A LECTURE INTRODUCTORY
TO THE
COURSE OF ANATOMY & SURGERY,
DELIVERED AT THE OPENING
OF THE
RUSH MEDICAL COLLEGE.

DECEMBER 4, 1843.

BY DANIEL BRAINARD, M.D.

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The Charter of the Rush Medical College was granted by the Legislature of Illinois, March, 1837; but it was only during the past Autumn that the Trustees determined upon the organization of a Faculty. A meeting of the Board was convened on the 14th Oct., 1843. The first action was to annul all former appointments, the second to appoint the present Faculty, and the vacancies in the Board of Trustees were then filled. At a subsequent meeting, means were taken to defray the expenses of the chemical apparatus and Dispensary, and laws for the regulation of the College were enacted. The first session of the Institution opened Dec. 4, 1843.

GENTLEMEN:

It is a long established custom in the Medical Schools of this and other countries to open the different courses of lectures with an Introductory Discourse. This usage, suitable at all times, is particularly so on the opening of a new College, and in complying with it, on the present occasion, we have chosen the subject of Institutions of Science, their influence in a community, and their claims on the fostering care of the public.

We have chosen this subject from the sovereign influence exercised by public opinion in our own country. Holding as it does the place of supreme power, those appeals of argument or persuasion which elsewhere are addressed to Governments, must, with us, be offered to it. There, the acts of princes, or the munificence of private individuals, has long since laid the foundation of those Universities which perfect, to the highest degree, the faculties of man; while here the fabric of society is still unformed, and requires combined action to perfect its different parts. Here, then, in our own country, but here more especially in the West, is it essential that the public mind should be directed to the founding of those Institutions of Science, whose broad foundations, interwoven with the earliest period of the history of society, shall develop themselves in increased perfection in each succeeding stage of its progress.

Need the value of scientific studies be enlarged upon in this assembly? The young mind, as these truths are unfolded before it, has its strength increased, its objects elevated, its capacities enlarged, its taste refined. Whatever is to be gained by a high standard of intelligence and virtue, flows from them; they add to the character of cities, they give influence to States, and their care has been the highest glory of the most enlightened nations.

It were easy to show that every class of citizens is interested in the establishment of a Medical School at this time and place.
We might appeal to men of business and capital, and by a rigid calculation of the advantages resulting from such institutions, convince them that it is for their interest to aid in its promotion. We might point them to Louisville, or Lexington, where, without many of the advantages of location which we possess, schools have been established which contribute materially to the prosperity of those cities.

We might appeal to the poor. The establishment of a hospital or dispensary, where they may receive gratuitous aid, without subjecting themselves to disagreeable personal obligations, or being associated with public paupers, is an essential part of our undertaking. We might appeal to the benevolent. What heart, sharing the common sentiments of humanity, but would delight in contributing to an undertaking whose sole result is the relief of suffering, the assuaging the distress of man. Most emphatically might we appeal to that middle class in fortune, the farmers, mechanics, and many professional men, the hard-won avails of whose industry are not sufficient to afford to their sons an education in distant and expensive schools; but whose healthy bodies, active minds, and industrious habits, eminently fit them for success in the pursuit of liberal studies. By bringing within the reach of such the means of a good education, talents are developed that would otherwise have lain dormant, and a thirst for knowledge is created. I might, in illustration of this remark, bring forward the history of many a man of our own country, who has struggled through his earlier years in poverty of body and mind, and who at length has become the ornament of his state or nation. I might bring forward, in our own profession the example of the first and greatest of its minds, that of John Hunter, who was a cabinet-maker before commencing his studies. A glance at the Museum of the Royal College of Surgeons in London, that splendid monument he has left to his talents and genius, shows the hand of the mechanic, as well as the systematic mind. Velpeau, one of the most eminent of living surgeons, was also a mechanic, and I have heard him in those lectures with which he instructs auditors from every country, speak of the time when he was a blacksmith.

These are examples of success. John Hunter had a brother who opened the way of eminence to him. Velpeau had friends who lent a helping hand. But who shall compute the number of those with equal genius, but whose names are unknown.

For Knowledge to their eyes her ample page,
Rich with the spoils of time did never unfold;
Chill penny repressed their noble rage.
And froze the genial current of the soul.

