

2

DISCOURSE

ON THE

IMPORTANCE OF A GENERAL DIFFUSION

OF A KNOWLEDGE OF

ANATOMY, PHYSIOLOGY AND HYGIENE,

DELIVERED AT THE

AUBURN FEMALE SEMINARY,

May 30th, 1838.

✓ ———
BY F. H. HAMILTON, A. M., M. D.
—————

AUBURN :
OLIPHANT & SKINNER, PRINTERS.

....
1838.

Auburn, May 30th, 1838.

F. H. HAMILTON, M. D.

DEAR SIR,—Permit me, in behalf of those who listened to your able introductory discourse delivered this afternoon, to express the high satisfaction it afforded. Duly appreciating the sentiments advanced, and the benevolence of the purpose by which they were dictated; and believing that the publication of the discourse will contribute to dispel the popular delusions at which it aims, by diffusing more enlightened views—and materially subserve the cause of physical education, so important to the preservation of health and success in intellectual pursuits; I would respectfully request a copy for publication.

Accept the assurance of my kindest regards, and believe me,

Truly yours,

E. HOSMER.

Friday, 31st May, 1838.

DEAR SIR,—I received yesterday your polite and complimentary note, and am gratified to learn that the subject of my discourse is regarded by you as worthy public attention. If in your opinion its publication may in any way subserve the interest of humanity, by leading the community to appreciate the value of a general knowledge of the science of "Life and Health," it shall be at your disposal.

Accept, Dear Sir, my personal respects for yourself, and believe me,

Yours, &c.

F. H. HAMILTON.

E. HOSMER, Principal of Auburn Female Seminary.

ADDRESS.

YOUNG LADIES,—

By the urgent solicitation of your excellent preceptor, Mr. HOSMER, I have been persuaded to deliver, at this Institution, a short series of Lectures on the important sciences of Anatomy, Physiology, and Hygiene. Suffering, as I am at present, under the severest earthly affliction, I find that what I had anticipated as an agreeable pastime, is indeed an onerous task ; and nothing but a sense of duty impels me now to a fulfilment of my engagement. How far this sense of obligation actuates me you will understand, when assured that I have ever declined receiving any pecuniary compensation for my services ; believing that in the consciousness of having imparted instruction on subjects so little understood, and of such vast importance to all, I shall find ample reward.

I have chosen to preface this course with a brief outline of the value of a general knowledge of the sciences upon the investigation of which we are about to enter ; and trust I shall be able fully to show that, whatever charlatanism or imposture has crept into the science or practice of medicine, it has not been because the science is not in itself important—nor because its pursuits are not exalted—nor because its guardians are not learned and intellectual ; but that it is solely because community themselves are wholly ignorant of Anatomy and Physiology, and all that pertains thereto ; and that a general diffusion of knowledge upon these subjects will lead to the detection and exposure of empiricism, and add greatly to the stock of human happiness, by leading to the prevention of ten thousand maladies and accidents which befall us in consequence of ignorance of the laws of our own nature and organization.

The history of medicine is a history of marvels. Whether we speak of the traditionary accounts of earlier days, or the written records of modern times, we relate tales of wonder, superstition, and

ignorance. At one age, we find a whole nation performing holy rites, and instituting sacred charms, to arrest the pestilential scourge which the wrath of an offended deity has inflicted upon them. At another, a half civilized world consulting the learned astrologer, who divined by the movements of the heavenly bodies what was passing in the bodies of his patients; or seeking to obtain from the wizard alchemist his hidden secret, discovered in his alchymic chamber by the fire of a sorcerous forge, and which secured to its fortunate possessor eternal youth and vigor.

In our own day, we see the learned German professors of Berlin, Halle, and Wurtemberg, defending by elaborate theses the Hahne-maniac fooleries, that the square root of the billionth part of a medicated drop, administered according to the principles of Homœopathy, is more potent than 100 drops employed *secundum* Allopathy; while Mesmer, Dupuyseger, and M. Poyen, by their ingenious tricks practised upon hysteric maids, convince the literary and medical savans of Europe and America that Animal Magnetism is the talismanic power by which the long unknown connexion between the spirit and body may be at will dissevered, and the ethereal essence be permitted to roam through space illimitable, unclogged by its corporeal parts; enter by routes unobserved the inward recesses of man, searching and exposing mysteries hitherto revealed only to the prying eye of the dissector; penetrate the veil of the future, disclosing to mortals coming events, which none but the omniscient mind of the Almighty before knew.

