

PART II.

DISEASE AND DRUGS.

NATURE AND CAUSE OF DISEASE, AND SO-CALLED "ACTION" OF DRUGS.

"Disease is abnormal vital action; hence, to fully understand the nature of disease, it is necessary to understand the actions of the various organs when in health. We may divide the vital organs into two classes, one of which digests the food and circulates it to all parts of the system, where it can be used for the purpose of nourishing and building up the body, while the other class gathers up the waste matters, broken-down tissues, and whatever else there may be in the system that is not usable, and casts the same out of the body. It can be seen at a glance that these two classes of organs must not only exist, and perform their work, but that there must be an exact balance in the work performed by them in order to insure health and prolong life. That is, the organs which supply nourishment to the tissues must supply just the requisite amount; otherwise, the body would decrease in size and strength. The organs that eliminate the impurities from the system must also be faithful in their work, and cast out all the broken-down tissues and other waste matters just as fast as they accumulate; should they fail to do this, there would be a clogging up of the entire system with these matters. When these two classes of actions are just balanced, the individual is in health. If, however, there is an unbalanced condition of these actions, for any cause, the individual is diseased.

The law of self-preservation is the first law that is obeyed by the vital organs; and it is an attempt on the part of the organism to obey this law that constitutes disease. Hence, it is plain to be seen that disease is not a thing, is not an entity, but is vital action. In one sense, it is just as natural to be sick as it is to be well; that is, disease, or abnormal vital action, is just as much the work of nature as is health or normal vital action. Both are put forth for self-protection, for the purpose of preserving the life of the body. In health, the organs all act with reference to keeping the body just as it is. That is, the broken-down tissues are removed as fast as they break down, and others are as promptly built up to take their place, all unusable matter being removed from the system as fast as it enters, without either increasing, diminishing, or in any way disturbing or unbalancing, the action of any organ.

In disease, the actions of the various organs are all put forth in obedience to the law of self-preservation the same as in health, with the difference, however, that in disease the vital actions are disturbed. They may be increased, diminished, or otherwise unbalanced, according to varying circumstances and causes; yet these actions are all put forth for the purpose of self-protection— not, however, to keep the body as it then is, but for the purpose of restoring it to the condition in which it was before the special cause that occasioned the disturbed action was brought to bear upon the organism. Hence, disease is remedial effort.

Whenever any action takes place in any part of the system, a certain amount of vital force is expended, and thus lost to the individual. This is because of the wearing out of some of the tissues of the part in exercise. This being the case, it is evident that all the vitality of the body would soon be expended unless some means was provided by which a constant supply might be furnished to the tissues. Such a supply is furnished by the blood, which is composed of water and organic matters derived from the food.

When the vegetable builds itself up, it does so by taking certain elementary substances of the mineral kingdom, and transforming them into its - own tissues, at the same time also transforming whatever force those elementary substances possess into vegetable life, or vital force. Whenever man or beast eats vegetable food, certain elements of the vegetable are converted into flesh, and the vital force manifested as vegetable life is transformed into animal life. Now, as all the digested food becomes blood before being converted into flesh, and as the flesh loses its vitality by the wearing out of its tissues, it is evident that the life of the flesh is in the blood, and that the flesh may replenish its vitality by renewing its tissues. But before this can be done, the broken-down tissues must be removed, which is principally effected by their combustion, or oxidation, as explained in the tract entitled "Good Health," to which the reader is referred. As there stated, these broken-down tissues are burned or oxidized by the oxygen received from the lungs, the carbonic-acid gas thus formed being immediately absorbed by the red corpuscles of the blood, and by them carried away, thus making room for the rebuilding of the tissues.

The red blood corpuscles are not used as material for building up any part of the body, their sole office being to convey oxygen from the lungs to the capillaries for the purpose of consuming the broken-down

tissues and then conveying the resultant carbonic-acid gas to the lungs for expulsion. And by this process heat is generated in all parts of the system by the oxidation of the wastes of the body. As previously stated, it is very important that the worn-out tissues should not be permitted to accumulate, as by so doing they would hinder the rebuilding of the new tissues. To remove these with sufficient dispatch, a great amount of oxygen is required; so much, that a quantity of blood equal in volume to the whole amount contained in the body is sent to the lungs every three minutes for the purpose of throwing off the carbonic acid, and of receiving fresh supplies of oxygen.

The truthfulness of the foregoing statement may be demonstrated in many ways. If a person with a pulse at seventy or eighty steps quickly up a flight of stairs, or runs for a short distance, or engages for a few moments in any very active exercise, he will find his pulse increased from ten to fifty beats per minute. What is the cause of this increased circulation? Simply this: the tissues, in acting to perform the labors required of them, become worn; and as they cannot repair the wastes until this worn material has been removed, it is necessary for the blood to be sent to the lungs much more rapidly than on ordinary occasions.

Thus we see why violent, or even active, exercise will accelerate the circulation. **The accumulation of worn-out material not only prevents the repairing of the tissues, but it also prevents them from manifesting any vitality.** This we see whenever the supply of air to the lungs is cut off, or whenever the circulation of the blood ceases; for, in either of these conditions, the flesh begins to weaken, and almost instantly loses its strength, and life soon becomes extinct. **These facts show the importance of a constantly full and unimpeded circulation of blood in every part of the human system if we would be free from disease;** for if for any cause the capillary vessels in any part of the system become clogged, there must of necessity be a stoppage of the circulation in that part, and, consequently, it will be insufficiently nourished, the wastes will be improperly removed, and the part will not be as active and strong as it would have been under other circumstances. When any part of the system is clogged with unusable substances, or with retained excretions, or even by a distension of the blood-vessels, as in congestion, nature's first law, self-protection, requires that an effort be made on the part of the organism to remove the obstruction. **The effort which is thus put forth is disease.**

When the effort is slight, and does not differ much from the actions of the system when in health, the individual may not be aware that he is diseased; but if the effort is great, or manifest itself by any very marked symptoms, requiring any very great expenditure of vitality in their manifestation, then the individual becomes aware that he is sick. It sometimes happens that obstructions to the circulation exist for a long time before any very great effort for their removal is put forth by the system. There may be two reasons for this. 1. The individual may have inherited a feeble constitution; 2. He may have lived under circumstances which caused the gradual yet constant reception into his system of the obstructing cause, which, not being cast out by a slightly increased activity of all the depurating organs, occasioned the accumulation of foreign and effete matters, at the same time over taxing some one or more organs, and thus causing their capillaries to become relaxed, and distended with impure blood. These organs soon ceased to perform their functions, and the entire system became clogged with the effete matter which should have been thrown off. The organic nervous system (which stands in the same relation to the vital organs that the brain sustains to the organs of voluntary motion) then perceives that something is wrong, that there is something in the system which is not usable; they consequently call upon the entire system to act for the purpose of eradicating these foreign matters from the vital domain.

The circulation may be clogged in various ways. The surface or **extremities may be chilled,** and the circulation in those parts thereby become impeded, or it may be checked by pressure, as in **the wearing of tight elastics about the limbs,** or corsets and belts about the waist, **or obstructing substances from without** may be introduced into the system. Any effort on the part of the system to remedy the evil, or to remove the obstruction, is in exact accordance with the principle of self-preservation, and is, consequently, a natural action; yet, inasmuch as it differs from the usual actions of the vital organs, it is an abnormal, unusual, or diseased action.

