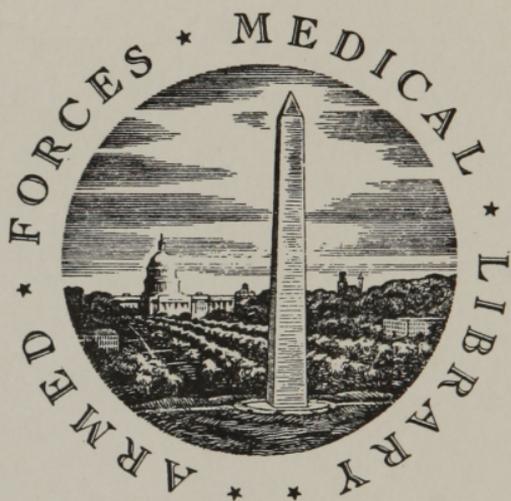


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BY SAMUEL JACKSON, M. D.

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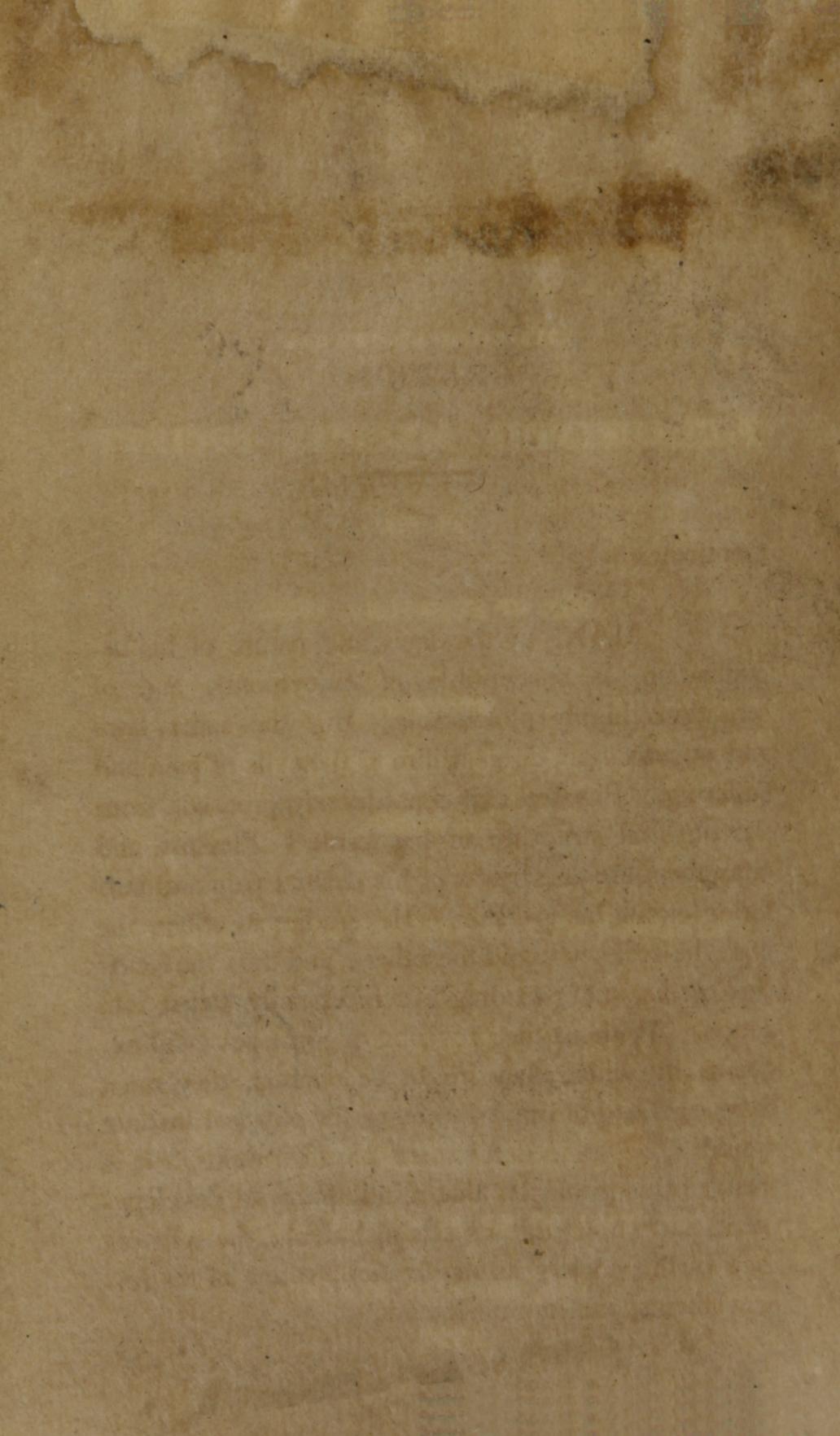
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ORATION.

Gentlemen,

MAN, by the laws and nature of his organization, is susceptible of enjoyments, and of sensations highly pleasurable. But the same laws and organization, subject him to the evils of pain and suffering. Physical evil consequently proceeds from the physical structure of his frame. Pleasure and enjoyment are the objects of his desire; pain and suffering excite his aversion. He studies to obtain the one; he seeks to avoid the other; and thus the faculties of his understanding are incessantly called into action. Without the provision of some powerful excitant, by which they might be elicited, they must have remained of limited extent; for physical instinct would have sufficed for mere physical wants. It is then, to this principle, that mind owes its development, and knowledge its establishment; the sciences their birth; society its civilization, much of its improvements, and its refinements.

