be increased or diminished according to the age of the child, and the effects of the medicine. Calomel is a remedy of much efficacy in the bowel complaints of children, but as it is one of those substances that may be serviceable or injurious, according to circumstances, physicians should generally prescribe it, and take upon themselves the accruing responsibility. I am much in the habit of using it, and I have not, I can safely say, seen it mischievous when judiciously given.

A more aggravated form of inflammation of the bowels, and one that in many cases threatens life, is *Dysentery*, or *Flux*. This inflammation is chiefly confined to the lower bowels, and the symptoms of it are sufficiently characteristic

to preclude the possibility of mistaking it for any other affection. Feverish symptoms are, in all cases of severity, accompaniments of acute flux or dysentery. The patient is hot, and has a dry and parched skin; he has headache, pain of his bones, great thirst, loss of appetite, a foul tongue, &c. Moreover, his abdomen or belly is hard to the touch, and upon pressure he evinces signs of an increase of pain,—there being very generally constant soreness present. He suffers paroxysms of severe griping pains throughout the lower part of his belly, and frequently, I may say almost constantly, he has the most urgent inclination to go to stool. If any doubt could exist previously respecting the nature of the disease, a medical man, upon examining the stools of a dysenteric patient, has that doubt speedily removed. These are invariably and uniformly characteristic. They are either slimy, resembling the white of an egg, streaked with blood, or they are, in a great measure, composed of blood; and they are nearly always scant, unless indeed, chiefly composed of blood, when they amount sometimes to a considerable quantity. In addition, a negative symptom of this inflammation, is the absence of natural matter in the stools.

The Causes of this disease have already been referred to so far as they extended; but there is one cause of a general nature that frequently excites this inflammation as an epidemical disease, affecting whole neighborhoods at the same time. That cause is some invisible agency floating in the atmosphere, not unlike that which excites intermittent and remittent fevers. Dysentery or flux is from this circumstance sometimes thought to be catching or contagious, but this is certainly an erroneous opinion. When patients die of acute dysentery or bloody flux, upon examination of the body after death, the lower division of the intestines are found in a disorganized condition, full of ulcers and abraded surfaces. The duration of this disorder is uncertain—sometimes terminating in a few days, and again lasting, it may be, for months or even years.

The Treatment of dysentery is simple, and, if well man-

aged, the disease is not, as it occurs in this country at least, attended with very great danger. In the south, however, it is a disease full of peril. The most rational course of treatment that can be adopted by a non-professional man, in this disease, as met with annually in this country, is to combine for an adult, from *twenty* to *thirty* drops of laudanum with a tablespoonful of castor oil, to be given and repeated at intervals, until the passages assume a natural appearance, or at least are mixed with the natural fecal matters of the intestines. Then the oil is to be discontinued, and the laudanum continued according to its effects, for the purpose of allaying the pain and soreness, and arresting the frequency of the discharges. This course it may be proper to repeat after one, two or three days. Hot poultices kept constantly applied to the abdomen is often followed by good effects. Conjoined with the treatment of dysentery, a matter of primary importance, both to the patient and the reputation of his physician, is proper dietetic regulation. A patient affected with dysentary must not be allowed more than a little rice and rice-water, or a little gruel, on any account, as nourishment. Of rice-water he should be even solicited to take a few spoonfuls from time to time. Physicians are much in the habit of using calomel in this disease, especially in southern dysentery, but I think that in the milder disease, as it occurs in our country, this calomel treatment is often unnecessary—not to say injudicous. Blisters do good, doubtless, sometimes, when the disease is pretty well subdued, but in my opinion these, too, are frequently injudiciously resorted to, and serve rather to annoy the sufferer than to resolve his disorder.

(*d*) *Inflammation of the Liver.* Though the liver is, by many, thought to be the seat of half the ailments to which human flesh is heir, yet, in truth, it is but seldom that after death inspection exhibits any traces of disease in this structure. *The liver complaints*, about which quacks and empirics have so much to say, is very generally dyspepsia. Still the liver is sometimes the seat of disease, and occasionally of acute in-

flammation. The symptoms of an inflamed liver are a sharp or obtuse pain of the right side, located just below the points of the short ribs; pain in or about the shoulders is frequently present; the signs of fever are often present, the tongue is foul, and the stomach, in many instances, irritable. The skin is often of a dusky hue, and sometimes the whole surface, even the eye balls, are tinged yellow; the urine is high colored and scanty. The bowels are sometimes inordinately active, and the stools are apt to be unnatural—generally clay colored. These are the common symptoms of the disease in question, which, if permitted to run on unchecked, is not unfrequently attended with dangerous consequences. Pus or matter may form in the liver as in other parts of the body, and when this happens, although the result is not necessarily fatal, yet the patient's life is in great jeopardy. Should the abscess burst internally, and discharge its contents into the abdomen, death is almost inevitable. But the abscess does not always open into the abdomen, and here we are enabled to behold one of nature's wisest provisions. Instead of the abscess making its way through the thin covering of the liver, it most often, perhaps, makes its way through the thick muscles of the abdomen, and points externally. When this happens, by opening the abscess, and sustaining the patient's strength by appropriate tonic medicines, recoveries are not very rare.

I need say little of the causes of this disease. They are, I believe, frequently quite obscure and evade every effort at detection. Cold, operating on an over-heated body, is no doubt a cause.

The treatment must be conducted upon general principles. Blood-letting is frequently practiced by physicians. Calomel is given, in union with opium, till the patient is salivated; cups and blisters they sometimes apply over the seat of the diseased organ. When matter forms—which is announced by a throbing sensation in the part, and frequently slight constitutional chills—they endeavor to call it to the surface of the body by keeping up a soreness of the part, or even by

cutting down near to the liver itself. The bowels, during the whole course of the disease, should be kept gently open, and the patient's strength is to be sustained—especially after the evidences of the formation of matter exist, by a nutritious diet and tonics, such as the *elixir vitriol*, quinine, and the bitter barks. This is all that I deem it necessary to say of inflammation of the liver at present, I may allude to it again when I come to speak of dyspepsia or indigestion.

(*e*) *The kidneys* are like other fleshy structures, obnoxious ot inflammatory attacks, but these are rare. In a practice of some years I have not seen one single example of well marked inflammation of the kidneys. Should we have the symptoms of acute inflammation of these organs, situated one on either side of the spine, immediately below the last rib, purgatives should be prescribed, and all the other useful aids with which we are acquainted be employed, if required, to procure the resolution of the inflammation, before it passes into a suppurative stage. In every case of inflammation of the kidneys, the urine will be found in some way deranged,—there is generally not enough of it, sometimes complete suppression.

(*f*) *The bladder*, too, is liable to be affected by inflammation, but it is rare, indeed, that we meet with it in practice, unless the effect of some irritating substance taken into the stomach, such as spirits of turpentine, or the tincture of the Spanish fly. In cases of this kind some salts or oil to clear the bowels, should be prescribed, and, after their effects have been obtained, laudanum will be apt to allay the burning distress and frequent inclination to pass urine. Symptoms of inflamed bladder are sometimes excited in persons of loose morals, in consequence of infection of the sexual organs from impure connections, but as it is not my design to treat of affections of this kind in the present volume, I pass to

(*g*) *The spleen*, which is, in our western country, often found diseased. Ague and bilious fevers, both not unfrequently, derange this organ very greatly. What is commonly called *ague cake* is nothing but an enlargement of the spleen; and

this is so great as to be distinctly felt, or even seen, through the walls of the abdomen, just under the points of the short ribs of the left side. Acute inflammation of the spleen is not often met with, but this enlargement, which appears to be a result of a pre-existing low grade of inflammation, is so common in aguish districts, as to excite but little fear among the subjects of it. The best means of cure that I have found is to effectually eradicate the cause of the ague from the system, by the judicious use of quinine and mercury.

(*h*) *Inflammation of the eyes.* (Ophthalmia). I have omitted saying any thing of this external and local inflammation until now. In the eye, while inflamed, we may behold the appearance of other inflamed structures that are out of sight. Here we see in this delicate organ, the redness, the swelling, &c., the work of inflammation. There are many forms of inflammation of the eye, and many causes for these, but I shall allude to but one, and one cause for it. Catarrhal inflammation of the eye is, as its name implies, generally regarded to be the effects of cold. It is liable to attack all persons, from infancy to extreme old age. The symptoms are a sensation of stiffness and roughness of the eyes—feeling as if sand were in them, redness, heat, swelling; pain; and these symptoms are usually attended with constitutional disturbances in cases of severity. The eye or eyes, for both are apt to suffer at the same time, usually pour out matter or scalding hot tears. In very severe cases of this disease I have seen the eyes completely closed, and the ball itself, when examined, by prying the lid open, looks like a globe of blood more than an eye,—the patient being entierly blind for the time being.

The Treatment. This must often be constitutional. If the inflammation be severe, blood should be frequently abstracted from the arm. Epsom salts are a good medicine for reducing, or assisting to reduce, this painful and alarming disorder. The patient should be freely purged with them, and his bowels kept open, until the disease is measurably removed, by repeated small doses. The eyes, during the first days of

the attack, should be bathed and washed, from time to time, in warm water or milk and water, and the light of day should be excluded from them by green spectacles, or a black handkerchief. After the inflammation has, by the above means, been somewhat reduced, astringent eye-waters are frequently useful. The best of these, agreeably to my experience, is a solution of Lunar Caustic; Sugar of Lead, Blue Vitriol, &c., are sometimes used for this purpose. Four grains of the lunar caustic, to an ounce of pure rain water, will form a solution of the requisite strength. I have seen inflammation of the eyes, of very aggravated character, somehow connected with the cause of fever; nor could I relieve patients thus afflicted, until I exhibited to them quinine. Cases of the nature of these occur, generally, during the fall of the year.

I have, in the foregoing manner, treated briefly of the most common pure inflammatory diseases. In many respects these have, I am aware, been hastily and imperfectly considered, but, I hope, enough has been said to prove of some service to my readers in those hours of bodily pain and affliction that all, sooner or later, are doomed to suffer. In accordance with the plan previously laid down, I pass next to the consideration of anti, or non-inflammatory diseases. These are to come under class third of my arrangement.

CHAPTER VIII.

OF ANTI OR NON-INFLAMMATORY DISEASES.

Class Third.—I am fully aware that there is much difficulty encountered in drawing a line between inflammatory and non-inflammatory diseases. It is true that the name of a disease is of little consequence, or to what class it is referred, as long as we do not permit ourselves to be misled thereby respecting the nature of such disease. We should carefully investigate the symptoms and nature of the ailment, with which we have to do, and predicate our treatment according to the result of such an investigation. If, however, we allow ourselves to be imposed upon by any one's classification, and without due forethought refer this train of symptoms to that class of disease, and that train to this class, we are liable to be continually misled and bewildered in our treatment. For, one and the same disease may depend upon quite different conditions of the system. It is for these reasons that much caution in investigating disease, is necessary. I shall, in the present case, begin with the non-inflammatory diseases of the brain; and I shall not consume much time and space in their investigation.

(*a*) *Apoplexy* is one of those diseases that frequently, almost instantaneously destroy life. A person may be in the enjoyment of perfect health, and be engaged in his ordinary occupation, when, in an instant, and sometimes without the least warning, he falls down, and, after a few moments' unconscious sleep, "sleeps the sleep that knows no waking." This is the worst form of apoplexy. It most often, however, makes its approach somewhat differently. For a time previous to the attack, the individual has fits of sudden blindness,

with swimming of the head and roaring in the ears, and then falls down only partially robbed of sensibility and consciousness. It may be that he sleeps and snores profoundly, but that he can, for a moment, be roused from this state, when again, after a careless look about him, he relapses into his former lethargic state. This lethargy may become more and more profound, until death closes the scene ; or, on the contrary, the patient may gradually recover his consciousness, and, after a few hours, or days, go about his work as before. Nevertheless, apoplexy is apt to leave traces behind it ; palsy of one entire side of the body may be its consequence, or the face may be palsied so as to be greatly drawn to one side ; or again, an arm may suffer a loss of power or sensibility. All classes and conditions of life are subject to apoplexy, but certain persons are much more obnoxious to it than others. Those of full habits, stout chests, and short necks, are particularly prone to be thus affected. Old persons are oftener the subjects of apoplectic attacks than those of middle life or youth.

Causes. Too much blood in the body, generated by eating too much and living on rich diet, and strong mental emotions, with the predisposition already alluded to, are the most common causes. Overloading the stomach with green hard fruits, and other indigestible matters, sometimes produces apoplexy; and the intemperate use of ardent spirits, is, likewise, a cause of the complaint, in some instances.

The Nature of apoplexy is now well understood. Examination of the brain of those who have fallen victims to this complaint, clearly demonstrates that it is caused by too much blood in the brain. In fatal cases of apoplexy, the small blood vessels of the brain are very frequently found ruptured or bursted, and the effused blood poured out upon this organ. When the disease has resulted in this manner, no hope of the patient's recovery need be entertained. In less violent cases, and where no considerable blood vessel has been ruptured, apoplexy does not invariably result unfavorably.

The Treatment. The indications to be fulfilled in the treat-

ment of apoplexy are, to empty the brain of the inordinate quantity of blood that is thrown to it, and restore the balance of circulation. If this can be accomplished prior to the blood escaping from its proper vessels, the patient recovers:—if not, he dies. Now bleeding from the arm may fulfil both these indications, but though a patient be bled to death, yet this means, alone, sometimes fails. Strong purgatives should be prescribed, to call, as much as possible, the force of the circulation from the head to the intestines, but the patient cannot always swallow. Apply heat and mustard poultices to the arms and legs; and the head may be kept cold, and it should always be elevated. I have thus given, briefly, the principles and the treatment of this head affection; but in spite of all our efforts, it is proper to remark, when it has made its attack, and especially in old persons, much doubt must be entertained with regard to the patient's safety. Even should he recover from one seizure, a second or third is apt to carry him off. Apoplectic subjects should, therefore, be exceeding careful to guard themselves, as far as possible, against the exciting causes of the disease in question. Live low, be temperate, and avoid strong mental emotions. And should premonitory symptoms, at any time, arise, prognostic of the attack, they should take opening medicines—salts. The late celebrated statesman, eloquent orator, and profound scholar, John Q. Adams, died of apoplexy;—the second or third attack, I believe.

(*b*) *Epilepsy, or Epileptic Fits.* This is, like apoplexy, a disease, of the nervous system; and it is one of the most curious. as well as most lamentable, disorders of the human body. It comes on a good deal similar to apoplexy, but instead of the patient, laboring under a fit of it, resembling a person in a profound sleep, he is so violently convulsed that the strength of several men is inadequate to restrain his involuntary movements; he froths at the mouth, often thrusts his tongue out between his teeth, and it is often bitten; during this time he is wholly unconscious of every thing going on around him. The fit often seizes the patient at night, while he is in bed

asleep, and he remembers nothing about it; but it sometimes comes on when he is about his ordinary occupation, and, in this case, he usually has, at least, a moment's warning, though sometimes not sufficient to remove himself from danger, and, in consequence of this circumstance, he sometimes pitches headlong into the fire, or falls from heights, dreadfully wounding and mutilating himself. Another peculiarity of epilepsy is, that it is often periodic in its returns, after it has once invaded the system. Many persons suppose, from this fact, that epilepsy is controlled by the moon, but an opinion of this kind is without facts to sustain it—utterly unfounded.

In relation to the causes and exact nature of this affection, both are, to a great extent, enveloped in obscurity. It is true that in *some* cases the cause can be traced out; but it is equally true that in even a majority of instances, no satisfactory cause can be assigned, after the most careful scrutiny. Worms are, in some instances, a cause of epilepsy among children; so is crude indigestible food. But the convulsions of infants are not to be confounded with epilepsy. The most characteristic symptom, perhaps, distinguishing these two diseases, is the periodic nature,—the recurrence, after a greater or shorter length of time, again and again, of epilepsy; whereas, simple convulsions are not very apt to return after they have once left the system. Dissection fails to give, at least very often fails, any satisfactory evidence of the exact nature of epilepsy. It is a disease of the nervous system; this we know.

The Treatment. When the cause of epilepsy can be ascertained and removed, provided the disease be not of too long standing, it may be cured. These, then, are the first things to be thought of, in the treatment of this affection—the cause and its removal. If it has originated from bad digestion, this is to be corrected; if from worms, they should be removed. But unfortunately, the cause, too often, eludes our scrutiny, and then, our efforts to cure must be chiefly in the dark. Many medicines, nevertheless, having occasionally cured epilepsy, have got the reputation of "cures for fits." Among

these, first of all, perhaps, is to be reckoned the Nitrate of Silver, or Lunar Caustic. Other mineral substances have been used with beneficial results, occasionally, but everything, it is right to remark, too often fails, and nothing but the cold arm of death relieves the patient from his wretchedness. Empirics are eternally lauding to the world new cures and remedies for this lamentable disorder, but they should never be countenanced; selfish motives, in nine cases out of ten, are their sole prompters. When every other resource fails, one of the very best means with which I am acquainted, *for putting off the fits*, or suspending them from time to time, is the habitual use of some purgative medicine; and for this purpose, castor oil will be found preferable to any other article. Unlike other medicines, the long continued use of this oil imparts no injurious effects to the constitution.

(*c*) *Hysteria or Hysterics.* This is another of those inscrutable nervous disorders. Certain females of excitable habits and delicate constitutions are the proper subjects of it, but a disorder, very similar indeed, is sometimes met with in the male subject. Hysteria assumes two forms—*passive* and *active*. In the first, the patient imagines herself badly diseased; she fancies that she will not live long, and that no one sympathises with her in her (imaginary) sufferings. She is low spirited often, and is apt to be tormented with a palpitation or fluttering of the heart; she complains of a sensation of smothering, and sometimes imagines that there is a something which rises up in her throat and threatens to choke her instanter. Again, she is apt to complain of pain, especially of the left side, and sometimes of exceedingly sharp-shooting pains in every direction through the abdomen. Her tongue is generally foul and flabby like, but most frequently, the appetite is pretty good. An irregular state of the bowels is very generally an accompaniment of this affection; and it is often the case that, upon inquiry, some derangement in the urine or genital organs will be found to be present.

Now this *passive form* of the disease is sometimes suddenly made to assume the *active* by slight causes. The husband

provokes his wife, or some ill news is brought to her; or, it may be, she eats too much bacon and cabbage, or something of that sort. All at once, all the foregoing symptoms are aggravated. The patient now imagines that her time *has come;* she feels that she soon *will die;* that the smothering and choking sensations are, for once, in earnest; her heart beats violently; she screams or howls outright, laughs or sings, it may be, then cries, and calls her friends to look upon them for the last time. About this time she is apt to begin to be cramped; her hands are firmly clenched, her limbs extended, and she sends out from her eyes such a wild raving sort of maniacal look, that it is almost enough to scare the Doctor himself off; she is, or fancies herself, unable to swallow; she is, in her own, and in the opinion of her friends, just gone; and now there is such a howling lament raised as almost to call tears from stones. Perhaps the Doctor arises about this time,—for he is sure to be sent for, night or day, rain or shine,—and to a table-spoonful of the tincture of Assafœtida, he adds 20 or 30 drops of laudanum, and pours the whole down the woman's throat, in spite of the entreaty of her friends, who suppose he is now too late to do any good. In a few minutes, she opens her eyes, casts them carelessly about the room, the cramp or spasm leaves her, she sighs deeply, and, upon being asked how she is, replies she feels better. The next day she goes about her work as usual; but the same scene, it may be, is to be enacted over again and again.