These, and a thousand other fancies, have all flourished during their brief day, and been counted as sage realities by the wise and learned; some are now in their palmy age of glory—a thousand more are yet to be. What shall be next we wot not—but augur from passing events, that the day is near when men shall be made to believe that this world is a hoax, and its inhabitants a moon story; that reason is a vagary, and common sense the destitution of all sense. Credulity and charlatanism prevail more or less, undoubtedly, in all professions and trades; but every one must have observed that the profession of medicine has the greatest complement. Who has ever said of a jurist, that he is in possession of a secret charm, by the exercise of which, the most impartial bench shall invariably adjudge the verdict in favor of his client—whether this client be

a thief, a robber, or a murderer ; whether he has committed his crime in the open light of day in presence of the multitude, or under the dark cover of night, when the storm and the thunder alone were by ? Who would say of a statesman, that by a certain magic, inscrutable and wonderful, he could heal the political differences of all adverse parties, allay their turbulent passions, and change in a moment the most sanguinary civil conflict into the harmony and love of a peaceful brotherhood ? Or who has believed that an engineer in one hour could raise a dam across the Mississippi's spacious channel, which should throw back its waters to its source—could drain the marshes of Benin, or irrigate the sands of Sahara in a day ?

Yet who among you has not listened with wonder and confidence to the marvellous tales of the empyric, who could heal all human maladies with one boasted catholicon ; who could allay in one single hour the inward struggle of the horror-stricken hydrophobic ; who in a moment could moisten with the dew of health the burning cheek of the fevered patient, and dry up at once the cold damp which has settled upon the brow of the dying man ? Have you not sat and listened to these tales of wonder—miracles superhuman, with the unwavering faith of a heathen devotee seeking divine counsel at the mouth of the Lesbian oracle ?

Thus it is that everywhere the science of medicine is whelmed with a flood of superstition and imposture. It is rational, therefore, to inquire, where is the explanation ? Is it because medicine is less important, in its relation to human interest, than its sister sciences ? We acknowledge that the future welfare of the soul is of higher consequence than the present well-being of the body ; the body is mortal and perishable, but the soul is immortal and imperishable. The one, can suffer only the afflictions of time—the other, may endure the tortures of eternity. With deference, we therefore concede to the office of the holy ministry the highest rank of honor and responsibility, in its relation to human interest ; but claim that to none other is the science of medicine second. Is the office of the jurist more responsible or more honorable ? “ Reputation is dearer than life ;” yet how often is it important that life should be prolonged, that suffering honor may be sustained or a calumniated reputation retrieved ! Does the political economist or the public financier, the supreme judiciary

or the national executive, the statesman or the military chieftain, occupy posts of greater trust, or require the exertion of greater talents, attention, and observation? Of what service are these lords and honorables, when the plague or the pestilence move over the land? What have all their laws and ordinances, their quarantines, their walls of defence, and their cordon sanitaires, done to arrest the steady progress of the eastern scourge, as it held its fearful and uninterrupted march through the world? Were the wheels of its chariot stayed, or its arrow of death turned aside? While the statesman and the hero alike deserted the council hall and the martial siege, and fled at its approach, the physician alone has stood as conservator of the public weal; his counsels alone have guided the national measures, and directed the movements of the tented field; and he alone has entered, with heart unawed, and the disciplined coolness of the veteran soldier, the tainted lazaretto, and stood amid the dying and the dead, to administer with his own hand the healing draught, and sooth with friendly consolation the last agonies of the departing spirit. How dearly they paid for their temerity, the unprecedented mortality of physicians must tell; they periled their lives in the cause of humanity, and turned from their virtuous work with the fatal barb fixed in their own breast which their skill had just drawn from another. Blessed are they; for they have passed from earth to bear the brightest crowns of martyrdom in the plains above.

We do not mean to place a fancied or fictitious value upon the physician's character, but appeal to the witness of every man's heart to corroborate what we state. If a brother, or a sister, or a wife, or a child, were wasting under an obscure and unyielding disease, and the sad hour of separation seemed nigh, would it be of more consideration to him whether his attorney had the requisite information and talent to arrest an impending judgment which to-morrow might involve him in bankruptcy, or whether his physician had sufficient skill and acquirement to arrest the disease which to-morrow might deprive him of this bosom idol? These are the moments when the physician's services are appreciated, and their value fully comprehended. Whatever may be the ingratitude of the world when the heart beats strong, and the vigor of health nerves the arm, it ceases when disease bears down the strength, and the current of life flows with languid

pace along the emaciated limbs. Ask the dying and conscience-stricken soul—What do you value most?—Life! “My kingdom,” cried England’s dying queen, “my kingdom, for one inch of life!”

