

ARTICLE II.

A

DISSERTATION

ON THE

PROGRESS OF MEDICAL SCIENCE

IN THIS STATE.

BY HENRY W. CHILDS, M.D.

Read at the annual meeting, June 2, 1823.

GENTLEMEN,

IT is my purpose to employ the short period of time to which I have limited myself, in an examination of some of the causes which have retarded the progress of medical science.

Ignorance of the causes of the phenomena peculiar to animal bodies denominated Phusis by Hippocrates, Soul by Stahl, Vis Vitæ, and Force Vitale by others, stands opposed to a grand desideratum in medical science.

There is wanting in physiology what the discoveries of Newton have supplied to the physical sci-

ences. We view with admiration that wisdom which disclosed the principle that so harmoniously regulates the revolutions of the heavenly bodies—but the application to medicine of those laws which elucidate a great variety of consequences, by referring them to a few leading causes, has tended in no degree to advance the science of physiology.

It may well be doubted whether the mechanical theory of Boerhaave has not rather retarded than advanced the science of physiology.

His exalted reputation as a philosopher and a physician, gave popularity and confidence to a system, which contained the absurdity of governing the functions of living bodies by the same laws which regulate inanimate matter.

The various theories which have at different times been promulgated, the continual fluctuation of medical opinions, and the great and sudden revolutions which have ever characterized the science of medicine, all proclaim our ignorance of the fundamental laws which govern the animal economy.

The numerous medical publications, generally the product of closet speculations, their authors never having watched at the bed side of the patients whose cases they affect to describe, is a fruitful source of error and disappointment.

The medical nomenclature is a subject deserving our serious consideration, as intimately connected with the advancement of medical science. The acknowledged influence of language over the hu-

man mind, the difficulty of obviating that influence where erroneous impressions are conveyed, establish the importance of great accuracy and precision in medical terms.

Among the many injurious consequences that flow from the improper use of language in its application to diseases, is the danger of reposing confidently and quietly in the name, to the utter exclusion of any thorough investigation of the nature and peculiarity of the particular affection concerned. That this is a real and a practical evil a few examples will illustrate.

Thus Anasarca and Icterus have a conspicuous place assigned them in most of the nosological arrangements extant, and are treated as specific diseases without reference to the causes which produce them, indeed they are most commonly the effects of diseases or mere symptomatic appearances arising from various and different causes. And what are the causes that give rise to so many disputed points, and to so great a diversity of opinion, on the subject of fever? What but a want of accuracy in the use of terms? A most unaccountable deficiency of clearness and precision of language in discussing the subject of Fever? The practice of substituting effects for causes, symptoms for the diseases which they represent, tends to perpetuate ignorance and sow the seeds of discord and confusion.

The appellation of fever has been given to every form and degree of disease, from that of an eph-

meral indisposition to disease of so malignant a character that to breathe its atmosphere would be to inhale a deadly poison. The term fever has been used to define disease, in the abstract itself undefined—originally confined to the expression of a single symptom, it has been considered an assemblage of symptoms. In a popular nosological work it holds a classic rank in the general arrangement of diseases, and mingles its influence with most of the disorders which disturb the functions of animal or organic life. From the manner in which some authors speak of fever, we should conclude that it is some “peculiar subtle essence,” indivisible and incomprehensible! Instead of being a symptom, it is composed of numerous associate and inconsistent symptomatic appearances. Is it not high time to dispel the cloud of darkness and ignorance which hang over it, and to rescue the young in our profession from the many labyrinths of confusion and absurdity into which the numberless volumes devoted to the subject necessarily lead. Let us then restrict the term fever to some definite intelligible meaning, or expunge it from the medical nomenclature.

No rational mode of treatment can be adopted—none adapted to a particular case founded on such vague and indefinite descriptions. The cure of diseases must depend on the removal of the primary cause—a description of each particular affection with its diagnostic characteristics carefully examined and distinctly stated, is the only intelligible method of

communicating instruction, and of aiding the physician in his investigation of diseases, and his selection of the most appropriate remedies.