There is another class of causes which occasion disease although they do not materially clog the system with their own substance. This class is by far the most fruitful source of disease of any that can be named. It comprises all the poisons of the **mineral, vegetable, and animal kingdoms, and includes both those which are taken into the system from without, and those that are engendered within the body.** Many of the poisons taken into the system from without, occasion immediate and prostrating diseases; and, not unfrequently, sudden death follows their reception into the body. Others do not immediately occasion any serious-or marked disturbance of the action of the various organs. The manner in which these poisons occasion disease is a matter which all should understand, for if they do not understand how disease is occasioned, they cannot understand how it should be treated; while a person

who fully understands the nature and cause of a disease will be better able to discern the mode of treatment to be adopted to effect a cure.

Of poisons that enter the system from without, perhaps none will better illustrate the subject than the malaria which arises from the decomposing vegetation of swamps, marshes, and other low, wet places. This malarious poison may arise from a chicken-yard, or barn-yard, or pig-pen, or heap of stable litter, or from a cess-pool, a privy-vault, or a swill barrel. It matters not whence it comes, whether from decaying vegetables in the cellar, under the house, or from the mill-pond; from whatever source such emanations arise, they mingle with the atmosphere, and are taken with the inhaled air into the systems of those who live in the vicinity where these poisonous germs are originated and diffused. If very little of the poison is inhaled, or if the person inhaling it has a strong constitution, it will be readily passed out by the organs of depuration without causing any great disturbance of the vital actions; consequently, no apparent disease is occasioned. The same is true of all kinds of poisons if taken in sufficiently minute quantities; but no person can tell how small a dose may occasion serious disease, or even death, for the reason that the condition of the system is constantly changing, and an amount of poison which at one time, and under one set of circumstances, would result in no serious difficulty, may at another time, under different circumstances, produce not only serious disease, but even death.

When a small amount of poison is taken into the system continuously for any considerable length of time, some of the organs of depuration become first weary, then weak, and soon they fail to do their share of the work, and the system becomes clogged, not so much, however, with the poison taken into the system as with the effete matters which the disabled organs should have cast out.

As some of the organs stop to rest, or, through overwork, fail to do their share of the work of keeping the body free from effete matters, other organs are called into increased activity to remove the causes of obstruction that have accumulated within the system, and this overwork, this increased activity, this remedial effort, is disease."

HOW TO TREAT DISEASE.

Shall we give medicines to the sick? All medicines are poisons, and all of them act in precisely the same manner as do the causes of disease; at least, so say the professors of materia medica in all the medical colleges in the land; and they claim to cure one disease by producing another. It is evident that, **in attempting to cure a disease, we should always seek to remove the cause.** We have found that disease is always occasioned either by poisons engendered within the system— retained excretions— or by poisons taken into it from without, which may be of either **mineral, vegetable, or animal** origin. Now, in case an individual has retained excretions, or has taken into his body some poison, what shall be done for him? Shall we give him some other poison? This we shall certainly do if we give him medicines; for **all medicines are poisons,** and the doctors say, "The strongest poisons are our best remedies." I am aware that many of my readers will be surprised when I tell them that **the mildest form of medicine,** be it simply a cup of tea, or of catnip, or of sage, or any other form of herb drink, or any one of the five thousand drugs and compounds which are given the sick, if it produces what the doctors call a medicinal effect, it is because it contains a certain amount of poison; for the so-called medicinal effect of all medicines and poisons is simply an act on the part of the system to reject the medicine or poison and to cast it out.

Take, for instance, the common tea of China. This herb yields a certain extract called theine. A few pounds of genuine tea will yield quite an amount of this extract, which if taken in large doses will occasion death. So with the herb known as peppermint. It yields a volatile oil (the oil of peppermint) which will also cause death if taken in large doses. **The same is true of all the herbs that are given as medicine.** Their poisons may be extracted and taken in sufficiently large doses to occasion death; yet none of these, when taken in small doses, and at long intervals, will occasion any serious difficulty, but on the other hand, if taken in doses of proper size, would actually afford pleasurable sensations. **Common tea, if used daily, even of moderate strength, will seriously injure the vital machinery by the constant labor which the various organs are obliged to perform in casting the poisonous ingredient out of the system.**

It is true that herb medicines are generally much less injurious in their effects than are the chemical compounds of the mineral poisons, or the viruses, excrements, and various other animal substances that are in general use as remedies by the medical faculty. **It is also true that of these vegetable medicines, many roots, barks, leaves, flowers, and herbs, may be named that possess properties so slightly poisonous that they can hardly be classed as poisons;** yet if they occasion any medicinal effect, it is simply because the little poison they do contain is recognized and resisted by the system in precisely the same manner that other poisons are. But, in such cases, the amount of poison is so small that

the action induced is very slight; and, consequently, no great injury results from their use unless it becomes habitual. Hence, we say, to those who will use **medicine of some kind, Use only the plants and herbs of the field, as by so doing you will suffer little damage, although you may receive no good.**

If a person is sick, the cause of his sickness may be retained excretions which have become poisonous by changes which have taken place in them while in the system, or which are simply clogs in the way of the circulation, or it may be some poison that has been taken from without. In either case, the disease which is occasioned is simply an effort on the part of the organism to expel the poison. Now, shall we give another poison? If so, what good will it do? It is simply adding a second unusable substance to those already in the system, and if it is recognized by the vital organism, it will be repelled in a manner essentially similar to that in which was the first. It is true, however, that in repelling the second poison the effort to expel the first may be suspended for a time, and that, if the suspension be continued sufficiently long for an organic change to take place in the organ previously diseased, the first disease may not recur, even when the second poison has been expelled; but such cases are very rare, and when they do occur, it is almost invariably the case that the diseased action induced by the medicine results in the most serious, and perhaps permanent, injury to the individual.

To make the matter plain, suppose that a person has inhaled miasmatic poisons for a long time. At first, he experiences no ill effects. This is because the depurating organs, being strong and active, can do the work of expelling the poison in addition to their customary work, which was to excrete the ashes or waste matters resulting from the breaking down of the tissues. After a time, this continuous overwork reduces the vitality somewhat, and one, or more, of the long over worked organs becomes impaired, and is no longer able to perform its functions; or it becomes so congested with blood and swollen that action is impossible, their tissues also becoming either soft and flaccid, or hard and indurated.

We will suppose that it is the liver which has thus ceased its action; as the result, the bile element, which is usually cast out by the liver, is retained in the system, as in jaundice and many other diseases. As the bile element is constantly accumulating, the whole system soon becomes filled with it. If the liver fails to act, the blood gradually becomes impure, and, in a short time, instead of pure, healthy blood being sent to the tissues, to impart to them strength and vitality the life fluid is contaminated by the putrid bile elements which should have been excreted and removed from the body, and the tissues become clogged, and thus unable to act, so that life soon becomes extinct.