As the physical sciences, more or less remotely, derive their origin from physical good and evil, in like manner, the moral sciences are indebted for their existence to moral good and evil. Moral evil is generated from the undue and improper action of human passions, and ill-governed self-love. But the passions and self-love, are essential parts of the constitution of the nature of man, and of his condition in this world. Deprived of his passions and his self-love, he would cease to be excited to action, by those powerful motives to which they give rise; which have elevated him above his original state of nature; and which constantly urge him on in the pursuit of the most noble objects, and to the attainment of the most exalted views. Moral evil is, then, a constituent of our system, and grows out of the laws essential to its perfection.

Were it proper on this occasion to pursue these views through their various ramifications, it might be demonstrated, that to the reaction occasioned by moral evil, is due no inconsiderable portion of the numerous benefits enjoyed in society, the development of knowledge, and the expansion of intellect. A single instance will be sufficient to explain the position.

The violences and unjust acts of those, whose uncontrouled passions and selfish feelings, drove them to the daily commission of crimes, compelled men to associate into societies, to establish governments, and

to frame laws, in order to protect their persons, their lives, and their property. The sciences of politics and law, those stupendous edifices of intellectual powers, have thus derived their existence immediately from the operation of moral evil.

Physical evil has been productive of corresponding results. That it was not irremediable, must soon have been apparent, and hence of consequence arose attempts for its counteraction. Observation early taught man, that the actions of his system, which impart health and bestow pleasure, afflict with disease and torture with pain, are affected by numerous agents, external and internal: and as some of those agents, induced the symptoms of various complaints, so others removed them, and restored to a state of health. He was thus instructed, that he possessed the means to allay suffering, to remedy accidents, to arrest the course of disease, and to avert death.

Possessed of this knowledge, instead of yielding in despair to the ills that afflicted him, as the fiat of an inexorable destiny, he sought to combat them with the weapons placed within his reach, by a beneficent Deity. In this pursuit, he laid the foundations of the science of medicine, and its collateral branches.

His first essays in the healing art were necessarily crude, and partook of the grossest empiricism. A few remedies and unconnected observations, which accident or coarse experiment had made known, constituted, for a long period, the extent of medical in-

formation. We learn from Herodotus and Strabo, that the sick were brought into the temples, and even high-ways, that the passers-by and strangers, might suggest such means of relief, as they had known employed in similar cases. From this rude state, and such as we witness it in the savage tribes of our country, medicine has gradually attained the high polish and lofty character, which now rank it, as the most distinguished work of human intellect, and the most noble of the sciences. But it has had to contend with innumerable difficulties, and been retarded in its march, by obstacles that place it far behind that state of perfection, which it might have reached, to which it justly aspires, and which it is destined to attain.

More than twenty centuries have rolled away since medicine assumed the character and attributes of a science. In that period, numbers of highly gifted and illustrious philosophers, have ranged themselves under its banners, and engaged with zeal and ardour in its cause. Yet when we contrast the doctrines and practice of the Greek Schools, with the doctrines and practice taught at the present day, it is painful to reflect, how many ages have been barren of instruction, and how many sages have lived in vain.

Our science has been retarded in its career, by causes foreign to its nature. What those causes are, becomes a useful and interesting inquiry. A knowledge of the mistakes of those, who have preceded us,

and by which, they were entangled in a labyrinth of errors, will serve as a beacon to warn us from the same dangers.

To point out some of those causes, I design as the subject of the annual discourse, it is the custom of the society to have delivered before them, and to perform which duty, I have had the honour to be appointed.

I am aware, that I enter on a field of vast extent, with abilities inadequate to perform what I have undertaken, with that justice its importance demands. It requires a fund of information, to which I have no pretension, and leisure I do not possess, to trace with accuracy and precision the sources of the failures, that have baffled the efforts of the learned and the wise. But in attempting to comply with the wishes of my fellow members, I repose with confidence on the liberality of intelligent minds, to overlook the imperfections, I am conscious, must attend the execution of my design.

The history of medicine, to which it will be necessary to refer, for an elucidation of my subject, is a rich mine of instruction. You cannot dwell too long on its eventful revolutions and changes, nor be too familiar with its details. It is, in truth, a history of the errors of the mind; and will impress you with a wholesome caution against relying with too much confidence on dogmas, however venerated their authority, unless confirmed by long and repeated experience. You will there behold talents the most splendid, and

learning the most profound, lost in the regions of folly, when observation and analytical reasoning were neglected. Shadows have been looked upon as realities, the fictions of an uncontrouled fancy regarded as immutable principles, and the recitals of mere dreams dignified with the name of philosophy. You will see genius the most Herculean, impotent in its own resources, baffled with pigmy difficulties, and ineffectually striving to reach the sacred boundaries of truth, when it disdained to follow the guiding steps of the great high priestess nature.

A rapid survey of the leading steps of the progress of medicine, will exhibit the following circumstances, as the general causes, which have retarded its advancement.

First. The principles of general philosophy having been derived from abstract reasoning and mental contemplation, instead of observation and experiment.

Second. Medicine having been treated as an humble branch of general philosophy, instead of an independent and distinct science.

Third. The abstract and often visionary principles of general philosophy, having been assumed as the principles of medicine, and accounting by them, for the phenomena of the human system, in health and disease, in place of seeking for those principles, in the study of the system itself: and

Fourth. As the consequence of the foregoing errors, the neglect of observation and experience.

A methodical illustration of each of the preceding positions, would consume more time than I can occupy on the present occasion. I shall not attempt it, but endeavour to exhibit them collectively, by a hurried outline of the most prominent philosophic systems, and the medical doctrines to which they gave birth.