Is it because our science is not intellectual and exalted in its principles and pursuits? What more intellectual or noble study than the study of man, fashioned after the image of God himself? What more exalted subject of contemplation can be conceived? The sun and the moon do indeed reflect his greatness, and declare his majesty; but it is only in man that we trace his perfect image as his own hand hath wrought it. Here are problems which Euclid never reached, and Bacon never solved. The connexion and reciprocal dependence of mind and body upon each other; the incognite and mysterious principle by which external impressions are conveyed to the sensorium, and the wonderful control which this last has over the body, by which its mandates are recognized and obeyed in the remotest parts of each member; these are mysteries altogether beyond our limited comprehension: but when we begin to unravel the thousand intricacies and labyrinths of the organs themselves, our wonder is lost in deep amazement at the complicated and harmonious operation of each organ at the same moment; amid all the bustle of which, not a nerve forgets its mandate, not a muscle delays to act, not an artery to circulate, nor a vein to reconvey, nor an absorbent to imbibe, nor an exhalent to excrete; but, like the wheels of a vast and perfect machinery, under the control of a self-regulating power, each part moves on in its apportioned sphere, and at its accustomed rate:—and although it is exposed constantly to the irruptions of sorrow and fear, of love and hatred, with the sudden explosions of the more stormy passions from within; and the hourly shocks of violence, with the eternal vicissitudes of wind and weather, cold and heat, wet and dry, from without, yet seldom does a wheel of these ever-plying works need repair, or a timber of this splendid building require to be replaced. Look at yon skull,

“The dome of thought, and palace of the soul!”

mark its architectural walls, its well-proportioned arch, its gateways, its audience chambers, its hall of council, its galleries, its observatories, its palisades, and its bulwarks. What a structure is here! Is not this

“A temple where a God may dwell!”

How greatly does its contemplation enlarge our views of man and his mental capacities, and by the stimulus of conscious intellectual greatness which it imparts, lead to the greater exertion of our rational powers, and tend to the detection and overthrow of bigotry, superstition, and ignorance !

But the science of medicine is not merely human anatomy ; it includes many other physical sciences. Botany, mineralogy, and chemistry, disclose nature in its ruder and simpler forms, and are claimed as collateral branches. The growth, structure, and medicinal properties of plants ; the crystallization, geological arrangement, and composition of minerals ; the separation, recombination, and chemical analysis of heterogeneous substances, constitute elements of our science, no less entertaining, than sublime and elevating. They form the polish and garniture of our profession, and are the proper studies of every accomplished medical man.

Is it, we again ask, because, though the science itself may be sufficiently worthy, its guardians are ignorant and unworthy ? We face the calumny with the proof of its falsity. Physicians in all ages have been the foster-parents of learning and education. The warrior has revolutionized empires ; the statesman has planned the laws of government ; but the medical man has ever been foremost to establish those principles and institutions of learning, which form the only solid and permanent basis for the prosperity of any nation.

In the early centuries, the "healing art" was considered of divine origin ; and none were intrusted with its sacred functions but such as, from their superior natural endowments and eminent attainments, were believed the lineal descendants or the especially favored of their deities. It was therefore early cultivated and practised, and treatises were written ; among the first of which, are the writings of Galen, of Pergamos, and Hippocrates, of the island of Cos : the latter lived 460 years before Christ, and is reckoned the 19th in descent from divine Apollo, and the 18th from Æsculapius, who was accredited the god and father of medicine. In his family, the science of medicine was followed hereditarily ; his sons, Machaon and Podalirius, accompanied the Greeks to the siege of Troy, and Homer has commemorated their skill in the treatment of wounds. By his mother, Æsculapius also traced his lineage from Hercules. "Stimulated by the fame of his ancestors, he early and zealously devoted himself to

the cultivation of the science of medicine." His writings, even at this early day, evince extensive general as well as professional knowledge; and exhibit more learning than was possessed by any of his cotemporaries. "His opinions, even in modern times, have been respected as oracles, not only in the schools of medicine, but also in the courts of law." From his day to the present, the press has teemed with the ponderous and elaborate tomes of medical scholars. Sydenham, Boerhaave, Cullen, Gregory, Hunter, and Brown, have left to us works which have rendered their names immortal. Armstrong, Cooper, Johnson, Louis, Andral, Broussais, Boisseau, and many more, still live; and for their laborious investigations and valuable discoveries in medicine, exceeding all previous advances, they shall reap a rich reward in the lasting gratitude of their race: the world shall call them blessed! In our own country, the names of a Rush, a Dorsey, a Hosack, a Mitchell, and a Physic, are familiar to us all. They stand, with many stars of lesser light in our firmament, a splendid galaxy. One of them, his locks whitened with age, has but recently gone to his sacred rest; honored and loved while he lived, in death he still shed a lustre about him brilliant and cheering as the bright reflections of a setting sun; and his departure has left a splendor which shall never be extinguished.