We now see how the inhaling of malarious poisons causes the clogging up of the system. It is not by any act of their own, nor by their own bulk; but the depurating organs (that is, those which separate impurities from the blood), become worn out, and fail to perform their usual work of renovating the wastes of the body, so that the system becomes filled with them. Something of an idea of the amount of waste material that is produced in the system may be obtained by considering the amount of food which is daily required to supply the place of that which has become worn out. As these impurities accumulate in the system, their presence is recognized by the organic nervous system, which is composed of between thirty and forty pairs of brain ganglia or nerve centers, which preside over the functions of organic life just as the brain proper, which is the center of animal life, controls the organs of voluntary motion. The brain ganglia, recognizing that something is wrong, induce action in the vital organs for the purpose of removing the poisonous substances from the blood. At first, there is merely a slightly increased activity of each organ. The circulatory organs work a little faster in carrying the blood to the organs of depuration; the kidneys, by their increased action, throw out a larger quantity of serum, and with it whatever it may hold in solution; and so with all the depurating organs. Soon there is a general disturbance in the system. The individual feels uncomfortable, is weak, in fact, is sick. The doctor is called, feels his pulse, and finds that it is ninety or one hundred beats per minute. The flesh is hot, the tongue coated, the breath offensive, and he pronounces it a case of fever. He orders, first, a purgative, "to cause the bowels to act," or an emetic, to "act upon the stomach." Then a diuretic "to cause the kidneys to act," then diaphoretics to cause sweating. If these poisons do not "cure" the disease, he will give alteratives, to change its form, or depletents, to lessen the vitality if the fever is too high; or, if the patient is failing in strength, he will give tonics to tone up the system; if he is so weak that he does not "respond" to the tonic, then stimulants are given, and, finally, if the patient is not likely to recover, and is in much pain, narcotics are given to destroy the sensibilities so that he may die easily. All the way through, the doctor watches the symptoms and medicates them; that is, he gives medicines which so change the patient's condition that he no longer manifests the particular symptom. **Instead of ascertaining what is the cause of the symptom, and removing that, he gives a poison** which experience has taught him will stop that symptom, and this he gives regardless of future consequences, and without inquiring whether some new complication may not result which will be more injurious to the patient than the first disease, his sole object being to so change the disease that the present symptoms

shall be no longer manifested. **Every one of the medicines given, is a poison;** and although they cure the disease for which they are administered, they do not remove the cause of the disease, but only occasion an action in the system to expel these very medicines, thus detracting the attention of the vital organs from the remedial effort in, which they were engaged.

As the medicines enter the system and are absorbed, their presence is recognized by the brain ganglia in the same manner that the nutriment, and the wastes, of the body are recognized. These brain ganglia discover that the medicine cannot be used to replenish any of the tissues of the body, and, consequently, that it can be of no possible use, and should be removed as soon as may be. To accomplish this, they direct the depurating organs to exercise their functions up on this new poison; and as the attention of the brain ganglia is directed to the new poison, they lose sight, as it were, of the first, and, consequently, the actions to get rid of the first poison are suspended, so that the attending symptoms cease to be manifested; but inasmuch as a new set of actions has been set up, new symptoms make their appearance. Thus we find it to be true that the drug doctors cure one disease by producing another.

The reason why one poison occasions an excessive excretion of urine, and another a powerful operation of the bowels, while a third occasions profuse sweating, and a fourth a copious expectoration, is because the brain ganglia differ in their powers of recognition, just as the nerves of the five senses differ, the one from the other. The mental perceptions are purely functions of the brain, while the vital instincts, or vital perceptions, are purely the functions of the brain ganglia, or nerve centers of the organic nervous system. The brain perceives, or recognizes, things through the five organs of sense. Through the eye, and by means of the optic nerve which is distributed in the eye, the brain is enabled to perceive the color, shape, and position, of things. Through the olfactory nerve, in the nose, it perceives, or recognizes, the various odors of things. Through the gustatory nerve, or nerve of taste, it recognizes the gustatory qualities, or the taste, of things. Through the nerve of hearing, it recognizes various sounds and musical tones. And through the nerves of feeling, it recognizes the texture, structure, size, weight, and various other physical properties of objects. We see that each of the five senses recognizes peculiar properties of matter. A person cannot hear the color of things, nor taste with the nerve of sight, nor smell with the nerve of hearing, nor feel with the nerve of taste. Each of these organs differs from each of the others, so that the brain recognizes through one what it does not through others.

As before stated, there are between thirty and forty pairs of the brain ganglia in the organic nervous system. They are situated along either side of the spinal column, and it is these brain ganglia that have the power of vital perception, or recognition, usually known as the vital instincts. These various brain ganglia send out nerves to the vital organs, and through those nerves perceive, or recognize, the quality of the blood and certain properties of its ingredients, as it passes through the various organs to which these nerves are distributed. These brain ganglia differ in their vital perceptions, just as various parts of the brain differ in mental perceptions, one part hearing, another part seeing, another feeling, another tasting, and still another smelling. One of the brain ganglia recognizes certain properties, or qualities, of matter, and another, certain other properties of matter. As before stated, it is this difference in the vital perceptions of these brain ganglia that causes the various organs of depuration to excrete different substances from the blood. **The reader will need to study this part of the subject closely, as an understanding of the nature of vital recognition and vital action will enable him to understand fully why and how drugs affect the system.**

As before stated, these brain ganglia preside over, and direct, the vital organs in their actions. One set preside over the organs of digestion and circulation; and when any substance is received into the alimentary canal which is usable in the building up of the tissues, this portion of the brain ganglia directs the proper organs to digest, circulate, and make use of it. Others of the brain ganglia preside over the kidneys, and distribute to them their nerves; so that as the blood circulates in them, it comes in contact with these nerves, through which the ganglia perceives certain unusable substances in the blood, and causes the kidneys to separate them from it. These substances are the saline matters which are held in solution in the blood.

Another set of the brain ganglia preside over the liver, and perceive other unusable substances in the blood. They accordingly direct the liver to separate those substances from the blood, which, by so doing, produces the bile or gall. Another set of ganglia preside over the mucous membrane of the intestines, and direct in the separation of certain other unusable matters; while another set preside over the sweat glands of the skin, directing in the work of separating still other matters from the blood; and still another set preside over the lungs, directing in the throwing out of still other unusable matters.

Thus, we have the urine excreted by the kidneys, the bile by the liver, the carbonic-acid gas by the lungs, the perspiration by the sweat glands, and the fecal matter by the mucous membrane of the intestines. All matter does not possess the same sensible properties; if it did, we would know of but one

kind of matter. As it is, we can, through the various senses, recognize various properties of matter, and are thus enabled to distinguish one object from another. Many kinds of matter possess properties which our mental faculties are not able to perceive. Some forms of matter that appear, to our external senses, just like certain other kinds of matter, are found, when taken into the system, to occasion entirely different effects. Again, certain articles when taken into the system are found to seriously affect one organ, or set of organs, while all the other organs remain unaffected. If, however, some other articles are taken into the system, some other organs are affected, while those which were affected by the first class of articles remain unaffected by the last.

The person who can understand the reason of this will be able to understand the whole subject of the nature and cause of disease, and why and how certain effects are occasioned by the taking of drugs. He will also be able to answer the question whether we shall give a sick man medicines; whether we shall give a man poison because he already has poison in his system. A man eats an apple, a piece of bread, or some other article of food, and that is the last he feels, thinks, or knows, about it. It is digested, formed into blood, and circulated through his body, and is eventually converted into flesh and bone, nerve and sinew; yet he remains wholly unconscious of the changes that take place in it, or of the means by which these changes are accomplished, that is, so far as his mental perceptions at the time are concerned. Now let the same individual take into his stomach a dose of tartar emetic, a little tobacco, or a dose of **lobelia**; how differently he is affected! Instead of being strengthened and nourished, he feels very sick, and presently vomits, continuing so to do until the stomach is entirely emptied of its contents. Give him a dose of **epsom salts**, croton oil, **aloes**, **rhubarb**, or **castor oil**; what is the effect? **These substances are not digested and used as nourishment, neither do they induce vomiting; but they occasion a very copious and offensive discharge from the bowels.** Give him spirits of nitre, salt peter, squill, digitalis, or turpentine, and copious urination will be the result. Give him other medicines, and profuse sweating will result. Give him still others, and he will expectorate freely. If each of the medicines named above is given in proper doses, it will occasion the effect named, and no other.