Hysteria, as will have been inferred, is not a disease attended with danger; hysterical patients will not die of their disorder, but they will, as long as they are the subjects of it, be uncomfortable to themselves, and troublesome to their friends; and, after a great length of time, their constitutions being enfeebled by this, other affections may more readily carry them off. It is, therefore, fit that the disorder be treated. And I know of no treatment, so often beneficial, as a long continued course of mild purgation. There are, almost always, in these cases, evidences of intestinal disorder,

such as foul tongue and breath, irregular state of the bowels, variable appetite, &c., to correct which, nothing will be found, in general, more useful than the "Aloetic pills," so frequently already advised. A sufficient number of these should be taken every other, or every third night, to procure one or two gentle movements of the bowels the succeeding day. After these have been persisted in for some time, some bitters, such as wild-cherry-tree, poplar, and dogwood barks, in equal quantities put into whisky—or what is better, the carbonate of iron, may be used with advantage. The diet should be nourishing. Lean meat, milk, weak tea and coffee, light wheat bread, and fruits, in moderate quantities, may be allowed. Daily exercise in the open air, and even moderate labor should be enjoined. *The use of Tobacco in this complaint, as well as in all others, and in health, is decidedly injurious.* These directions, put into practice and accompanied with good cheerful habits, are in most cases, successful in mitigating hysterical habits. If evidence of worms should be present, the pink root should first be given, according to the rules laid down under the head of Worms.

(*d*) *Indigestion or Dyspepsia.* A disease extremely common, and one that, from the extensive range of symptoms and unpleasant accompaniments that attend it, deserves careful investigation, is Dyspepsia or Indigestion. It will not, however, comport with the design of the author of the present volume, to enter at large upon the examination of a disorder, that requires all the sagacity of medical men to understand the nature and causes of the various and multiplied symptoms that often attend it. In the west, indigestion is extremely common, and its prevalence is, undoubtedly, in a great measure, due to two circumstances—*first*, to the injurious effects, operating upon every one within its influence, of the atmospheric cause of our autumnal fevers. This is a cause overlooked, very often, but it is a cause of derangement in the functions of the digestive apparatus, and consequently of ill digestion. *Secondly*, a coarse, heavy, indigestible diet. These two causes are often conjoined in the same individual, and

then they are apt to excite a condition of which it is troublesome to get rid.

Of the nature of Indigestion, I may say it is pretty well understood. In its earlier stages, it seems to depend upon a deranged condition of the nerves of the stomach. This nervous derangement is of such a nature as to prevent the stomach from performing its functions properly. Now, food taken into a disordered stomach, instead of undergoing the changes necessary to its elaboration into the general system, lies heavily there until it, in some measure, putrefies, when it, of itself, becomes a source of disease, and an irritant to the tender coats of the stomach. The stomach may reject food thus circumstanced by vomiting, or rather gulping it up; and food when thrown up, in this manner, is nearly always found in a soured or putrid sort of state. The stomach being in this condition, and more food being continually forced upon it than it can digest, inflammation of a low form is presently excited in its coats,—and this, not unfrequently, extends to the liver, and constitutes what is commonly called "*Liver complaints.*" It is the opinion of many that dyspepsia necessarily implies a spitting or gulping of food, but such is not necessarily the case. A dyspeptic may, it is true, and often does spit or gulp up what he has shortly before taken, but many dyspeptics do not, during the whole course of their ailment, do so. Any deranged state of the stomach, interfering with its office, is properly a dyspeptic or indigestive disorder. The half digested food, in such cases, may be carried off through the bowels, instead of being thrown upward, by an inverted action of the stomach. Be this as it may, however, in all cases of dyspepsia that do not speedily destroy life,—and it is very rare, indeed, that the disease runs anything of a rapid course,—barely a sufficiency of food, and sometimes not even this much, is, by the action of the stomach and bowels, so changed as to prepare it for entering into the general system as nutriment to supply its wants, and the overplus has to be disposed of, as already mentioned, in a soured or half putrefied state, either naturally down through the bowels, or unnaturally, up through the mouth. And right here, as well as

anywhere, I may make the practical remark, that one morsel more food than can be healthily digested, must, necessarily, be in some measure, more or less, injurious. Fragments of undissolved food, in their long travel along the intestinal canal, must be, I repeat, a source of irritation to the tender surface over which they pass. Hence, the necessity of using just a sufficiency of food, and no more, to supply the absolute wants of the system, or to correspond to the ability of the digestive system, for macerating and carrying it, thus prepared, into the blood. The health of thousands of children is annually sacrificed for want of an observance of this kind. Almost before their eyes are opened, it is, too often, the custom with the kind-hearted old ladies, to fill their tender stomachs with some rich and indigestible soups. These are sure to decompose and sour, sometimes in the course of a few minutes, thereby producing colic and griping pains in the bowels: the child cries, and the nurse, taking this as a criterion for hunger, repeats the dose again and again, until finally the little creature dies in excessive agony, in the midst of convulsions, or, what oftener happens, insulted nature relieves it by vomiting or purging the excess thus accumulated upon its feeble and untutored powers of digestion.

Respecting the symptoms of Indigestion, they are so discrepant that a general view of them is all that I shall attempt. It sometimes happens, as has already been stated, that sooner or later, after eating, the food, slightly changed, is gulped or spit up. This, though not by any means a uniform, when it is present is an unmistakable symptom of dyspepsia. Another symptom, scarcely less certain, is, shortly after eating, the occurrence of pain about the stomach, and belching of putrid gas or wind. This pain is sometimes trifling, while, at others, it is most acute and excruciating. The bowels are most often bound, but they are sometimes too open; the tongue is very uniformly coated or otherwise deranged; and the urine is almost always high-colored—frequently resembling lye. The skin is often yellow or dusky, and some soreness is very commonly found to exist at the pit of the stomach. It is extremely common for dyspeptics to be tormented with

headache, and, in a majority of instances, the *sick headache* is nothing more nor less than a symptom of a dyspeptic or disordered state of the stomach. Physicians are habitually consulted concerning sick-headache; persons supposing it to be a disease, separate and apart from all others, whereas, it is, most often, but a reflexion, so to speak, from the stomach to the head. Correct the stomach, interdict gluttony and the use of heavy, indigestible diet, and we cure the disease either temporarily or radically, according to the fortitude of the patient in denying him or herself. Nervous symptoms of another kind often manifest themselves. Thus, females may have palpitation of the heart, and sometimes regular fits of Hysterics. Males are apt to be low spirited, to fancy themselves as the recipients of the most serious complaints, as consumption, &c. Indeed, insanity, I have good reason for thinking, is often the offspring of this affection—the patient first becoming morose, absent, melancholy, and insane. Many poor fellows, suffering from indigestion, are so crabbed, so easily excited and put out of fix, that they are not only unhappy to themselves, but also disagreeable to their too frequently cold-hearted friends.

The Causes most commonly concerned in giving origin to dyspepsia, have been anticipated. Improper diet and overeating, are by far the most fruitful; but long living in unhealthy situations, frequent attacks of our western fevers, when conjoined with these, are powerful auxiliaries in bringing this affection about. Tight lacing, by cramping the stomach, as well as some of the organic functions of this organ itself, may give rise to all the unpleasant symptoms of indigestion.

Of the Treatment.—Almost every dyspeptic has it completely in his power to cure himself, if he but comprehend the principles of treatment, and possess the fortitude and selfdenial to put them into practice. The natural action or powers of the stomach must be restored. Now if we have a horse greatly enfeebled by too much work, laden with a great burden, how shall we so effectually restore his strength,

as by taking off his load, and giving him rest? Put more upon him, load him heavier, and drive him faster, and what are the obvious results? Likewise, it is with the stomach of man. By abuse, already enfeebled, it must have rest, or it goes on, departing farther and farther from health—becoming more and more enfeebled—until, finally, it refuses to perform its office altogether; and the patient perishes, because the very root of his existence has been destroyed. But, on the contrary, let it have rest; remove from it, as far as possible, every source of irritation; give it no more labor to perform than it can accomplish without fatigue, and soon it will be, ten to one, restored to its natural strength; and through it, the whole sympathising organisms to their original unison of action. Dietetic regulations, then, it would seem form the first and chief indication of cure in all cases of indigestion. Now there are certain articles used as food for man, which are dissolved with much more ease and facility than others are. Great pains have been taken to ascertain what these are, and to institute comparisons between the various articles of diet, as to their digestibility and nutritious properties. The results of experiments of this kind are very satisfactory. Among all the articles of diet in general use, there is none, which, while it is superlatively rich in nutrition, is so bland and nutritious as *milk*. If, therefore, upon trial it is found to agree with the stomach, good sweet milk should form a part, indeed, a great part, of the dyspeptic's diet. And even this, in many instances, should be taken in very small quantities—only a few spoonfuls at a time. In union with the milk, a little well cooked rice, or what, perhaps, is equally good, a little well made light bread may be taken, from time to time. I would advise these simple articles to be taken in quantities sufficiently small to insure their retention on the stomach; because it is infinitely more rational to do this, than to so load the stomach as to offend it and cause it to reject, by vomiting or gulping up, the greater part of its contents, or to run the risk of iritating the bowels by crowding along their tender surfaces the half digested

and putrid substances, which the stomach was unable to dissolve. Lean and tender well cooked meat, in small quantities, it will be proper to allow once a day. So, also, it may be said of a cup of weak tea or coffee; but much fluid, of any kind, should not be used, either during or between meals. All fatty or greasy substances should be scrupulously abstained from. Well ripened and mellow acid fruits, provided the seeds and skins be avoided, may, I conceive, be moderately indulged in; an Irish potato may, also, occasionally be allowed; and so, also, may a softly poached egg. So much for diet.

Unless proper dietetic laws be observed, it is worse than useless for dyspeptics to take medicines at all. Their appetites are often morbidly sharp, but if they expect to ever regain their health, they must not pamper them too highly. And this remark is particularly applicable to those of them, who are continually haunting doctor shops. As I assume in this volume to advise no other than safe and simple medicines, I will not venture to speak of mercury as an appropriate means for combating certain disordered states of the liver, that are apt to be present in indigestion. Nor shall I advise the indiscriminate use of strong bitter tonics. They may now and then be useful, but my experience enables me to say, with confidence, that they are often hurtful. It is proper that physicians themselves prescribe them. But the same objections cannot with propriety, be urged against the use of an occasional purgative. To obviate costiveness, therefore, an occasional dose of mild purgative pills should be taken at bedtime. For this purpose there can be found no preparation, which, for safety and simplicity, is equal to the "Aloetic Pills"—see this head. But these need not be taken oftener than once or twice a week; or only, according to the indication to be fulfilled by their exhibition. Among all the pills with which I am acquainted, I know of none so pleasant, mild, and at the same time so effectual in their operation as a simple cathartic, as these Aloetic Pills. Mr. P. J. Nicholson of this county, who learned how to prepare

them from a physician of some notoriety—but who, like a genuine quack, keeps his light under a bushel; had the goodness to communicate to me the necessary information for their preparation. To correct the acidity or sourness of the stomach a solution of a few grains of saleratus, or a little weak lye will be good. To restrain the diarrhœa or lax state of the bowels that sometimes accompanies indigestion, the most useful direction is, to eat less. If, however, this is not successful, a few spoonfuls of the Alum Cordial, (see alum) may be of benefit. To relieve the severe headache, *sick-headache*, that frequently attends ill digestion, a dose of salts, or castor oil will generally be promptly successful. Opium is now and then useful in allaying the paroxysms of pain in the stomach, but its use should be cautiously indulged. With these remarks, I take leave of indigestion and pass on to a brief examination of its kinsman—

(*e*) *Jaundice.* Now, as was intimated above, a yellowish tinge of the skin and of the whites of the eyes, is in some cases, signs of indigestion, and demands no farther notice than that already bestowed upon this latter affection. But persons in the enjoyment of comparatively good health, are occasionally attacked with Jaundice. Their skins, eyes, and even their tongues are deeply tinged yellow. Their bowels are apt to be rather lax, and the stools present an unnatural white color—clay color; the urine is of a deep lye color; appetites impaired, their heads may ache, but fever does not necessarily form a part of the disease; a bitter taste is very apt to be complained of. A dull heavy pain is now and then felt under the points of the short ribs of the right side; this pain is sometimes sharp and acute These are the most common symptoms of jaundice, but they are occasionally discrepant. The disease is not often attended with much danger, but it does in some instances, run a tedious course, and, by impairing important functions, may carry the patient off. In a majority of cases of simple jaundice, a light and unstimulating diet with rest, will, in a few days, relieve the system. It is well, nevertheless, to use an occasional dose

of gentle purgative pills, such as those referred to in the last section. In more obstinate cases, calomel or the blue pill should enter into the purgative medicine. The causes of jaundice frequently elude the most careful investigation, but they, in some way, operate upon the liver, so as to obstruct the flow of bile into the intestines; and, being thus impeded in its natural course, it is carried somehow backward into the blood, whence it was abstracted, giving thus, to every structure, an undue amount of bile, and tinging every part with its peculiar coloring matter.

(*f*) *Of Worms.*—I may as well, in this place, as in any other, give some account of *intestinal worms.* Although they, of themselves, do not constitute a disease proper, yet their effects and complications are such as not unfrequently to require our interference. There are at least four varieties of worms that infest the human intestines. In this country three of these are rare, but the other is exceedingly common.

1. *The Tape Worm* is a very curious creature, occasionally of many yards in length. It presents a jointed appearance, resembling, somewhat, a string of gourdseeds, placed end to end. It is rarely the case that it is passed away whole, being usually broken up into many pieces. I have never seen but one of these creatures, and that was preserved in alcohol, and exhibited to the students of Rush Medical College.

2. *The Maggot-like Worm.*—Ascarides Vermicularis, is not often met with. It is quite small, not measuring more than one or two lines in length, and is almost uniformly found in the lower portion of the bowels, wadded with others in such a manner as to be formed into a ball. Immense numbers of these are sometimes found thus congregated, and the most characteristic symptom of their presence is the unpleasant itching produced by them about the anus.

3. *The Maw Worm*, is also, comparatively rare, and holds a place, as to size, between the last and the fourth, or next to be noticed. They vary in length from half an inch to several inches; and, in thickness, they are little larger than a horse hair.

4. *The Common Round Worm*—Ascarides Lumbricoides, is so common in this country as scarcely to require description. A vast majority of all the children of this country, and indeed, many grown up persons, are, to a greater, or less extent, the subjects of these ugly and troublesome intruders. I have practiced medicine for near six years, and I can safely declare, that, during this time, I have scarcely ever prescribed a worm medicine to any child, without carrying off more or less worms; not unfrequently enormous quantities. A few days ago, I prescribed a worm medicine to a child sixteen months of age, and, as the father subsequently informed me, with the effect of bringing away more than two hundred worms of the present species. Nor do I neglect in most cases of the diseases of children, be their nature what they may, to attempt to rid the bowels of worms, should circumstances lead me to suspect their existence. The present variety of worms are in general found in the upper portion of the intestines, and in the stomach. Of course, they vary greatly in length; while some are but a few inches, others are, not uncommonly, more than a foot.

Symptoms.—Unless we judge from the occasional passage of a worm through the bowels, or from their being vomited, which sometimes happens, I may safely say, we have no certain, infallible sign of the presence of worms in the human subject. It is true, nevertheless, that we *infer* their existence from a combination of symptoms and circumstances. If the individual under examination, whether a child or an adult, have a full tumid abdomen, a wan and sickly appearance, a foul breath, an irregular state of the bowels, picks the lips and nose, has a voracious appetite, sleeps illy, complains of sudden and sharp pains through the bowels, and discharges a muddy sort of urine, we *infer* worms. But, if, with these symptoms, worms are now and then voided, either from the bowels or by vomiting, this inference is strengthened into proof positive.

About the *origin* of intestinal worms, a great deal has been said and written, but, I am sorry to add, that as yet,

as far as I know, the whole subject is one of complete mystery. While one contends that they are spontaneously generated in the bowels themselves, another, with more show of rationality, concludes that the germ, which produces them is somehow, introduced from without. But this latter theory as well perhaps, as the former, is completely overthrown by the single fact, that they have been found in the bowels of new born infants. One fact, however, and it is of practical importance, is well established concerning the *presence* of intestinal worms. It is, that they stand, at least, in a very great majority of instances, in relation to a preexisting derangement, as an effect. I conceive that they originate, only, in consequence of a previous disordered state of the digestive aparatus ; yet their presence, undoubtedly, increases and adds to that disordered state, and very often, even so disguises and obscures it, as to become the most prominent symptom, and to require our first attention in treatment. I am aware that it is the opinion of many persons, that a certain number of intestinal worms are necessary to the health and well being of every child ; but such an opinion is absurd in the extreme. On the contrary, their presence invariably evinces a deranged state of the digestive organs.

Treatment.—Now although I do not doubt that intestinal worms are, in most cases, an effect or accompaniment of disorder of the stomach and bowels, yet all attempts to right such a disordered state, without first removing the worms themselves, will prove abortive. It is, therefore, under almost all circumstances, proper to prescribe a worm medicine, whenever we infer the presence of worms in children ; and the same remark is equally applicable to adults. Then, after the bowels have been freed from these parasites, it will be proper, by dietetic regulations, and medicines, if need be, to correct the cause which, in the first place, favored their production. To fulfil the first indication, the *Spigelia Root*, commonly called Carolina Pink, will, in general, answer an admirable purpose. The following is a very good method for administering it : Take from half an ounce to an ounce

of the root, to which add a pint of boiling water, and, after it has been permitted to simmer for half an hour, the tea should be strained, so as to separate it from the root. Of the tea, thus prepared, being first made pleasantly sweet, a child of two years old, should take the amount of two large tablespoonfuls every hour or so, until six doses have been used. If, in a few hours after the last dose has been swallowed, the bowels are not opened, a full dose of Castor Oil should be given; but, if the bowels are in a lax state, the oil may be neglected. A course of this kind hardly ever fails to expel worms, when they are present in the bowels. The doses here recommended should be varied according to circumstances.

"B. A. Fahnestock's Vermifuge," so extensively sold throughout the western country, is, undoubtedly, one of the very best worm medicines ever invented; and, were it not that Fahnestock, instead of heralding the recipe, by which he prepares it, to the world, as the free gift of a benevolent heart, carefully conceals it in his own selfish bosom, he would deserve a place among the first benefactors of the present age. But, as it is, his name should go down to posterity obscured, as well by the shame, as brightened by the fame which he has gathered around it. Since writing the above, I have had an opportunity of observing the effects of "McLane's Vermifuge," a preparation very similar to that of Fahnestock; and, although the same remarks applicable to Fahnestock, are equally so to McLane, yet candor compels me to confess, that its effects have been highly satisfactory; indeed, astonishing! Both these medicines owe their virtues, chiefly to the Oil of Wormseed, which they contain.

After the worms have been expelled, a nutritious, but not gluttonous diet should be allowed; and if some of the milder preparations of iron be administered until the child's color is restored, the worms will hardly again be generated. The treatment here proposed is not equally applicable for the expulsion of every variety of worm; it is the most proper for the most common; the long round worm. The spirits of

turpentine, in large doses, is perhaps, the best medicine we possess for the expulsion of the Tape Worm; and the same may be said of Aloes, for expelling the small maggot-like worm that inhabits the lower bowel. But it is only seldom that we meet with either of these latter worms. Physicians should, therefore be consulted when they are suspected. The symptoms are, in a great measure, analagous in all.

