Introductory to the course of medical lectures : delivered in the Medical Department of Georgetown College, session 1856-'57 / by James E. Morgan.

INTRODUCTORY

TO THE

COURSE OF MEDICAL LECTURES,

DELIVERED IN THE

MEDICAL DEPARTMENT

OF

GEORGETOWN COLLEGE,

SESSION 1856-'57.

BY

JAMES E. MORGAN, M. D.,

PROFESSOR OF MEDICAL JURISPRUDENCE AND HYGIENE.

WASHINGTON:
THOMAS McGILL, PRINTER.
1857.

WASHINGTON CITY, D. C., *March* 16, 1857.

DEAR SIR: We, the undersigned, on behalf of the students of the Medical Department of Georgetown College, respectfully request a copy, for publication, of your Introductory Address, delivered on the 20th of October, 1856.

Very respectfully,

J. C. W. KENNON,
JOHN A. WILCOX,
DAN. B. CLARKE,
THOS. A. WOODLEY.

J. E. MORGAN, M. D.,
Professor of Medical Jurisprudence and Hygiene.

WASHINGTON CITY, D. C., *March* 17, 1857.

GENTLEMEN: Yours of the 16th instant, requesting a copy of my Introductory Address before the class of the Medical Department of Georgetown College for publication, is at hand. I cannot, with a proper appreciation of the honor you have thus conferred on me, decline to comply with your request, although the lecture was not prepared with a view to publication. A portion of it being historical, is to a certain extent a compilation, and possibly therefore may prove instructive to you now and interesting as a reference hereafter.

Respectfully, your obedient servant,

JAMES E. MORGAN.

DRS. KENNON, WILCOX, CLARKE, WOODLEY, *Committee.*

INTRODUCTORY ADDRESS.

GENTLEMEN:

It is my agreeable duty this evening to welcome you to the halls of the Medical Department of Georgetown College, and to introduce you to the course of lectures which we propose to deliver during the approaching winter. I am fully sensible of the delicacy and responsibility of the undertaking, and must crave your indulgence, while I endeavor to perform a task which the partiality of my colleagues has assigned me.

You have selected, gentlemen, for your Alma Mater, an institution whose literary department has for years stood pre-eminent for profound erudition and most extensive popularity; whose fame is not confined to the limits of our vast domain, but is known and felt wherever letters are cultivated and science fostered. You have come with buoyant hopes and high expectations to quaff of the all-healing waters of medical lore, and to worship at a shrine made sacred by the ovations of the sages of all ages. So far as our humble abilities extend you shall not be disappointed. We this day take you by the hand, and will endeavor to initiate you into the mysteries of Æsculapius and Hippocrates. We will lead you amid the hoary records of our profession, and point out those which are worthy of your consideration and necessary for your success. From you we expect attention, strict application, and zeal worthy of the calling you have selected. Remember that medicine is a high and ennobling science, and when properly appreciated, it elevates the mind, refines the sensibilities, and likens man to a superhuman or spiritual being. In the language of a great Roman, "*Homines ad deos nullâ re propius accedunt quam salutem hominibus dando.*" Men resemble the gods in nothing so much as giving health to their fellow-men.

A science so eminently useful and so universally demanded could scarcely be otherwise than most comprehensive in its studies. Indeed, the relations which exist between other branches of science and medicine are so closely interwoven that it seems impossible to understand one without possessing a considerable knowledge of the others; for instance, if a physician wishes to be a perfect master of his profession, he

must at least have a superficial knowledge of natural philosophy, natural history, geology and mineralogy, chemistry, and general literature.

From natural history the physician becomes acquainted with the varieties of food and drink proper for the use of man, the clothing which gives warmth to his body, the remedies which restore him to health, and with the luxuries and enjoyments of his existence. Of all the branches of natural history, there is probably none in which the physician is more immediately interested than zoology. Every part of this science is of the highest interest, from the zoophites, which are the lowest order of animated creatures, to the vertebrated animals, including man, the highest and noblest work of God. The physical structure and moral development of man is a most curious and instructive study. Whether we view him in the untutored savage of the forest, or in the perfection of his species, made so by the cultivation of the arts of life and the lights of religion; whether we contemplate him in the lowest varieties of his species, the African or American, or in the Circassian, from whom the most civilized nations of the earth are descended, we find him a source of wonder and surprise.

It is equally necessary for the physician to have a knowledge of chemistry and natural philosophy. These enable him to understand the minute and hidden laws of physiology, and explain many of the abstruse phenomena of disease.