Why do not apples cause vomiting, and bread, purging? Why do not boiled or baked potatoes cause sweating, and rice, frequent and copious urination ? Why does not squill cause vomiting, and tartar emetic, purging? Why does not rhubarb or aloes cause sweating? Why do these various medicines occasion certain special effects in particular organs? Many doctors of medicine inform us that it is because certain medicines have a special affinity for certain organs; and that "the medicine goes through the system seeking out from choice those organs and tissues on which it can make its impression." Thus they ascribe to drugs a species of intelligence. **Right here is where almost the entire medical faculty stumble.** Instead of medicines having special affinities for certain organs and tissues of the body, the vital organism has a special dislike for drugs, and makes a special effort to expel them as rapidly as possible. It endeavors, through the kidneys, to get rid of all those medicines that are known as diuretics; through the sweat glands to get rid of the diaphoretics; through the intestines to get rid of the purgatives and cathartics; through the lungs to get rid of the expectorants, and through the stomach to get rid of the emetics. Could the doctors understand this, they would see that **drugs are dead, inert things,** and that the action is all on the part of the living organism. **And yet the whole subject may be made so plain that a child of twelve years can understand it.**

When food is taken into the stomach, it comes in contact with the nerves of organic life which are distributed to the mucous membrane of the stomach, as also to all the vital organs. As the food comes in contact with these nerves, the brain ganglia that preside over the functions of the stomach perceive through them, just as the brain perceives through the nerves of feeling, that the food is a substance which has certain properties that adapt it to the use of the system in building up and maintaining the tissues. Recognizing this, the brain ganglia direct, or cause, the stomach to digest it, just as the brain wills the hand to pick up a book or do other work. After the food is digested, the proper organs are directed by the nerve center having them in charge to absorb and circulate it to all parts of the system. While this digested food, which has now become blood, is passing through the capillaries, the brain ganglia which have charge over the building up of the tissues direct them to make use of a portion of it to repair or rebuild themselves, as the case may require.

When the tartar emetic is taken into the stomach, the brain ganglia which have charge over that organ perceive or recognize through their nerves that a substance has entered the stomach which is not adapted to the wants of the system. They perceive that the properties of the tartar emetic are so unlike the character of the matter of which the body is composed that it cannot be used. Now as it is the special function of these brain ganglia to accept whatever is usable that enters the stomach, and to reject whatever is unusable, they cause the stomach and abdominal muscles to contract spasmodically, thus forcing the

contents of the stomach up through the esophagus, by this means emptying the stomach of its contents. This expulsive action is termed vomiting.

Now what part did the tartar emetic act in this whole matter? None whatever. It was a dead, inert thing, incapable of the slightest action. Living hands placed it in the mouth, living organs of deglutition swallowed it, or forced it down into the stomach. There it was recognized as an unusable thing, and a spasmodic contraction of living muscles forced it out of the system. In this case, the vomiting was an act of self-protection. The vital organism acted in an unusual manner to get rid of the poison (the tartar emetic), and the unusual, disturbed action, the remedial effort, the vomiting, was disease. It is in the same manner that all that class of medicines known as emetics are recognized and acted upon by the system. They are not allowed to enter the circulation, but are ejected before being absorbed. Suppose a child has eaten some indigestible substance, such as old cheese or green apples; its stomach tries to digest it, and finding it to be difficult of digestion, we will suppose, from insufficient mastication, it contracts upon it with greater force, in order to crush or pulverize it so that the gastric juice can thoroughly permeate and so digest it. This contraction causes pain or cramp, and the child becomes very sick; yet the disease is simply an effort on the part of the stomach to remedy the evils resulting from swallowing food half masticated. If the stomach succeeds in grinding the food, then the contractions cease, the disease is ended, and the child is well. If, however, it does not succeed, the brain ganglia which have charge of the stomach notify other ganglia which have charge over the entire muscular system, and they are called into action, and the child has convulsions. Now, what are these convulsions? They are simply the contractions of various muscles which act in obedience to the nerve centers which preside over them, and which have perceived that something which is not usable in its present condition is in the system, and these various muscles are directed to contract so as to help remedy the evil.

It must be remembered that the brain ganglia, or nerve centers, are not intelligent. They simply discover that something is wrong, and, making this discovery, set the organs over which they respectively preside, at work to remedy the difficulty. It must also be remembered that the organs over which these nerve centers preside, can only act, each in its own manner, and that while they may not accomplish anything whatever to ward remedying the existing evil, or in removing the obstruction, the action is nevertheless induced for that purpose. **Many a child has convulsions which are caused by the presence of indigestible food in its stomach**, and although the effort is unsuccessful, yet it was put forth solely as a remedial effort. The nerve centers, finding that the contractions of the muscular coats of the stomach were insufficient to crush the un-chewed food, call the entire muscular system into action; thinking, so to speak, that by one powerful effort it may accomplish its object. We will suppose that a doctor has been called to see a case of convulsions caused in the manner described. He gives an emetic, which produces vomiting, as before described, at the same time causing a most deathly feeling in the patient, which is only relieved when the contents of the stomach have been expelled. Thus he cures one disease by producing another. In this case, however, the cause of the first disease was removed, and had there been no other way to remove it, the giving of the emetic would have been proper, although the new disease was the cause of much distress. **But there is a better way than the giving of poisons. Give the child a few glasses of warm water, not hot, then tickle its throat, and the stomach will void its contents with very little distress or discomfort to the child.**

We will now take some one of that class of medicines that are said to act directly on the kidneys, and are known as diuretics. The properties of this class of poisons are not recognized by the nerve centers which preside over the stomach, hence, vomiting does not occur. The poisons are dissolved and mingled with the fluids of the stomach, and are absorbed and passed directly into the circulation, being then carried to all parts of the system in the blood without doing any harm or causing any disturbance until they reach the kidneys. Immediately upon so doing, they come in contact with the nerves which are freely distributed there, and through these nerves, the brain ganglia having charge over the work of the kidneys, which have the power of recognizing this class of poisons, perceive that something is mingled with the blood which is not usable in the system, and so they excite the kidneys to increased activity in excreting and separating this poison from the blood. Why did not these diuretics occasion vomiting? Simply because they were not recognizable by the nerve centers which preside over the stomach.

Let us now examine that class of medicines known as purgatives. Why is it that these do not occasion vomiting, nor increased action of the kidneys, nor sweating? It is because these poisons have no properties that are recognizable by the nerve centers which preside over the stomach, kidneys, and sweat glands. But they do possess properties that are recognized by the nerve centers which preside over the mucous membrane of the intestines, and the minute structures of this membrane are set at work to throw these poisons out of the system, which they do by separating them from the blood, together with some of the

serum, all of which is thrown into the cavity of the intestine. As these substances accumulate, their weight or presence induces a peristaltic movement of the bowels which casts them, and whatever fecal matter may be present, out of the body.

It is in this manner that drugs, medicines, and poisons of every kind occasion unusual vital action in the various organs of the body ; and this action is disease. The professors of materia medica in the various medical colleges are right when they say that "medicines when in the human system act as do the causes of disease," and that "medicines cure one disease by producing another." In order that the reader may fully understand this matter, we will recapitulate a few of the propositions already laid down.

1. In all the relations between living and dead matter, the living only is active.

2. There are two classes of perceptive organs in the body. 1. The brain, to which belong the functions of mental perceptivity; 2. The brain ganglia or nerve centers of the organic nervous system, to which belong the functions of vital perceptivity.