A belief in the existence of a Deity seems to be an instinctive impulse of the mind. But in the infancy of society, man, ignorant of the laws of nature, and unenlightened by revelation, with a gross and rude conception, gave being to as many deities, as the phenomena he observed. Animated with an enthusiastic remembrance of the benefits, he had derived from those whose inventions and discoveries in the useful arts had ameliorated his condition, and promoted his happiness, he carried his gratitude beyond the grave, and made his benefactors his Gods.

Esculapius, who appears to have lived before the siege of Troy, was eminently conspicuous for his knowledge in Medicine, Surgery, and Botany. In veneration for his character, Greece erected statues and temples to his memory, and established a worship in honour of his name, as the God of Medicine, and those who were afflicted with diseases, resorted to his temples to invoke his aid. His immediate de-

scendants inherited the knowledge he had acquired, and directed his worship. For some ages, the Asclepiades transmitted from parent to child, all that was known of the healing art, and appropriated its practice exclusively to themselves.

Such was the state of Medicine, until about the fiftieth Olympiad. At that era began to be established the various schools of philosophy. The human mind, emerging from the clouds of ignorance in which it was enveloped, and shaking off the fetters of superstition, engaged with boldness in the investigation of the hidden causes of things, the laws of nature, and the elements of the universe. In proportion as knowledge was enlarged, the influence of religious imposture was shaken. The Pythagoreans, however, made the first inroads on superstition, and publicly proclaimed that they cured diseases by natural means. But it was by the Asclepiades themselves, that this important revolution in medicine was effected. Yielding to the spirit of the age, they ceased to practice medicine in the shades of mystery, and under the mantle of superstition. Those who laboured under diseases, had adopted the custom of offering to the healing God, votive tablets, on which were described the symptoms of their complaints, the remedies employed, and their effects. The Asclepiades enriched their stock of medical knowledge by means of these tablets. Euryphon, of Cnidus, published from them, the famous Cnidian sentences, the first treatise on medi-

cine, which was, however, no more than a simple description of diseases. The Asclepiades of Cos pursued a more elevated course. They applied themselves to the study of semiotica, or the doctrine of the signs of health and disease. By their exertions, medicine gradually progressed in improvement. They purged it of the vicious arts and superstitious practices, which had been introduced by the priests, and freed it from the subtleties of the philosophic sects. But it is more especially to a single individual of this family, that is due the glory of completing the reformation of medicine. A disciple of the first philosophers of the age, possessing a sound judgment, a rare penetration, and profound knowledge, Hippocrates, early perceived, that observation is in all sciences the route, which alone conducts with certainty to truths; and that all reasoning, both in physics and medicine, which is not founded on it, must be false and arbitrary.

Appreciating the full value of observation, Hippocrates did not, however, abandon reasoning, but confined it to its proper province. He considered that philosophy and medicine, restrained to their peculiar limits, mutually aided each other, and were inseparable. "It is necessary to introduce philosophy into medicine," he observes, "and medicine into philosophy, for a philosophic physician is truly a divine man."

In Hippocrates, we have one of those uncommon instances of intellectual powers, which seem to penetrate to the deepest recesses of knowledge by an intuitive perception. He dissipated at once the mysteries and arts of superstition, dispelled the dark shades of ignorance, and scattered the clouds of scholastic dogmas and philosophic subtleties, that enveloped and obscured our science. There was no intermediate step between rudeness and perfection. The chaos, at his touch, received form and became order.

These services Hippocrates rendered to medicine, because he drew his knowledge from the purest source, Nature herself. He avoided the useless discussion of the essence of diseases, as not within the scope of our comprehension, and confined himself to a consideration of the evident symptoms, and the indications they presented.

Though he did not abstain entirely from all speculation, yet he guarded against its indulgence, or too great influence over his practice, with a jealous caution. With Galen, we must consider him, as the real author of the doctrine of the four elements, fire, air, earth, and water; and of four corresponding humours, blood, phlegm, bile, and ultra-bile, in the system. From the deficiency, superabundance, or want of proportion of these humours, he conceived that diseases were produced; and that health was to be restored, by re-establishing the equilibrium, that

ought to reign amongst them. Thus far he carried his speculations, yet he remarks in the book *De Natura Hominis*, “ that any one may plunge into the most profound and subtle speculations on this subject, but for himself, he will dispute with no one, for the victor will only prove, that he can accumulate words with the most volubility.” This sentence displays the character of his mind. He felt no pride in sustaining his principles with a vain parade of sophisms; with learned dogmas; with the invention of novel terms. He was satisfied to trust to observation and experience for the elucidation of truth, and sustaining the opinions he advanced.

The great reputation of Hippocrates is justly founded on his admirable mode of observing diseases, the accuracy of his descriptions, and the correctness of his prognostic. He did not neglect the slightest circumstance that attended diseases; but noted down with great exactness all the particulars by which they were preceded; the accidents by which they were accompanied; whatever gave relief, and whatever did injury. He thus learnt critically to distinguish diseases from each other, and the symptoms that were peculiar to each. He acquired a knowledge of the changes which occur in diseases, with respect to their commencement, their augmentation, and their decline; or as otherwise expressed, their crudity, coction, and crisis. The signs of these states he has described with remarkable precision, and indicated the pheno-

mena which announce a happy or fatal termination, or a metastasis. He also demonstrated, that the movements of nature require a certain time for their full developement, and thus exhibiting, that the coction can only be completed in determinate periods, according to the nature of the disease, established the doctrine of critical days.