A partial knowledge of botany is also essential. It leads to a comprehension of the properties and uses of the trees of the forest, and teaches to distinguish wholesome from deleterious plants, as well as those which possess medical properties. And thus I might go on to show that medicine is dependent upon nearly all the sciences for its proper elucidation and its rapid progress.

During a long period the sciences were independent of each other in their progress. It was essential that facts should be discovered, carefully studied, well considered, analyzed, and classed, in order to obtain a knowledge of their causes and first principles, and by that means each science advanced to a certain degree before their points of contact—the mutual assistance they afforded and the influence they exerted on each other—could be fully understood. It is especially since the end of the last century that the progress of the human mind in the study of the sciences has so wonderfully developed their reciprocal relations.

The labors of the physician of the present day are not sufficiently appreciated, because they are not seen by the public and generally understood. The time has not yet arrived to bring to full light the

fruits of his long and patient vigils; but at no epoch of history has medicine, both theoretical and practical, counted among its votaries so many illustrious men as since the commencement of the present century. They work in the silence of the night to produce results for future ages; and it is only by successive comparisons, made at far distant intervals, that the improvements and discoveries in medicine can be sufficiently understood and properly appreciated, and I therefore propose now to take you back for awhile to the early days of medicine; I propose, as Tully sought, amidst bushes and brambles, the tomb of Archimedes, to ramble with you, amidst the darkness and superstition which surrounds the fathers of our science, and hastily trace the progress of that science through successive ages to the present time. You will thus, gentlemen, be able, after attending the lectures this winter, to make your own comparison between the condition of the medical profession of the present day and the defective systems which existed in days gone by. To view the progress of the human mind through the mazes of an erroneous philosophy and ill-founded hypothesis—to observe with what confidence and admiring applause systems and remedies have followed each other, and in due succession have been exploded to make room for new ones, though they afforded but a humiliating picture of the extent of our boasted intellect—cannot fail to gratify curiosity, and at the same time serve us as lessons of instruction, by which we are to avoid the errors of our predecessors, and the useless labors of retracing their footsteps.

It would be idle to attempt to trace the state of medicine in the rude ages which preceded the light of history, or describe how or where it originated. Disease is the lot of humanity, and remedies or attempts to relieve must have been coeval with the "ills that flesh is heir to."

In the early ages, the most obvious mode of obtaining relief was to expose the patient in the street, and claim the greater experience or capacity of those who passed; and when either a natural sagacity or opportunity for observation was combined with a good recollection, they constituted the physician of the rude ages.

The Egyptians are supposed to have been acquainted with the structure of the human system, both from their surgery and their practice of embalming the human body. We also read of their Thoth, their Æsculapius, and many more of their physicians, but their real characters are so completely wrapped in metaphor as to elude all our endeavors to determine, with any degree of certainty, what had ever been the state of medicine in ancient Egypt.

Among the ancient Jews, if any thing like medicine ever existed, it

was confined to mere human invention unguided by science. True, we find that Moses forbade the intermarrying between individuals closely allied in blood, and he doubtless sought thus to prevent the evil consequences resulting from such unions. He also forbade the use of the flesh of swine, which even at the present time is supposed by many physicians to be the cause of such universal prevalence of scrofulous diseases in the United States. But these exceptions may be regarded as rather the results of observation than conclusions drawn from scientific reasoning. To the Greeks we must look for the earliest records of facts in medicine. Their first practitioners were probably priests, the most successful of whom were deified. But superstition soon mixed in the scene, and dreams in the temples of the gods, or incantations and amulets, soon corrupted the few lights which experience had suggested. Yet by means of the temples some facts were preserved, for they were the receptacles for cases recorded by patients; and from the temple of Æsculapius, Hippocrates is said to have drawn his best observations. He was the first to give medicine the form of a distinct science; and personally observing the progress of disease, as well as the effects of remedies, was the first to whom the appellation of physician in its modern acceptation is due. In approaching Hippocrates, we feel as though we were treading upon holy ground. It is a name sanctified by the universal veneration of more than a hundred generations, and his doctrines, regarded as authoritative precepts in every age, are not open to the profanations of vulgar scrutiny. Let us, then, with becoming deference, examine the validity of his claim. He was born 460 years before Christ, and is said to be the seventeenth in a direct line from Æsculapius. He first practiced medicine at Thasis, then at Abdera, and last in Thessaly, but his principle residence was at Cos. He died at Larissa at the age of 90. Beyond these facts, all that relates to his private life is doubtful.