3. The brain takes cognizance of things external to the body whether they are in contact with the body or not; while the brain ganglia take cognizance of those things only which are within the system, and are in contact with the nerves of organic life. The brain induces action in the organs of voluntary motion, and causes them to act in accordance with its recognition of external objects no matter whether its recognition is correct or not, thus leading a man to treat his mortal enemy with the greatest kindness if he comes to him in the disguise of a friend, but causing him to quickly change his conduct toward him when his true character becomes known. Thus we see that all the voluntary motions of our bodies exactly correspond to our mental recognitions. The brain does not recognize the properties or conditions of substances or organs within the body, and has no control over the vital organs, as they act involuntarily.

4. The brain ganglia to which belong the power and function of vital perceptivity, or vital recognition, differ in their perceptive powers so that while one set perceive one class of substances, another set perceive another class. These ganglia induce actions in the various organs over which they preside; and those actions always correspond to, or are in accordance with, the vital perceptions, so that if a substance within the system is recognized as being usable, there is an effort made to use it ; or if it is recognized as not usable, there is an effort made to expel it.

5. The nerve centers, or brain ganglia, have every organ and tissue of the body under their control, so that even the organs of voluntary motion at times act without the control of the will, being directed by the nerve centers instead of the brain.

6. Whenever a nerve center recognizes anything in the system that is not usable, the organ, or organs, over which that special nerve center presides, is set at work for the purpose of expelling the poison.

Whether the efforts of the organ thus acting to expel the poison are successful or not depends wholly upon the nature of the work usually performed by the organ. If the organ thus acting is a depurating organ, it will remove the morbid matter or poison from the system, and the effort will be successful; but if some other organ is called into action, the effort will be unsuccessful. What has thus far been presented, is without doubt clear to the reader; but right here we come to a point which it is hard to make the doctors understand, and which may appear hard for the common people to understand. The query is often raised, **if disease is remedial effort, why do people die of disease? Why are not these remedial efforts successful? To this it may so replied, While it is true that the nerve centers possess the property of vital perception, they do not possess intelligence. They cannot reason from cause to effect; they can only distinguish between those substances in the system that are usable, and those that are not usable.** As already shown, whenever a nerve center discovers that there is something in the system that is not usable, it induces an action in the organ over which it presides, to remove that substance from the body. If the nerve center that presides over the stomach discovers an obnoxious substance in that organ, vomiting is induced to get rid of it, and the effort is successful. If the nerve center that presides over the liver makes the discovery that some obnoxious or unusable substance is in the system, the liver is influenced to increase its action, and as a consequence, more than the usual amount of bile is excreted. If the nerve centers that control the action of the kidneys make the discovery, the kidneys will work faster, and more urine will be excreted. The same principle applies, also, to the other depurating organs, each of which performs its proper work when called into action by the presence in the system of those substances which it is its peculiar function to remove. If the nerve centers which preside over the mucous membranes of the intestines make the discovery, the excreting cells of this membrane will be set at work, and there will be an accumulation of fecal matter in the intestine.

If it is the nerve center that presides over the mucous membrane of the air tubes and cells, there will be a greater amount of mucus, or phlegm, thrown out into the passages. In each of these cases, the effort is more or less successful, because the organs through which the effort is made, are organs whose special

function it is to eliminate impurities from the system. If, however, the nerve centers which preside over the circulatory organs become acquainted with the fact that there is unusable material in the system, they induce increased activity in the circulatory organs and the blood circulates faster, as may be readily seen by the changed condition of the pulse; but no impurities are thrown out; for this is not the function of the circulatory organs. If the nerve centers that preside over the salivary glands are the ones that recognize the poison, or if they, through the nerves that connect them with other nerve centers, learn from those centers that such unusable substances are in the system, there will be an action induced in the salivary glands to expel the poisons; but the effort would be unsuccessful; for the work of depuration is no part of the functions of the salivary glands; they can only secrete saliva. The muscles can only contract; hence, if the nerve center that presides over the muscles becomes acquainted with the fact of the presence of poisons, or unusable substances, in the system, they, acting in accordance with the law of self-preservation, induce in voluntary contraction of the muscular fibers, and cramp or convulsion follows. In this case the cramp or convulsion is not successful in purifying the system; for the muscles are not organs through which depuration can take place; yet the effort that is made through them is remedial effort. Hence, it is claimed that all disease is remedial effort whether it is successful or not.

There are poisons which have many properties, some of which are recognized by one set of nerve centers, and some by others; so that one poison will often induce action in several organs. This is only because several organs are set about the work of eliminating that poison. Another fact worthy of consideration is that all of the brain ganglia are connected, the one with another, by an intricate net-work of nerves which also connects them with the brain. Whenever any one of these ganglia perceives that there is something in the system which is not usable, and which it cannot remove, it has then the power to notify another one of the ganglia, and procure its assistance, which is rendered by setting the organ over which it presides at work. Perhaps the disease known as gout, or rheumatism, will illustrate this subject better than any other.

Gout is a disease of the joints of the toes. **Mineral matters, either acid or alkaline in their nature**, exist in the blood; and as these substances pass through the structure of the synovial membrane of the joints of the toes, the nerve centers which preside over those organs perceive them, and they set the dense tissues of the organs at work to expel these substances. But as these are not depurating organs, they cannot successfully accomplish the task; they can only create heat by their friction, and, as a result, inflammation ensues. The nerve centers which made the first attempt, finding themselves unsuccessful in their efforts, now communicate with other nerve centers which have charge over organs similar in character, that is, other joints, and the individual has rheumatism in the knee, hip, back, or shoulder. **Now, if we should attempt to cure the rheumatism, as many do, by giving an alkaline or an acid poison, we would be very likely to aggravate the disease.** As we add to the poison, the nerve centers that have charge over the membranes which line the cavities of the body (these membranes being similar in structure and function to the synovial membranes of the joints), recognize the existence of these poisons, and the membranes over which they preside are set at work to throw it out. It may be the peritoneal membrane of the abdomen, or the pleura of the thorax, or the pericardium which surrounds the heart, or the dura-mater which envelopes the brain.

The only work that it is possible for any of these last-named membranes to perform, is to secrete a watery fluid that shall keep the various organs which they surround moist and well lubricated, so that there shall be no friction of the parts. Now, when these membranes are set at work with an increased activity, the only thing that they can do is to secrete an extra amount of this fluid, and pour it out into the cavities which they enclose. This is dropsy. If the peritoneum is the active or diseased membrane, the water collects in the cavity of the abdomen; if the pleura, then the water collects in the chest or thorax; but if the dura-mater is the diseased membrane, water collects about the brain. The first is dropsy of the abdomen; the second, dropsy of the chest; the third, dropsy of the brain; while if the water collects in the pericardium, or heart-case, we have dropsy of the heart.

It is often the lining membrane of the capillaries that is set at work, in which case the water collects among the loose tissues of the body, producing general dropsy.

Why was this water thrown out? Simply because the only function which these membranes can perform is to secrete this peculiar kind of fluid; and as they are under the direction of the nerve centers, when they are incited to greater activity, they do the only thing they can do. All this is an effort to remove something from the system; yet as these membranes are not depurating organs, the effort is unsuccessful. Sometimes, in cases of rheumatism, when drug medicines are given, the action induced in the membranes mentioned, whose structure and function are similar to those of the inflamed synovial membrane in the rheumatic joint, is so great, that instead of water being thrown out, the action is entirely stopped, inflammation of the

membrane follows, death speedily results, and the patient is said to have died of rheumatism of the heart, stomach, etc.