(*g*) *Of Colic.*—Physicians recognize two or three kinds of colic, but as these are not very diverse, and require only slight modifications in treatment, I shall examine them all under one head. When the liver is greatly disordered, and the patient vomits frequently, the disorder is usually styled bilious colic, whereas, when these symptoms, are absent, the simple name colic, is applied. Now it may be laid down as a truism that, were there no undigested food, or compound substances undergoing changes in the stomach or bowels, we would never meet with a case of colic. It is, therefore, a disease, or rather an effect of some decaying or decomposing substance in the intestines or stomach. And gas, or wind, thus generated, is essentially the disease itself. And all the symptoms, however distressing and agonizing, while the disease is yet colic, are owing, and to be referred to the distension thus occasioned. Every one knows that certain articles of diet will invariably produce colic in certain individuals. This fact explains fully the *nature* of colic. The substance, whatever it may be, instead of undergoing the solution and digestion, necessary to convert it into chyle, runs rapidly off into a putrefactive state, parts with a gas, (air,) which fills or distends, to a greater or less extent, the digestive canal, and often gives rise to all the excruciating symptoms of colic. Digestion being in this manner arrested, the cause, as well as the symptoms, goes on increasing, the patient suffers exceedingly, his abdomen swells smartly, he rolls about over the room, presses his belly upon some hard substance, moans, &c. &c., until, at length, he vomits, belches up, or discharges down a quantity of wind, when he is immediately greatly relieved, or he is relieved by the appro-

priate medicines; or lastly, inflammation is developed, and the disease is no longer simple colic. From what has been said it is readily seen how it is that dyspeptics are so often the subjects of colicky pains. Little children are apt to suffer very greatly, in the same way, the cause of which is, nine times in ten, over feeding.

Colic is to be distinguished from inflammation of the stomach and bowels; 1. By the suddenness of the attack. 2. By the absence of fever, and of an increase of pain when pressure is made on the belly. Indeed, pressure often gives relief in colic, but, on the contrary, it increases the suffering in inflammations within the abdomen.

For the relief of colicky affections, I know of no remedy that, in a majority of instances, will be found so effectual as castor oil, in union with the spirits of turpentine. To an adult give 30 drops of the turpentine, mixed with a tablespoonful of oil, every two or three hours until purging is excited. It sometimes happens however, that the stomach is so irritable that it rejects every thing of this kind. When this is the case, 15 or 20 drops of laudanum should be given every half hour, and the stomach poulticed with mustard, until it is quieted. Great caution should be exercised in diet for a few days after an attack of colic; and indeed, every article should be abstained from, for life, that has, upon repeated trials, been found to excite colicky pains. For children only a few drops of the turpentine should be added to a teaspoonful of the oil, to be repeated according to circumstances. When inflammatory symptoms arise, the disease is to be regarded as momentous, and medical aid should be sought.

(*h*) *Rheumatism*, perhaps should have been placed among the inflammatory diseases, yet as it is often met with when neither swelling nor heat appears, I have placed it in the present class. Many persons are *predisposed* to rheumatic attacks, but the effect of cold, operating on the body is, I believe, always the efficient cause in setting the disease up. There are two forms of rheumatic disease—the acute or active, and the chronic or seated.

The *acute* variety commonly comes on suddenly, and is characterized by pain, redness, heat, and swelling of one or more joints, attended with febrile symptoms, as headache, thirst, high colored urine, and costiveness. The inflamed joints are extremely painful, and the ability to move the affected limbs is often almost wholly destroyed. The disease may be confined to a single joint, or it may, on the other hand, be general and affect a great number at the same time. In the *chronic* variety, being frequently a consequence of the acute disorder, there is pain, but not commonly much heat or swelling, and in most cases, the constitution remains undisturbed. Chronic rheumatism is not always a consequence of the acute. It is sometimes a primary affection, coming on suddenly or gradually, affecting first this joint, and then that; passing from the wrist to the ankle, it may be, in the course of a few minutes, the one being simultaneously with the attack on the other. If this form of rheumatism continues a very great length of time, the affected joints are apt to become enlarged, and the limbs contracted or drawn so as, in a great measure, to make a permanent cripple of the patient. Moreover, his constitutional powers, in consequence of pain, irritation, and want of (rest, for night is the time that the pains are almost sure to become very greatly aggravated,) are apt to be so undermined as to destroy life, after the lapse of many years. This form of rheumatic disorder, let the nature of the acute be what it may, in many respects bears a close resemblance to the nervous diseases. But I will not argue the point here. Both acute and chronic rheumatism spend their force, chiefly, upon the ligamentous tissues, the bonds of union of the joints.

Treatment.—In acute rheumatism, active treatment will frequently cut the disease short. Physicians are apt to bleed in the very beginning of the disease, but they are aware that bloodletting of itself, is inadequate to effect a cure. I advise my reader to purge his patient, in the first place, pretty freely with epsom salts, and then, to keep his bowels loose with equal parts of the flower of sulphur and cream of tartar.

Of a mixture of this kind, a teaspoonful should be used from time to time, so as to keep up a lax state of the bowels. The swelled joints may be bathed and steamed with flannels wrung out of hot water, with a prospect of benefit. If this course fails to relieve the patient, after a few days trial, the Dover's powder, (see Index,) should be commenced with, in three grains doses, to be continued until a general perspiration is excited, or until the pain is abated.

If the disease becomes chronic, the swelling and heat having disappeared, but the pain remaining unrelieved; or should the attack be one of a primary chronic form, the patient should wear flannel next his skin both summer and winter; his bowels should be kept open with the mixture advised above, and he should use a tablespoonful of the "Tincture of Guaiacum" three or more times daily; and, if he suffers much at night, five grains of the Dover's powder taken just before retiring, will be apt to procure him rest. The tincture here alluded to, may be procured at any drug store. Diet in both cases should be light, but in the chronic form, it should also be nutritious; meat, in reasonable quantities, being allowed.

(*i*) *Dropsy.*—A dropsy, in its medical and restricted sense, means an accumulation of a watery fluid within some natural or artificial cavity of the body. For example, we have dropsies of the chest, of the abdomen, and of the brain. We have also, either connected with these conditions, or independent of them, a general dropsical affection, in which the water is effused into the muscular structures, causing them to present a puffy or bloated appearance. Dropsy may be, and often is, the result of inflammatory diseases. Thus, the most common cause of the disease styled dropsy of the brain, is inflammation. The same may be said of dropsy of the chest, and also of abdominal dropsy. It is, therefore, in many instances, a symptom of another disease, or rather, I should say, an effect. When it comes on people, however, who are in the enjoyment of health, and who have not recently had any serious inflammatory disorder; when in short,

we have no evidence that anything else is the matter, other than the dropsy, then we pronounce the disease to be primary, independent of previous disorders.

The existence of dropsy is to be inferred more by the eye than by any other means. When, with a bloated state of the whole muscular system, we see the belly distended, we infer abdominal dropsy; this inference is strengthed, when upon inquiry, we find that the urine is scanty. But I need not dwell upon the symptoms of dropsy, for the public do not recognize the disease until it is visible to the eye; nor can any very accurate description be given to them, whereby to detect it otherwise.

In all dropsies, whether primary or secondary, the *immediate* cause, whatever be the remote one, is a want of balance between the bloodvessels and the absorbents, or that system of vessels, whose office it is to pick up and carry off the wastes and more fluid parts of the body, which, not being thus removed, collect in the part or parts, and in this way, in time, form, the dropsical accumulations, in question.

Now the proper *treatment* of dropsy, plainly consists in restoring the loss of balance in the two sets of vessels, above referred to. To fulfil this indication, those purgatives which produce copious watery stools are to be unremittingly prescribed. The cream of tartar, in union with rhubarb or jalap, answers this purpose very well; and, at the same time, it is apt to act upon the urinary organs so as to increase the quantity of urine. When the disease is secondary, that is, when it depends for its cause upon a previous disease, the primary condition is entitled to our first consideration. It must first be attended to, and if possible, removed, and with its disappearance, the dropsy is, also, apt to disappear. It is proper to remark, that sometimes every means directed to the removal of the disease, fails, and for the removal of the accumulated fluid we have to adopt the dernier, but temporary remedy of tapping the body, as you would a sugar-tree; and, in this way drawing from it the excess of fluids that it contains. I said temporary, because nearly always,

after this operation is begun, it has to be repeated, again and again, during the whole of the patient's subsequent life. This is especially true, in the abdominal form of this affection.

In conclusion, I remark, that in the whole catalogue of diseases, there is not one more deserving the physician's attention than dropsy. It may depend upon such a multiplicity of diseased conditions, some of the symptoms attending it are so anomalous, and all the rules of treatment, that can be laid down are so liable to modifications and exceptions, that I am constrained to conjure my reader, as the very best advice I can give him, to call able medical counsel in, at as early a date as possible, when he has good reason to suspect the existence of dropsy.

(*j*) *Cholera-Morbus.*—I need not occupy much space in investigating this affection. Every one is familiar with the *symptoms* of cholera-morbus. It is an affection that prevails as a general rule, during the heat of summer, and appears to be the effect of improper diet, conjoined with the heat of our seasons. Let it be caused, however, as it may, the symptoms are vomiting and purging, accompanied in many instances, with cramps of the belly, legs, &c., and the most excruciating pains of the bowels. The vomiting is frequently incessant, and the stools are copious and watery. It is a disease that now and then results rapidly fatal; the patient sinking and dying of exhaustion.

The treatment of cholera-morbus is, for the most part simple, but it is frequently indispensable to the patient's safety, that it be prompt. Opium—laudanum; is the great remedy for relieving the pain, checking the purging, and suspending the vomiting, in almost all cases of cholera-morbus. But this medicine is to be facilitated in its operation by certain other auxiliary means. Mustard poultices should be placed over the stomach and to the wrists and ankles. The laudanum should be given in doses of thirty drops, repeated every half hour until relief is obtained. It is not unfrequent that the patient vomits the laudanum almost as soon as it is swal-

lowed. When this happens the medicine should be repeated again and again, until it is retained in sufficient quantities, to fulfil the object for which it was exhibited; in the meantime the auxiliary means above pointed out, being put into practice. Cholera-morbus is, on some occasions, followed by a continued sort of fever, kept up chiefly, perhaps, by the low form of inflamation of the bowels that generally supervenes on the subsidence of the affection. Low diet with blisters to the abdomen are the leading indications of cure.

CHAPTER IX.

OF SPECIFIC OR CONTAGIOUS DISEASES IN GENERAL.

Class Fourth :—This is a somewhat numerous class of diseases, including as it does, every distemper that is, by any means, communicable from one person to another. There are many affections of this class that, to be communicated from one individual to another, requires nothing but a near approach to the persons laboring under them, as Measles, Small Pox, Whooping-Cough, &c., while others require actual touch, as Clap, &c. This latter variety is usually termed *infectious*. My design however, is, in the present place, to notice only the first variety here mentioned — those affections which are conveyed at some distance from the affected person. Now there are several curious things connected with these catching distempers. In the first place, they pursue a definite course,—that is, they come on, after exposure to contagion, uniformly after a certain number of days; the fever which attends them reaches its height on the second, third &c., days, according to the nature of the particular disease in question, and they decline and pass away at a regular stated time. Nor can any treatment or management curtail or shorten their course. It is, therefore, obviously the Physician's duty to guide, direct or convey them on this course, and by no means, by a bold and reckless stroke, attempt to force them from the system before they have reached their destination. An attempt of this kind is exceedingly improper and cannot be too severely reprobated. Many young Physicians, and indeed, some of riper years, but no more discretion, commit the egregious error of doing too

much in these specific affections; — thereby not unfrequently thwarting nature and trammeling her in her efforts to relieve the suffering organism. A rather singular and interesting fact connected with the history of the present class of diseases, is that a turn or an attack of them forever afterwards, as a general rule, protects the system against a second attack.

Of the Cause of this class of diseases we know absolutely nothing. We see it only as it manifests itself to our senses in the effects it produces. It is somehow generated in the body of one person, and, being conveyed through the medium of the atmosphere, when inhaled by another, like leaven or yeast, after a certain time, renews itself or generates its like again. In many respects, in its effects, it certainly bears some analogy to yeast. After being introduced into the blood of a well person in an effluvial state, and after lurking there for a certain length of time in a state of incubation or hatching, so to speak, it disturbs the whole system, manifesting itself in this form in this disease, and in that, in that disease.

Of the Nature of the diseases themselves, however, we are not unknowing. Whooping-Cough we know is a disease that chiefly affects the air passages; that Measles is a fever that impairs more or less, almost all the bodily functions; that Small Pox spends its force mainly on the mucous membranes and the skin, and that Scarlet Fever is an inflammatory disease, of a low type, possessing an undeniable tendency to putridity and mortification. These are facts, tangible to every medical man, and they are of much practical interest.

Having premised these general remarks, without further tediousness, I pass to a brief notice of some of the individual diseases composing this fourth group of disorders.

(*a.*) *Small Pox.* I need say very little respecting Small Pox, first, because, it is a frightful disease, secondly, because when prevalent in a neighborhood it never fails to be recognized; and thirdly, because no one, I think, in the enjoyment of his senses, will neglect to call in medical aid, if it can be procured, in its management. Small Pox is exceedingly contagious; so much so, indeed, that it has been conveyed, or

rather the contagion which gives rise to it, carried hundreds of miles in clothing or adhering to merchandize. While a Student of Medicine, I recollect hearing Professor Fitch relate the following circumstance, illustrative of the extremely active nature of Small Pox contagion. He stated that in attending a Small Pox patient in the earlier part of his professional career, having removed some of the scabs from his face, he enclosed them in beeswax. Next, boring a hole in a gate-post, he inserted the bolus and drove a pin tightly upon it. Years afterward, when the Professor had forgotten all about his thoughtless piece of work, the post becoming measurably rotten, the wax, thus stowed carefully away, was accidentally discovered, broken open and examined, the consequence of which examination was, a case of Small Pox excited in the person of the unfortunate finder!

The Symptoms of Small Pox are,in from ten days to two weeks after the distemper has been contracted, the individual is seized with a burning fever, attended with excruciating pains of the head back and limbs; soreness of the throat, thirst, nausea, and vomiting. After these symptoms have existed for the space of about three days, the peculiar Small Pox eruption begins to make its appearance, first on the face, then the neck, &c., until extending itself, it finally spreads to the whole body. The eruption upon its first appearance resembles small red pimples. These go on, gradually increasing in size, till about the eighth day, at which time they are found to be filled with matter: they are now termed *pustules*, — that is, little boils. From this time these pustules usually begin to break — discharge their contents — and scabs are formed which in four or five days, fall off. About the time the eruption makes its first appearance, the suffering of the patient and the febrile symptoms abate somewhat; but about the time the pustules fill with matter the fever is apt to be renewed; and it is at this time that the greatest danger is to be apprehended. This is termed the secondary fever, because it seems to be a mere consequence of the excessive irritation communicated to the system by the numerous pustules,

overspreading the whole body. When the eruption is very trifling, presenting but here and there a pustule, as is sometimes the case, the whole course of the disorder is commonly very mild, — the secondary fever being of little consequence. But, on the other hand, if the eruption be very abundant, converting the whole surface into one almost solid mass of sores, the face being greatly swollen and the eyes completely hidden, we predict for the patient a case of great severity, — the secondary fever not unfrequently destroying life. Should the patient recover however, the scabs dry and fall off, leaving behind them, thus, pits, peculiar to this affection, which remain for life and constitute "pock-marks."

The Treatment consists in not doing too much. The patient must not be heated up and stimulated by close rooms, heavy clothing, and hot teas; but, on the contrary, he is to be kept cool, his room being very well ventilated; and he should, from time tc time, take gentle purgative medicines, Opium is sometimes useful, and should be given to allay excessive irritation, and to procure sleep. The diet ought to be the same as that recommended in the worst inflammatory diseases, because it is the inflammatioon of the skin that is the chief source of danger, and to keep this within bounds, a cooling, bland, and even stint diet is among our most efficient simple means. But the Doctors will be consulted invariably, I presume, in the treatment of Small Pox, and they will, in some instances, resort to other means than those here recommended. I have given *the Treatment*. It may require auxilliaries in this case, restrictions in that, but *the principles* are not to be deviated from with impunity.

(*b*) *Of the Kine, or Cow-pox.* This disease, if indeed it deserves the name of disease, is one of intense interest to every human being. Much cavilling among medical men has long been kept up, respecting its origin. My own opinion is, predicating it upon the best evidences that I have been able to collect, that the Cow-pox is nothing more nor less than the Small-pox modified by its transmission through the Cow.— For example: A cow contracts Small-pox, somehow, by be-

ing milked by the hands of one who is laboring under the disease, or otherwise,—from the human subject. It takes hold of the cow as it does of the human being, and *pustules* are developed upon her bag or udder. Now, matter taken from these pustules and introduced into the body of man, instead of exciting in him Small-pox, gives rise to that mild and modified disease in question—the Cow-pox, or in medical language, Vaccine disease. But we do not go back to the cow to get a second supply of matter. The disease excites its like again in the human body, and we may extend it, at pleasure, from individual to individual, *ad infinitum*, in the same manner that the brewer keeps up his yeast, by transmitting small quantities of it from one cask to another. Such, I repeat, is my opinion.

Let Cow-pox, however, originate as it may have done, to Dr. Jenner the world owes the discovery of its protective agency against Small-pox. In the year 1796, having noticed that certain milkers were affected with a pustular disease, apparently contracted from the cow, and, observing further, that such persons did not readily contract small-pox,—he inferred the possibility of protecting all against the contagion of this latter disease, by introducing into their systems, by inoculation, the pustular disease taken directly from the udder or bag of the cow; and, accordingly, began immediately to experiment upon the human subject. His experiments were, as every one knows, crowned with the completest success. For a time it was supposed that the vaccine disease, Cow-pox, afforded, in all cases, perfect protection against Small-pox; but subsequent observation has proven this to be erroneous. It is true, that in a majority of instances, where vaccination has been successfully practised, complete protection against Small-pox has been secured; yet, in some cases, it must be confessed, that although vaccination does not prevent the individual from taking the disease, it almost uniformly renders it so mild—stifling it, as it were—that it is, in a great measure, divested of all its terrors. It was the custom of physicians, prior to the discovery of Jenner, to inoculate with the

Small-pox matter itself, and, thus to excite disease at will; but, although the disease excited in this way does not usually prove severe or fatal, yet, owing to its doing so occasionally, and its liability to be propagated by contagion to others, it was always an exceedingly objectionable mode of avoiding, in after life, one of the most dreadful distempers to which human beings are obnoxious. The discovery of the illustrious Jenner obviates both of these objections; for the vaccine disease scarcely ever—not one time in a thousand cases—produces serious consequences, while its protective influence, as has been illustrated innumerable times, is so perfect that death, though Small-pox should afterward occur, is so very rare as not to deserve notice. Nor is the Cow-pox, by any means, other than by being introduced into the system by the aid of inoculation or vaccination, contagious.

The proper manner of introducing the vaccine disease into the human body deserves a moment's notice. We usually use the humanized matter—that is, matter that is procured from the human subject. This matter is obtained in two forms: the fluid, while yet in the arm, and the solid, as the scab after it has fallen from the arm. If we have an opportunity of using the former, it is only necessary to scratch the skin of the person to be vaccinated, and, opening the pustule of the one now laboring under the disease, we take a small bit of the matter on the point of a lancet, and apply it to the scratch. If the scab is to be used, taking a small bit of it and reducing it to powder with a knife-blade, we add just a sufficiency of water to form a pasty mass, when it is to be introduced in the same manner, already indicated.—Now it matters not where the matter is introduced, whether in the toe or in the forehead, but custom has assigned the middle of the left arm, and it is well enough to observe this uniformly.