Besides the humours, Hippocrates inculcated, that three principles are to be regarded in disease and health : viz. the solids, the fluids, and the spirits, or the moving powers : or, as he expresses himself in the book on Epidemics, that which contains, that which is contained, and that which excites motion.

Founded on the nature of the animal system, these principles cannot be neglected with impunity, in any system of medicine. The humoral pathology, which maintained an unquestioned sway over the medical world for many centuries, was derived from a partial view of the animal economy. All diseases were attributed to certain states of the humours. But as soon as physicians began to return to a study of nature, the errors of that doctrine were detected, and it was discarded. The theorists of the present time, limiting their pathological views exclusively to the solids, err equally with the humourists, and are in opposition to nature and to truth. We must concur, I am fully satisfied, with the sage of Cos, in the doctrine, that the fluids or the blood, and the spirits, or the moving powers, are equally concerned with the

solids in the production of disease, and preservation of health.

To unfold all the principles, the practice, the useful researches, and the immense improvements, accomplished by Hippocrates, in Pathology, Therapeutics, and Surgery, would constitute, in itself, the subject of a highly useful and voluminous work. Time, nor my subject, will permit more than a slight allusion to the most prominent. I have entered indeed into detail, and endeavoured to enforce his merits more than may be deemed necessary. But medicine under the auspices of his genius, assumed that character of close observation and correct deduction; sought truth in so direct a route, that his method is a standard by which to compare those of all after times, and from which we cannot depart, without the induction into our science of gross fallacies. In this view, a general outline of his system, became essential. From the short sketch, which has been given of the labours of the sage of Cos, we are sensible, how immense was the progress, that medicine made under his guidance, when divested of theoretic abstractions, and pure empiricism; when constituted an experimental science, founded on observation and reasoning, drawn from the phenomena of nature. We cannot but reflect, that had the course he pointed out, been steadily pursued through succeeding generations, that our science might have reached a degree of perfection, that imagination scarcely dares to contemplate.

Such unhappily was not to be its destiny. Rational analysis poured on philosophy a flood of light, dispelling the phantoms that peopled its darkened regions. But its day of glory was transient as it was brilliant. The genius of Hippocrates broke for a moment through the darkness of the age, but, as it descended from its zenith, the shadows of ignorance and a false philosophy again spread over the regions of knowledge, and involved all its objects in their uncertain and dubious light.

The dogmatic school appeared early after the death of Hippocrates. It derived its origin from Thessalus and Draco his sons, and Polybius his son-in-law. The principles and system of Hippocrates, were at first professed by that school, but they were soon abandoned by its disciples. The mystical doctrines of Plato, promulgated from the academy with a sublime and commanding eloquence, had made a deep impression on the philosophic world. They were adopted by the dogmatic physicians, who incorporated them with medicine, by which it became contaminated with the baneful and deleterious influence of metaphysical abstractions.

Constituted by nature, in his intellectual powers, for a poet, Plato, fatally for the advancement of science, and the true interests of mankind, became a philosopher. The patient research and attentive examination, required to obtain a knowledge of natural causes, by a study of natural effects, did not comport with

the ardent character of his mind. Driven from the contemplation of nature, by the restless workings of his imagination, he expected to find in its unbounded and ever-changing regions, truth that never changes. In the boldness of his aspirations, he dared to believe, that the finite understanding of a mortal, could penetrate to the secret councils of the Eternal, and seize on the originals, from which he had modelled the universe.

His philosophy, a heterogeneous and confused compound of the principles of every other system, mingled the pure and simple doctrines of the moral and political wisdom of Socrates, with the mystical and absurd speculations of Pythagoras. His dialecticks, he borrowed from Euclid; natural philosophy he obtained from the Eleatic school, and astronomy was furnished to him by the priests of Egypt. Collecting together these tenets, in many respects conflicting with each other, he endeavoured to cast them into a consistent form, with the creations of his own brilliant, but unlicensed fancy.

Scepticism with regard to the objects of the senses, was prevalent in the philosophic schools of ancient Greece. Plato made it the basis of his system. He considered that natural objects were in a state of continual flux and change, and inferred that no proof of their existence could be adduced, nor any positive knowledge of them be derived through the senses. In order to obtain knowledge, therefore, it was neces-

sary to recur to the first origin of all things, and truth was only to be found in the contemplation of ideas, according to which, all things were made.

These deceptive precepts, clothed in the rich and seductive imagery of a glowing imagination, and conveyed in a style of matchless beauty, sweetness, and force, gained a general and favourable reception with the philosophers of Greece. Their introduction into medicine, by the dogmatists, proved fatal to its advancement. The patient investigation of the phenomena of nature, by which the father of medicine had disclosed so many of its arcana, was forsaken. It was vainly imagined, that the basis of an incontrovertible system, was to be laid by the mere force of reason, without employing reason on facts. Hence idle sophistry assumed the place of observation, and futile hypotheses were preferred to solid experiment. Instead of studying natural effects, physicians lost themselves in subtleties on the causes of those effects. Instead of examining the qualities and laws of bodies, the most rash and unfounded speculations were hazarded, on the general elements of the universe, and their essence; and, in proportion as they lost sight of nature, they became bewildered in the interminable mazes of error and folly.

Indulgence in this licentious course of philosophising, gave birth to numerous sects, which, far from aiding the advancement of medicine, plunged it into new and almost inextricable difficulties. Imitating

the swarms of sophists, who spread themselves over Greece, the physicians sank into mere babblers, whose eternal talking, vapouring, and absurd reasoning, brought on them merited contempt. They justified the harsh and cynical rebuke of Heraclitus, who had remarked at an earlier period, that "there were no such fools in creation, as grammarians, except physicians."