It is not, then, that medicine is possessed of less actual importance, or is less exalted in its purposes and pursuits, or its disciples less learned and intellectual, that it is now, and ever has been, proverbially the dupe of ignorance, superstition, and imposture. No, Young Ladies. The explanation is not with us, or with our science; but exists alone in the utter ignorance of the mass of community, of all that pertains to this subject; who neither understand their own structure, nor the properties of medicines, nor the effects of their administration: but, assuming to be guided by truth and common sense, are ever placing their limited and partial observation against the experience and skill of the educated physician—and are found to dictate and censure the scientific practitioner, and even dismiss him for the employment of an ignorant charlatan, whose only recommendation is his ignorance, impudence, and egotism; three qualities which have always a singular predilection for each other's company. Who has not observed how often the pompous empyric, who, like the self-styled Paracelsus, Bombastus De Hohenheim, proclaims himself "the

very down on whose bald pate had more knowledge than all the learned schools," may successfully compete with men of extensive science but modest pretensions? Paracelsus himself, who spurned all learning as unworthy a great man's attention, so far imposed upon his cotemporaries as to be elevated by the popular voice, from an itinerant mendicant to the first professorship of the highest medical school of Europe—the ancient University of Basle. Even our own legislators, moved by the same influence, have by a statutory law raised the professed empyric, whose only diploma is a \$10 patent, to the same rank, with all the privileges and immunities pertaining thereto, of the regularly-educated physician. Had they as well comprehended the necessary qualifications of a physician as they have of a jurist, they would no sooner have permitted a man to practise in a higher capacity than nurse, who had not passed the proper curriculum of study, than they would have permitted a mere pettifogger to enter or defend causes in the higher courts of judicature.

Here, then, lies the secret, and here must rest the odium. Neither the mother, who is the first guardian of our health—nor the nurse, who is intrusted with the responsible duties of physician in ordinary—nor the father, at whose suggestion medical counsel is selected—nor the legislator, who establishes the laws of medical education and police—in short, none, however learned in other matters, have made themselves familiar with the rules and principles of that science, which of all others most frequently and intimately concerns them. They are as well prepared to believe the empyric who pronounces the tumultuous action of the heart a fatal organic disease of its structure, as the scientific counsel, who, discovering some lesion of the stomach, declares it a sympathetic nervous affection, and in itself unaccompanied with danger. Had the patient himself understood the connexion existing between these two organs—that the same nerve which supplied the one with its muscular excitability, supplied also the other—and that, therefore, what disturbed the one, would by continuous sympathy interrupt the healthy action of the other—he would have avoided his causeless alarm, and given to merit its due consideration, and to charlatanism its just disgrace and contempt.

We do not say it is necessary every man and woman should be an anatomist and physician, any more than it is necessary every man and woman should be a lawyer. But we mean to say, that, if it is

important that all should have sufficient knowledge of law to protect their property and avoid the penalties affixed to its transgression, it is equally important that all should have sufficient knowledge of the first principles of medicine to enable them to guard their health, and avoid the penalties which the God of nature has affixed to every transgression of his perfect and immutable laws; and that it is so far every man's business to have this knowledge, that ignorance forms no apology for a transgression, any more than in civil law, and for every infringement he ought to receive a proper punishment—and this not only where the sin is against his own person, but especially where he has acted as guardian of the health and interest of another.

Let us not declaim against the cruelty and superstition of the heathen mother, because she tears from her breast the smiling infant and plunges him into the sacred Nile, or casts him beneath the ponderous wheels of the blood-thirsty Juggernaut, to expiate her past offences; neither let us weep over the delusion of those misguided women, who, with wild and unalterable determination, ascend the funeral pyre, and are consumed in its torturing flames; when, in our own land, thousands of children are annually sacrificed, by their own mothers and fathers, at the insatiate altar of medical ignorance—and thousands, self-immolated, ascend undaunted the pyre which their own blindness has built, or bury themselves in the grave which their own hands have dug.