Under the name of Hippocrates you will find works of very different value, and interpolations have crept into the very best of them. It was attempted by Galen, Haller, and others, to separate the genuine from the spurious, but after all their labor the task is not yet completed—the best of his works must be received with some caution. The anatomy of Hippocrates is superficial and incorrect. He only dissected apes and quadrupeds, and never but once had an opportunity of seeing a human skeleton. Of his physiology, much is fancy and more conjecture. The air inspired he supposed mixed internally with the fluids of the body, and he confounded the functions of the arteries, veins, tendons, and nerves, and often calls them all by the same name. He divided the

fluids of the body into four—the blood, phlegm, yellow and black bile. The spinal column he describes as consisting of twenty vertebra, and this is a fair sample of his anatomical knowledge. Hippocrates describes the daily progress of disease with much accuracy and perspicuity, and his practice may be divided into dietetic and surgical. Pneumonia, pleurisy, &c., he thinks are cured by nature, and the physician must look on and attend; such as have a fair, proper crisis he must not disturb. In these he employed low diet and entire quiet. This, you will perceive, approximates very nearly to the homeopathic doctrine of the present day, which, in acute cases, is just about as successful as was that of the illustrious Father of Medicine over two thousand years ago. Here, then, we see in homeopathy a resuscitation of an error nurtured and prevalent when true science was unknown, and when ignorance and superstition held a profound sway over the human mind. I do not say that the principles upon which those two practices were based are the same, but I do say that the results arrived at are identical, which are nothing less than an acknowledgement that medicine has no control over disease, and that nature must make the cure. But my time will not allow me to pursue this analogy, for I must return to my subject. Hippocrates' description of the symptoms of disease is certainly very accurate, and his observations on that peculiar appearance of the features of the face called, after him, the Hippocratic countenance, as well as his advice in reference to wounds and abscesses, are thought worthy of attention at this day. He seems to have possessed a knowledge only of a limited number of drugs. The hellebores, colocynth, elaterium, oxides and scales of copper, onions, garlic, wild parsley, wine, honey, and cantharides, constituted his materia medica. By-the-by, I find in the writings of Hippocrates directions for performing an operation, the possibility of which is even questioned now by some physicians. I refer to the introduction into the air passages of acrid and caustic medicines to remove bronchitis, phthisic, and other kindred diseases. He directs the tongue to be drawn aside, and by means of an instrument made for the purpose, he introduces the application into the trachea. I doubt very much whether, with his imperfect knowledge of anatomy, the Father of Medicine ever succeeded in entering the windpipe. His medicines more likely found their way into the stomach than into the trachea. But I wish not to derogate from the merits of Hippocrates. Considering the difficulties of his day, the superstition of the Greeks, who thought themselves polluted by the touch of a dead body, the embryotic state of most of the physical sciences, and the strife of contending opinions, we must regard Hippocrates as justly entitled to the appellation of the Father of Medicine.

The descendants of Hippocrates continued in the same line, with no essential improvement in practice and physiology, for several ages. We find that the difficult operation of lithotomy was often performed; and we are told that Praxagorus was accustomed, in obstinate cases of colic and inter-susception, to lay open the abdomen, relieve the difficulty, and then sew up the wound, but we are not informed of the success of this desperate practice. The era of the Alexandrian school produced some geniuses whose names have withstood the wreck of time. Erasistratus, one of the professors of that institution, is said very nearly to have discovered the circulation of the blood, but he could not understand the use of a double heart. He was afraid of bleeding, lest the blood should find its way from the veins to the arteries. A little after this time a school of quacks sprung up. They contended that anatomy was not necessary, and that a knowledge of medicine was to be obtained only by observation. As in nearly all erroneous medical systems there is something good, so it was with this. It first taught the profession the important medical virtues of henbane, castor, opium, and cicuta.

Some time about this period Asclepiades appeared in Rome as a physician. He became the friend of Cicero, and was, without doubt, a man of merit. Pliny, Plutarch, and Cicero tell us of the arts by which he gained his reputation; and a modern writer adds, they were such as a practice now quite fashionable employs, viz: pleasing the patient, and avoiding everything that can give pain, until nature cures or sinks under disease. He pleased his patients by curtailing the rigid abstinence of the Greek system of practice then in vogue; he gave wine moderately, recommended frictions, baths, and a generous diet, and professed to cure with speed, safety, and no inconvenience. Is there a wonder that he should have been the most popular physician of his day?