The principles of medicine were next derived from the doctrines of Zeno. The modification, which stoicism effected, tended to recall medicine, in some measure, from the mysteries of the Platonic philosophy. The end of the stoics was to obtain a knowledge of nature, and to penetrate its mysteries, and accordingly led to observation. Yet they fell into the absurdities of dialecticks, and committed the fatal error of seeking to understand the relation which exists between the nature of man and that of the universe, through the medium of contemplation, and not of experiment.

The philosophic systems of the Greeks were all strongly imbued with materialism. But Zeno was the first who composed a system of philosophy exclusively on the principles of materialism. All that exists is for that single reason material; and the causes of their existence themselves, are also material. This is the first principle of Zeno, on which he commences the establishment of his system.

The first cause, or the Divinity, he considered as material. It was eternal fire which had given form to

primitive matter, and had established order in Chaos. This material substance of the divinity penetrates all the universe, and is the being we call nature. It acts from immutable laws, and is named destiny.

The principles of physiology were moulded in conformity with this doctrine. As the soul of the world was the purest fire, and permeated all matter, so the soul of man was of an igneous or aerial nature, and was spread throughout his frame. It produced the functions of the body, the faculties of the mind, the operation of the senses, the phenomena of disease and health. The doctrine of the temperaments which was first taught by the stoics, was an obvious inference upon the application of these principles. For as the emanations of the soul differed, the qualities of the body and the affections of the mind varied. An abundance of igneous vapours disposed to anger, and a predominance of aqueous vapours produced pusillanimity. This doctrine was more extended by succeeding physiologists, and is still retained in the systems of some schools.

Parmenides, Plato, and other philosophers questioned the possibility of acquiring knowledge by the senses, and preferred to it, that which can be obtained by the faculties of the mind. Pyrrho carried the spirit of scepticism to a greater extent, and believed that both means were equally deceptive. The extension of Pyrrhonism brought dialects into disrepute, and enfeebled the influence of the dogmatists. A new sect

arose, whose chief seat was at Alexandria. Embracing the principles of Pyrrho, they established the empirical school, directly hostile to the system of the dogmatists. The principles of the new sect admitted that only which is evident, rejected all hypothesis as corrupting observation, banished all reasoning, all research into the hidden causes of diseases, and confined practitioners to combat them solely with remedies, whose efficacy had been proved by experience.

The early empirics were limited to a particular attention to the concurrence of the symptoms, without regard to the disease itself, or its causes. But in time, more enlightened views were entertained. By raising their system entirely on experience, and restricting themselves to fixed and invariable rules, they narrowed the boundaries of medicine: yet the information derived from their experience, rendered infinitely more service to the science, than could be received from the abstractions of the philosophers, or the speculations of the dogmatists. Relaxing in time from the severity of their principles, and cautiously venturing on induction, medicine, under the sway of the empirics, was gradually regaining the route of nature.

The principles of medicine were modified by the philosophy of Epicurus. The doctrine of elementary atoms, constituted the ground-work of his system. Atoms, he taught, are the elements from which all things are compounded, and into which they are resolved; and the energy or principle of motion that

essentially belongs to them, is the sole agent in the operations of nature. Rejecting all final causes, the Epicureans directed their attention to acting causes, and consequently to an exact and rational study of nature, and admitting no other arbiter between truth and error, than experience, they avoided the fallacious reasoning of dialecticks.

The atomic doctrine never found admission into the medical theories of the Greeks. Their allegiance was claimed and divided, between the empirical and dogmatic schools. But in the medicine of the Romans, it bore a conspicuous part, and has lately been revived by Keill in medicine, and by Davy and Wallaston in physics.

It is impossible to take leave of the schools and philosophy of Greece without regret. In that highly favoured land, nature seems to have lavished her choicest gifts. A happy sky diffuses a perpetual spring, inviting to social games and sports, and warming to the softer passions, amidst the most romantic scenery.—The human form developed in its finest and noblest proportions, awakened an exquisite taste to grace and beauty. A delicate organization created a lively sensibility, which, inspired by the invigorating influence of freedom, carried the intellectual faculties to their highest tone and elevation. The creations of her genius are the pride, the boast, the glory of our species, and constitute in poetry, in the arts, and in science, models of perfection, from which we cannot deviate

without a violation of good taste and natural feeling, and which, in vain, we endeavour to excel. The errors of her philosophy, and they were profusely scattered through all her science, possessed nothing low, vulgar, nor sordid, to offend or disgust. The sublimity of the conception, and the vigour of thought that soared to an intimate acquaintance with the nature of the Deity, and the essence of the universe, call forth our admiration. We can feel no surprise that those daring flights should have proved unsuccessful, and that the mysteries of the creation could not be disclosed, whilst the objects of creation were almost wholly unknown. Yet we reflect with astonishment, that many truths were divined by the mere strength of reason, which observation and experiment daily confirm. For we find the ancient doctrines of the compound nature and distinctions of vitality first promulgated by Pythagoras, and more dwelt on by Aristotle, are strongly countenanced by the course of experiments pursued by Bichat, Brodie, and Philips.