May we never again witness what we have once seen, and a too vivid recollection yet urges before us. A mother sat by the bed of a dying son, and as she covered her face in her hands, she exclaimed, with almost choked utterance, "My son, my son, I have killed you!" "No, mother," said the affectionate boy, "No, mother; I shall get well; don't cry, mother; I shall soon be well." The mother could only answer by sobs and bitter self-accusations; while the boy, upon whose hollow cheek the clammy dew of death had already settled, with generous simplicity, assumed a strengthened and cheerful voice, "To-morrow I shall be well, mother—to-morrow." Ere the morning broke, his spirit had fled to the God who gave it. He fell in youth, a martyr to the empiricism of that vilest school of empirics, the Thompsonian. The mother herself had administered the fatal draught, and learned, alas! too late, the irremediable consequences.

Does any one ask, how much knowledge of the science is then

important or useful? We answer—a general knowledge of its basis and established principles, and as much more as the circumstances of profession or trade will permit. Its basis is Anatomy and Physiology, and its established principles are the ascertained laws which govern the operation of all agents upon the system. These are the only essential pre-requisites to enable every man and woman to secure and protect their own health, or to examine and decide the competency of their physician. We do not mean to say that such knowledge will enable us to guard against or prevent all the casualties and accidents incident to life; nor possess us of the long-sought secret, the famed *lapis vite*; for the discovery of which, the deluded alchemist for centuries searched in his subterranean cell, and tried all his wizard arts. Such wild fancies, reason and the word of God have long since done away. It is appointed unto all men once to die; and however much we may dread and seek to avoid dissolution, it is as certain as that the grass shall perish, and the green earth become dry. But we only mean to teach that all the accidents and evils of life are not dependent upon, or necessarily connected with it; and that a proper knowledge of our own structure and organization would enable us to alleviate and avoid many of the miseries of a rugged and toilsome life, and lead us to our allotted age of fourscore years and ten, bearing a vastly less weight of both physical and mental infirmities. The assertion that every misfortune and sickness is a dispensation of Divine Providence, which no foresight or care on our part could have prevented, is unreasonable and irreligious, and only a miserable apology for our own ignorance and indiscretion, and intended to throw from ourselves the blame upon Him who never afflicts willingly. It is no farther an evidence of divine will, than as it teaches us that the laws of nature and of nature's God are perfect and immutable, and cannot be broken with impunity by any creature. How common is it for the unhappy dyspeptic to cram his diseased stomach to a painful repletion, and then quietly address his friends and his conscience with the soothing reflection that it is God's will that he should thus suffer, and therefore he should not murmur! As well may the beastly inebriate who reels into the ditch and breaks his head, moralize upon the wise providence of God in having so ordered it, and thus endeavor to repress the complaints and griefs of his afflicted family.

Another circumstance, which adds not a little to the importance of these sciences, and which has a manifest bearing upon the interest of our health, is, that they furnish data by which the value of any novel medical doctrine may be tested, and thus enable us to avoid entrapment in the snares of a plausible and specious theory. If the building rest not upon these solid corner stones, the superstructure, however splendid and imposing in appearance, can never be trusted. For illustration, let us apply our test to that most ludicro-serio humbug the world ever knew, animal magnetism. Attempt first to disprove it upon any other grounds of argument: Call it opposed to the philosophy of metaphysics: For the mind can receive no impression from external objects, except through the medium of the particular organ destined to transmit such an impression. A clear and correct statement, but in metaphysics utterly destitute of proof: For what proof does this science afford, that the impressions of taste are conveyed to the mind through the medium of the fifth pair of nerves as its organ of communication, rather than through the fourth; or that vision is an impression received through the second, or optic, rather than through the first, or olfactory? Is there any internal perception or mental consciousness by which these physiological facts are ascertained?

Call it opposed to common sense. But what is common sense? Had not the Salem Fathers, who admitted that the devil, in very essence, entered the bodies of men, informing them of many things before unknown; and so bewitched them with infernal suggestions, as to persuade them to the commission of abominable crimes and sorceries, deserving the most cruel death? Had they not common sense? Their works display as much sound doctrine and solid argument as the writings of any other men. Has not the industrious defender of Catholic rights, who contended alone with the whole army of Protestant clergy, and alone reasoned right, when all others reasoned wrong? Has not the learned—the candid—the *pious* Col. Stone, common sense?

Reason and common sense, is the admission of those principles which seem to be settled, and which the majority of mankind receive. That the arteries contained air, and that the heart was the seat of the mind: that sails were the greatest possible improvement in the speed of navigation, and post coaches of land conveyance: that the plan-

ets were globes of fire, and our earth an extended plain, have all been at some age matters of general faith, and held as established principles of common sense and reason.

