ADDRESS.

AN ADDRESS,

BY

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As Retiring President,

OF THE MEDICAL ASSOCIATION OF CENTRAL NEW YORK,

At Rochester, May 16, 1876.

GENTLEMEN: It becomes my agreeable duty to welcome you, on this ninth annual meeting of The Medical Association of Central New York. Congratulating you on the renewed evidence of interest in its prosperity that your presence gives, I beg to express my appreciation of the honor of again being your presiding officer. It is made my duty at this time to address you on some topic of professional interest. However fresh or old my views may seem, I will endeavor to be brief, for I prefer to yield the time to others more competent to instruct. I ask your attention to some thoughts on

"THE PHILOSOPHY OF DISEASE."

From the earliest times this subject has been discussed, and it is only necessary to refer to the widely-differing notions as to the treatment of disease, to impress you with the opposing doctrines held as to its nature. We have always heard much of the *Vis Medicatrix Naturæ*, yet how vague are the ideas of many, of the force in question! Ever since the days of Hippocrates there has been this tendency to personify the actions of the system, to speak of the operations concerned in the recovery of sickness as the expression of a special force, implanted within us, for protection from the injurious influences surrounding us. You are familiar with the general drift of these articles, and I merely now refer to them. My object at present is to ask your attention to a modified view of the operations in disease, which has been an outgrowth especially of modern scientific studies and thought.

The tendency now is to regard all modes of life, animal and vegetable, as dependent on some common force. Dismissing speculations as to the nature of matter, and the origin of life, there is no difficulty in conceiving of vital processes in health and disease as expressions of force. Indeed we all, consciously or unconsciously, assume this. We speak of healthy and diseased *activity*—of *changes* in health and disease, and use terms constantly which imply the operation of forces in organic bodies, determining their growth, maintenance of life, and dissolution. And because this force seems different from inorganic force, it is called organic or vital. The difficulty of defining "vital force" does not weaken our conviction that there is a power in living bodies, which, whatever its nature and origin, operates to determine forms and modes of life under varying conditions along numberless lines of species.

A slight study of any organism shows how distinctly it is formed for and affected by the conditions of life in which it is placed; and also exhibits a power of resistance to injurious influences and adaptation to changed conditions, which serves largely for individual preservation. We observe further, that when a normally conditioned body is acted upon by forces or stimuli normal to it, the reaction to these influences is normal, and the state is one of Health; but when the forces or stimuli are not normal to the body, or it has been changed by the operation of former abnormal conditions, then the resultant action is abnormal, and the state is one of Disease. Normal food, drink, air, light, may thus at different times produce healthy or unhealthy reactions. Hence, we may formulate the view thus: Normal organism acted on by forces normal to it equals Health; normal organism acted on by abnormal forces equals Disease. Health and Disease thus appear as resultants of related

activities; and it is important for our present purpose that they should be so considered; because the common use of the term disease leads to misconception. By many, disease is deemed an entity—something to be routed from the system as its foe; but if our view is correct, we must regard disease as the reaction of the organism to certain abnormal forces. This reaction takes various forms, and yields varied results. For example, the congested lung, the cancerous tumor, the skin eruption, and diphtheritic exudation, are not strictly the diseases, Pneumonia, Cancer, Eczema, Diphtheria, but their products or results. The disease, properly speaking, is the sum of certain complex activities which pertain to living bodies. And while the products of these activities are often regarded as the disease, we must not forget the distinction here made.

It is essential then to our purpose to restrict the term Disease so as to represent the sum of certain reactions to abnormal forces which are, of course, harmful. We shall now produce some arguments to show that the reactions of the system to these abnormal forces, in their general effect upon the individual, and the race, imply a conservative process, in short, that this, which has always been asserted in particular cases, may be affirmed as The Law of Disease.

Our proofs are largely inductive. They are drawn from the observation of—

First—The effects of non-interference with disease.

Second—The detrimental effects of interference with some of the manifestations of disease.

Third—The beneficial effects of assisting natural processes of disease.

Fourth—The apparently conservative tendency of organic disease.

Fifth—The phenomena of latent disease.

First—When in animals and plants, so many reactions to abnormal forces by unaided nature, are seen, which are manifestly conservative of the individual, it is to be questioned whether there is any reaction of the system of an essentially different character. Every man here has often witnessed reactions in disease so markedly favorable, that he has admitted that no resource of our art could supplement them. They are termed nature's methods of arresting hemorrhage, of repairing injuries, of uniting fractures, of adapting parts to new uses which they are required to perform. The illustrations are numerous. We have seen spontaneous amputations which would do credit to an excellent surgeon, and the formation of new joints which he could not imitate. We heard at our last meeting of the extrusion of sixteen inches of small intestine in a case of Intussusception, and the continuity of the bowels restored, under no treatment, Dr. Moore recently reported a case of Tetanus recovered from without treatment, and Flint has shown that Rheumatism and Dysentery are recovered from spontaneously, often as speedily as by active medication. In short, there are few diseases curable by our art, from which recovery is not witnessed without the intervention of the physician.