With the liberties of Grece, perished her lofty character. No instance in the records of man so strongly portrays the debasing and degrading operation of slavery. Her philosophers, poets, statesmen, and warriors, who had enlightened every region of science, who had cultivated letters and the arts, with the purest taste, and enriched them with the most perfect productions; who had presented the most illustrious instances of pa-

triotism and of virtue, the admiration of every intelligent people, and the examples of their feeble imitation, felt, under the degradation of bondage *foedum crimen servitutis*, every noble quality wither at their heart's core. As freemen, they had contended for pre-eminence in the imperishable annals of fame; as bondsmen, they vied for excellence, in the meretricious practices of slaves.

The accumulated treasures of the east were poured into Rome by the successful operations of her arms, directed by Lucullus and Pompey. Indulgence and luxury followed in their train. The arts and sciences, and letters of Greece were transferred to the metropolis of the world. But changed were their character and destination. They were no longer pursued from a love of true wisdom; from the impulses of a noble and generous ambition; from a desire to promote happiness, by teaching virtue. They were devoted to the base purpose of gratifying the pride, of swelling the pomp, and pampering the sensual gratifications of the dissolute patricians.

Amongst the crowds that flocked to Rome, with a view to advance their fortunes, was Asclepiades of Prusa. With limited information, yet bold in pretensions, he rejected all former systems of medicine.—He impudently strove to ridicule the great physician of Cos, whose tranquil observation of nature he called a study of death. With a servile spirit of adulation, he accommodated his practice to the characters

of his patients, which he studied more than he did their diseases, that he might gain the favour of the rich and powerful. In order to advance his reputation, he introduced a new doctrine into medicine, founded on the atomic system of Epicurus. The functions of the body, and the phenomena of disease and health, he explained by the relations of atoms and pores.

The system of Asclepiades was more fully developed by his pupil Themison, who subjected it to new modifications, and gave to it greater precision. He is, therefore, to be considered as the true founder of the methodic school. He rejected the occult causes of the dogmatists as too uncertain, and he was equally dissatisfied with the *concursum symptomatum* of the empirics. All diseases he reduced to two classes, depending on certain conditions of the system, which are common to various diseases. These conditions he named *strictum* and *laxum*, or a state of constriction, and a state of relaxation. This is the first regular arrangement of diseases that was made, and possesses a similarity to the famous system of Brown.

The low state in which philosophy, especially medical philosophy, was held in Rome, tended to destroy the spirit of research, and to remove every inducement to an attentive and patient investigation of nature. To render his labours as light as possible, in what had become a mere profession for gain, was the great object of the practitioner. The true principles

of science were neglected, and the invention of some ridiculous compound of wholly dissimilar articles, became a sure passport to reputation and to fame.

At this epoch, appeared the philosopher of Pergamos, whose doctrines, for thirteen hundred years, exercised the most unbounded influence, over the science of medicine. Gifted with a comprehensive genius, which embraced, and successfully cultivated every branch of science, possessed of great acuteness of perception, and devoted from his earliest youth to the study of philosophy and the acquirement of knowledge, Galen brought to the aid of medicine, falling into decay and disorder, advantages and resources which had been possessed by none before him.

Reclaiming medicine to the path of nature, which Hippocrates had traced out, Galen is to be considered as the restorer of our science. Yet it must be acknowledged, that incorporating into it the principles of Plato and Aristotle, and decking it out with all the pomp of learning, he added more of ornament, than solid acquisition. The simple principles of Nature, were lost in the splendour of philosophic dogmas, and observation was stifled under a mass of subtle and superfluous rules.

Many errors of a gross character, were unquestionably contained in the system of Galen. He obscured medicine by mingling with it the philosophy of the Stoics, the Academics, and the Peripatetics, by the introduction of occult causes, and the admission of

the phantoms of imagination, to supply the place of observation and experience ; yet notwithstanding his defects, Galen, it will be confessed, rendered the most important services to our science, and must be esteemed in the history of medicine, as the most uncommon instance of rare endowments, and profound erudition.

Unhappily the successors of Galen, were unable to follow in his track, and preserve medicine in the march of improvement. It gradually sank, with the declining knowledge of the age, until lost with its sister sciences and the arts, in the dark flood of barbarian violence and ignorance, which swept into a common ruin, all the intellectual labours of man.

A few fragments of medical knowledge were picked up by the Arabians of the seventh century, from the general wreck. But they corrupted them with the irrational and unnatural principles of the oriental philosophy, and alchemy, astrology, and magic, constituted, for some centuries, the most important branches of medicine.

It is not within the scope of my design to particularise the numerous fantastic doctrines, that prevailed in medicine during the middle ages. The gross superstition that was universally spread over Europe, degraded our science, and reduced it to its original rude state in the period of primitive barbarism. I shall confine myself barely to remark, that on the restoration of letters, the works of the Arabian, Latin,

and latter Greek writers, were supposed to be the depositaries of all medical knowledge. They were regarded as infallible oracles, by whom nature spoke, and whose doctrines it were impious to doubt. This slavish vassalage to authority, led to a total neglect and disregard of observation.

From this state of blind and lethargic submission to the influence of names, the medical world was roused in the latter end of the fifteenth and commencement of the sixteenth centuries. At that period, numerous diseases, before unknown, suddenly made their appearance. Fracastorius, in his classical work, *De Morbis Contagiosis*, dwells with emphasis on this circumstance. He mentions that Italy was laid waste by a species of pleurisy in 1482; that epidemic ophthalmias afflicted many cities; that even cattle were not exempted from the ravages of diseases. He describes fevers in his time, before unheard of, proving extremely fatal, which corresponded in character to the late epidemic of this country, and was designated by the same name,—spotted—*quas lenticulas vocant!* The sweating sickness swept off numbers in England; and the hooping cough, devastated France; siphilis, spread with astonishing rapidity into every part of Europe, infecting every rank and class of society, from the mitred prelate to the humble cottager; and scurvy was introduced into the catalogue of diseases by the extension of commerce.