Take what ground you please, call it opposed to the laws of science, or the doctrines of revelation, and after all your efforts to corner it, it will slip its way out at some convenient door, and elude your utmost cunning. Anatomy is an exact and demonstrative science; whatever is known, is known not with the dubiousness of a metaphysical or moral statement, but with the certainty of a mathematical fact. That the eye is the proper organ of vision, we know, for if it be diseased vision is impaired or destroyed, and dissection also shows it to be constructed in every part according to fixed optical principles. If the ear is obstructed or injured, hearing is defective; and in the structure and arrangement of its trumpets and sounding boards we trace the evidences of a perfect acoustic instrument. If therefore we are told by men of reputed judgment and established veracity, that a certain Miss Bracket, could see with her nose, or stomach, or elbow, or occiput, we should begin to enquire, where, or what part of the nose, is the organ of sight, with all its complicated and necessary apparatus? Where are its lids to protect, its gland to wash, its conduits, its lens, its humors of refraction and condensation, its pigment, its camera obscura, its nerve to receive and convey impressions to the sensorium? If after diligent search, in and about this useful member, this organ of "sense extatic" we could discover none of these parts, we should at once denounce her as an impostor, and unhesitatingly assert that she could no more see with her nose, than if her nose were a glass bottle or a tin horn.

But, if the feat was varied, and instead of the nose, the stomach, under the mystic influence of animal magnetism, became at once elevated from the vile office of digester of pork and beef, to the exercise of the nobler function of visual sense, we should at once enter with zeal, into a farther investigation of its curious structure. We should again dissect and observe its nerves, its muscles, its villous coat, its glands, its secretion, its gates of entrance and exit, its sluiceways; and if we should still discover that in its figure, situation, structure, and contents, it resembled more John Bull's kitchen, or a snug refectory of pies and meat, than a telescopic observatory, from which

objects of sight might be contemplated, then, we should at once conclude that the poor girl had mistaken her senses, and should be guarded, lest, in her magnetic phrenzy, she should put out her eyes with the salt and pepper, which she designed as seasoning for the contents of her stomach.

We might next apply our infallible test to that late medical humbug, Homœopathy, another learned reverie of the Germanic school, of which Hahneman is the originator and grand maestro. These absurd doctrines, driven by cruel persecution, had traversed England and the continent of Europe, and have lately sought a refuge in our own land, ever the asylum of the oppressed. The illustrious Dr. Vanderburg of New-York, has become their champion and defender; he has entered the field sword in hand, and attacked at every assailable point our strongest bulwark of defence, Pathological Anatomy. But we, who are "*intra muros*," mock at his vain thunders. Against such doctrines as he sustains, we need no better weapons than corporal Falstaff, with his twelve men in real buckram. We contend with empty air. It is no caricature, for Hahneman in his "*Organon de Medicini*," directs that the one billionth part of a grain of pulverized charcoal be taken as a cathartic, and he might have added the infinitesimal fraction of the shadow of a dead crow, as an emetic.

We would not presume upon your patience, by entering into a farther explanation of this ridiculous science, nor impose upon your intelligence by attempting a serious refutation. It will, suffice to say, that, whatever is specious or intelligible in the doctrines, meets a complete refutation in the science of anatomy.

Phrenology, also, a third offspring of Germany, that fatherland of all absurdities, may be tested by the same rule, anatomical consistency. Indeed, it has already been done by almost every scientific anatomist in Europe and America, and proved utterly baseless.

To these, and some other absurd doctrines, when opportunities present, we shall again advert in the subsequent series of lectures, and examine their value by the light of anatomical facts. The doctrines of Thompson, that American prodigy, who has threatened to revolutionize the empire of medicine, and establish upon its ruins the eternal throne of pepper and steam, may be looked into, and its strength tested. Like his illustrious predecessor Paracelsus, he disclaims all science, general as well as anatomical, having received

his instructions only in the rude school of nature : the grand result of whose lessons have only been promulged to the world after many years of secluded reflection. They are now fully revealed in a printed book. With great labor he drills down the long catalogue of human maladies to one single disease, " animal heat confined." The treatment is equally simplified ; the only indication being to force the obstructions and evolve the caloric—the mode of accomplishing which is hereby illustrated. The patient is like a turf-covered coalpit ; the internal heat cannot escape, and is consuming his vitals and crisping his bones ; but instead of endeavoring to extinguish the flame by water and cold, they throw in quick combustibles, and ply a fiercer fire within to force the weaker fire, subdued and affrighted, to retreat : they set Beelzebub to drive out the devils, because he is the prince of devils. Thus, when the fever rages, and the struggle of the heart waxes stronger and stronger to throw off its already too much heated blood, the foolhardy empiric thrusts into the stomach his burning peppers to feed and urge the flame, till a complete ebullition having been effected, it literally bursts like expanded steam through the thousand pores. What destruction of wheels and works the terrific struggle has made within the walls of the vessel before the final explosion, anatomy alone reveals. Surely we envy not these men their murderous distinction, nor their death-bed reflections !