Second—Proof is found in the detrimental effects of interference with many of the reactions of the system to morbid forces. All advanced physicians are now agreed that certain reactions are the best means known, for the dissipation of some morbid influences. Would any of us attempt to suppress the eruption of Scarlet Fever, or Measles, or Small-Pox? Are we not often shown the danger of disturbing other and simpler reactions? Do we not hesitate at times to touch the anal fistula of the consumptive patient? And have not certain persons abundant proof that an eczematous patch or a chronic ulcer conduce to their well being?

Third—Proof is still further furnished by the benefit obtained from imitating or aiding natural reactions in the cure of disease. A large share of our success is, consciously or unconsciously, thus reached. We make nature's path more open; we remove obstacles; we facilitate a crisis; we conserve and strengthen normal reactive powers. Take an illustration. A man receives into his system the poison which determines a series of definite reactions, which we have learned to recognise, and name Typhoid Fever. As we know of no way by which this condition once commenced can be broken up, the best treatment has been found to be that based on the conviction, that the disease is conservative, in the sense that it is the best action that the system can afford, and the only process by which the morbid forces can be counteracted. We therefore, guide our patients through the different stages into returning health—a result never so frequently obtained as since the adoption of the view here given of the nature of this disturbance. The same is true of Scarlet Fever, Measles, Pneumonia, and other conditions which will occur to you, and when death ensues in any instance, it is simply an evidence that the conservative reactions of the system, reinforced by the physician's art, were unequal to the pernicious influences at work.

Fourth—For further proof of the correctness of this view of disease, Professor King, in an article in the Popular Science Monthly for June, 1875, shows how organic structural diseases may prolong life. Pathology, according to this writer, is a modified physiology. The line which divides them cannot be strictly drawn. Adaptation of structure to function is the apparent purpose of both. This is as evident in the enlarged heart as in the normal one—in the callous bare foot as in the delicate hand of the lady of fashion—in the enlarging anastomosing arteries, as in the normal capillary

vessel, in the everted mucous membrane becoming skin, as in the normally placed mucous membrane. It is now admitted that no man can tell where normal nutrition ends and inflammation begins. But, you may ask, is this adaptation shown in those diseased structural formations which we are accustomed to regard as fatal conditions? Do they subserve a conservative end, and are they life prolonging? I think that this is the case. In order that it may appear, you must keep in mind our definition of disease, namely, *the resultant of certain related abnormal activities.* As in Cancer, Tubercle, Degenerations, Hypertrophies and Atrophies of various kinds, we generally do not know the real nature of the action and reaction which have produced them, observation and analogy teach that it is probable that the resultant of this action and reaction is the best possible for the unaided system, and is, in that sense, life-prolonging. When we strive to benefit patients with these disorders, we do it by effecting some change in the forces at work. A surgeon, for example, who removes a tumor which, according to our view, must have been the most favorable result of certain complex activities, removes a cause of further disturbance by abstracting a morbid force, and vastly benefits his patient.

The organic diseases we have named, contrary to the popular notion, do not immediately or directly kill; but, generally speaking, they involve tissue changes more or less rapid, which may render their subjects liable to acute inflammations, and to those causes of death common at the extremes of life, when tissue changes are most active. We do not say that growth is a cause of death, yet recall the mortality of all animals and plants in the growing period. Professor King shows that the fatality of many organic diseases, seems to depend upon the increased liability to the action of disturbing influences, especially of

heat and cold, which they predispose to. Refer to your experience for the truth of these statements. We all know that it is rare for a patient to die directly from chronic heart disease, and if you will recall the manner of death of your patients affected with organic disease, you can tell how large a percentage of them died from what we have been accustomed to term intercurrent maladies, which finally overcame the conservative reaction of the system. The effect of change in the seasons carries off our cases of Tubercular Consumption. The undisturbed Cancer of the breast or uterus slowly kills. And the surprise of our earlier practice becomes in later years our conviction, apart from any idea of conservative process, that nature is very tolerant of what we would suppose to be intolerable conditions.

Fifth—If we want further proof of this, we find it in the common occurrence of organic disease in a latent form. So quietly has the accommodation to it been made, that the patient and doctor do not recognise its presence. Fearful of overlooking an important element in diagnosis, the experienced physician of large practice, now examines every unsuspected organ in the body, as well as those plainly implicated, for he knows that without this precaution his reputation might speedily be ruined.