In about three days after matter has thus been applied to the arm, some redness and slight soreness with a pimpled appearance is seen to be present at the seat of the scratch, which gradually increases, until about the ninth day, when

the part bears some resemblance to a common boil, standing upon a widely inflamed base. This is the vaccine pustule, and it is at this stage usually filled with a greyish sort of matter, presents a pitted or depressed spot just upon its top. Gradually shrinking, this pustule dries into a scab, which is apt to separate and fall from its hold about the fifteenth or twentieth day from the vaccination, leaving behind a characteristic cicatrix or scab that remains, in most cases, during life thereafter. It is usual for fever to be present in young and irritable subjects from the eighth to the eleventh or twelth day, but this is commonly trifling. Some opening medicines and low diet are all that need be done, in general, for its palliation. With regard to re-vaccination, I do not think it necessary after it has once been successfully effected, as I am not of the opinion that its protective agency is ever lost. Very young children I would not vaccinate, unless of necessity, to guard them from immediate danger, nor would I introduce vaccine matter into the system of an invalid without a similar reason.

(*c*) *Chicken-pox.* This is a disease of some interest, as it may be mistaken for Small-pox, and, in this way, give rise to an unnecessary stir and bustle in neighborhoods. Constitutional symptoms, such as slight pain of the head and back, some heat of the body, thirst, with loss of appetite, usually precede this affection. The eruption shows itself earlier than in Small-pox, the pustules never contain matter as in Small-pox, but on the contrary, a thin yellowish fluid only; they never form deep sores, and are usually beginning to dry up about the third day from the first appearance. Chicken-pox is regarded by many physicians as being contagious. Little treatment, in general, is required in this affection. To moderate the fever some small doses of salts may be beneficially prescribed, but it is seldom necessary to interfere at all.

(*d*) *Measles* is frequently a serious affection, and sometimes, owing to unfavorable complications, or to improper treatment, a fatal one. I know of no other disorder which, while it requires little treatment, is so often mismanaged.—

Measles is a specific fever, the most characteristic symptom of which is, the peculiar eruption that attends it. It is a contagious disease, and usually makes its attack about the tenth day after exposure to its contagion. The symptons which precede the eruption are analagous to those of influenza, and I once knew an eminent medical professor to pronounce a case of Measles, prior to the appearance of the rash thereof, to be an influenza, and to prescribe accordingly. The patient complains of debility, of aching pains of the back and joints; loss of appetite, heavy and dull pain of the head; he is now and then chilly, has thirst, a bad taste in his mouth; his eyes are red and watery; he coughs almost incessantly, sneezes, runs at the nose, &c. Now these are the symptoms of Measles, as they are, also, of a bad cold; but I have seen them in some cases greatly aggravated. Occasionally a persistent burning fever, nausea and vomiting, entire loss of appetite, &c., &c., are the premonitory or foreboding symptoms of the rash of Measles. Even convulsions, in young subjects, are not very rare during the febrile stage of the disease. The peculiar eruption or rash is almost sure to show itself on the fourth day of the fever. It is usual for this to be visible, first upon the forehead or face, and to spread thence to the entire body, not reaching the lower extremities, in general, before the sixth day of the disease. The appearance of the eruption is somewhat difficult of description. It bears some resemblance to flea-bites, the patches—for it is distributed in patches—being only very slightly elevated above the surrounding surface.—These patches or blotches of the rash are most commonly irregular in shape, and have been, not inaptly, styled horse-shoe shaped. With the appearance of the eruption the most distressing symptoms commonly disappear. The tongue, in this affection, is, very uniformly, thickly coated, and the patient is apt to loathe every description of food; the bowels are not often deranged. In one or two days from the first appearance of the rash, it is usual for it to begin to fade, and, at the end of four days, it has chiefly disappeared; but the patient still has red eyes, a cough, and feels feeble and bad.

Measles spreads its force almost altogether upon the inner linings of the air passages of the stomach and bowels, and upon the mucous coverings of the eyes, nose, &c. It is, indeed, a specific inflammation of these parts.

Of the Treatment. Measles is a disorder which runs a certain definite course, and, do what we will, we cannot shorten this course. It is, therefore, obviously our duty—sole duty, to watch it, guide and direct it safely to the end of this course; and he who assumes to do more than this, is to be looked upon as an intruder upon nature and common sense. He may remove obstructions, palliate symptoms, assist nature, &c., but he must not break in, and, with a bold and reckless hand, attempt to change the whole current of the distemper. In the first place, it is well to clear the bowels, and for this purpose Castor Oil answers a good purpose. The patient is to be confined to his room, but he should not be kept too warm, nor loaded with bed-clothes; he may be allowed cooling drinks, and should, from time to time, be solicited to take a few spoonfuls of rice-water or thin corn-meal gruel. A little boiled milk with light bread in it may, also, be allowed, if relished by the patient. Patients laboring under the Measles are apt to crave acids; to indulge them moderately, a little pure vinegar weakened and sweetened, may be taken without detriment. After the bowels have been opened, and where the patient remains restless, a few grains of the Dover's powder—3 to 5, for an adult—may be prescribed with a prospect of advantage. It sometimes happens that, after the rash is well out, it fades prematurely, and that the patient becomes anxious, has great difficulty of breathing,—in short, seems to be on the brink of dissolution. To relieve these distressing, and, indeed, dangerous symptoms, heat should be applied to the patient's extremities, mustard poultices over his chest; and he should take, as soon as possible,—if an adult—20 or 30 drops of Laudanum in union with a teaspoonful or two of spirits of Camphor, and this dose should be repeated, if relief is not obtained in the space of half an hour.

Measles may become complicated with other affections,—

particularly with inflammation of the lungs and with croup; and such complications, it is useless to add, are momentous. The treatment proper for these latter diseases has already been referred to, but I advise the family physician to be sent for without delay, when they do occur. A tedious and troublesome cough sometimes remains after all the other unpleasant effects of Measles have passed away; and this may ultimate in incurable diseases of the Lungs—as Chronic Bronchitis, or even Consumption itself. To guard against such consequences, and attempt to remove the cough when it does exist, the patient should go warmly clad, and he should use Cox's Hive Syrup, as advised for Chronic Bronchitis. With these remarks, I pass to a far more serious affection:

(*e*) *Scarlet Fever.* This disease, in its most malignant form, is the terror of both friends and physicians; for the tears of the former, and the skill of the latter are, alike, unavailing. In its mildest form, however, it is so trifling as scarcely to deserve the name of a disease at all. It is an affection, the severity of which, falls, almost entirely, upon young persons and children; and, in some of its visitations, the fatality attending it is truly enormous. During a single year there died in the city of London above four thousand persons of the present distemper. Again, it is proper to remark, that it is in some of its visitations quite mild, and few, only, fall a sacrifice to it. Scarlet Fever is a contagious disease, but all cases of it cannot be traced to an origin of this kind, and we are, therefore, forced into the conclusion that particular, though inscrutable states of the atmosphere favor its propagation, and that it is, thus, frequently excited independently of its well known contagious source. It is a disease, therefore, that is propagated in two ways—by contagion, and by epidemic or atmospheric influence. When taken in the contagious manner, from four to six days intervene from the time of exposure to its cause, before the fever or disease manifests itself.

The Symptoms of scarlet fever are not, in general very difficult of detection. In cases of moderate severity the patient is generally attacked with symptoms of a common fe-

ver. He has chills intermingled with flushes of heat, pains of the limbs, back, and head; presently he is intensely hot, and often vomits strongly. He complains of stiffness of the jaws, and some soreness of his throat. Upon opening the mouth the tongue is found to be covered over with a white fur, through which little red elevations, resembling the surface of a strawberry, show themselves; its edges are also, apt to be red and fiery. Looking further back into the throat, this part is seen to be swollen and of a vivid red appearance. The pulse is frequent, but not very full and strong. These are the most prominent symptoms of scarlet fever, prior to the rash, and it will be seen that they differ from those of measles in the *absence* of the cough and catarrhal complications of this latter affection. For in scarlet fever, cough, running at the nose, sneezing, &c., are rare in its earlier stages. Authors tell us that the peculiar rash of scarlet fever shows itself, in general, about the end of the second day; but my own observation has not borne this statement out. On the contrary, in those cases that I have observed, the rash has very generally made its appearance at a much earlier date than that here indicated. Indeed, it has appeared to me to be coetaneous with the disease itself. The eruption appearing when it may, however, in all cases tending to a favorable issue, it begins to recede in two or three days from the date of its first appearance, and, in two or three more, the skin has, in a great measure, regained its natural color. In cases of greater severity, however, the scarf skin usually falls off in branny-like scales, the process of which is not fully completed for some weeks. Of the appearance of the eruption itself, it is useless to say much; for one single examination will be worth more to the reader, than half a dozen pages of words. It more nearly, perhaps, resembles the rash of measles than any other skin affection, but the experienced physician will instantly discriminate between the two. In scarlet fever the redness is more uniformly spread over the surface, less in patches, and hardly ever assumes the half circular horse-shoe shape that it does in measles. About the time the rash

makes its appearance, considerable itching and irritation are, in some instances, present.

Now I have described, rather imperfectly, a case of scarlet fever of middling severity, the eruption, the fever, and all passing away about the end of the first week, leaving the patient debilitated, but not much the worse for the attack. Cases much milder than the one here described, sometimes occur. In such cases only very slight soreness of the throat, a fever so trifling as to elude observation, and the peculiar eruption are all the evidences of the existence of the disease; restraint often being necessary to keep the child within doors. This mild form of scarlet fever, I repeat, scarcely deserves the name disease, but as it is only the stifled workings of a poison that, under other and less favorable circumstances, hardly fails to destroy life, this one circumstance entitles it to the most anxious consideration. And if there is an exceedingly mild form of the disease in question, there is also one of extreme severity, attended with the utmost danger; nay, even with the certainty of death. For I am of the opinion that certain aggravated forms of this terrible distemper, are at the present time, necessarily fatal in their consequences; though it is to be hoped, that at no distant day a remedy adequate to control them may be discovered. In those aggravated cases the attack is similar to that of those already delineated, but, instead of the disease declining at the end of two or three days, the fever persists, the swelling of the throat increases, delirium, or craziness frequently ensues, a diarrhœa is apt to set in, great heat and dryness of the skin, a thin ichorous kind of matter escapes from the nostrils; and, upon examination, the throat is found to be greatly swollen, of a dark color, and ulcerated. I need hardly say that under these circumstances, swallowing, and even breathing, is very difficult; and I have seen the former of these processes entirely interrupted. The patient sometimes dies as early as the fourth or fifth day of the disease, but more commonly he survives until about the ninth or tenth, when, worn out with excessive irritation, he sinks, it may be, sud-

denly and without warning. It sometimes happens that bleeding from the nose, in the last stage of scarlet fever, suddenly carries the patient off.

The after consequences of scarlet fever are often to be dreaded. Even for weeks after apparent recovery from this affection, there is a constant liability to the supervention of other serious diseases, the consequences of the fever. Dropsies are the most common of these secondary affections, but others, more serious, make their encroachments, not unfrequently; also, such as inflammation of the lungs &c.

Of the nature of scarlet fever, I will not speak further than to say, that it appears essentially to consist in the workings of a poisonous ferment, which the constitution in its efforts to relieve itself, throws to the surface, and out upon the mucous coatings of the internal structures. These mucous linings, are, therefore, in one sense of the word, to be looked to as the seat of the disease; and are, during its activity, in a state of inflammation; but this is of a specific kind.

Of the treatment of scarlet fever neither need I say much. It is well, however, to warn the reader against doing too much. I would rather, infinitely rather, trust a child of mine, affected with the present distemper, to the silly or loathesome, though inert and harmless prescriptions of an old lady, than to the care of the most eminent medical adviser, provided he, with active and powerful medicines, attempt to cut it short. The former does not interfere with the operations of nature, while the latter discards its service altogether. But physicians now begin to know their duty, in these specific affections, better than formerly; and they should, therefore, in general, be consulted. I say physicians, and do not mean mere pretenders or ignoble quacks. Every one who deserves the name of physician must be aware that his sole duty in the treatment of specific affections consists in aiding and abetting nature, in assisting and fostering her, in her struggles to rid herself of the poison which is, essentially the cause of the disease; and which, such efforts *tend* to expel from the suffering organism. The man, therefore, who comes

in to treat scarlet fever with his lancet unsheathed in the one hand, and a vial of calomel and another of antimony in the other, must be looked to not as an angel of mercy, carrying with him healing balm, but as the minister of destruction, bearing about him the instruments of death.

Emetics are sometimes useful, if properly timed, in the earlier stages of scarlet fever, but my experience leads me to suspect the propriety of their administration in a majority of cases. The same remark applies with equal force, with respect to the propriety of bleeding ; though inflammation is undoubtedly, present, it is so modified in its nature as rarely to require bleeding for its subjugation. A gentle purgative of castor oil, provided the stomach retain it, will generally prove serviceable in the earlier stages of the disease, and may occasionally be repeated with profit. The cold bath has been highly recommended, but although useful in certain cases, and at certain stages of the disease, I cannot advise its use indiscriminately in all cases. Sponging the body frequently, during the hight of the fever, with warm vinegar and water is both safe and grateful to the patient. As a local wash for the throat, to be used from time to time, a moderately strong pepper tea, made of the common red pepper, is, perhaps, as a general rule, as good as any other. With a tea of this kind the throat should be gargled from time to time, and, provided the fever be not too high, it will be well to permit some of it to be swallowed at each gargling. After the severity of the disease has gone by, and the patient begins to recover, he should not, even for some weeks, expose himself to changeable and damp states of the atmosphere; and caution should also, be observed about his diet, avoiding all heavy indigestible substances.

The dropsical effusions, inflammations, &c., that sometimes follow, as consequences of scarlet fever, demand, as a general rule, active constitutional treatment, and the family physician should therefore, be consulted.

Now to sum up the treatment of scarlet fever, it amounts to about this: In the mildest form of the disease nothing, in

general, is required. It is well to confine the child to the house, to open the bowels with a little castor oil, and to enjoin a light diet, such as boiled milk, rice, &c. In cases of greater severity, emetics, bleeding, gentle purgation, sponging the patient's body with warm vinegar and water, or cold water itself, are all means that may, under certain circumstances, be profitably resorted to; as may, also, the pepper gargles. In the worst and most malignant form of the disease, the simple, the active, and the medium modes of treatment, I regret to declare, are too often, alike unavailing, and the little patient, for I presume the patient to be a child, the tender object of anxious parents, falls a victim to the biting grasp of scarlet fever.

(*e*) *Whooping-cough.*—Every one knows something about whooping-cough. Some are dreadfully afraid of it, while others solicit its acquaintance, thinking it better for their children to have it while young, than run the risk of contracting it in after life. It is an affection of the lungs and air passages, and the only characteristics, distinguishing it from an influenza or severe cold, are the peculiar "whoop" and the paroxysmal nature of the cough, coming on as it does in paroxysms or fits. Now, I repeat, it is the peculiarities of the cough, alone, that serve to distinguish whooping-cough from certain other disordered conditions of the air passages; but it is a week, or even weeks, after the cough begins to trouble the patient, before the peculiarities here indicated manifest themselves; and it is therefore, frequently impossible, during the early stage of the disease, to say with certainty, whether the particular case in question is influenza or whooping-cough. It is true, whooping-cough is contagious, and influenza is not; but children—for they are the subjects chiefly of the former affection, do not always contract the disease when exposed to its contagion, nor can all cases of whooping-cough be traced, without difficulty to this cause. Consequently, some caution should always be exercised in pronouncing this case to be, and that not to be, whooping-cough. When it prevails in our neighborhood, and a child

gets a severe cough, coming on in paroxysms or fits, and when one knows it has had a chance of catching the disorder, we infer whooping-cough. But when, after the persistance of the cough for one or more weeks, the child begins to give out during its fits of coughing a peculiar shrill sound, *a whoop*, we do not hesitate to declare outright that the case is one of whooping-cough.

The symptoms of the present affection are so well marked and so characteristic, after its full development, that I need not rehearse them particularly. The contagious nature, the paroxysmal cough, and the peculiar whoop, are symptoms not to be mistaken. The space of time that intervenes from the time of exposure to its contagion, to the commencement of the cough, varies; the medium number of days being about ten. The duration of the disease itself, is also uncertain. It may last but six weeks, yet it is not unusual for it to extend to six months. In pure, uncomplicated whooping-cough, fever forms no part of the disease. The cough above constitutes the whole deviation from the state of health; for, between the paroxysms of this, the child is, apparently, in good health. If it is not, we are warranted in the conclusion that the cough is complicated with another, or other diseases. And these complications are always serious; often fatal in their issues. I neglected to say, that during the fit of coughing, the patient frequently bleeds at the nose, or vomits, or both. These discharges, other things being equal are favorable indications.

The nature of whooping-cough is not very well defined. That its seat is in the lungs and upper part of the windpipe, all agree. But while some assert it is a spasmodic disease, others contend that it is inflammatory. In most instances, I conceive, that both these conditions are present at one and the same time. The *whoop* depends upon the rapid passage of air into the lungs through the chink in the upper end of the windpipe, it being partially spasmodically closed at the time.

With respect to the *treatment* of whooping-cough, in the

pure uncomplicated disease, very little is required, other than the enjoinment of a light diet, avoidance of all sources of colds, and the occasional administration of a small dose of castor oil, so as to keep the bowels in a lax state. In the latter stages of the disease, however, should much phlegm collect about the pipes, the alum cordial, (see alum,) given in teaspoonful doses, repeated three times daily, to a child of two years of age, will be found serviceable. When the disease becomes complicated with inflammations, or with convulsions, as is the case in some instances, the appropriate treatment for these affections must be put into practice. But medical aid should now be sought, if it has not previously been obtained.

(*f*) *Mumps* consists of an inflammation of a glandular body—the parotid gland—situated near the angle of the lower jaw, and is, at least in some instances, propagated from one person to another by contagion. Though a somewhat painful affection, mumps is rarely of much consequence, unless, as happens sometimes, a translation of the swelling from the jaws to the testicles in males, or to the breasts in females, takes place. When this takes place these parts are apt to become considerably swollen and very painful, while the original affection has entirely disappeared.

Simple mumps scarcely requires any treatment. A dose or two of salts, light diet, and rest, are in general sufficient to carry the disease off in a few days. When, however, complicated as above, more active purgation, and strict rest in the lying posture, with warm fomenting applications to the painful parts, and mustard poultices to the jaws, over the original seat of inflammation, are proper remedies, and should not be neglected to be put in requisition. A few drops of laudanum, to allay restlessness will also be apt to do good.

(*g*) *Erysipelas*—(St. Anthony's Fire.)—This is a disease that spends its force, at least in a great measure, upon the skin ; the covering envelop of the body. And it is, undoubtedly, under certain circumstances, a contagious or catching disorder ; yet, in some of its forms, it cannot be looked upon

as an affection of a contagious nature. As the disease occurs in its sporadic or *accidental* form, without a contagious cause, the symptoms are, a bright redness and slight elevation of some part of the skin, perhaps of the face, attended with a burning pain of the parts. The redness is apt to terminate abruptly, and the adjoining skin looks quite of its natural color. When pressure is made upon the affected part the redness disappears for a moment, but speedily returns upon the pressure being removed. Small blisters are apt to form upon the inflamed surface, which, after a short time give way and discharge a thin acrid fluid. Now should the disease extend itself, which it usually does, it travels slowly from one part to another, thus involving new tissue, and adding to the patient's suffering and danger as it proceeds. Constitutional symptoms do not always accompany this local variety of erysipelas, but if the inflammation be extensive, they very generally do. Such symptoms are headache, nausea, sometimes vomiting, with other disagreeable febrile attendants. Matter sometimes forms underneath the inflamed skin, and this is to be regarded, in general, as an unfavorable indication; for as long as this is going on, an irritative fever is necessarily kept up; and a loss of appetite with emaciation, and death may result.