The causes and nature of these new and unknown diseases, it was vainly attempted to explain, on the principles of the Arabian, and ancient writers; nor were their rules of treatment found applicable. The physicians were compelled to abandon their former guides, whose infallibility was thus destroyed, and rely on their own experience. At the same time, the higher cultivation of classical literature, made known the various systems of the Greek philosophers, and the works of Hippocrates were restored to the importance due to their merit, in the completion of medical instruction. No little effect was produced in the overthrow of the Arabian and Galenical dominion, by the doctrines of the fanatics, and of the Rosicrusian physicians and other theosophists; and especially by the rude and bold assaults of that eccentric and singular genius, Paracelsus, who proclaimed, with undaunted assurance, that "his shoe-latches possessed more knowledge, than Galen and Avicenna." But it was more especially to the researches made in anatomy, and the discovery of the circulation, exposing the nakedness of these reputed oracles, that the veneration they had so long excited was destroyed. The route to observation and experience being again laid open, the Hippocratean method was restored, and medicine re-assumed its progressive career.

But the subjection of medical science, to general philosophy, continued to exercise its noxious influ-

ence ; indeed at no period was it more extensive, or acted with more force in retarding the advancement of our science.

No sooner was chemistry pursued with success and attracted attention by its discoveries, than medicine was reduced to a dependance on chemical principles. Van-Helmont first introduced them into medical theory. His famous system, was a strange and barbarous compound of chemistry and theosophism. It was Silvius, however, who undertook to illustrate medicine entirely on chemical principles, and was the founder of the chemico-humoral pathology. By this doctrine, life itself was made to consist in a purely chemical action. The different organs performed their respective functions by means of ebullitions, fermentations, and combustions ; while acids and alkalies, creating acrimony in the blood, occasioned disease. The solids and the vital forces were wholly forgotten, and the living system was looked upon much in the light of a still or a brewer's vat. This system threw new difficulties in the route of medicine, and led to a practice, replete with the most fatal errors.

The chemical doctrine did not enjoy a long celebrity. Its explanations of the phenomena of the animal economy, proved but little satisfactory, and opinions nearly the reverse, were favourably received and embraced, by the first philosophers of the time.

Mathematics and experimental physics were elevated by the genius of Galileo, into important branches

of science, and were prosecuted with ardour and zeal in Italy and England. A society was formed in Florence, consisting of the disciples of Galileo, with a view to cultivate experimental physics, and to apply them to the explanation of the phenomena of all nature. From the academy Dell Cimento, sprang the mechanical system of medicine, which recognises Borelli for its founder. By this system, the phenomena of life were elucidated on mechanical principles. The human body was compared to a machine operated on by pullies, levers, and a system of ropes. It was converted into a hydraulic apparatus, consisting of tubes of different lengths and diameters, filled with fluids, moving with different degrees of velocity. Too great laxity or rigidity of the fibre, some defect in the pullies and joints of the levers, some obstruction in the apertures of the pipes, was the cause of a derangement of the natural actions, and consequently of disease.

The chemical and mechanical systems, were both overthrown by doctrines of greater refinement and more elevated views, to which the philosophy of Des Cartes, Leibnitz, Bacon and Newton gave birth.

According to Des Cartes, matter is passive; possessed of no essential or inherent accidents or qualities, and of course, all the changes it undergoes, proceeds from an external and spiritual cause.

Leibnitz on the other hand, agreeing with Descartes in considering matter as matter devoid of forces,

yet conceived it endowed with forces, from the creation, by the Deity. His simple substances, monads, possessed perception and appetite, and by combining with matter, gave to it form, force, and action. To simple substance, he attributed two forces, the possibility of being and real activity; and consequently the cause of all the changes of compound bodies does not proceed from external force, but resides within them.

The theory of Stahl derived its principles and character from the philosophy of Descartes. Adopting the axiom, that all matter is passive, he drew the inference, that the human body had no power of motion of itself, but must always be put in action by an immaterial cause. Action is then, an immaterial or spiritual act; or proceeds from a soul, to which he had recourse on all occasions, to explain the phenomena of the system.

Hoffmann embraced the contrary tenets of Leibnitz, and modelled his theory in accordance to their spirit. The human body, he taught, the same as all other bodies of nature, possesses material forces, by which its movements are effected. A refined material substance, which he sometimes calls sensitive soul, sometimes nervous spirit, was communicated through the nerves to the solids, impressing motion, and imparting life. The office attributed to the nerves, brought from the shades, in which it had long reposed neglected, that important system. Demon-

strating, as he did, the "consensus partium," or sympathies to which it gives origin, he opened new and extensive views in correct physiology and pathology, which, adopted by later physiologists, and more extensively applied, constitute the sympathetic doctrines, that are so conspicuous in our present systems. The principles of his system, chastened by the spirit of the Newtonian philosophy, and modified by later observation, have been employed by Cullen, Brown, and Darwin, to construct their respective theories, the richest ornaments and most substantial supports of the splendid façade, that will long continue to adorn the temple of medicine.

It has been attempted, in a slight and rapid manner, to sketch out the most prominent systems of philosophy, that have at different periods been promulgated, and the systems of medicine, whose principles were borrowed from them. Imperfect as is the performance, still I think it is apparent, that medicine has been erroneously and injuriously treated, as an humble attendant on general philosophy. From misconception of its true character, and an ignorance of its high claims, it has been degraded from its rank, and considered as an inferior and subordinate planet in the system of the sciences, which could only shine with borrowed light.