From the era of Asclepiades, Rome was destined to become the rival of Greece in respect to medical science. The profession was for several centuries afterwards held in high respect in the Roman capital, which period might properly enough be called the medical era of the republic. Previous to this period, according to Pliny, the medical art consisted of blind empericism, superstitious charms, and religious incantations.

Celsus was a Roman of the Augustan age, and although he belonged to the school of Hippocrates, still he often followed the practice in many respects of Asclepiades. In his medical works he laughs at the doctrine of critical days in disease, which was so much insisted on by Hippocrates, and ascribes it to a superstitious attachmeut to the Pythagorian doctrine

of numbers. He is the author of some very excellent works which describe the practice and opinions of ancient physicians.

Dioscorides and Pliny were very celebrated physicians of Rome. They lived about the time of Nero. Pliny likely belonged to the sect of Asclepiades, and was a learned man and a great writer. About the same time appeared Aritius, who was one of the most judicious, enlightened, and active physicians that the world ever produced. He endeavored to investigate the cause of disease by anatomical dissections, and was the first who taught that the nerves crossed each other in the form of the letter X. Thus he explained the paradox of disease occuring in injuries of the head on the opposite side to that where the injury had been received. He used emetics and active carthartics, and drew blood freely from different parts of the body. He relied on certain regulations of diet greatly in acute diseases, yet he employed arteriotomy, cupping, leeches, frictions, and other remedies, also wine and opium freely, under certain restrictions. In the writings of Aritius, practitioners of the present day will find many most sagacious and useful medical observations.

I regret that time will not allow me to trace the influence which the revolutions of the Grecian philosophy had on the state of medicine, and also that I am compelled to pass names conspicuous in medical history to arrive at the period of the famous Claudius Galenus, familiarly known as Galen, who lived in the second century of the Christian era, and was physician to the pious Marcus Antonius. He studied medicine at Alexandria and Rome, and attained all the learning of his time, but was soon disgusted with the prevailing systems of medicine, and therefore determined to select from each what was most valuable, and was consequently called an eclectic. He pursued the course that we of the Allopathic school follow at the present day—whatever we find good in Homeopathy, Hydropathy, Thompsonianism, Chrono-Thermalism, or any other medical ism, we adopt without hesitation, and throw to the winds the quackery and nonsense which make up the humbuggery of these systems. That this is not generally understood by the people, is evidenced by the fact, that, in some of our western cities, men calling themselves physicians with the most astonishing effrontry have opened medical schools, and proclaimed to the world that they alone are eclectics, and are patronized by large classes of students, who ignorantly believe that other schools in the country are opposed to a healthy and judicious reform in the established medical doctrines. Such deception can only succeed for a time, for it is already giving way under the superior enlightenment of the country.

Galen wrote diffusely on every branch of medicine, but he is said to have only added a new dress and ornament to the system of Hippocrates. His fame, however, so dazzled his cotemporaries and successors, that we find but few who dared to think beyond his circle; in fact, his undisputed sway over the realms of medicine continued for more than twelve hundred years.

After Galen, medicine began to decline, and we find a few names thinly scattered through several of the succeeding centuries. Oribasus, physician to the Emperor Julian, in the fourth century, was a practical man of no little merit. Actius lived about the beginning of the sixth century, and is said to be the first Greek writer among the Christians who gives us any specimens of medical spells and charms. His works show forth the ridiculous quackery of the day, and how wofully superstition was beginning to degrade the healing art.

After the establishment of Christianity, some of the Christian bishops and priests directed their attention to medicine; but the sun of science was set for the season, and though some faint rays shot forth under the Arabian princes, and we find from the tenth to the twelfth century the names of Rhazes, Avicena, and Avenzour, yet they soon withdrew, and left a long night of mental darkness over the civilized world.

In all this time, from the days of Hippocrates, we cannot perceive that medicine gained anything except in practice from the good sense of a few individuals.

Various and gradual were the means by which the human mind was aroused from the lethargy of the dark ages. The Greeks had at no time suffered a total extinction of the spark of science, and when literature revived among them, the science of medicine also revived. But no important theory was introduced until that extraordinary man, Paracelsus, made his appearance. He blended the chemical doctrines of the day with medical theory, and burnt in solemn state the works of Hippocrates and Galen as no longer useful, professing to cure all diseases speedily by chemical remedies; and after declaring himself to be possessed of "the universal medicine to secure immortality," died himself at the age of forty-eight.