But if interests more vital, more directly applicable to every one of you than those we have mentioned, were not involved in this question, it is not probable it would at this moment be urged upon your attention. But there are others of a more personal nature. The health, the happiness, and the life of your dearest friends, and your own, may, and will, some day, depend upon the skill of some member of the medical profession. In a moment when least expected, some accident brings the object of your tender love to the verge of life. It is a wound, and while you and all around you are frantic with despair, while the tide of life is ebbing, the surgeon appears, calm amid the confusion, he places a ligature upon the bleeding vessel, and life is saved. Or, it is a deep-seated and insidious disease, that wastes the frame and drives the roses of health from the cheek. On whom will you rely for relief, or for solace, if relief be impossible? On the one hand you have the physician, whose life has been spent among the sick; his hair is already silvered with approaching age, his mind has been trained in the detection of disease, his business is the solace of suffering; mild, patient and discerning, he has been tried in many a scene of danger and found faithful. Or, you have the pretender—he has discovered a new road to the cure of disease. He has tried the practice of medicine some years in an obscure country village, and found it good for nothing—or, in other words, he has failed in practice. He is wiser than Hippocrates, the learning and skill of Sydenham and Rush, of Dupuitren, Cooper, and Mott are nothing to his. Choose now between the two. To elevate the standard of skill and knowledge in the profession, to excite an honorable emulation among its members, to disseminate in this new region the principles of medical science in its perfected state—such are the objects held in view by the founders of this Institution, and in carrying forward these views, they will endeavor to widen the difference between the medical profession and charlatans of every description, holding it for a maxim, that any member who deserts its ranks and associates himself with quacks, is either ignorant of its true principles, or willing to sacrifice an honorable standing on the altar of gain. We consider the soldier who deserts his country, the clergyman who is faithless to his sacred trust, and the man回顾ant to the principles of truth.
and honor, worthy of the same rank as the physician who leaves
the course of honorable improvement, to avail himself of the
errors and prejudices of men. Let such not cast reproaches upon
the science of medicine for faults that exist only in themselves.
That Science, and its worthy practice, are fraught with blessings
to humanity. Carefully studied and faithfully pursued, it leads to
eminence and success. Of science it may indeed be said, which is
ture of few objects to which the mind and heart of man may
be devoted, that her smiles and favors are in proportion to the
merit and the love of her admirers.

But there are objections to such a project. It is the opinion
of some one that it is premature, that students cannot be obtained,
teachers procured, or suitable buildings erected. I grant there is
a period in society when such efforts would be ill-timed. The
supplying his physical wants, resisting the encroachments of hun­
ger and cold, are the first wants of man; until these are satisfied,
it is useless to call his mind to the advantages of education. But
this period, throughout a large portion of the West, is long since
past. Nowhere are the people at large so surrounded with the
comforts of life; nowhere are there such numbers of youth whose
means enables them to pursue literary studies, whose minds are so
open to noble impressions, but with so few institutions to lead them
on and gratify their desires. The present, then, is emphatically the
time when schools of every kind, but especially those of the profes­
sions, should be established; schools which not only gratify the love
of study among the young, but which give direction to the public
mind, and exert a salutary influence on the community.

The opinion that suitable teachers cannot be found in the West,
is alike unfounded. Next to the merit of making great discov­
eries in science, is that of extending them in regions where they
would be otherwise unknown. In the present time of 'emulation
in the way of improvement, there are many of high acquirements
who are ambitious of so honorable a distinction. Nor is the objec­tion
that suitable buildings cannot be erected, more substantial than the
others. The matter taught is of more importance than the place where it is communicated, yet the latter is not without its
influence. We have already had occasion to invoke the aid of
the citizens of Chicago in supplying the necessary chemical appa­
ratus for the first course of lectures, and the liberality with which
they have responded to the call, is a sure guarantee of their course
when they see a school in successful operation, and only in want
of larger halls to give shelter to those who seek knowledge in our

City. The time, we trust, is not far distant, when the Medical
College shall be among the structures in which every citizen of
Chicago shall take an interest and a pride.

But another objects, "are there not already medical schools
enough?" "Are not Doctors already too numerous?" In answer
to both these questions we reply, there are certainly enough both of
schools and physicians; but no one acquainted with the facts of the
case, will for a moment assert that the number of well educated phy­sicians is too great. Go over the prairies and see the sick mal-
treated, the dislocations unreduced, the fractures un-united, the
numbers of blind from ill-treatment, and say whether improvement
is not needed in the profession. Poor as are the qualifications of
many graduates, whole towns, and almost counties in this State
are without physicians possessing even this slender proof of skill;
and in the larger villages, where better things might be expected,
we find but a small number who are skilled in the more perfect
methods of detecting and treating disease. To remedy this defect,
to point out to those who shall pursue their studies in this Institu­tion,
the true road to skill in their profession, and to aid them in
their progress, such is our object, and far from being dissuaded from
our purpose by the number of medical schools where, but few
means of instruction are afforded, it is to counteract the effect of
those that our efforts will be directed. Far from fearing the effect
of increasing the number of physicians, we know that every one
added, of suitable character, of sufficient information, of honorable
views, will be welcomed by the profession and the public wherever
he may choose to locate himself. We regard the power of
unlimited competition, both in the establishment of medical schools
and in the pursuit of medical studies, as the only security for the
faithful performance of their duties, on the part of those holding
the responsible stations of teachers.