It will be your duty, gentlemen, as professors of the healing art, to vindicate and maintain its independence, and to defend it from the injurious conse-

quences, I have endeavoured to show it inevitably experiences from a too slavish connexion with sciences, that can only lend it subsidiary aid. Confined to their proper spheres, they diffuse well regulated and proportioned lights, which give certainty to our views ; but, drawn to a nearer focus, they dazzle and confuse the vision, blind it to a correct perception, distort images by a false reflection, and betray every step into error.

Under the influence of a fickle sky and ever-varying temperature, which carry us with rapid transition from the frosts of the arctic regions to the fervid suns of the torrid zones, the diseases of our country present peculiar characteristics. The earlier practitioners of America found no authorities on which they could depend, and were forced for their treatment into a reliance on their own powers. Hence was awakened in them a habit of close observation, of patient research, a prudent distrust of general deductions, and mere authority, which has continued to designate the medical profession of our country. This genuine spirit of the father of medicine, especially actuated the founders of this distinguished and flourishing school. Guided by its dictates, and inspired by genius, they maintained the lofty character of our science, unsullied by the narrow and partial views of mere speculative systems ; and free from the reproaches of wild and conjectural hypotheses. With pride, with feelings of exultation it may be pronounced, that for sound physiological

doctrines, for correct pathological views, for enlightened and successful practice, for a just system of therapeutics and materia medica, for accurate knowledge of anatomy, and expert and improved surgery, the medical science of our country, stands conspicuous ; and the University, with which our society is intimately connected, may lift its head amongst the proudest. I shrink with a consciousness of the feebleness of my powers from an attempt to recal with appropriate eulogy, the memories of the illustrious dead, to whom this medical school owes its being, and who were the authors of its greatness. Their useful labours are consecrated in the annals of our science ; their virtues and talents ensure an immortality to their names. No higher testimony of their meritorious and successful efforts in the advancement of our science can be adduced, than the celebrity acquired by the University, whilst they presided over its destinies. Its fame was not alone confined to our own shores, but passing the bounds of the Atlantic, astonished Europe recognised, proceeding from the wilds of America, the doctrines of able and enlightened philosophers, for her instruction. It is a subject of professional gratification, that our science first began to repay to Europe, the heavy debt, we owe for her letters and her philosophy. But it was not the truly-great professors of this institution, to whom it was alone indebted for its renown. No inconsiderable portion, it must be gratifying to you to know, was

the work of its pupils. It may be assumed without a fear of contradiction, that, during the period the sound regulation was in existence, which compelled each graduate to publish a thesis, that no other school surpassed this University in the number of excellent practical and experimental dissertations, that annually issued from its walls ; many of which were translated into the languages of Europe. New physiological principles were adduced, investigated with industry, and established by incontrovertible proof. The *Materia Medica* was enriched by the investigation of the medicinal properties of our indigenous productions ; and the practice of medicine was much benefited by many histories of local endemic and epidemic diseases. Unwisely, I believe, this most wholesome regulation has been abolished. But though your Medical Alma Mater no longer calls into requisition your abilities and your exertions, yet they are imperatively demanded by higher authority. In assuming the character of a practitioner of medicine, a vast responsibility is incurred, which can only be discharged by strenuous efforts for your own improvement and that of your science. On your professional skill, will often depend the fond hopes of domestic affection. Some stay, some support of your country in the hour of its peril, some patriot, the ornament of society and of human nature, may be confided to your care, and their safety be demanded at your hands, by the people whom they have

honoured and have served. How awful to reflect that lives of so much value, may be lost through negligence or ignorance ! How melancholy to know, that such is the uncertainty of our art, that the best directed exertions are too frequently baffled, and the highest skill proves unavailing.

Medicine descends to you, gentlemen, a rich and precious legacy, in a state of progressive improvement. Sacred is the trust, and deep will be the disgrace, should you permit it to pass to posterity, unimproved by your labours, or vitiated by false doctrines. The performance of this duty will require all your watchfulness and your industry. The inattentive, the indolent, the uninformed physician, while his practice is without light, and his essays are made at random, cannot fail to commit many fatal errors. To his profession he is useless, and leaves it without the slightest trace to tell that he has been.

But the enlightened and well informed practitioner, the philosophic physician, marks ever step of his route with some token of his worth. He is at once a benefactor to his species and to science. His operations are directed by the collected experience of his predecessors which he gathers into his store-house, and sensible of the benefits derived from their labours, he repays the debt by adding to the heap. His knowledge enlarged by research and corrected by observation, his mind disciplined to a rigid scrutiny of truth, enable him to sift in theory, what is plausible from

what is sound, what is novel from what is ancient, what is a mere flight of imagination from what is the result of sober reflection. In his practice, he discriminates cause from effect, the accidental from the essential symptoms, and penetrating to the nature of the disease, can seldom be deceived in the indication of his treatment. Whatever subject he handles, he improves, and possessing a faculty like that fabulously attributed to Midas, whatever he touches receives substantial value. While living, he reaps the rich reward of accumulated honours and well earned praise, and dead, according ages gather round his tomb to raise and decorate the column of his fame.

Such, gentlemen, are the higher duties incident to our profession, and the noble incitements it presents, to tempt you to atchieve the honourable distinction of a real improver of the science of medicine. But to accomplish this object of a legitimate and just ambition, you must listen to the voice of History, proclaiming from the "dark backward abyss of time," that this enviable title can only be gained by consulting Nature, through observation, experience, and experiment.

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