Morrison and Brandreth also should not be forgotten, with their endless series of boluses, *quaque tertia hora* ; nor the Root Doctors, those miserable mountebanks, who, ignorant of the elementary constitution of their own structure, idly talk of the incompatibility of mineral and animal substances, and declaim against their use as inconsistent and dangerous. Yet anatomy teaches us that iron and lime, in different forms of combination, constitute the basis and framework of the human fabric. Effect an absorption of the calcareous matter of bones, and the unfortunate patient bends into a hideous object of deformity. Deprive the blood of its iron, and the pale and waxen patient becomes puffed up with a watery percolation, or gradually sinks from inanition. The iron gives color to the blood—and being said by some physiologists to form the centre of each drop of this fluid, the opinion has given rise to an ingenious thought, that it is not surprising the wheels of life continue so long, since they turn

on iron axletrees." Phosphate of magnesia, soda, muriate of soda, manganese, silex, alumine, phosphate of ammonia, and several other minerals, also enter largely into the composition of the human structure, and are therefore compatible and proper medicinal agents.

We do not wish to depreciate the importance of botanic science to the regular physician; but we would speak of those who employ vegetable to the exclusion of all other remedies, and who base their objections to minerals on the ground of incompatibility. Admit, if you please, that our constitution contains no mineral substance whatever. Does it, we ask contain any, vegetable? Certainly not. Wherein, then, is there greater incompatibility between mineral and animal structure, than between vegetable and animal? Is it in the fact that vegetables serve us as food, while minerals do not? We deny the premise as an universal principle, but again give it admission to show its fallacy and absurdity. If the edibility of an article be the test of its compatibility and sanative powers, then we must reject nearly one-half of the vegetable kingdom. Is it not true that the most active poisons in nature are drawn from this kingdom? What will convulse the palsied arm, and toss with frightful contortions the most sturdy frame? Strychnine, an indigenous product. What will paralyze the eye, and fasten it in the wild gaze of insensibility? Stramonium, a common garden plant. What is more certainly fatal than arsenic's deadly potion, swifter than the lightning's vivid flash? A single drop of Prussic acid, an extract from the peach. To these we might add many others—cicuta, laurel, deadly nightshade, belladonna, opium, &c., which, taken in any considerable quantity, would act as virulent or deadly poisons. Or to mention those drugs which are in most common use among them: Do they contend that bloodroot, prickly ash bark, poke-weed, mullen leaves, or lobelia, are esculent vegetables, and fit food for the human stomach? Then should they be served up, well savored with their favorite spices, as a dinner repast for these vegetable epicures; with what grateful emotions would their heaving stomachs welcome the generous weeds!

We should also do injustice to our own opinions and feelings, were we to omit to mention the ultra dietetic systems of Graham and Mussey; the latter of whom we regard as among the brightest stars of our profession. Honored and distinguished by his countrymen for his high moral rectitude, his sound talents, and supereminent

attainments, he holds a reputation of which no calumny or envious censures can ever dispossess him. Some who now hear me have listened to his words of experience and instruction with ever-increasing interest, and received lessons of practical utility which will never be forgotten. But while we award to him the meed which his virtues merit, we hesitate not to withhold our assent from his absurd notions of exclusive vegetable diet; and we plainly aver, that the theory, though it assumes to be based on physiological principles, and is called by its advocates the physiological doctrine *par excellence*, is opposed to every anatomical argument. That man was created an omnivorous animal, every organ of his body plainly indicates, and is susceptible of complete demonstration by the rules of the science we contemplate. It is thus that Providence has prepared us for all the contingencies of our mutable life, and enabled us to carry our footsteps and extend our species into every region of the globe. We may find a healthy and ample sustenance in regions the most remote and inhospitable; amid the arid sands of the eastern desert, or far on the ocean's restless wave; under the burning heat of the torrid zone, where the orange-tree and the citron are forever green—or in the cold regions of the north, where an eternal winter binds the unfertile earth with frost, and where the bear and wild deer can alone subsist upon the stunted moss.