The treatment of this accidental, [so to speak,] variety of erysipelas, consists in depletory measures during the earlier stages of its course, and of these, in conjunction with tonic medicines, should the system fall into a debilitated condition, and the disease run a tedious course. In mild cases a few doses of salts, rest, and a light diet will generally be found sufficient to carry the disease off in a few days. Should evident signs of debility, such as great weakness, a frequent small pulse, loss of appetite, &c., ensue, it will be proper to prescribe a grain or two of quinine, three times daily, with a few grains of Dover's powder at night. But in severe cases of this kind, the advice af a physician should be asked. A genuine erysipelatous inflammation is sometimes excited by "poison vine."

Of the *epidemic* variety of erysipelas a great deal has been said and written of late. Some contend that it is not a contagious disease, while others, with better evidence on their side, assert, unequivocally, that it is. Now, with the best lights that I can collect before me, I am led to believe that it, like scarlet fever, is, under favoring circumstances, propagated both by contagion, and through the medium of the air. It is a disease that has, of late years, ravaged extensively, the western country, and has, in many sections, proven lamentably fatal. Several names have been applied to it, as black tongue, epidemic sore throat, &c., from the malignancy with which it frequently attacks these parts; falling, as they often do, into a state of mortification before the death of the patient takes place. In many respects the present disease resembles scarlet fever, and, indeed, some have considered it a mere modification of this latter affection, involving more particularly the skin than the usual forms of scarlet fever do. It is, unquestionably, a specific fever, spending its force somewhat after the manner of smallpox, upon the skin, the internal lining structures, the throat, &c.

The symptoms of epidemic erysipelas are a good deal analagous to those of scarlet fever, with this difference: In the former the rash is supplied very generally, but not uniformly by an inflamed condition of the skin, of that description above delineated. This erysipelatous inflammation, showing itself perhaps first upon the face, is apt to involve, in its course, a considerable surface of the body, and indeed, in some instances, it is said to have extended itself over the greater part of this; and in cases of this kind, that terminate fatally, a rotting and falling off of the flesh from the bones actually takes place. The throat, the tongue, and all the mucous coverings of the mouth and throat turn black, and are perhaps in a state of gangrene.

I have here given it as my opinion that the present variety of erysipelas is propagated both through the medium of an impure air, and by contagion, from one person to another. Now, in support of such an opinion, I am in possession of a

sufficiency of proof to warrant me in adopting it. We know that the disease is communicable from one person to another by inoculation. That it has been thus conveyed, undeniable evidence has been afforded by bleeding persons with lancets that have recently been used with erysipelatous patients; and, in this way, communicating the disease to such persons.

It is proper to remark that in some of the cases of the present disease, inflammation of the skin is not present. In such cases the disease appears to spend its force mainly upon the internal structures, and they are, therefore, more to be dreaded than the more common form of the disease.

The treatment of this form of erysipelas, is in a great measure, to be conducted in the same manner as if the case were one of the former, or accidental variety. It is well to be cautious, and not purge too much. Emetics and bloodletting have been recommended in the very beginning of the disease, and calomel and opium at a later period; but the employment of these herculean remedies belongs, in my opinion, exclusively to medical men. My former preceptor, very ingenious and estimable friend, Dr. H. E. Talbott, of Greencastle, informs me that the external application of the common tobacco has appeared to him more highly useful, in the present affection, than any other remedy. And from its well known power of producing a most decided relaxant effect upon the living system, I am inclined to think favorably of its reputed virtues in this complaint. He moistens the tobacco and applies it to the skin above the stomach, &c., until a decided impression—its depressing effect — is made upon the system. It is then to be removed, to be again applied as soon as its distressing effects have passed away. The best external application, upon the whole perhaps, that can be made to the inflamed skin is sweet pure hog's lard; with which the parts should be smeared from time to time. It, in some measure, serves to allay the burning pain.

(*h*) *Continued Fever*, *Winter Fever*, properly *Typhoid Fever*. It may be thought strange that I should place here, apart

from the true febrile diseases, a disease that, in point of severity, holds a first place in primary fevers. But as I regard this disease to be one of a contagious nature, I could not, without violence to the arrangement of this work, have included it under any other head. Then, I have already said enough to commit myself in favor of the opinion of its contagious nature. Many medical men do not regard this as a catching disorder, but I have seen enough myself, if I had no other authority, to declare unhesitatingly, that it is a disease, that under favoring circumstances, is communicable from one who is laboring under it to another who is not. This is all, then, that I shall say respecting this matter, in this place. When the disease has appeared, got a start in a neighborhood or town, it is apt to spread from the sick to those in immediate communication with them, by means of its contagious character.

The symptoms of the disease, when well marked, are very evident, and by the experienced physician are not apt to be mistaken for those of any other affection. The fever comes on most commonly with slight chills, pains of the head, back, and limbs, heat of the body, a white coated tongue, more or less sickness of the stomach ; and the bowels are very often—not always, lax, and have wandering pains and soreness through them. In the course of a few days the chilly sensations wholly disappear, the heat and dryness of the skin increase, and, if not before, the patient now takes to bed. His pulse is not commonly much varied from its natural standard ; his tongue, though slightly coated over does not look bad ; if he has thirst, it is not very great, nor is his appetite apt to be totally destroyed. But he sleeps illy, is disturbed, perhaps talks a great deal of foolishness over in his sleep ; his eyes are dull, and his manners quite unnatural ; indeed, by close observation his mind, even when awake, is found to be not right, he is half deranged.

Now the *characteristic* symptom of typhoid fever from this time to its termination, either in health or death, is a disordered state of the mind. And the disease is apt to run a

rotracted course, lasting from two to six weeks or even longer. There are other symptoms, it is true, of much value in distinguishing this from other diseases. One of these is an eruption or rash of a peculiar kind, resembling semewhat fleabites, that is almost uniformly developed at some time during an attack of winter fever; most often, about the first of the second week of indisposition. The disordered state of the mind above referred to, provided the disease be severe, terminating in a tedious convalescence or in death, is, in general, very marked, amounting, most often, to an idiotic sort of delirium. The patient is continually muttering in his sleep about this thing and that, and, sometimes, about things that he never before heard of. He reaches his hands about him, and appears to be picking at or hunting for something about the bedclothes. Presently he begins to talk while yet awake; he fancies that things are so and so; he imagines that this is a near relative, and that a total stranger. He is apt to be concerned about his business affairs. Now this state of his mental faculties either increases or decreases with the age of the disorder. If the patient is about to recover, he gradually regains his understanding; comes to himself, and coetaneously with the improvement of his mind all the disordered functions of his body return to a state of health. If, however, the disease is about to result in the death of the patient, he becomes more and more delirious, he presently knows no one, nor notices anything that is transpiring around him; nevertheless, he talks and mutters incessantly, having his eyes half closed and picking at imaginary flocks or motes that seem to haunt him all the while. His bowels are commonly much deranged; and it may be, and is indeed, often the case, that the unmanageable purging carries him off sooner than the exhausting nature of the fever otherwise would do. Under such circumstances, his tongue and all the inside of his mouth assume a dark color, and become covered with a waxy sort of scurf. Presently he dies, it may be at the end of two, three, seven, or even ten weeks from the time of the attack.

Upon an examination of the body after death, the greatest destruction seems to be confined to the inner coating of the bowels. In certain portions, they are often seen in a disorganized, ulcerated, or even mortified state. But other parts are also, frequently the seats of disorganization. The brain is sometimes marked with evidences of previous inflammation. In short, typhoid fever is a general disease, involving, in its course, every structure, but falling with more particular severity upon the inner linings of the bowels. This fever, as its name implies, is an affection that is oftenest met with during the winter months. Nevertheless, it sometimes happens that it reaches back to the latter part of fall, or extends forward to early spring. It is always a serious disease, and not unfrequently destroys life.

Treatment. In the very commencement emetics may now and then be useful, but bleeding and purgatives are seldom so. To allay the irritability of the bowels, and to quiet the disordered state of the mind, opium given from time to time is very generally serviceable, to which, should there be excessive purging, sugar of lead in one or two grain doses should be added. Though purgatives are hardly admissible in this disorder, should much costiveness be present, an occasional dose of castor oil, containing ten or fifteen drops of laudanum may be advantageously prescribed, watching and checking if necessary, its effects with opium. Blisters over the bowels, stimulating frictions, such as strong pepper tea with common salt added thereto, over the whole body, are very often of much service. These are the principles of treatment, but to put them into practice, my advice is that physicians be employed. No one but a physician, in cases of winter fever, can judge correctly of the patient's condition ; nor can any one so accurately proportion doses, give instructions as to diet, &c., as he. Then I hope the reader will not hesitate to employ, at the very onset of this terrible malady, reliable medical advice. It is seldom necessary, should the disease run a tedious course, that daily visits be made, after the first few days. Days and weeks often pass

away with but slight alteration in the patient's condition. The diet of the patient should be nutritious, rich soups not unfrequently being required to support the strength. His room should be kept cool, dark and perfectly quiet; all officious and unnecessary visitors and tattlers being peremptorily excluded.

CHAPTER X.

DISEASES NOT INCLUDED IN ANY OF THE FOREGOING CLASSES.

In the four classes of diseases, now gone over, I have purposely omitted several disorders that it may be expected that I should say something on. I omitted mentioning one of these, under the original classification, first, because I am not well satisfied as to which class it properly belongs; and, secondly, because I have never seen a case of it myself. I allude to *Asiatic Cholera*,—that terrible disease, which, for many years, has been devastating the old world, and, on one or two occasions, has paid its respects to our own country,—leaving its foot-prints indelibly impressed upon the memories of thousands of our fellow-citizens. Its name would indicate that it originated in Asia, but I believe, at present, we know little of its rise. That it is not a contagious disease, I believe ample evidence can be adduced; yet, from its universal prevalence, affecting, as it does, on some occasions, almost every one within the range of its influence, the public are apt to conclude that it is catching from one to another. Cholera is, in several respects, both a curious and an inexplicable disorder. For example: it usually travels from east to west, against winds and tides. Thus, some years ago, arising in the countries to the east of Europe, it travelled in a westerly direction, and, passing through and desolating almost all the crowded cities of this latter country, it reached the Atlantic Ocean. Nor did this impede it in its onward march, but mocking as it were, on the wings of the wind, it crossed over and began ts work of destruction in the large towns bordering its shores in our own country. Continuing its course, it swept along

from one city or country to another, until, finally, it seemed to have been lost or buried in our own beloved west.

The symptoms of Asiatic Cholera are of such a nature as not to be mistaken when the disease is in the country, provided a little self-possession and presence of mind be exercised. But, unfortunately, when Cholera, a few years ago, visited this country, and carried so many to their graves, not only individuals, but whole communities, were so affrighted, that the most trivial ailment was apt to be mistaken for Cholera; and I have not the slightest doubt that hundreds and thousands of persons were so reduced and enfeebled by that least valuable of all our passions—*fear*—as to actually predispose them to the disease; and, in this way, numerous were they who died of fear. Let us but have courage, stand up and boldly face our foes, and ten to one if they do not cower, sneak off, and leave us unharmed. But, on the contrary, if we turn pale with fear, and attempt to hide ourselves from them, they are apt to seek us, and when they lay hold of us, timidity forbids us making even a tolerable effort to free ourselves from their grasp. These are wholesome hints and should be remembered. But to return to the symptoms of Cholera. In some instances, without previous warning, the individual is seized with vomiting, violent spasms of the muscles of the abdomen—sometimes of the extremities—and frequent watery stools. The stools are frequent and large, and in appearance resemble rice-water—hence the patient is said to have rice-water discharges. A state of exhaustion and sinking speedily ensues, termed *collapse*—characterized by a cold and shrunken condition of the whole surface, and an obtundity of all the faculties, both corporeal and mental. Out of this collapsed state the patient scarcely can be rallied, but, sinking lower and lower, he dies in the space of a few hours. In this manner, almost all cases of Cholera terminate, unless relieved by art in the very onset of the complaint. But all cases do not set in as here indicated. On the contrary, *premonitory symptoms* of a certain character are apt to precede the attack hours or even days. The most

common of these forerunning or premonitory symptoms is a lax or diarrhœal state of the bowels. And now is, let me remark, the proper time for preventing, by medicinal treatment, the full development of the malady. During this period, a little rest, a few drops of laudanum, occasionally repeated, in union with small doses of sugar of lead or calomel, will, in general, be sufficient to check the bowels and ward off those desperate consequences that are, otherwise, almost inevitable. After the disease is, so to speak, in full operation —copious rice-water discharges being every few minutes poured from the bowels—after vomiting and spasms are present, but little hope is to be entertained for the patient; for, in a few hours, or even minutes, collapse and death are to be apprehended. Were I called, however, to a case thus reduced to a state of desperation, my treatment would be, most probably, mustard poultices, together with dry warmth and friction to the body and extremities; and, internally, I would prescribe large, even mammoth doses of opium and the sugar of lead, designing to arrest, as speedily as possible, the action of the bowels, and this indication being fulfilled, I would then give calomel, in union with such quantities of opium as the circumstances of the case would warrant. These medicines I would continue until I had evidence that the liver was roused into action. With these brief remarks, I dismiss the disease, with the hope that I may never be called upon to treat cholera other than I have done here—upon paper.

2. *Itch.* This is an *infectious* disorder; and, being purely local, confined to the skin, and its cause being, unquestionably, an invisible insect, it is most proper, perhaps, that it be considered apart from the contagious class of affections. It is an extremely common disease, one troublesome to get rid of, and, as already intimated, dependent for its existence upon a microscopic insect which burrows itself in the skin. Innumerable of these insects, thus concealing themselves beneath the skin, are capable of exciting considerable irritation and itching of the parts which they infest. The skin of the affected parts is, in this way, rendered scaly; little blisters

(vesicles) filled with a sort of puriform matter, and even sores of considerable magnitude, are frequently formed. These sore and abraded surfaces the individual is apt to aggravate by scratching, and in a few instances, in young and tender subjects, very extended and troublesome sores are created in this way. The *itch insect*, here referred to, prefers carrying on its work in thin and tender skins, and accordingly children suffer more from it than grown up persons, and the thinnest and most delicate portion of the skin—as between the fingers, under the arms, &c.,—more than other parts of the body. But still it is an affection that most persons, both young and old, are obnoxious to. It is infectious only through the agency of the itch insect. It is capable of passing from one body to another, when brought into contact, or of being transmitted through the medium of clothing or bedding, to which it appears, in some instances, to adhere, with considerable tenacity, and for some time.

With the *Treatment* of Itch, most persons are familiar.—Brimstone, sulphur, will kill the cause of it, and cleanliness will, usually, prove a preventive to its re-appearance. Other things, beside sulphur, are occasionally used, and now and then with success, *but sulphur is the proper remedy*—the safest, and when perseveringly used, a never-failing cure; it is a specific for itch. Then, to an ounce or two of the flowers of sulphur—or the beaten up brimstone will do—add two or three times its weight of hog's lard, and mix thoroughly. With this preparation, for two or three nights in succession, smear the affected parts, having previously washed the body off with soap and water. After this course has been gone through with, wash off, put on other clothing, both on beds and bodies, and the chances are against the army of little intruders. Itch is a loathsome and filthy disease, and as every one affected by it has it completely in his power to remove its cause in the course of a few days, without danger to himself, he is culpable if he neglect to do so.

3. *Ringworm*, Being a very common and somewhat troublesome circumscribed affection of the skin, demands a few ob-

servations as to the proper mode of its cure. I need not describe its appearance. Its name implies its shape, and its vesicated and traveling nature are too well known to deserve attention from me. To relieve it, a weak solution of Blue Vitriol may be applied from time to time to it. If this fails, the strength of the solution should be increased. The manner of forming the solution is to add to an ounce of rain-water an amount of Bluestone about equal in bulk to a hazlenut. A solution of the Lunar Caustic, is also, an effectual remedy for ringworm.

Nettlerash. This is an affection, also, of the skin, but nearly always depends upon some constitutional cause. It is sometimes occasioned by particular articles of diet, but it is oftener, perhaps, the consequence of vitiated accumulations in the stomach and bowels. And I have seen a few cases of the disease that were, in some way, connected with fever of the intermittent kind. Whatever may give rise to it, however, it is characterized by a sudden tingling of the skin, perhaps of the whole surface, accompanied with flushes of heat. In a short time, a most unbearable itching begins, and the individual is apt to claw and scratch himself with all his might, and, perhaps, as I once did, he employs a bystander to assist him. The characteristic eruption now begins to appear, and if the complaint has not hitherto been understood, the eruption now reveals its true nature. It resembles the stings of insects, rising up suddenly in hard wheals, and having upon their summits a white flattened appearance. These wheals scarcely ever form sores, but are apt to pass away, along with every other unpleasant symptom, in the course of a few hours. The eruption sometimes gets into the eyes, and a few rakes with the finger nails, during a fit of the disease, are generally sufficient to bring it out on any part of the body. Nettlerash is occasionally intermittent in its character, and returns every night, especially upon retiring to rest. When this is the case, the patient being prevented from rest, the disease is not only troublesome, but may, by its persistence, greatly reduce the constitutional powers.

Little else is necessary for the effectual removal of the acute variety of this affection than a few purges of some mild cathartics. Ten grains of rhubarb added to a teaspoonful of the cream of tartar, answers well for this purpose. If, however, the affection be connected with ague, quinine must be given. In the intermittent or chronic variety of the complaint, other means of treatment will be proper. Arsenic, of all known remedies, will be found, in this form of Nettlerash, most to be depended upon. But medical men—and they of the better class, too—should prescribe this powerful drug, which, even in very small doses, requires the most careful watching.

I have now gone over with most of the commoner diseases incident to this climate. In many respects, I am aware, they have been imperfectly dealt with. But imperfections I could not hope to avoid, in a work prepared, like the present, for the benefit of those unacquainted, in a great measure, with the subjects upon which it treats. If, however, I have been able, as I trust I have, to instruct—to introduce useful matter, in a style plain and familiar, then I have accomplished all that I could anticipate and hope for.

CHAPTER XI.

A GENERAL VIEW OF THE PRINCIPLES AND PRACTICE OF SURGERY.

Surgery, though taught and practised in some places as a distinct branch of science, is, in reality, so intimately connected with medicine as not to be separated from it without violence. It is impossible to practise surgery with success, without first acquainting ourselves with Anatomy and Physiology, and with the principles and practice of physic. Nor can any one practise, with any kind of success, this latter branch, without necessarily becoming acquainted with the rules and regulations that govern the surgeon in his operations.

It is in consequence of this intimate connection that practitioners of medicine and surgeons are continually infringing, upon the departments of each other; it is impossible that it should be otherwise. But, before proceeding further, it may be well to define, somewhat definitely, the province of the surgeon. He, in his practical capacity, performs all bloody cutting operations, from opening an abscess to the capital operation of amputating or cutting off the thigh. He reduces dislocation or displacements of the different joints, and adjusts broken bones, retains them in situ, and procures their reunion. All wounds, burns, frost bites, bites of poisonous reptiles, insects, &c., are the legitimate objects belonging to his branch of medicine.