I appeal with confidence to you, gentlemen, who have had experience in the arduous duties of the profession, whether the value and importance of most medical writings be not greatly diminished, and the application of the knowledge they are designed to convey, rendered difficult if not impracticable from the deficiency of precision and clearness in the records of diseases and their treatment. You give the affirmative answer, by your patient and laborious investigation of the cause, and *modus operandi*, of every interesting case in which your advice and assistance are required—on different occasions all your physiological and pathological knowledge and especially your experience are brought into requisition—you search out the latent causes, you take into view all the circumstances of age constitution and habits of life, you study all the symptomatic appearances with a discriminating judgment—you hold yourselves aloof from all visionary theory and prejudice, and with candour change your opinions and practice when preponderating evidence gives you the requisite authority—you are not less cautious and observing in the administration of medicines—you have occasion frequently to regret that the accounts of certain articles of the *materia medica* are unaccompanied with that just and accurate relation of circumstances which would enable you, *a priori*, to deter-

mine their just and appropriate value. The many omissions accompanying the extravagant commendations of favourite medicines, leave you but little practical information, you rely with confidence only on what you have learned from experience and observation.

Destitute of that only sure guide, experience, the reputation and usefulness of the young practitioner can be established only by the most persevering industry in the investigation of diseases accompanied by the most painful anxieties of mind. To assist and encourage the young by the communication of interesting discoveries and improvements, is it not greatly to be desired that some method of transmitting the valuable acquisitions of the wise and experienced in the profession should be adopted? And is not the correction and improvement of our nomenclature one indispensable means of accomplishing so desirable an object.

The various nosological systems which have been in high repute at different periods of time, have from their artificial and arbitrary arrangement had a powerful tendency to mislead the inquirer, and divert the mind from the investigation and discrimination of diseases, points of the greatest interest and importance in the practice of medicine.

Of the nosological arrangement of diseases as well as of the language employed to describe them—some change, some improvement must appear absolutely necessary to every reflecting physician.

The intimate connexion that exists between theories in medicine and the arrangement of diseases is exemplified in the artificial and frequently absurd nosologies, connected with the hypothetical and visionary theories of systematic writers. In perfect coincidence with his theory that "child of genius and misfortune, *John Brown*, reduced all diseases to the compass of two grand classes; and on the principle that every agent acting upon the human system was a stimulant differing only in force and degree, proportionably abridged the remedies to be employed, and although the simplicity of the doctrine of the nosological terms, and of the therapeutic means contained in the Brunonian system, may have disclosed some valuable principles, it does not, on the whole, appear that this generalization has been better adapted to the improvement of medical science, than the complicated and hypothetical classification of Dr. Darwin.

In the present state of medical science, the plan of Dr. Good, who has attempted to establish a nosological system on a physiological basis, seems the most unexceptionable. To incorporate the study of diseases with that of the animal structure, and the animal economy, has not, I believe, been attempted by any former systematic writer.

The study of anatomy, by which we are made acquainted with the structure of the human frame; of physiology which informs us of its functions; of pathology which instructs us in the diseases to which

it is subject, by being concentrated, instead of being separately and distinctly taught, would be an important step towards the advancement of medical science.

By thus uniting the several branches the interest of the student would be excited by the obvious practical use of his knowledge, and the field for future reward and usefulness would invite the exercise of all his genius, industry and perseverance. The introduction of such a plan into the study of medicine with an arrangement of diseases natural in its order, would have no occasion for that class of diseases which were denominated by Dr. Cullen "Catalogus morborum a nobis omissorum."

Thus it is that whilst all those sciences connected with medicine, have respectively an appropriate nomenclature and classific arrangement, to which they are indebted for much of their present elevated condition; medicine, destitute in a great degree of these important aids, as well as of those authoritative decisions which with the jurist become established law and the end of strife, has been subjected to injurious theories and ambitious speculations, which backed by the authority of a name, and perhaps, supported by the spirit of a party, have not unfrequently impeded the progress of the student, promulgated the most fatal errors, and called down upon the whole profession the reproach and prejudice of the community. New systems hastily constructed on the basis of a few peculiar cases, or most com-

monly the result of visionary speculations, have been received with approbation and applause, and having lived a brief existence, have been neglected as useless, or remembered as pernicious. Many of these productions have been exalted to influence and celebrity, have been honoured with proselytes and disciples, whose partizan zeal has made them forget that in a science so practical, no error can permanently maintain itself, even in theory.