We might also notice the disease known as mumps. This is a disease of the salivary glands. It consists of an inflamed condition of these organs induced by the nerve centers that preside over them, they having discovered impurities of some kind in the blood during its circulation through these glands. Now, if the patient suffering with mumps takes cold, the diseased action is greatly increased, and the nerve centers that preside over organs similar in structure and function to the salivary glands are invited to assist in the work, which they do by setting the respective organs over which they preside, at work. These are the testes in the male, and the breasts, or mammary glands, in the female.

There are other diseases in which all the nerve centers are called on to assist, as in fever, in which disease there is a general disturbance of all the vital functions. Now, all disease is caused by some poison or unusable substance that has found its way into the system from without, or that has been engendered within, and all medicines that are capable of occasioning a medicinal effect are poisons, and always occasion a diseased action in some part of the body, the disease being the actions that are set up to rid the system of the poison. **In reply, then, to the question, Shall we give medicine to a sick man? We say, most emphatically, No.**

Medical men have, in all ages, observed that certain medicines occasioned special results in certain organs, while other medicines occasioned different results in the same or other organs; hence, they have attempted to classify medicines, calling one an emetic, another a purgative, and another a diuretic, etc.; but this classification has been entirely based upon an erroneous theory of the nature and cause of disease. Many physicians have supposed that the effect occasioned in the various organs by these medicines was occasioned by the action of the medicine upon the organ, and by the medicine acting upon it in some manner when it was diseased, in which it would not, or could not, have done when in health. They supposed that the medicine acted in some manner for the purpose of curing the sick organ. Others have supposed that the action was all performed by the diseased organ, and that the organ used the medicine to cure itself with. Others, still, have claimed that all medicines antidoted poisons in the system by combining chemically with them, and that they cured disease by so doing.

All of these classes of physicians have expected that in the good time coming, when medical science should have been perfected, every disease would have one or more unfailing remedies, and that the medical practitioner would know just what to give his patient in every disease from which he might suffer. If the theories of the action of medicine just mentioned, were either of them true, then we might expect just such a time as has been looked for by some medical men of past times.

We have already shown that all the phenomena that are manifested as the result of taking medicines are simply the action of some, or all the vital organs in their efforts to expel the medicine from the system; and it is easy to understand that these vital efforts cannot be made without an expenditure of vital force just in proportion to the effort made. **As the vital force is expended in the performance of these actions, there is a consequent weakening of the system, a lowering of the vitality of the patient; so that instead of the patient's vitality being augmented, it is greatly diminished, by the use of medicine.**

The question may be asked right here if medicines never cure disease. To this query we answer, Medicines stop the disease, and if that can be called curing, then medicines cure disease.

But here is a point to be considered. Disease, we have shown to be vital action; therefore, whatever stops the disease, stops vital action, How do medicines stop vital action? They are the cause of the expenditure of vital force in an attempt to cast the medicine out of the system, When a person has fever, for instance, the doctor gives medicine to cure, or stop, the fever. The vitality that was previously used in the fever action in an endeavor to expel bilious matters, and other retained excretions, is now used in an endeavor to expel the medicine. The fever stops, or is cured, because there is not vitality sufficient to expel both poisons at once. **We should never seek to cure a disease by any means that will use up any considerable amount of the patient's vitality; for if we do, we shall be killing the patient while curing the disease.**

We have already seen that disease is remedial effort; therefore, whoever stops a disease, stops remedial effort. We should never stop remedial effort, we should only control and assist it. We cannot accomplish this by giving medicines, we can only cause a new remedial effort, an effort to expel the medicine; and this new effort is always made without any reference whatever to the previous efforts that were being made to expel other poisons. It will not be contended for a moment that the lives of men have not, in any instance, been saved by taking medicines; for it is quite possible that this may have been the case. But when we take a look at the grave yards, and read upon the tombstones the ages of those who lie buried there, we find that nearly all were cut down by the cruel hand of death before they attained to old age. Almost the entire race of men in past generations has died of disease, yet they took medicines in their last sickness. Why did

not the medicine save them? A physician may have ten patients. He gives them all medicine—five get well, and five die. What right has he to say that his medicines cured the five that recovered? How does he know but they would have recovered sooner if they had not taken his poisons? How does he know but that the five who died would have recovered if they had not expended their vitality in expelling the poisons he gave them? **Drugs and medicines probably send more persons to untimely graves than do all other causes combined.** One reason for believing this is this: Disease is vital action put forth to expel some unusable substance, or poison, from the system; and, from the nature of things, it is evident that when the foreign substance is expelled, the disease will stop of itself; for the cause being removed, the effect must cease. Therefore, diseases are self-limited if let alone; but if other poisons are introduced, the vital organs wear themselves out in their efforts to keep the body free. **If we wish to "live long in the land," we must eschew all drugs and medicines.**

QUOTATIONS FROM MEDICAL AUTHORS.

That there are others who hold to these views, the reader will see by the following extracts taken from the sayings and writings of noted medical men as quoted by R. T. Trail, M. D., President of the New York Hygeio-Therapeutic Medical College, in a lecture before his medical class : —

Professor Alex. H. Stevens, M. D., of the New York College of Physicians and Surgeons, in a recent lecture to the medical class said: "The older physicians grow, the more skeptical they become of the virtues of medicine, and the more they are disposed to trust to the powers of nature." Again: "Notwithstanding all of our boasted improvements, patients suffer as much as they did forty years ago."

The venerable Professor Jos. M. Smith, M. D., of the same school, testifies: "All medicines which enter the circulation, *poison the blood* in the same manner as do the poisons that produce disease." Again: "Drugs do not cure disease; disease is always cured by the *vis medicatrix naturae*."

Says Professor C. A. Gilman, M. D., of the same school: "Many of the chronic diseases of adults are caused by the *maltreatment* of infantile diseases." Again: "Blisters nearly always *produce death* when applied to children." Again: "I give mercury to children when I wish to *depress* the powers of life." And again: "The application of opium to the true skin of an infant is very likely to *produce death*." And yet again: "a single drop of laudanum will often *destroy the life* of an infant." And once more: "Four grains of **calomel** will often *kill an adult*." And, finally: "A mild mercurial course, and mildly *cutting a man's throat*, are synonymous terms."

Says Professor Alonzo Clark, M. D., of the same school: "From thirty to sixty grains of calomel have been given very young children for croup." Again: "Apoplectic patients, who are *not bled*, have double the chance to recover than those who are bled." And again: "Physicians have learned that *more harm than good* has been done by the use of drugs in the treatment of measles, scarlatina, and other self-limited diseases." And yet again: "My experience is, that croup *can't well be cured*; at least, the success of treatment is very doubtful. A different mode of treatment is introduced yearly, to be succeeded by another the next year." Once more: "Ten thousand times ten thousand methods have been tried, *in vain*, to cure **diabetes**." Still another: "In their zeal to do good, physicians have done much harm. They have *hurried many to the grave* who would have recovered if left to nature." And, finally: "**All of our curative agents are poisons; and, as a consequence, every dose diminishes the patient's vitality.**"

Says Professor W. Parker, M. D., of the same school: "Of all sciences, medicine is the most uncertain."

Says Professor B. F. Baker, M. D., of the same school: "The drugs which are administered for the cure of scarlet fever and measles, *kill far more than the diseases do*. I have recently given no medicine in their treatment, and have had excellent success."