Van Helmont, the successor of Paracelsus, was a man of superior talents, distinguished by sagacity and judgment. He, however, inundated the whole science of medicine with the mysticism of alchemy, and introduced a most difficult nomenclature. His doctrines were founded on a supposed principle which he called archeus, and which he considered superintended and presided over the animal economy. This idea was probably suggested by the Anima Mundi of Plato, and

is in no essential respects different from the Soul of Stahl, or the vis medicatrix of modern schools. In the seventeenth and eighteenth centuries many learned societies were instituted, and medical inquiry prosecuted with a zeal hitherto unknown. The important discovery of the circulation of the blood, which we all know Englishmen, to support their claims of pre-eminence, ascribe to their countryman, Harvey, in 1619, was in reality made by Servetus, a Spanish physician, seventy years before. This unfortunate man was tried and brought to the stake, and all his books burnt with him. Harvey deserves the credit of possessing the boldness of again promulgating this doctrine, but not until he had hesitated for years after he became possessed of the secret. In those days the man who advanced a new doctrine was looked on with suspicion both by the profession and laity, and Harvey, for making known his information, is said to have lost nearly all his practice; and not a physician over forty-five is believed to have adopted his theory of circulation.

We next find the celebrated Boerhave, Sydenham, Pornetus, and other eminent men advocating the humoral and chemical doctrines, which ascribed all diseases to thickness or thinness of the blood, fermentation, acidity, alkalescency, &c.; but they were not sufficiently acquainted with chemistry to support their ideas, and they gradually gave way to new theories.

The mechanical physicians forming a host, at the head of whom we find Borille, Baglivi, Mead, and others of first rate eminence, attempted to explain the laws of physiology, by an application of the principles of mechanics, but this, in turn, was superseded by the doctrines of morbid action and spasm, first suggested by Hoffmann, and afterwards adopted and extended by Cullen, who rejected in toto the humoral pathology. The theory of Cullen was compiled with great elaboration and method, yet it had scarcely left the hands of its venerable author when it also was eclipsed by the doctrines of Browne. This singular genius grounded his pathology on the principle that excitability is generated during rest and exhausted by action, and perpetually renewed for the demands of the systems by food and sleep, and that health depends upon a proper balance of these principles, and disease upon too much or little of either. The followers of Browne were numerous, but the doctrines of Cullen predominated in the schools even to the time of Rush.

Rush found that the diseases of the United States could not be explained nor properly treated by the systems then prevailing in medicine, and therefore invented a theory which he thought better adapted for

that end. He ascribed disease to a morbid action in the living solids. He maintained the unity of disease, contending that the various genera and species were merely so many forms of the same condition or varieties of morbid action, and that after the removal of the exciting cause, to add, abstract, or equalize excitement, according to circumstances, constituted the most effectual mode of cure.

In this hasty sketch I have indulged in but few comments on the different systems as they passed before us, and it is now sufficient to say, that, modified as the fancy or judgment of individuals dictate, they constitute the bases of the doctrines of the schools and best medical practice of the day.

The question has been agitated whether medicine has been improved in later periods, and a sweeping argument to prove that it has not, is that we still resort to the older authors, and disease is still mortal as before. We may reply, that since the days of the visionary Paracelsus, medicine has never been regarded as the instrument of immortality. But to determine the point clearly, we have only to contrast the results of the best modern practice with that of the hot rooms, the warm, stimulating medicines, sodorifics, and seclusion from fresh air of the Galenist, and let the bills of mortality decide. Now death is comparatively rare from fever; formerly recovery was equally so. We indulge less in abstract disquisitions respecting the causes of disease and the operation of remedies; our indications are more clearly pointed, better chosen, and more direct, and our remedial resources more accurately adapted to the end than in former days.

It has been gravely asserted that medicine has produced more ill than good to mankind. Compare the effectual checks put to the progress of epidemics and contagious diseases by medical means with the devastation they produce when left to themselves, and the great proportion of recoveries from wounds and maladies treated by judicious art to those left to nature. Look into the walks of private life, and see what a vast saving to the peace, happiness, and domestic comforts of families and individuals, by a kind and skilful interference of the physician, and we can find neither doubt nor difficulty in deciding this point.

Wise, discreet, candid, and feeling physicians are both an ornament and honor to society. Of such we trust the graduates of the Medical Department of Georgetown College will ever be. We wish to point to them, as the Roman matron did of old to her children, as our jewels; and we would impress upon them now, that "there is no royal road to science"—that knowledge is only obtained by assiduous application, and that on themselves depend, as much as upon us, their future greatness and eminence as physicians.