It is not among the least of the evils which have resulted from those changes in medical opinions, which too many of our profession have been ready to adopt upon the promulgation of new theories, that community have withheld, in some degree, from the profession as a class, that confidence and respect which has been forfeited by a few, and which is at once due to every judicious practitioner, and especially to the welfare of his patient. Nor is it surprising, that the speculative and angry controversies among physicians, should go far to excite the prejudices of society, and impair their confidence in our integrity and skill. The fact is so; and let it read an impressive lesson of scrupulous examination to us all.

Let the experience of careful observation be thoroughly weighed by well established principles; and let every principle be carried through the severe test of repeated and varied experiments, and we shall arrive at a course of measures which will give certainty and precision to the most important of all sciences.

It is confessed, that an obstacle (perhaps insur-

mountable) to the ultimate perfection of medical science, exists in its nature. The impediment arises from our inability to define, with precision, the nature of that spiritual principle, life, and its influence upon our organization. It is, however, owing to a conviction of this important truth "we are ignorant of the nature of the vital principle;" that the attention of the physicians is now beginning to be turned away from all those splendid superstructures built on the imaginary qualities of the vital powers, to the humble, but more useful, labour of marking its effects in the varied phenomena of health and disease; and the true mode of philosophising, so long ago taught by Lord Bacon, and upon which were born the splendid discoveries of Newton, now at last forced upon physicians the important truth, that Medicine as well as Physics is a science of observation and experience; and hence it is that the writings of Hippocrates and Sydenham, so remarkable for their accurate details of symptomatic appearances, their perspicuous descriptions of the leading features of disease, and their true record of pathognomic facts are now again studied as invaluable treasures, and will secure to their names imperishable fame, when hypothetical speculation and visionary theory, with their hundred authors, shall be buried in oblivion. And the maxim of Cicero is found as justly applicable to medicine, as to the other varied pursuits of life.

*"Præstat naturæ voce doceri, quam ingenio
Suo sapere."*

Under the influence of this happy revolution in the plan of medical investigations, the recent pathological and physiological observations have been attended with so much success, as to promise an explanation of many of the phenomena of disease generally, and an elucidation of some of the pathognomic symptoms of the diseases considered as belonging to the class fevers, which may enable us to apply some corrections to the nosological systems, and improve the therapeutic department of medicine generally.

From these investigations it would appear, that it is not alone by the prevalence of a single principle that the phenomena of health and disease are regulated; but that the mechanical must share in reputation with the chemical theory; and the spasmodic made compatible with the humoral pathology, that the fluids and solids must each receive an appropriate attention in the healthy and in the disordered states of the system; the solids, as the seat and agents of most of the phenomena of disease, while the fluids are indispensable to their action, the vehicle of morbid matter, containing the principles of disease and producing disorder in the functions of the animal machine. The fluids dividing themselves into those of composition and decomposition mingling in the circulation of the blood, recrementitious and excrementitious principles, receiving and rejecting the poison of disease. Diseases, or their causes, may be introduced into the system by the clyde, by internal or exter-

nal absorption, as well as through the medium of the lungs; and they may be carried out of the system by means of exhalation or secretion, by the mucous or cutaneous surfaces, and by the organs destined to the separation of the several excreted fluids.

The crises which take place in a great variety of diseases, are explained upon the above principles, and an exhibition is made of the origin, and an illustration of the phenomena, and especially of the termination of epidemic diseases, and in short the great improvements now making in medicine, and all the collateral sciences, cannot fail speedily to rescue, in a great measure, the profession of medicine from the reproach of uncertainty which has too deservedly been cast upon it.

Gentlemen,—Experience has now given its sanction to the advantages of a State Medical Society.

By the co-operation of a liberal and enlightened government, its genial influence has pervaded every section of the Commonwealth.