Now it will not be expected that I should speak separately of all the offices of the surgeon. It would require a volume, or even volumes, to do so. All that I shall aim at, in the present chapter, will be to notice, briefly, a few of the most common, as well

as the most simple, diseases and accidents that fall within the scope of surgery. And I shall endeavor to be more full and explicit as regards their treatment, than the phenomena that attend them as symptoms.

(*a*) *Whitlow or Felon.* This is not only a very painful affection, but also, one that not unfrequently results in the loss of one or more joints of the fingers or thumbs. Its approach is announced by heat and swelling of the finger or thumb, and pain of a pungent, throbbing, and unremitting kind. So severe, indeed, is this pain in many instances, as to prevent the sufferer from sleep for days and nights together. These symptoms, as the disease advances, are augmented until, generally, after the lapse of many days, openings form upon the swollen joint, and give exit to an ill-conditioned bloody matter, when an abatement of the severity of the pain usually takes place. But the sore does not, in general, heal kindly; on the contrary, it is apt to continue for a long time, unless properly treated, to discharge an ill-looking matter, and within it ugly unhealthy granulations—proud flesh—are almost sure to sprout up; the whole end of the finger or thumb diseased, becomes hollow, rots, to use a common expression, out, and the bone itself is thus exposed, and not unfrequently destroyed. Constitutional symptoms are occasionally developed, but these are rare unless the disease has run a very protracted course.

As respects the treatment, after evidences of matter in the part, exist—such as considerable tension and swelling, communicating to the touch an elastic feel,—the best means that can be adopted is to lay the swelling freely open, and thus let out the matter. In the very commencement of the pain and swelling, a brisk purge of salts, with the application of a tight bandage wound around the finger, beginning at its end and carrying the turns up to the hand, as a preventive means, I think worthy of trial. Such means are worth, at least, as much as all the pow-wowing of conjurers, so often sought in affections of this nature. Should the sore, however, after the part has been opened, either artificially

or naturally, give out proud flesh, this should be touched from time to time, either with caustic potash, lunar caustic, or with a red hot iron. Applications of this kind hardly ever fail of being immensely serviceably in correcting the unhealthy character of the ulcer, and disposing it to put on the healing process. Laudanum, in 20 or 30 drops' doses, repeated, if necessary, at suitable intervals, should be given to assuage pain and procure sleep.

(*b*) Akin to whitlow, and demanding the same general treatment, is *carbuncle*. This usually begins exteriorly upon the skin, and extending downwards into the structures beneath, often proves both tedious and painful, and sometimes destructive of the diseased parts. Externally, it presents, a very ugly appearance, having numerous openings upon its surface, from which issues a large amount of filthy matter,—leaving the parts hollow underneath. Proud flesh, too, is almost sure to spring from these openings.

Carbuncle may form upon almost any part of the body, but the hands, are, perhaps, the most frequent seat of it. When it is very extensive and situated near the head, constitutional disturbance is almost necessarily an accompaniment of it. Paleness, loss of appetite, &c., are the most common of these symptoms.

The treatment must be measurably the same as that directed for whitlow. The proud flesh must be removed by some caustic application. The powers of the system must be maintained by bitter tonics, such as Peruvian or dogwood bark; the pain and irritation of the constitution are to be allayed by laudanum, if rest cannot be procured without it. The abraded surface of this affection, as well as that of whitlow, should be protected by some simple salve or ointment, The following is among the best: Take of beeswax one part; of fresh hog's lard four parts; melt them together and strain. This is a simple and very useful salve, and will answer most of the purposes for which salves are used.

(*c*) *Boils* are painful tumors, too well known to require any special description. They nearly always result in mattering.

And they seem, in some instances, to originate in a constitutional defect; for successive crops of them, one after another may rise, and no other cause can be assigned as their origin, but that of a general one, acting through the medium of the constitution. In some instances, they undeniably originate from contusions or bruises, but this is not often the case.

To correct the tendency to their formation, the avoidance of sweetenings of all kinds should be observed, and the individual should take, from time to time, small amounts of saleratus. If constipation of the bowels be present, small doses of salts should be used, so as to keep up a regular action of these organs.

The boils themselves, after they have become hard and painful, should be poulticed with some warm and soft substances. Applications of this kind not only assuage pain, but also hasten the boils to maturation. When they present a pointed appearance, and are soft to the touch, a lancet should be introduced into them, so as to evacuate their contents completely. A simple salve, such as directed in the last section, will answer a very good purpose for dressing them.

(*d*) *Scalds and burns* are very common accidents, and in many instances, not only involve extensive surfaces of the body, but destroy life itself. They may be usefully divided into three varieties: First, into those superficial burns that produce considerable pain and redness of the part, but do not result in the destruction, or even blistering of the skin. Secondly, into those cases that do destroy the contiguity of the skin,—resulting in blistering, and leaving behind an exposed and very tender surface. In the third variety, the life of the skin and subjacent parts are wholly destroyed, and a deep cinder is left upon the injured surface.

In the superficial or even the second variety of burns, unless a large extent of surface be involved, constitutional symptoms are not necessarily developed; but in the third variety, and especially if the seat of the accident is near any of the vital organs, or a wide extent of surface is destroyed,—the constitutional symptoms are well marked. The patient

complains but little of the injury itself, but he has shiverings for several hours, it may be. The pulse is feeble, and it may be irregular or intermittent; the breathing is hurried, or otherwise unnatural. The patient may die immediately from the effects of the shock, and in the cases of children, convulsions are to be apprehended. If he recover, however, from the shock, fever is speedily evolved, and this, owing as it is, to an extensive injury, may wear down the vital powers, and bring the patient to his grave.

The Treatment. In superficial burns of the first class cold water is not only soothing, but, when perseveringly applied, by means of cloths, it will, in general, in the course of a few hours, permanently relieve the patient's sufferings. Raw cotton, such as the batting now in common use, if applied to burns of this discription, or even to those upon the surface of which blisters form, and retained in its situation, hardly ever fails to afford, after a short time, complete relief. If blisters, however, seem inevitable, constituting the second variety of burns, soft warm poultices, thickened milk, for example, should be applied to the inflamed surface, and continued until the inflammation, pain, and redness, have in some measure, subsided, observing care not to remove the skin further than necessary to evacuate the blisters of their water. When the pain, redness, &c., &c., have partially subsided, the simple salve, already referred to in the present chapter several times, spread on old soft cotton or linen cloths, will form an appropriate dressing, and should be continued until the cure is effected. With respect to the management of the third variety of burns, warm soft poultices are to be applied to the injury from time to time, until the sloughs or cinders are separated; and then the simple salve will answer a very good purpose for protecting the sore; and *time* will be a useful ingredient in effecting the cure. It will be well in all cases of burns to prevent, if possible, the contractions and distortions of the parts that are so liable to follow the healing up of the injuries. Common sense must be our chief guide in endeavors of this kind, as no directions can be laid down.

But in cases in which constitutional disturbances are present, these demand our first attention. To relieve the shivering and shock which extensive burns communicate to the system at large, and rally the patient's constitutional powers, laudanum will be found of essential service. It should be given in doses of 20 or 30 drops, and repeated if necessary, to an adult, immediately upon the receipt of the burn.

Should there, after after a time, be excited a considerable degree of fever, marked by heat of surface, flushed face, headache, &c.,—the bowels should be evacuated; and for the purpose of doing this, I would prefer a spoonful or two of castor oil. It sometimes happens, and this is especially liable to be the case with young and tender children, that from the irritation resulting from the burnt surface, convulsions, or a threatening of them occur. Now, in my opinion, although not supported by the opinions of many physicians, I am aware, opium is the proper remedy. Therefore, to quiet and relieve these symptoms, a few drops of laudanum should, according to my experience, be given, and repeated if relief is not obtained. Should the parts injured discharge a large quantity of matter, the addition of a few grains of the sugar of lead to the dressing salve will be found beneficial.

I have, in the foregoing manner, given the best method of treating accidents of the kind in question, in at least a majority of instances, but in all serious cases, it will be proper to consult the physician. He will be better prepared, if he be skilful, to give advice in the particular case than I or any one who does not see it, and who consequently can scarcely hope, in a general direction, to include the peculiarities and complications that may be present. And I take this opportunity to admonish my readers in cases of burns, (or, indeed, in any other cases,) not to be led away after the lo! here, or lo! there, of any body, but to pursue steadily that course which their own common sense dictates, or the physician has advised. There are in every neighborhood a sufficient number of doctors; and I care not whether they wear petticoats or breeches, if their officious advice be followed, to not only put

the friends of the burnt child (or adult, as the case may be,) to unnecessary trouble, running after this or that one's salve or poultice, "*to draw the fire out*," but also to aggravate the burn, and worry the condition of the sufferer. Some of these "doctors" pretend to have some supernatural power—to be in possession of some magic by which they are able to draw out fire, relieve pain, staunch blood, &c. Against becoming the dupes of such silly fools, I need not caution the intelligent and informed reader, but there are those who have, as it were, drawn in with their mother's milk, notions extremely preposterous; and these are so fixed in the mind, that the experience of their whole lives, is insufficient to erase them therefrom. Every well meaning person should discountenance, on all suitable occasions, these vulgar superstitions of whatever kind. God has given to one person no more magic than to another. He never gave the power of conjuring away disease—no, never. Faith without works is dead; but faith and works are mighty and most often prevail.

(*e*) *Of Wounds.* By wounds I mean to designate such accidents as are of every day occurrence, from a trivial cut, up to the most fatal lacerations and mangling of the limbs or bodies of men, by machinery or otherwise. Wounds may be usefully divided into several classes or varieties, for example,—into *incised*, when inflicted by a smooth cutting instrument; *punctured*, when made by sharp pointed and small instruments, as thorns, &c.; *contused*, when the effect of blows, producing deep bruises; *lacerated*, when torn asunder by some powerful force, or divided by a dull and tearing instrument; *poisoned*, when inflicted by poisonous insects or reptiles, or by the introduction, into a wound, in any other way, animal, vegetable, or mineral poisons.

1. *Incised wounds* are such as are made by cutting instruments, and may or may not destroy life. General rules only can be given for their management. If the wound is a simple flesh cut, merely penetrating and laying open the skin, the divided surface should be drawn together immediately,

and held in situ by a simple bandage. Thus treated, without daubing the part with any salve or poultice, too often practised, the cut is, in the course of a few days, as a general rule, united without having caused the individual more than the slightest pain or inconvenience. But should the wound be more extensive, and give out a good deal of blood, it will be proper before dressing it, in the manner here directed, to arrest, in some measure, the bleeding. With the design of accomplishing this purpose, cold water may be freely poured upon the part, when, after a few minutes, provided no considerable blood vessel be divided, the bleeding is usually arrested. Then the wound is to be dressed as above. But again, supposing the wound bleeds profusely and the simple means here recommended fail to arrest the flow of blood—supposing it comes away in an interrupted, jetting stream, what then is to be done? I answer, the wound should be drawn tightly together, and if it be situated on either of the extremities, the pulsating artery above the cut vessels, that is towards the body, should be so firmy pressed upon by the fingers as to prevent the blood from flowing along it. The proper vessel, artery, of the arm will be found upon examination, pulsating above the elbow joint, on the inside of the arm, and may be traced and easily compressed up to near the body. The proper vessel of the leg may, in like manner, be found at the superior or upper part of the thigh, just in the groin, pulsating or beating strongly, and may, by applying considerable force, where it passes over the broad bone, be very successfully compressed. This done, relieves the patient from immediate danger, when a messenger should be despatched, in haste, for a physician, whose duty it may be to tie up the divided vessels,—an operation that none but skilful persons should undertake to perform. Should incised wounds fail to unite readily, become very painful and swollen, poultices of some soft materials should be applied, until these conditions are improved, when the simple salve dressing should be substituted for them.

2. *Punctured wounds*, though very trivial in the first place,

yet they are, in their after consequences, frequently accidents resulting in much mischief. For example: a pin, needle, or thorn, is run into the ball of the thumb. The accident causes but little pain after a few minutes, and may be of no further consequence, yet should the external wound heal, before the internal and deep-seated, and especially, should matter be poured out, as the effect, into the sheaths and tendons of the part, it becomes confined and all the painful circumstances of the whitlow will follow. To relieve cases of this kind, it is proper to lay the part freely open and let the matter out. Should fragments of splinters or thorns be left in wounds of this description, they should be carefully sought and removed, if possible; if impossible at first, when the part matters they are apt to be discharged with this fluid.

3. *Contused wounds*, are such as are inflicted by blows—the skin not necessarily being broken. They may be serious or not, according to the parts implicated, and the severity of the stroke or strokes. They require to be treated, in the first instance, by evaporating and cooling lotions, among the simplest and best of which, a solution of sugar of lead, in cold water, may be mentioned. The bruised surfaces should be kept wetted with this from time to time. If a bloody matter collects under the bruised skin, a small opening should be made with the point of a lancet, and it may in such instances be proper to poultice the part. When constitutional symptoms manifest themselves, they demand either a stimulating or a reverse plan of treatment. Immediately upon the receipt of an injury of this kind, stimulants may be necessary to rouse the system from the state of depression that is apt to ensue, after which, should febrile symptoms appear,—heat of surface, headache, &c., purgatives will be proper, and these should be conjoined with rest and a light unirritating diet.

4. *Lacerated wounds*, are such as have been inflicted by some tearing process, or with a blunt dull instrument. Thus, the tearing a limb assunder by machinery, or the passage of a ball or some blunt missile through the flesh, serves for an example. Of course this description of injury may be, or

may not be, attended with risk, according to the nature of the accident; but there is more danger attending wounds of this class, other things being equal, than simple incised wounds. Large blood vessels are liable to be torn across in wounds of the lacerated variety, but it is a remarkable, as well a very fortunate fact, that, as a general rule, they do not give out much blood, and few patients only, comparatively speaking, bleed to death as a result of such accident. Gen. Shields, at the battle of Cerro Gordo in Mexico, was shot through one side of the chest with a large bullet, which must have, necessarily, torn into two many blood-vessels of considerable magnitude, and yet, it is gratifying to his countrymen to know that he made a rapid and perfect recovery.

The treatment of wounds of the lacerated kind consists in the removal, as far as possible, of all foreign bodies from the wound itself, and in simple dressings,—poulticing if local inflammation runs very high. But our chief dependence, in severe injuries of this kind, must be placed upon judicious treatment. Stimulants, in the first place, are often necessary to bring up the vital powers, and afterward, purgatives, rest, and low diet, to restrain them in proper bounds. The removal of limbs, when these have been the parts injured, by amputation, is sometimes obliged to be practised. But of these capital operations it were needless for me to speak, as none but medical men will undertake to perform them.

5. *Poisoned Wounds.* These are produced in several ways. Thus, by the bite of a rabid animal, a poisonous snake, or the sting of an insect; or lastly, by the introduction, through a wound into the body, of any mineral or vegetable poison. The stings of poisonous insects rarely require any active treatment. A strong solution of common salt applied to the wound, is said to afford relief,—at least in many instances. But a better application is the spirits of hartshorn, which, when pretty freely applied to the stung part, almost always relieves it promptly. When a person has been stung by numerous bees or other poisonous insects, and the parts have become greatly swollen and very painful, brisk purging with epsom salts should be immediately instituted.

A thousand and one remedies have been recommended and used for the cure of snake bites, but I am warranted in saying that after the poison has once entered the circulation, and been carried to the different parts of the body, an antidote—that is, a medicine that will promptly destroy the poison, is unknown to man. Prior, however, to its absorption into the system at large, some local measure may be used with a prospect of success. Were I present on the receipt of a snake bite, I would, with permission, remove immediately, by incision, the bitten part. But unfortunately, this procedure is rarely practicable; and other and less efficient means have to be resorted to. Sweet oil, freely applied to the bitten part, has been recommended by numerous persons, and from the character of the testimony in support of its good effects, I should be inclined to give it a trial. If used at all, the part is not only to be feeely bathed with it, but it is, in spoonful doses, at short intervals, to be given internally. Should evidence of a disposition to sink supervene soon after the bite has been inflicted, let the patient drink freely of whisky or brandy, until his pulse becomes full and regular, and the surface of his body has restored to it a natural warmth. The carbonate of ammonia, commonly called the volatile smelling salt, or salt of hartshorn, has been highly recommended by several physicians, as an internal medicine, in cases of snake-bites; and as it is a powerful stimulant, I have no doubt of its usefulness in those instances in which great depression follows soon after the wound has been inflicted. Purgatives, are, when febrile symptoms appear, useful agents in moderating these, and should therefore be given, provided the bowels have not been freely opened by the sweet oil—if it was prescribed. Arsenic in pretty large doses was recommended and highly lauded, some years ago, by a Mr. Ireland, as a remedy of considerable powers in cases of snake-bites; others beside him have given to the practice their praise. It is known to be a powerful tonic, and may, perhaps, by bolstering up the system against the depressing effects of the poison, operate favorably, in the same way that stimulants are

believed to do; and thus enable the constitutional efforts to expel the poison through the natural outlets—the skin, the urine, and fetal matters—from the body.

Of the bites of mad dogs, and the disease resulting from them, I need say nothing further than that the disease *is an incurable affection;* but that, taken in time, its development may, generally, be prevented, by cutting out every vestige of the wounded part, and then searing the new wound with a red-hot iron; or, what amounts to the same thing, by destroying, by the iron, or with a powerful caustic, such as oil of vitriol, aqua-fortis, or the caustic potash, the whole of the bitten part. Now it is proper to remark, before quitting this subject, that many cases, both of snake-bites and the bites of mad dogs, do not result in such dreadful effects as are to be apprehended and feared. Thus, even a rattle-snake may bite an individual, fairly inflicting a wound through the skin, and yet no bad effects may possibly ensue. And the same remarks apply with greater truth to the bites of dogs, undeniably mad. For it is well known that not one-half of the persons bitten by mad dogs, contract the disease. Hence the numerous means recommended for the cures of these accidents. Now these circumstances are to be accounted for in two ways. First, serpents are not always equally charged with poison, and, secondly, though they be exceedingly venomous, it is not always the case that the virus enters the wound; for it may be discharged, either when the teeth are passing through the clothing, should this be interposed, or it may even enter the wound, and be immediately washed out by the sudden gush of blood that usually follows the bite. Mad dogs nearly always bite through the clothing, which article frequently very perfectly brushes the teeth, and removes, almost completely, the slaver therefrom; and it is in this slaver, or slobber, to speak more plainly, that the poison is contained. It is not well, however, let me say in conclusion, in cases of the bites of rabid animals, to conclude that because nine have escaped contracting the dreadful disorder, that the tenth one will escape also. Better maim the patient,

needlessly, than rest on a hope so precarious. I should greatly prefer removing the arm or leg of a friend of mine, than see him affected by the horrible signs of *Hydrophobia.*

(*f*) *Ulcers.* These are, frequently, both painful and troublesome sores, and deserve the careful consideration of the surgeon. The simplest form of an ulcer is that in which a small scratch or pimple has resulted in a deep, ragged, and painful eating or running sore, that is liable to continue, not for years only, but for life. Though ulcers may form upon any part of the body, they are most commonly met with upon the legs ; and more frequently in broken down constitutions—occasioned by long intemperance—than in persons reversely circumstanced. Ulcers are either painful or not painful. When painful they are termed *irritable ;* when not attended with pain *indolent* ulcers.