Thus we are led to conclude that since we have to be exposed variously and constantly to abnormal forces, reactions to these forces must take place. Resulting so often in that readjustment which we call health, they are essentially conservative, and in the aggregate, life-prolonging. The basis on which this view rests is "the continuous adjustment of internal relations to external relations." This is stated by Spencer to be The Law of Life, and it debars us from believing in the existence of reactions to abnormal forces unregulated by law, now dormant, now ac-

tive, now destroying and now restoring, now exciting our admiration, and now our contempt. On the contrary, we must hold that these reactions do in general result in adaptations that concern the welfare of the individual, and, in the aggregate, of the race. The great law of organic life is therefore correctly expressed as a "Struggle for Existence," and "the Survival of the Fittest," is thus accomplished through those modifications of structure, which serve to adapt the race to the changed conditions imposed upon it.

There is therefore no basis for a *Vis Medicatrix Naturae*, as a separately existing force. All the reactions of the system, whether the patient dies or recovers, must be classed together as physical necessities, uniting to conform to the law of adaptation or relational adjustment just given. The application of this principle may be difficult, without more thought than you can now give to it. You may ask "If disease is conservative, why not let it alone?" I answer, no treatment *is* better than bad treatment, and when the physician, unless avowedly experimenting, does not know the probable effect of his interference, he had better give the patient the benefit of the doubt. Further, you may add, I see nothing conservative in that reaction of a patient which results in his death, for example, from hemorrhage, before the arrival of the doctor. To which I reply. In the alarming case cited, you will note an immediate effort at adaptation to a changed vascular condition, the best that we can conceive possible by the unaided system. The loss of blood soon impairs nervous energy; faintness ensues, necessitating the horizontal posture; the heart's action becomes feebler and feebler; and all these processes imply an adaptation to changed conditions the most favorable the system is capable of, and often averting a death which would otherwise occur. We believe,

therefore, that these changes show a process on the whole conservative, and though the patient dies, do not remove the case from the operation of the law laid down.

Permit me to refer to a few of the deductions to be drawn from the foregoing somewhat abstract discussion. We should keep in mind the distinction made as to the real nature of disease, whatever our usage of language may be. Otherwise we shall share the popular error of mistaking certain reactions of the system for the abnormal forces which have produced them.

If the view of disease enunciated be correct, it follows that no narrow system of practice can ever be adequate to the various operations of the abnormal forces to which we are subjected. The best physician will always be simply—The Physician. No adjective can qualify his practice, for he will draw his knowledge from all sources.

We see also an explanation for the hold that Quackery has upon the public. The popular misconception of what constitutes sickness leads to a misconception as to its best treatment. So long as this continues the reckless and indiscriminate use of remedies will last. Still further, the correctness of the principle advanced is seen in the fact that patients affected with disorders of a serious nature get well under the most varied modes of treatment. No two physicians, generally speaking, treat the same malady in exactly the same manner, and under wide diversities of practice, good, bad and indifferent, patients will recover.

Gentlemen, these facts the marvel of the public, which often cause us much surprise, harmonise only with the view that the reactions of the system to disturbing influences are conservative in tendency.

Finally, we are now prepared to see what is the sphere of the Physician. Instead of lessening his office we magnify it. It calls for the ex-

ercise of the highest knowledge and skill. Nature's best mind is to co-operate with, or control, the laws of nature. The true physician is the man most thoroughly versed in these laws as they affect our race; who has become familiar with the forces causing disturbance, has watched their modes of access, and learned how the reaction by the system must take place. When he has been unable to prevent their operation, he must deal with their effects. He has found the lines of least resistance, where the strain upon the system will be the greatest; and these he guards. His work, intelligently done, will show that his aggregate of interference with disease, has been the least, for he knows when to assist, when merely to watch conservative reaction. The greater his study and experience,the more cautious will he be in the application of remedies, and the more ready to acknowledge that the power of a drug to benefit the system, bears a very constant ratio to its injurious influences when injudiciously given.

He will see in his remedial agents,forces,more or less concentrated, and will recognise that all he can accomplish by the most simple or elaborate therapeutics, is the changing of the relation of the action upon the organism, and the reaction by it, through the addition of new force, or the subtraction or modification of existing forces. All, did I say that he can accomplish by this changing of related activities? In many instances how much is this? It is the restoration of life and health. It is at times almost the resuscitation of the dead. And, on the other hand—it is sad to think of it—it may be through the ignorant application of remedies, the overthrow of nature's best reactions, resulting in the arrest of the life we strive to prolong. This should teach us humility and caution, and impress on us the great need of the most exact knowledge attainable of all of nature's laws as they affect the race, if we would be of service to our fellow-men.