Says Professor J. W. Carson, M. D., of the same school: "It is easy to destroy the life of an infant. This you will find when you enter practice. You will find that a slight scratch of the pen, which dictates a little too much of a remedy, will *snuff out the infant's life*; and when you next visit your patient, you will find that the child which you left cheerful a few hours previous is *stiff and cold*. **Beware, then, how you use your remedies!**" Again: "We do not know whether our patients recover because we give medicine, or because nature cures them. Perhaps *bread-pills* would cure as many as medicine."

Says Professor E. S. Carr, M. D., of the New York University Medical School: "All drugs are more or less adulterated; and as not more than one physician in a hundred has sufficient knowledge in chemistry to detect impurities, the physician seldom knows just how much of a remedy he is prescribing." Again: "Mercury, when administered in any form, is taken into the circulation and carried to every tissue of the body. The effects of mercury are not for a day, but *for all time*. It often lodges in the bones, occasionally

causing pain years after it is administered. I have often detected metallic mercury in the bones of patients who had been treated with this sub tile poisonous agent."

Says Professor S. St. John, M. D., of the same school: "All medicines are poisonous."

Says Professor A. Dean, LL. D., of the same school: "Mercury, when introduced into the system, *always acts as a poison.*"

Says Professor Martin Paine, M. D., of the same school: "Our remedial agents are themselves *morbific.*" Again: "Our medicines act upon the system in the same manner as do *the remote causes of disease.*" And again: "Drug medicines do but cure one disease by producing another."

Says Professor S. D. Gross, M. D., late of the New York University Medical School, now of the Louisville (Ky.) Medical College: "Of the essence of disease very little is known; indeed, nothing at all." These testimonies were taken from the lips of the professors to whom they are attributed, as they lectured before their classes in the most noted medical colleges in the United States.

To the foregoing statements, we add the following from some of the standard authors of the allopathic school of medicine, as quoted by Dr. Trail:—

"I have *no faith* whatever in medicine."—Dr. Baillie, of London.

"The medical practice of our day is, at the best, a most *uncertain* and unsatisfactory system; it has *neither philosophy nor common sense* to commend it to confidence."— Professor Evans, Fellow of the Royal College, London.

"Gentlemen, ninety-nine out of every hundred medical facts are *medical lies*; and medical doctrines are, for the most part, *stark, staring nonsense.*"—Professor Gregory, of Edinburgh, Scot land.

"I am incessantly led to make an apology for the instability of the theories and practice of physic. Those physicians generally become the most eminent who have most thoroughly emancipated themselves from the tyranny of the schools of medicine. Dissections daily convince us of our *ignorance of disease*, and cause us to blush at our prescriptions. What *mischiefs* have we not done under the belief of *false facts* and *false theories*! We have assisted in multiplying diseases; we have done more; we have *increased their fatality.*"— Benjamin Rush, M. D., formerly Professor in the first Medical College in Philadelphia.

"It cannot be denied that the present system of medicine is a *burning shame* to its professors, if indeed a series of vague and uncertain incongruities deserves to be called by that name. How rarely do our medicines do good! How often do they make our patients *really worse*! I fearlessly assert that in most cases the sufferer would be *safer without a physician* than with one. I have seen enough of the *mal-practice* of my professional brethren to warrant the strong language I employ."—Dr. Ramage, Fellow of the Royal College, London. "

Assuredly, the uncertain and most unsatisfactory art that we call medical science, is *no science at all*, but a jumble of inconsistent opinions; of conclusions hastily, and often incorrectly, drawn; of facts misunderstood or perverted; of comparisons without analogy; of hypotheses without reason, and theories not only useless, but *dangerous.*"—Dublin Medical Journal. " Some patients get well with the aid of medicine; more without it; and still more *in spite of it*"—Sir John Forbes, M. D., F. R. S., Physician to Queen Victoria.

"Thousands are often *slaughtered* in the quiet sick-room. Governments should at once either banish medical men, and proscribe their *blundering art*, or they should adopt some better means to protect the lives of the people than at present prevail, when they look far less after the practice of this *dangerous profession*, and the *murders* committed in it, than at the lowest trades."— Dr. Frank, an eminent European Author and Practitioner.

"Let us no longer wonder at the lamentable want of success which marks our practice, when there is scarcely a sound physiological principle among us. I hesitate not to declare, no matter how sorely I shall wound our vanity, that *so gross is our ignorance* of the real nature of the physiological disorder called disease, that it would, perhaps, be better to do nothing, and resign the complaint into the hands of nature, than to act as we are frequently compelled to do, without knowing the *why* and the *wherefore* of our conduct, at the obvious risk of *hastening the end of our patient!*"—M. Magendie, the eminent French Physiologist and Pathologist.

"I may observe that, of the whole number of fatal cases in infancy, a great proportion occur from the inappropriate or undue application of *exhausting remedies.*"—Dr. Marshall Hall, the distinguished English Physiologist.

"Our actual information or knowledge of disease does not increase in proportion to our experimental practice. Every dose of medicine given is a *blind experiment on the vitality* of the patient."—Dr. Bostwick, author of the "History of Medicine."

"I wish not to detract from the exalted profession to which I have the honor to belong, and which includes many of my warmest and most valued friends; yet it cannot answer to my conscience to withhold the acknowledgement of my firm belief, that the medical profession (with its prevailing mode of practice) is productive of *vastly more evil than good*; and were it absolutely abolished, mankind would be *infinitely the gainer*."— Francis Cogswell, M. D., of Boston.

"The science of medicine is a *barbarous jargon*, and the effects of our medicines on the human system in the highest degree *uncertain*, except, indeed, that they have *destroyed more lives than war*, pestilence, and famine combined."— John Mason Good, M. D., F. R. S., author of "Book of Nature," "A System of Nosology," "Study of Medicine," etc.

"I declare, as my conscientious conviction, founded on long experience and reflection, that if there was not a single *physician, surgeon, man-midwife, chemist, apothecary, druggist*, nor *drug* on the face of the earth, there would be less sickness and *less mortality* than now prevail." — James Johnson, M. D., F. R. S., editor of the Medico-Chirurgical Review.

The following declaration was deliberately adopted and recorded by the National Medical Convention held in St. Louis, Mo., a few years since : —

"It is wholly incontestable that there exists a wide-spread dissatisfaction with what is called the regular or old allopathic system of medical practice. Multitudes of people in this country and in Europe express an utter want of confidence in physicians and their physic. The cause is evident: *erroneous theory*, and, springing from it, *injurious*, often— *very often*— FATAL PRACTICE! Nothing will now sub-serve the absolute requisitions of an intelligent community but a medical doctrine grounded upon *right reason*, in harmony with and vouched by the *unerring laws of nature* and of the vital organism, and authenticated and confirmed by successful results."

The reader will see by the foregoing quotations that the practitioners of the drug system of medication condemn the use of drugs and medicines in full as severe terms as can well be done. Let us now see what some of these same men say concerning the healing powers of nature, and the use of hygienic agents in the treatment of disease.

Says Prof. Parker: "As we place more confidence in nature, and less in preparations of the apothecary, *mortality diminishes*." Again: "Hygiene is of *far more value* in the treatment of disease than drugs." And again: "I wish the *materia medica* was in Guinea, and that you would study *materia alimentaria*." And yet again: "You are taught learnedly about *materia medica*, and but little about diet." Once more: "We will have *less mortality* when people eat to live." And, finally: "I have cured granulations of the eyes, in chronic conjunctivitis, by hygienic treatment, after all kinds of drug applications had failed."