In the treatment of the irritable ulcer, the constitution usually demands our first attention. Purgative medicines should be given from time to time, and the patient's diet should be restricted to vegetable food. At the same time that the constitution is receiving attention, it will be proper to apply to the ulcer itself warm poultices of bread and milk ; and it will be best that these be not so large and cumbersome as to be inconvenient. If the sore be either upon the leg or arm, the part should be elevated, so as to drain, as much as possible, the blood from the part. By treatment of this kind, in the course of a few days, the very tender and painful nature of the sore can generally be removed. Then a bandage, about three inches wide, should be applied, provided the limb be the part upon which the sore is situated, tightly, or as tight, at least, as can be borne, around the whole limb, beginning always at the toes or fingers, and only about one-half of the width of the bandage should be gained each twist. Over the sore itself, which is to be included under the bandage, a little of the simple salve should be interposed. An appliance of this kind is capable, in the course of a few days, of making a very great alteration for the better in the appearance of of the sore, disposing it to heal kindly and even rapidly.

The bandage should be be kept constantly applied, only adjusting it as occasion may demand ; but should the part, as sometimes happens, be indisposed to heal, notwithstanding the management here advised, it will be proper to sprinkle upon it some calomel in dry powder, and continne the use of the roller or bandage. Calomel, thus applied, from time to time, and aided in its operation by a roller, as here suggested, is almost uniformly capable of exerting a powerful curative influence over the foulest and most ill-conditioned ulcers, bringing up speedily from their surfaces healthy granulations. I had occasion to remark the excellent effects of the treatment here laid down, in numerous cases, even among persons of the most dissolute habits, while in attendance as a student, in the Chicago Hospital, during the last winter—1847–8.

The indolent ulcer demands the same treatment as that above given, with the exception that constitutional treatment and poulticing can usually be dispensed with. It is well to remark, before quitting the subject of ulcers, that those of the leg, even for a long time after they have, to all appearance, been effectually healed, are disposed to break out anew or re-appear. It will be advisable, therefore, to continue the use of the bandage for a considerable length of time after the patient has been dismissed for cured. Also, it is well to say, that ulcers are now and then met with which owe their origin to genital diseases, and that, then, they are exceedingly difficult, and sometimes impossible, of cure.

(*g*) *Fractures and Dislocations.* By the word Fracture, surgeons mean the breaking of bones, and by Dislocation or Luxation, they mean the displacement of the bones from their natural situations, without their fracture. Now it is useless for me to attempt to give directions, and lay down rules, by which either fractures or luxations are to be treated, yet it may be both interesting and useful to allude to some points connected with accidents of the character here in question. Fractures are of two kinds—first, where the bone alone is broken—secondly, where the soft parts are injured, also. The first are called *simple fractures*—the second *compound fractures.*

A simple fracture, other things being equal, is, as a matter of course, much less serious than a compound one. Sometimes the bones are literally crushed to atoms, and the soft parts, also, greatly mangled. Though not always demanding removal, limbs thus circumstanced often require amputation, as the best treatment. To set, adjust, and confine in their proper situations broken bones, requires more knowledge and dexterity than people generally possess in matters of this sort, and it is impossible, without, at least, a tolerably correct notion of anatomy, to be prepared to perform these duties. There can be no rules laid down for the adjustation and treatment of accidents of broken bones, applicable to the public at large, more profitable than that embraced in the general direction *of treating them on common sense principles.* Should the arm be broken, it is to be extended—and sometimes very considerable force is necessary to do this—by gently and steadily pulling at it, in a straight line, until its length and natural appearance are restored; then a bandage, beginning at the fingers, is to be run around it, and splits, with soft pads beneath them, placed above this, are to retain it in the proper position. The bandage must not be drawn too tightly, else considerable pain and even mischief may be the result. Such are as good directions as can be given to unprofessional persons—to straighten the broken limb, and to retain it in its proper situation by those means which the ingenuity of most persons will enable them to supply. But medical aid, as a general rule, should be solicited.

A broken bone re-unites, provided the ends are kept in coaptation, as a general rule, in from two to six weeks, and the bones of young and healthy subjects form much readier unions than those more advanced in years, and of less vigor of constitution. Much more time, however, than that here mentioned, is required, before very firm and strong unions are made. Even for the space of a year or more, the broken part is more easy of fracture than the adjacent portions that have suffered no fracture. Inflammation seems to be a necessary part of the process of reparation of the broken bones;

nor can they, under any circumstances, probably, unite without a certain amount of it. Pain, therefore, it will be inferred, is an accompaniment of the healthy re-union of all fractured bones. This sometimes is excessive and the inflammation passes far beyond that characterized as necessary. To allay pain and reduce inflammation, are, therefore, indications that deserve attention. The first is, after the fever and inflammation have been somewhat abated, by purging, low diet, and even blood-letting, if this is advisable, to be fulfilled by the administration of the Dover's powder, in doses of three or four grains, repeated as occasion may require. When the fracture is compound, and the soft parts are extremely implicated, the case is much more desperate. Much depends, in cases of this character, upon the constitution of the patient. If he be robust, and in the enjoyment of good health, the chances are generally in his favor, for however mangled the parts may be, Nature, untrammeled in her efforts, will very often triumph, and re-union and restoration, to some extent, at least, will ensue. But, on the other hand, when the constitutional powers are feeble, or the patient of intemperate habits, do what we will, and death will often be the result.

Respecting the management of Luxations, or Dislocation, the remarks upon Fractures are, also, equally applicable to them. *Common sense, alone,* must guide those unacquainted with the insertions, origins, and line of action of the muscles, in attempts at reducing displacements of the different bones from their sockets. It is proper to remark that, even in cases in which the heads of bones are not removed permanently from their natural positions, but which have been severely *sprained*—the bands and ligaments having been put greatly upon the stretch, or broken up, are, as a general rule, not only exceedingly painful, but; also, are often more tedious in regaining their natural actions than are broken bones themselves. In the management of such cases, *time* is the great and reliable agent, but it is the general custom of surgeons to amuse their patients, and in some sort kill the tediousness of the cure,—effected measurably by nature, to apply to the

strained joint, various liniments, ointments, &c.,—that, in truth, do very little good. Rest and time, I repeat, are the great agents of cure in cases of this kind; and he who attempts to hurry them along their tedious course, most usually meets with disappointment.

(*h*) *Of Cancers*, and other malignant tumors, I will not speak further than merely to mention them. It were useless that I should do more; for the very best description that could be given would prove perfectly inadequate to the public, as a means of distinguishing them. Indeed, their origin is a matter of doubt in the minds of professional men, and their malignancy and tendency to a fatal termination are too well known to the public to warrant them in permitting quacks, under the specious title of "*Cancer Doctors*," from interfering with tumors that are suspected of being cancerous in their character. Every wart or corn is not a cancer, the decision of "cancer doctors" to the contrary notwithstanding; and it is well for humanity that such is the fact. Were it not so, fewer cures of terrible cancers by conjuration, faith, &c., &c., would, I am very sure, be heralded to the world. Warts and such like excrescences are apt to go away spontaneously, and so are cancers, that, in truth, are nought but simple warts!

(*i*) *Wens—Encysted Tumors*, properly speaking—are very different in their nature from cancer, and are not, by any means, to be confounded with this latter complaint. They are composed, solely, of shut sacks or bags, which secrete or pour out from their inside a watery fluid; and their increase in size is wholly attributable to the increase of fluid continually accumulating within, and distending them. Moreover, they are inconvenient only on account of their size, and dangerous only when they come to press on, and interrupt the offices of important organs. Their treatment consists in removing them with the knife, when this is practicable; or in puncturing and letting out their contents, when their removal is out of the question.

Tooth Ache is too well known to deserve a description here, and its proper treatment is no ways equivocal. If the tooth

be hollow—which is generally the case with aching teeth—if it can be extracted, this is certainly the shortest and least painful mode of getting shut of an extremely painful affection. But I would advise the reader to permit no bungler to undertake the extraction of a strong back tooth. The pulling of teeth is always attended with pain, and, unskillfully performed, may result in serious injury to the jaw bone. No one should undertake to use the tooth-key, in common use, without a pretty correct knowledge, both of its mechanism, and of the conformtion of the parts concerned in its application. When a sound tooth aches, which has not been addicted to aching, or when the situation of the person suffering is such as to forbid the extraction of a tooth, some purgative medicines should be prescribed; and a mustard poultice to the face may probably prove serviceable. I am convinced from some experience, that many teeth are habitually extracted, which, had a course of the kind here recommended been followed, would have been not only permanently relieved, but also of service in after life. Children shed their teeth after they have attained the age of a few years, and other permanent teeth come to supply their places. It is proper, therefore, when the teeth of children become loose, to remove them, which is easily done, in general, by cutting with a sharp pointed knife the gum, and picking them out either with the fingers, or by tying a string fast around them, and pulling them suddenly out. When this is neglected, the permanent tooth is sometimes diverted from its course, and ugly and inconvenient "snaggles" are the consequence.

I have now ended all I have to say in this place on the diseases and their treatment, both surgical and medical. I have purposely omitted the mention of some, and have only alluded to others. In those diseases that I adjudge physicians should always treat, the symptoms, the causes, the nature and the treatment were severally very briefly stated; and I did this for the sole purpose of affording the community the

general principles of the nature and treatment of diseases, and of admonishing them of the danger and the responsibility that would attach to them, should they undertake to perform that, a requisite knowledge for accomplishing which they do not possess. And, on the other hand, in those trivial affections, that are, in some instances, alarming to the uninformed, but which, nevertheless, are devoid of danger, I have, after a plain description, attempted to lay down concise rules to manage them by, which, when followed out, scarce ever fail in bringing relief to the patient, and at the same time, save expense and avoid a great deal of trouble. Besides, the remarks contained in this small volume, I hope, if they subserve no other purpose in many instances, will, in others, be at least, in some measure, a satisfaction to those persons who have not had previous opportunities of making acquisitions in medical knowledge, from more elevated sources than the present treatise can boast.

Having made these explanatory remarks, I pass, in the next place, to the twelfth and last chapter, to consider, in accordance with the plan already laid down, a few of the articles used as medicinal agents; and it is my design to notice only those recommended in the foregoing chapters which are both simple and safe in the hands of those who do not make the profession of medicine their vocation in life.

CHAPTER XII.

THE MATERIA MEDICA.

By "The Materia Medica" is, in plain English, meant the materials or agents used in the cure of diseases—the *materials of Medicine*. Without a knowledge of them, of their physical and medical properties—of the effects which they produce upon the human body in a state both of health and disease, the boasted science of medicine would well nigh be an empty sound—ay, quite, were not *the natural resources of the constitution*, in many instances, adequate of themselves to repair the inroads and breaches that are so often made upon our bodies by extraneous agencies.

Now, all that is known respecting the medical properties of any substance whatever, is the result of observation and experience. For example: no one, however learned or wise, can possibly, by a simple examination, arrive as the conclusion that the Peruvian Bark is capable of curing Ague; yet that it is, the evidence of thousands can easily be adduced. Nor is it possible that any philosopher can arrive at the fact that Rhubarb purges, when taken into the stomach, other than through and by the experience and observation of those who have witnessed its effects. Then, it will be seen that this branch of medical science is built wholly upon observation and experience, that it is progressive, being the accumulated work of thousands of honest, honorable and intelligent persons. What folly it is, therefore, for ignorant, unlearned, and superstitious people to reject by a mere ipse dixit, evidence of a character so elevated, and declare that this medicine is improper, that injurious, and the other rank poison? Physicians are well aware that all their most useful medicines

are poisonous. Indeed, this very property entitles them to the name of medicine. A potato is not a medicine, because when taken into the stomach, this organ transforms and appropriates it to the wants and nutrition of the system; *it produces a natural effect.* But, on the contrary, the root of the ipecacuanha plant, when taken into the stomach, produces *an unnatural effect.* This organ does not act upon it, but it acts upon the stomach, in so much as to prevent entirely its natural office and produce vomiting. In this way a division of certain substances is easy into two classes—naturals and unnaturals:—The first includes every nutritous substance, which during the digestive process, is capable of such transformations as to prepare it to enter into and sustain the bodily functions:—The second, all those substances which the stomach is incapable of transforming in this manner, but which are capable of effecting some change upon the stomach itself, or through it upon the body at large. It may be laid down, therefore, as a truism—with few exceptions—that whatever substances, upon being introduced into the system at large, are capable of working a change upon it, are properly medicinal agents; while those that, in entering into the system, induce no disturbance or inversion of action therein, are not medicinal, being either nutritive or inert.

It has therefore been the custom of almost all writers on Domestic Medicine to notice, at length, a host of medicinal plants, giving their histories and medical virtues, or supposed virtues,—recommending this for the cure of that disease, and that for the cure of this. Now such a course, I believe to be not only useless, but in its tendency decidedly mischeivous. There is already a proneness on the part of the public to hunt out new cures, and to experiment upon themselves or their friends, with new remedies. And it is obvious that a treatise, such for example, as that given by Dr. Gunn, is calculated to foster and keep up such a state of things, which, so far from advancing the science of medicine, impede it. The illiterate and unlearned are not the proper persons for conducting researches of this kind. A knowledge of Botany, of

Chemistry, and of the organic laws relating to life, are indispensable prerequisites to investigations of a sort similar to those in question. For these reasons, with others not specified, I shall introduce in the following sections those medicines only with whose properties and peculiarities of action the public must necessarily have an acquaintance, approximating, at least, to correctness. People, I repeat, what I have before repeatedly declared, had better, infinitely, let medicine alone altogether, and wholly trust to the sanative resources of nature, than to prescribe it ignorantly, and, perhaps, incompatibly with those salutary tendencies. But there are medicines, which, comparatively speaking, are innocent, but which, when administered with a view to accomplishing some simple purpose, become highly useful, as well in unprofessional as in professional hands. Such conditions as I imagined these simple medicines to be useful in, I have attempted to point out, so that "the wayfaring man though a fool need not err therein;" and I pass now, in the next and last place, to put down most or all of the articles, or remedial agents referred to in the foregoing chapters.

I. *Emetics.* Emetics are substances which, when taken into the stomach, excite it to contract, or close upon itself and expel its contents. They are frequently useful in freeing the stomach of indigestible food, and in expelling from it the vitiated secretions that often gather in it. But I do not think them admissible, at all, unless symptoms urgently demand their use. In some inflammatory affections, as Croup, for example, they exert a very beneficial influence, but they do this chiefly, perhaps, in consequence of the nausea and state of debility which accompany their operation—amounting, in some measure, to the more active means for reducing fever and controlling the heart's action. Emetics are medicines, which, considering their mode of action, the nicety of judgment frequently required to prescribe them judiciously, their liability to prove mischievous, &c., should generally be directed by professional persons. Persons are apt to imagine that, because an individual has nausea, complains of a loaded or

burning sensation of the stomach, or is making continual efforts to vomit, the stomach is foul, and an emetic is indicated. Now these are the symptoms of inflammation of the stomach, and the exhibition of an emetic in this affection never fails to aggravate all its unpleasant symptoms. I, therefore, not unfrequently having witnessed the ill effects of emetics, admonish my readers not to prescribe these substances, without the exercise of considerable caution, under the mistaken notion that they never do harm. *Tartar-Emetic, Ipecacuanha, and Lobelia,* are the substances most frequently employed as emetics. Warm water, taken in large quantities, in cases attended with much nausea, frequently answers the purpose of emetics; and to its use, in such cases, no objection can be raised.

II. *Of Purgatives.* These are substance which, when introduced into the stomach and bowels, stimulate these organs to an unnatural state of activity, causing them to discharge their contents, as well as an additional amount of fluid matters which they excite them to pour out, with more than usual activity. Many ingredients, both of the vegetable and mineral kingdoms of nature, possess a purgative principle;—about the intimate nature of which, however, but little is known. Some of the ingredients here referred to possess this principle in a state of great activity, while others possess it in a much milder degree. The former are styled *active* or drastic, the latter *mild purgatives.* Again, purgatives are divided by physicians into those which produce *copious watery* discharges, and those whose chief action consists in a *mere hastening* on of the feculent matters that the intestines happen to contain at the time of their exhibition. I shall notice but the milder of these divisions, because I cannot, consistently with the body of this work, do more.—I cannot conscientiously advise my friends to employ, without the advice of a medical practitioner, medicines that I myself am continually liable to abuse; and which are habitually doing mischief to the constitutions, and even destroying the lives of many of my countrymen, from injudicious administrations.

Purgatives, when judiciously given, may prove serviceable in various ways. 1st. They clear the bowels of vitiated accumulations which, not uncommonly both give rise to and aggravate various diseased conditions. 2d. They are indirectly, when perseveringly administered, agents calculated to weaken and debilitate the body, by abstracting from it its source of nutrition, and even of instituting a drain directly upon the blood itself. 3d. They call the undue quantities of blood that flow to, or are accumulated in the head and other organs, from these parts by making strong impressions on the coats of the stomach and bowels, draining the blood vessels, in this way, of a considerable amount of their more fluid contents. Such is particularly the case with respect to the beneficial influence of purgatives in affections of the brain.

(*a*) *Epsom Salts.* These are formed by dissolving indefinite proportions Magnesia in the Oil of Vitriol—Sulphuric Acid—hence, they are, properly speaking, a Sulphate of Magnesia. They are neutral,—that is, they possess none of the properties either of the Vitriol or of the Magnesia. They possess the property of a sure and somewhat active purgative, when given upon an empty stomach, in doses of about an ounce or, a large tablespoon heaping full. They should be dissolved in a considerable amount of water, either cold or warm—to suit the taste of the patient. A smaller dose than that here specified will, in general, prove sufficiently active, if taken upon an empty stomach. The dose for children to be in proportion to their age.

(*b*) *Castor Oil*, as is generally known, is procured from Castor Oil beans by expressing it in a manner similar to that for obtaining Linseed Oil from the seed of flax. It is one of our mildest and most useful purgatives, acting, in general, without pain or nausea, and yet, with much certainty and a good deal of efficiency. In the diseases of children, when purgatives are indicated, this is often particularly applicable. Nor is there, in the whole Materia Medicæ, another cathartic of so much value in dysentery and other inflammatory diseases of the bowels, in which, nevertheless, an evac-

uant is desirable. In dysentery there is much pain and irritation of the bowels with frequent slimy or bloody discharges, unaccompanied, however, with the natural secretions of these organs, which, along with the feculent matter, it is often absolutely indispensable to carry off. For this purpose Castor Oil, to which, as a general rule, a few drops of Laudanum may be added with advantage, is the best means in our reach. In Colic, again, it is, in combination with Laudanum or Spirits of Turpentine, one of our surest remedies. In conclusion, I recommend every family to keep a bottle of this valuable Oil constantly by them. Dose for an adult, a table spoonful, more or less. Children, a teaspoonful, repeated, if need be.

(c) *Aloes.* This substance, like the preceding, belongs to the vegetable kingdom. It comes to us from beyond the seas, and, in appearance, resembles pretty nearly common Rosin. It is extremely bitter, but in other respects, is not very offensive to the taste. There are several species of Aloes, but they do not differ greatly either in appearance or in their action upon the system. They are all the inspissated or hardened juice of several varieties of the same plant, and are, perhaps, somewhat differently treated in their preparation.

Aloes is one of our very best purgatives in almost all cases connected with a sluggish state of the bowels. In indigestion it is, in a vast number of cases, of itself, when aided by a rational diet, sufficient to remove disease. In some of the affections peculiar to females Aloes is very frequently a most valuable medicine; in others it is not. Almost all the patent quack pills of a purgative character which flood our country from time to time, are chiefly composed of Aloes, disguised by the cunning work of the impostor. Hence, the usefulness of these pills in dyspeptic cases.