The respectability of the gentlemen associated for improving the medical profession, and diffusing its benefits, inspired the government with confidence in the measures proposed; and the community have already experienced his benign influence.

The government having entrusted to this society the almost exclusive authority and responsibility of prescribing the qualifications which shall be requisite for admission to the practice of medicine. A consi-

deration of the means and advantages which are requisite to the acquisition as well as improvement in medicine, demands your careful deliberation.

To determine on the proper measures a nation or state should adopt for the advancement of medicine, (as well as their other varied interests) a consideration of all the circumstances and peculiarities of that state or nation is necessary, and in order to arrive at correct conclusions, an adaptation of literary and scientific institutions to the existing state of society, is not less to be regarded than that those of a political and civil nature should be suited to the condition of that people for whose benefit they are established. To a people ignorant and incapable of estimating, or exercising, the rights of freemen, an elective system of government would prove a greater evil than a monarchy; and on the other hand, any attempts to improve the maxims and principles of eastern monarchy or aristocracy, on the people of the States who have enjoyed the blessings, and known the value of equal rights, would be to secure to their authors that contempt which all ought to receive, who would endanger the successful issue of the political experiment which we trust is the happy destiny of this country to establish.

The discourse which we listened to with so much satisfaction, on our last anniversary on "Medical Education, and the Medical Profession," would entirely supersede any remarks from me on either of those subjects, but for the suggestion that medical

schools are in this country already too numerous, and the exhibition of a plan of medical education on the recommendation of a French physician, consisting of 20 professors, 18 courses of lectures annually, and extending the term to 5 years.

The advantages arising from the studies which may with propriety be denominated preparatory or preliminary, were ably elucidated by reasonings forcibly exhibiting the importance of the several branches proposed, and their application to the practice of medicine. The method of teaching the science of medicine recommended, must also meet the cordial approbation of every enlightened physician. But, are medical schools already too numerous in this country? I would ask you to consider the genius of our government, and the character and condition of the people from whom it emanates. Its basis is equal rights and privileges, and its guarantee the general diffusion of knowledge. Where is the patriot, the friend of knowledge, or the lover of science, who does not highly appreciate the primary schools of New-England? It is to these wise institutions of our fathers, accessible to all our youth, that genius, however humble its rank, is discovered and encouraged; and to those schools is this country already indebted for some of its ablest statesmen and most distinguished scholars, who have been her pride and boast, and who, but for the facilities of education peculiar to our country, would have remained forever buried in their native obscurity.

The equality of rights and of property, the peculiar privilege of our country, which ought and will have a controlling influence over all our civil, literary, and professional institutions, render the maxims and policy of the old world, whether political, literary, or scientific, entirely inapplicable to the state of society in this country.

Let us take a brief survey of our own state, and enquire what are the opportunities for acquiring a knowledge of medicine in Massachusetts.

Till within the last year, the medical school connected with Cambridge University, was the only institution in Massachusetts, where public instruction was given in the science of medicine, and its collateral branches.

The inducement to young men, in this state, to engage in the study of medicine, is not so much to supply the deficiencies in the Commonwealth, as to answer the demand for well qualified physicians in other parts of the country. The great extension of territory, and the rapid increase of population in the United States, call for an increased number of professional men; which, for many years to come, must be furnished principally from the older states of the Union. Out of the whole number of medical students in the Commonwealth, the proportion who are enabled to attend the instruction of the distinguished professors of Harvard, is inconsiderable. Within the last few years an alarming number have resorted to the medical institutions of the ad-

joining states ; and many have been licensed to practice who have had very inadequate means for obtaining the requisite qualifications. Do these facts afford evidence that our medical schools are already too numerous ? Do not the interest and the reputation of Massachusetts, require that the means of medical instruction should be multiplied ? The government have evinced a disposition to co-operate with you in the support of such a system of measures as are best calculated to advance the science of medicine, and to diffuse through community the many blessings that flow from its improvement.

Graduate then the qualifications requisite for the profession, by the means which you afford the student for their acquisition, and rise higher and higher in your demands as you multiply the facilities of education.

THE END.