Says Professor Carson: "**Water is the best diaphoretic we have.**" Again: "My preceptor used to give colored water to his patients; and it was noticed that those who took the water *recovered more rapidly* than those of another physician who bled his patients."

Says Professor Barker: "The more *simple* the treatment in infantile diseases, the *better the remit*."

Says Professor Peaslec: "Water constitutes about eight-tenths of the weight of the human body, and is its *most indispensable* constituent." Again: "Water is the only necessary — the only natural— drink."

Says Professor Gilman: "Every season has its fashionable remedy for consumption; but hygienic treatment is of *far more value* than all drugs combined." Again: "Cold affusion is the *best antidote for narcotic poisoning*. If the medical profession were to learn and appreciate this fact [why don't they learn it?], the number of deaths from narcotism would be diminished one-half." And again he says: "The continued **application of cold water has more power to prevent inflammation than any other remedy.**" And yet again: "The **application of water to the external surface of the abdomen is of great importance and value in the treatment of dysentery.** I have also *cured* adults by this means alone." Once more: "Water is equal in efficacy, as **a diuretic, to all other diuretics combined.** Water is the thing that produces diuresis; all other means are subordinate." And, finally: "Water is the *best febrifuge* we have."

Says Professor Smith: "The vapor of warm water is the **most efficacious expectorant** we have." Again: "Abstinence from food is one of the *most powerful antiphlogistic* means."

The following extracts are from a lecture delivered in course before an Association of Physicians in Brooklyn, N. Y., by Prof. Samuel G. Armor, M. D., of the Long Island College Hospital : —

"The study of therapeutics, as we shall see, is beset with many difficulties, none of which are more prominent than our want of knowledge of the natural history of disease. The bearing of this upon our therapeutic reasonings must be at once apparent. Usually we see but one side of the question, and find it difficult, therefore, to form a proper estimate of what belongs to *Nature* and what to *Art*. Drugs are administered, patients recover, and we suppose we have cured them; whereas our remedies may have had little or nothing to do with the recovery; very likely it took place in spite of our drugs.

"This mistake of sequence for a consequence appears to be one of the most natural to which the human mind is liable. We encounter it in every department of physical science, and in none, perhaps, more than in estimating the curative value of drugs. Many reasons might be assigned why this is so, one or two of which I may mention. In the first place, we have no distinct instruction in the natural history of disease— I mean, uninfluenced by drugs. Nor have we any field for observation. Call to mind, if you can, a single instance in which you watched the course, progress, and termination of disease, uninfluenced by remedies of some kind.

"And we have not only no field for observation, but we find it difficult to create one. The natural instinct to seek relief from suffering and danger prompts all ranks and grades of people to put themselves under some sort of treatment. Moreover, physicians, from prejudices of education, as well as from conscientious convictions of duty, rarely omit the ordinary remedies in severe disease.

"Just here, then, is a defect in our therapeutic literature which we find it difficult to correct. Our libraries are full of books on therapeutics proper, but contain few on nature's power of curing disease. And yet there would seem to be no good reason why, if nature has the power of creating disease, she may not have the power of curing the same, and that she has such power there can be no doubt.

"It is an old aphorism that 'physicians cure — i. e., "take care of"— but nature heals.' In visible diseases, surgical so-called, nobody doubts that this is the case. The surgeon does not cure the fracture, the wound, or the ulcer; he merely guides the operations of nature, removes obstacles, and the vital power restores to health.

"And the same principle, precisely, holds good in internal diseases, the relations of which are simply hidden from our senses.

"What, then, does art do toward curing ? Art only assists nature in restoring the vital forces to their normal action.

"It is an error very liable to beset the young practitioner, to try to meet every different symptom by the addition of another drug to his formulae. This is sure to lead to excessive medication. Let me guard you against becoming 'shot-gun practitioners,' on the principle that, if you fire a profusion of shot, it is extraordinary if some do not hit the mark! Quantity and complexity of prescription are very apt to be in proportion to the obscurity of the case. The strong and successful practitioner is usually a man of few remedies.

"And always— let me once more insist as a sound rule of practice—**when you have doubts as to your knowledge of the case, or doubts as between nature and drugs, resolve that doubt, for the time being, in favor of nature.** And, whether administering drugs or not, see that your patient is put on the best possible hygiene; that his room is airy and well lighted; that his drinks are suit able; that his food is adapted to his case; that he is bathed and sponged if too hot, and warmed if too cold; and, above all, that his mind and nervous system are kept as quiet as possible.

"We should enforce a rigid hygiene in obedience to a most conservative and safe rule of practice, namely, **that it is the duty of the physician to restore health by the simplest means in his power.**

"Trousseau, the great clinical teacher of France, has well said that '*to know the nature and, cause of disease is more titan half of medicine.*' And, let me add, from another stand-point of medicine, '*To know the natural cure of disease is more than half of therapeutics!*'

In these last quotations we have an inkling of the true healing art, which, as there intimated, consists in so applying and using hygienic agents that the efforts made by the various organs of the body may be successful in removing all impurities from the system and in overcoming all obstructions.

It is evident that whatever rules and regulations are applicable to the preservation of health, are also, in a certain degree at least, applicable and adapted to the restoration of health, for those laws which it is necessary for him to obey who would keep healthy, must certainly be obeyed by him who would become healthy. The truth of this will be very evident to a person who understands how the body is affected by surrounding conditions and influences, and is thus enabled to appreciate the importance of hygienic agents as a means of restoring health. The subject of Hygienic Agents has been considered in Part I.

If the reader has carefully perused the preceding pages, there can be little doubt that he fully understands that disease is remedial effort, is an effort on the part of the organism to remove impurities from the system, and that, consequently, the only safe and successful way to treat disease is to supply such conditions as will enable the diseased organs to be successful in their efforts. This being the case, how foolish it would be to simply watch the symptoms of a disease, and to so medicate the patient as to mitigate or change the symptoms without removing the cause which occasioned them! As previously stated, diseases are self-limited in their nature, being simply efforts to remedy evils that exist in the system. This being the case, the moment the evil, the impurity, or obstruction is overcome or removed, that moment the disease will cease.

Therefore, in the treatment of disease, we should ever direct our attention to the cause of the disease and seek to remove it; well knowing that when this is accomplished, we have done all that is required. We should never watch the symptoms and medicate them, as many physicians do; for in so doing we create a new symptom every time we cause an old one to cease. So long as an individual has impurities in his system, and his organic nervous system has sufficient vitality to recognize their presence, just so long will there be an effort made by some organ to expel it; and if we stop this effort without removing the cause that occasioned it, some other organ will be called into action, and new symptoms will be manifested. In treating disease, we should simply seek to control the vital actions so that they shall not become so violent as to destroy any organ or tissue, and this we may do in three ways: first, by reducing or changing the temperature of the part; second, by inducing increased activity in the skin by inducing a more active circulation therein, which is readily done by the proper application of the bath; and third, by a proper application of the various hygienic agents, thereby supplying as nearly as possible those conditions which are necessary to preserve the body in health. Most invalids make the mistake of seeking present relief, regardless of future consequences. This is wrong, as it becomes a source of temptation for them to take, and for physicians to administer, articles that will seriously affect their constitutional vigor in the future. The foregoing pages treat upon the various hygienic agents necessary to the maintenance of health, and the nature and cause of disease and the true relation of drugs and medicines to the human system; but little has been said, however, in regard to the treatment of disease, except in a general way. The object of the following pages will be to explain the fundamental principles of water treatment, and to describe the various baths and their application, together with the diseases to which they are severally adapted.