Aloes is modified, to a considerable extent, in its action upon the human system by long boiling. By this means it seems to be rendered milder and more pleasant in its operation. I have, in the foregoing chapters, repeatedly referred to an Aloetic Pill, the mode of the preparation of which I now proceed to give. Boil the aloes, in a considerable quantity of

water, down to a thick syrup, removing the impurities, should any be present. The syrup is then to be removed from the fire, and, when partially cool, a sufficiency of Castile Soap, in fine shavings, is to be added, to insure the adhesion of the pills after they have become dry. Only a small amount is required for this purpose. In the last place, the mass is to be divided into pills, rolling them in a little flour or starch. If there be added to the aloes, previous to boiling, some pulverized Ginger and a little Cayenne Pepper, I think, the value of the preparation will be enhanced.

The dose of these is from one to four or five, taken upon retiring to rest at night. From considerable experience with pills, formed in the above manner, I am convinced that no preperation, with which I am acquainted, has advantages over them, in the pleasantness and efficiency of their operation. By the addition of a few grains of calomel they become very useful in stimulating the liver to pour out more than its ordinary amount of bile. In the body of the work reference has been repeatedly made to these pills, and it is unnecessary, therefore, to speak more fully concerning them in this place.

(*d*) *Rhubarb.* Of this medical root there are several varieties in use by physicians, but these are quite analagous in their operation. The common broad leafed *pie-plant*, now everywhere extensively cultivated as an esculent vegetable for making tarts, affords a tolerably good article of rhubarb. As a purgative, in the hands of skilful physicians, rhubarb may, in certain cases, be very advantageously substituted for other purgatives, but as a simple cathartic, designed chiefly to evacuate the bowels, I do not regard it equal to those already recited. It possesses, along with its purgative property, an astringent principle, and it is apt, on this account, to leave the bowels in a costive state; but this very circumstance frequently renders it highly serviceable, particularly in cases in which a tendency to diarrhœa exists, but which, nevertheless, demands an evacuant plan of treatment. A good laxative bitter may be formed by adding to an ounce of Colombo root, one half its weight of rhubarb, to which

one pint of whisky is to be added. A tablespoonful of this taken before eating, two or three times daily, both invigorates the bowels, and obviates costiveness.

(*e*) *Cream of Tartar.* This is composed of potash, in union with a vegetable acid, called Tartaric Acid, and is properly a Tartrate of Potash. It, therefore, combines in itself an ingredient from both kingdoms of nature—the mineral and the vegetable. In febrile diseases it is sometimes allowed to patients as a pleasant cooling drink. In large doses, and especially when combined with another purgative, as Jalap, for example, it acts as a strong, and, indeed, oftentimes as a powerful purgative. But I am of the opinion that physicians ought, generally, to prescribe it, unless, as is sometimes the case, persons only slightly indisposed, crave a pleasant sour drink, when a teaspoonful of the article in question, mixed in a glass of cold water, will be found refreshing and grateful.

(*f*) *Calomel.* It is proper that I should say a few words with respect to this very important medicinal agent; but as I have not recommended it to be used, except by physicians themselves, it is unnecessary that I extend this notice to great length. Calomel is prepared from Mercury or Quicksilver, and a gas (air) known to chemists as "Chlorine gas," which is one of the principles contained in table salt. It is a purgative, but it is not always given with a design to its cathartic operation. Most often when designed to purge, it is given in combination with some vegetable substance, as jalap, rhubarb, or aloes, the actions of which it very greatly modifies. It is a medicine having a decided tendency to act upon and rouse the liver to unnatural activity, and is very often prescribed chiefly for this purpose. In inflammatory disorders, however, it should be prescribed with a design to its anti-inflammatory effect upon the system. It combines with, and impoverishes the blood, and for this very reason is a powerful agent in controlling those diseases that depend upon too rich a blood, as almost all pure inflammatory disorders do. To accomplish his aim, the physician has often to

give calomel in small doses, until its constitutional effects begin to manifest themselves in the gums of the patient, when, as a general rule, the medicine should be discontinued, lest a troublesome salivation should ensue. Opium is, in numberless instances, very usefully combined with calomel.

Calomel has long been of essential service to quack doctors, as the notion of a far off endless hell has ever been to quack preachers. Both serve the purpose of scaring the vulgar and superstitious parts of the community into subjection. The doctor tells the dear people that calomel is a dreadful poison, and will, if taken, make shipwreck of their constitutions, while the preacher holds up *his darling* as the future eternal abiding place of all who refuse to bow in implicit obedience to the provisions of his narrow creed. And both are equally successful in making disciples, or rather, I should say, dupes! But apart from jesting, the fact that, even in the hands of skilful physicians, calomel sometimes creates troublesome sore mouths, and too long continued acts injuriously upon the general system, is seized by unprincipled empiricks, and putting aside all good it is capable of achieving when judiciously prescribed, they assert that it ruins and breaks up constitutions, gets into the bones, destroys life, &c., &c. I once heard of an empiric who, having an old skeleton, the bones of which were partly rotten, held their crumbled ends up as an example of the action of Mercury upon the bones —first asserting that the person to whom they once belonged had, during his life, suffered a salivation! And the admiring crowd gulped it all down, surprised at the wonderful sagacity of the doctor! It must be confessed, however, that calomel, injudiciously prescribed, is capable of doing much mischief, and of acting injuriously upon the constitution, but it is, also, capable of doing much good, and even, not unfrequently, of saving life; and no respectable physician will ever throw it away altogether, because ignoble quacks and vulgar fools abuse and cry out against it. All medicine may, under certain circumstances, prove more or less injurious, and may, with equal propriety with calomel, be pronounced poisonous,

&c. But it is well to remember that the very practice of physic is founded upon necessity. The physician has, not unfrequently, to choose between evils—to either let his patient die for want of treatment, or to interpose and try to save his life by a mode of treatment, heroic and powerful; and it is his duty ever, and under all circumstances to choose the latter.

III. *Diaphoretics* are such medicines and means as are used for reducing fever and over heated states of the body, by exciting perspiration or sweating. They are useful in most febrile diseases, and some of them being always at hand, should be used in all cases of severity—such are cold water and fresh air. One of the most useful medicines of this class is the Dover's Powder, so often recommended in this work. Though not identical with the original recipe for preparing this powder, the following is the one I usually prefer: Take of opium and ipecacuanha, in fine powder, each one dram; of nitre, (salt-petre) one ounce. Grind the ingredients and mix them thoroughly in a mortar, till the mixture assumes a uniform color. It is then fit for use, and should be kept in closely stopped bottles. Of this powder, two or three grains taken every two hours, will hardly fail, after a few doses, especially if assisted by warm and gently stimulating teas, to excite a very general and pleasant sweat. In many cases of disease, the Dover's powder is one of the surest and most powerful means of bringing about their resolution. While it quiets and soothes, it, at the same time, opens the pores of the skin, and thus permits effete and injurious fluid matters to escape. Physicians combine it variously, with calomel, antimony, sugar of lead, &c., according to the peculiarities of the particular case under treatment. Antimony—*the Tartar Emetic*—is a good and powerful diaphoretic, but owing to its great activity, and the dangerous symptoms which it sometimes gives rise to, none but skilful physicians should, by any means, prescribe it. There are several common vegetable substances that serve a valuable purpose as diaphoretics in certain cases,—those not complicated with any serious in-

flammation. Such substances are Pennyroyal, Peppermint, Sage, Catnip, Bone-set, and especially the Black Snake root of this country. These should be given in the form of weak tea, warm, and drunk in large quantities. Slight colds are often speedily removed by adopting a course of this sort. In cases attended with considerable fever, however, I cannot recommend these stimulating teas; they may prove mischievous in such cases.

IV. *Expectorants.* These are medicines which excite the inner or lining membrane of the lungs, to exhale or throw off a more than natural quanity of mucus; and they are chiefiy useful in cases of dry coughs and other states of the lungs, wherein the natural mucous exhalation is deficient or otherwise deranged. I need mention but a few articles of this class, for although they are numerous, yet a few only are in much repute. The Tartar emetic, and the Dover's powder are both frequently used as expectorants, but considerable discrimination is to be exercised in their administration. The preparation called Cox's Hive Syrup, to which reference was made in the section on croup, is one among the best expectorants in simple cases of dry cough. It is prepared from the Seneca Snake root and Squills, and it, also, contains a small amount of Tartar emetic,—the whole being formed into a syurp with honey. The dose is from 20 to 60 drops for an adult, three or four times daily. It may be obtained from any drug store. Lobelia—the tincture, is also occasionally useful as an expectorant. Dose the same as that of the last mentioned article.

V. *Sedatives* are such medicines or agents as produce a soothing effect upon the system, and ease or lull pain. *Opium* stands at the head of medicines of this class. It is the solidified juice of the poppy, and is chiefly imported to this country from Turkey. In the practice of medicine, without this drug, the physician's hands would be, in a great measure, tied; he might behold pain and wretchedness, but would be without means to give relief; he might witness the pangs of mortality, but could not smooth the pillow of death. Yet

its proper administration is frequently a point of much nicety, and none but experienced persons can hope to give it in all cases with due discrimination. There are but few diseases, indeed, in which opium, at some period of their course, is not useful, but, I repeat, the judgment of experienced persons is often required to prescribe it timely, I have already referred to it as one of the constituents of the famous Dover's powder, and having, in the foregoing chapters, repeatedly advised *laudanum*, I will now give the receipt for forming this useful liquid. It is a simple solution, called a tincture, of opium in good whisky. I care not how it is formed, provided as much (or more) opium added to the whisky as it can dissolve. The clear liquid is then always of a uniform strength, and may be depended upon as good strong laudanum. The dose of laudanum proper for an adult varies greatly. Twenty drops is, perhaps, a medium dose, but in a few cases I have given it in one or two teaspoonfuls at a time. And I once knew a man who, from habit, could drink it like water. Children do not bear opium well, and a child of one year old should not take more than one or two drops at a time, to be repeated, if need be.

(*b*) *Gum Camphor*. Camphor comes to us from across the ocean, whence it is obtained from the camphor tree, in a manner similar to that which our countrymen employ for obtaining lamp black from the pine tree. The gum, resin, more correctly, is scarcely ever used by the common people in its solid form, but when dissolved in whisky it is to be found in almost every house, and is used for relieving all accidents, from a sprained toe to a broken back, besides being given internally to save life under a thousand circumstances. And although, in truth, the spirits of camphor is oftener used than necessary, it is a simple, safe, and sometimes prompt medicine in cases of sudden fainting, of slight colic or sickness of the stomich; and as an external embrocation in slight bruises and sprains. It is well to remark, however, in this connection, that the proper treatment of sudden fainting, from whatever cause, is to lay the patient down with his

keels up hill, so to speak, so as to bring his head low, and to dash cold water forcibly in his face. The camphor bottle is almost always employed in such cases, but by no means uniformly with advantage to the patient. Mothers frequently weaken a few drops of the spirits of camphor, and feed it to their babies to relieve them of colic, and it is frequently used for this purpose. In the hands of physicians the solid camphor is, in many diseases, of essential service. But I need say no more upon this substance at present. Being greatly innocent and safe in the hands of every one, I need not point out the proper dose.

VI. *Stimulants.* Whatever, upon being swallowed, imparts warmth to the body, and increases the frequency of the pulse is properly a stimulant. For accomplishing these purposes physicians employ numerous substances, at the head of which I may mention the spirituous liquors, as brandy, whisky, wine, &c. The whole catalogue of aromatic teas, as peppermint, sage, &c., belong to this class of medicine. Stimulants are occasionally useful, and in some states of the body they are imperiously demanded to sustain flagging nature, but they are liable to be abused, and are often abused by physicians themselves. They should be used, perhaps, as a general rule, in those cases only, in which a judicious diet (provided there be any relish for food) aided by external warmth, fails to sustain and keep up the circulation, and the patient is in imminent danger of falling into a fatal collapse. But that man who habitually uses stimulants, especially, those of the spirituous kind, needlessly, and perhaps I should say, murderously excites nature and infringes upon her operations, the penalty for which, in nine cases out of ten, is premature decay. Besides drunkenness—for I allude to this now—is a positive sin, engendering as it does, not only the destruction of the drunkard's life, but implicating also, the welfare and happiness of his friends.

VII. *Tonics.* These are substances that are often of immense value in the treatment of disease, especially of the western country. When the vital powers have sunk low,

the patient being greatly enfeebled, and after he has been prepared for their reception, then tonics, by imparting tone and energy to the drooping system, prove highly serviceable. All those medicines and means, and they are numerous, that increase the energies of the body, and give tone to its various functions, are properly tonics. The numerous preparations of iron are tonic in their operations upon the system. So, also, of many other mineral substances. But all these, in my opinion, demand the discriminating judgment of the physician as to the propriety of their exhibition. In the vegetable kingdom of nature, also, innumerable productions exert, when taken internally, a genuine tonic influence over the enfeebled body. Some of these exert this, however, in a much higher degree than others; and at their head stands, undoubtedly, the *cinchona* or *Peruvian bark*.

The tree which furnishes this bark grows abundantly in South America, particularly in Peru; hence its name. It is imported in large quantities into the United States, and immense cargoes of it are sent to the European countries,—more especially to France, where from it is manufactured the invaluable drug, so useful in the treatment of our western diseases—quinine. Formerly the bark itself was used as a general tonic, and as a remedy in cases of ague; but, although the bark in substance, in a few cases may be found more effectual than the quinine, yet its very offensive and nauseous taste and irritating properties render it in others, greatly inferior to its active principle, *the quinine*. I need not detail the method by which quinine is manufactured. It is only proper that I inform the reader that it is a chemical compound, formed by uniting oil of vitriol, (sulphuric acid,) with the active principle of the bark, called quinine. Hence, the chemical name of *sulphate of quinine*, by which it is everywhere known. I have already, in the course of this work, spoken of the value of quinine in the management of diseases, and I need not therefore, refer to the same here. A prejudice fostered by the hordes of quacks everywhere to be found, has been got up against the use of this valuable, and compara-

tively innocent medicine. Certain persons imagine that it acts injuriously upon the constitution. Now, although quinine may be abused, as everything else is abused, and under certain circumstances may even destroy life, yet I am bold to declare, that, notwithstanding I have prescribed it thousands of times, I have never, but in one single instance, seen it excite very unpleasant symptoms. But I have seen, and even had, in the earlier part of my professional career, many persons die for the want of it And it affords me the deepest consolation, amid the many trials of my professional life, to look back and recount the numerous lives that a correct estimate of the medicine now in question, has enabled me to rescue from impending death. I repeat, that I have seen people die *for the want of quinine—never from its use.* It is useful, in small and often repeated doses, as a general tonic; and, in more efficient doses, in all periodic affections, recurring daily, or at regular intervals, as is the case with ague and our paroxysmal autumnal fevers, it is, many times, an absolutely indispensable curative agent. Knowing, as I do, the great value of quinine in the diseases of our country, I do hope that the reader, if he possess predilections unfavorable to its exhibition, he will divest himself of prejudice, and no more assist in impressing error upon the public mind. It is the very depth of madness to declare that "I will never take another grain of it." It may be, at no distant day, that you may be called upon to make choice between a dose or two of quinine and death! When the question will no longer be, "is it injurious," but, "will it save my life?"

Allied to the Peruvian bark, in medical properties, is the bark of our own indigenous *dogwood.* Though inferior in several respects, to the Peruvian bark, it may not unfrequently be substituted for it; and it is probable that, at no distant day, its active principle—*cornine*—will be extensively manufactured and used as a substitute for quinine. The bark is frequently used in whisky as a bitter, and when the circumstances of the particular case require a tonic, this may be a very good one. Colombo, both the American and imported,

Gentian, and an extremely bitter wood called *Quassia* are useful bitter tonics, and are frequently prescribed by physicians for this purpose. But it is unnecessary that I particularize these, or dwell upon their distinctive medical properties. No profit would result from such recitations, as medical men themselves should discriminate minutia of this kind. I, therefore, conclude what I have to say of tonics, and with them I close the body of this work—the object of which has been to impart to the reader something of a correct understanding of the structure of the human body, of the various functions or offices belonging thereto, of the nature and treatment of diseases and accidents, &c.; together with an account of a few of the more common and useful medicines.

CONCLUSION.

Before bringing the present volume to a close, I feel it incumbent upon me to allude briefly, to the relations existing between the medical profession and the public. To avoid unpleasant consequences and misunderstandings, it is extremely proper that a few suggestions, appertaining to reciprocity of action on the part of both, be laid down.

1. It is the duty of every person, upon becoming the patient of any respectable physician, to hear and heed his advice, and strictly observe and obey all his directions.

2. It is the duty of the patient's friends (or nurses) to observe most scrupulously every office with which the physician may entrust them, in any way pertaining to the management of his patient; and, as far as possible, to encourage and fortify him (the patient) against the depressing influence which an unfavorable case might exercise upon his feeble powers.

3. It is their duty to instil into the patient confidence in the skill and ability of his medical attendant.

4. It is their duty to exclude from the patient's room, officious tattlers and useless visitors; and to peremptorily forbid, in the presence of the patient, every species of low whispering.

5. The nurses and friends of the sick should, moreover, wear cheerful countenances, and treat the patient with the utmost kindness, attending promptly to his every want.

6. In case of the unavoidable absence of the regular or fam-

ily physician, it is right and proper that another be called in, but the case should, as a general rule, be restored to the first in attendance, whenever he shall be able to take charge of the same.

7. The friends of any sick person have a right to call in a consulting physician, with whom, should he be a reputable practitioner, it is the duty of the attending physician to confer in a friendly and courteous manner respecting the case under treatment.

8. The public have no right to fall out with, discard, and abandon a physician merely because of the loss of a patient. Some diseases from their very onset, are necessarily fatal in their consequences, while others, surrounded by a multiplicity of unfavorable circumstances, are liable to be so. No imputations should, therefore, be thrown out against the medical attendant for this cause alone. If the physician is a reputable practitioner, a moral, steady, and sober man—humane and tender; if he have been assiduous in his attention upon the patient, if he have, at the solicitation of the friends, warned them of the probable issue of the case, then, it is to be presumed, that he should be exculpated from all blame. But, on the other hand, if he promised unreservedly to cure the patient; if he flattered the friends of the patient, and, especially, if he is known to publish cards or handbills, signifying his ability to cure consumption, scrofula, cancer, ague, without quinine, and the liver complaint without mercury, then, it is fair to infer that he is a quack, and that the patient has been carried off of empiricism.

It is proper to remark, in this connection, that I am not insensible to the imperfection of the present treatise, but from the circumstances attending its composition, I could not hope to avoid some seeming incongruities. It were impossible that it could be otherwise. For the volume was written to benefit those, whom the author had to presume, unacquainted, in a great measure, with the subjects upon which it treats. Therefore, it has been his study to simplify the various topics upon which he has written; and if he has occasionally,

carried his simplifying too far to please *the few*, he indulges the hope that *the many*, whose wants have been chiefly consulted, may profit by it. No one more than the author detests, in conversation with unprofessional friends, the use, or rather, abuse of medical technical terms, and high sounding phrases; and he has therefore, aimed at least, in the present treatise to avoid them altogether, or when used, to plainly define their meaning.

In conclusion, the author asks the indulgence of a liberal community. The style of his work, he is aware, is open to criticism; but if it prove acceptable to the public, if it impart to those, for whom it was begun, useful information in those hours of bodily pain and affliction, which all are doomed to suffer, sooner or later; and, above all, if through its instrumentality a single human being shall be rescued from impending death, then the author must rest satisfied.

THE END.

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