In short, Young Ladies, we hold that we are able by the guides of anatomical, physiological, and pathological science, which are mutually related to and dependent upon each other, to trace out the leading principles, the full observance of which will tend to the promotion of health, and lead to the detection of ignorance and empiricism, in whatever garb it is before us. The former of these objects, viz. the promotion of health and extension of life, is that at which we chiefly aim; the latter, the exposure of empiricism, being always collateral and secondary. As important and weighty, therefore, as is health and life, so important is the subject upon whose investigation we are about to enter. The thoughtless sarcasm of Rochefoucault, "that most men die because they cannot help it," is false. The lives of mankind are mostly in their own hands, and they are mostly their own murderers. He is undoubtedly in the truest sense of the word a suicide who surfeits himself to death, and his verdict should be "*felo de se*;" neither is the case altered, or

the guilt of the crime diminished, if, instead of cutting his own throat, he throws himself into the power of an ignorant empiric, and thus puts the instrument of death into the hands of another; the inquest should still return a verdict of "*felo de se*"—thysel the murderer!

It is every where becoming the popular sentiment that physicians are the only proper guardians of every man's health, and that any interference on their part is meddlesome, and fraught with injurious or dangerous consequences. The sentiment is correct as applied to the general administration of medicine, or the treatment of actual existing disease; but false and pernicious as applied to the prevention of possible or apprehended maladies. Of what avail is it that the skill of the physician successfully extinguishes the fever, if immediately, by surfeit or exposure, or some similar indiscretion, the flame is rekindled? Of what service is it that a father pursues with kind affection a profligate son, and by his money and influence procures him a release from the penalty of his crime; if, when liberated, he forthwith plunges into deeper dissipation, and falls into the commission of greater crimes? He may as well reach the penitentiary or gallows now, as after a longer career; nay, better.

We cannot here fail to express our gratification that the science of anatomy, which we have always regarded as most important, is engaging more deeply the attention of the profession, and is regarded with increasing interest by the general community; and that with this increasing interest more liberal views are springing up. But a few years since, the human dissector was abhorred as a sacrilegious wretch, and the zealous student was scarce permitted to prosecute his researches unmolested under the protection of chartered walls. Now, the devotion of the anatomical student is noted and respected as the omen of future eminence and usefulness in his profession; and the galleries of the medical amphitheatre are often filled with a silent and attentive audience of worthy and respectable citizens of both sexes, who but lately were leagued for its destruction, or carefully avoided its precincts as unholy ground. These are the advances of an enlightened age, and should be hailed as harbingers of greater advances in intellectual greatness, and a sure token of the approaching departure of ignorance, prejudice, and superstition, that triple monster, which has for centuries closely guarded every avenue to the temple of medical science.

But while we rejoice at the brightening prospect, we should not fold our hands and vainly imagine that nothing more remains to be accomplished. We should thus place an effectual bar in the way of all farther advance. As yet, we have only entered the threshold of the temple; all its treasures remain to be explored. In many of the foreign schools, both in England and on the continent of Europe, where the higher branches of literature are taught, anatomy and its sister sciences are made a regular and established course of study; the effect of which is seen in a more general diffusion of the science of Life and Health, and an eminently more elevated standard of professional attainment. A few of the American schools have copied the example; as a philanthropist, we wish it would be soon followed by all. The study of the human system, its organization and its various functions, together with its diseases, their preventives and remedies, should doubtless form an essential part of every man and woman's education, and should claim a prominent place in the scientific course at every school and seminary of learning in our land; the attainment of which end would establish upon a more permanent basis the science of medicine, and do more towards the melioration of the human condition, the doctrines of Christ alone excepted, than all the philanthropic operations of the world combined.

Permit me, Young Ladies, before I conclude these remarks, to congratulate you upon the present flattering prospects of the Institution with which you are connected. Located in one of the most flourishing and delightful villages of our State, in a district which from its earliest settlement has been remarkable for its salubrity, convenient and accessible to a large number of surrounding villages, it seems designated by nature as the spot for the assemblage of youth and the establishment of literary institutions. Through the liberality of its trustees and our enterprising citizens, you are provided with a spacious building and ample grounds, in the most convenient and healthy portion of our town. Added to this, the high and established reputation of your excellent principal, and of the several experienced teachers to whom are entrusted the charge of the minor departments, you may justly boast of your school as unrivalled in western New-York. Let me assure you, therefore, that I feel honored in being associated with its name, and shall esteem it a privilege to add my humble efforts to those of your able instructors, for the advancement of its pupils and the promotion of its interests.