All who have at heart the best interests of the profession, who
have well observed the difficulties which surround it in its progress,
have felt deeply the necessity of some measure which should elev­
te the standard of acquirements among its members. It has been
proposed to establish a National Board of Examiners, to whom
students should apply from the schools of every section of the
country, and who, being removed from the influence of personal
interest, should be more exacting in their demands than are the
Boards as at present established, and whose diplomas should, there­
fore, command a higher respect. However valuable would be
such a Board, it is obvious that no power capable of creating it
exists in our own country, and we must therefore look to some other source for a remedy for existing evils. Some have proposed such a Board for each State; and an esteemed friend, Dr. Linton, has urged upon the medical public, with great zeal, the importance of establishing these Boards. While I honor the motive that prompts this action, I yet cannot indulge the hope that they could be of any essential benefit, or indeed that anything really valuable can be expected to result from legislative action. The profession must look within itself for the energy and spirit that is to raise it from its present state of depression to one of comparative intelligence and respectability. The minds of the young are easily excited to ambition, and it is to this susceptibility to good impressions, directed, when once awakened, by competent teachers, that we are to look for the most valuable results. To the improvement in this manner of each successive generation of practitioners, are we to trust for the best effects in the profession. Such being my views in regard to competition and its effects, it will readily be supposed that I do not attach much importance to the opinion of those who think that admission to medical schools is too easily obtained; that the fees are too low. Those who devote themselves to teaching should be liberally paid, justice and the public interest require this, and at the present time there are no other means except by fees from pupils. Still it is obviously for the interest of all that instruction should be as widely disseminated as possible; that Institutions of Science should be, as nearly as may be, free to all. Science, like Religion, should be taught without price. Such is the principle which we hope at some future time to see practically followed in our own country. But while a different system prevails, it should be the object of public teachers to modify its effect by a course of the most liberal conduct. On this subject let me quote the words and the example of one of the most worthy of our profession, the late Dr. Armstrong. In the Introduction to his Course of Lectures he makes the following remarks: "A lecturer should at all times exercise the most unbounded liberality toward his pupils, and if to any gentleman who may wish to attend these lectures the fee may be an obstacle, I would far rather forego than receive it. I trust I lecture here, not for the mere consideration of money, but for the purpose of instructing the rising generation of medical practitioners, of refuting, to the best of my abilities, the numerous errors and absurdities which prevail in medicine, and of establishing the truth. With respect to those gentlemen who intend to devote their attention to this important subject on the principle of public utility, who take a liberal and honorable view of the purposes and advantages of the practice of medicine, I shall feel an interest in their welfare and prosperity, which will, I trust, only be equalled by their own." Such is the language of one whose name is dear to the profession from the excellence of his character as well as from the greatness of his talents, whose fame is widely spread, of one who forced his way from an humble to the highest station. Let us add that the errors and absurdities of which he spoke were not things of his imagination, but were real, and had taken a deep root in the medical schools of his, as they have in those of the present day.

From all these considerations, it will, I hope, be obvious, that the project of establishing a medical school, where sound instruction shall be given, is, at the present time, not unworthy of encouragement; and that it is demanded in a special manner in the newer States of the Union. I have had occasion to speak of improvements in the modes of teaching the different branches of Medicine and Surgery. Without, on an occasion like this, going into all the details, I may say that I refer, in the branches of Chemistry and Anatomy, to greater minuteness and thoroughness, and in the branches of Medicine, Surgery, &c., to a course which shall be more practical. Every principle laid down in theoretical teaching should be illustrated by its application in practice, so that when at length the student comes to leave his teachers and rely upon his own knowledge, he should not find himself in constant doubt, but should be able, with facility, to recognise and treat those diseases with which he has long been familiar in his studies. It is for want of a few examples of this kind of practical teaching, that so many young men going out from the schools with good advantages, find themselves unable to contend with uneducated practitioners, who have a little practical knowledge, and great faculty in applying or misapplying it in every case which presents itself to their observation. This should not be. The student, as each successive principle is unfolded before him, should be shown its use and application, whereby it is at once enforced upon his mind and rendered valuable to him in all his future life.

It is by means of a dispensary where patients may receive advice and medicine, without a fee, that we expect to supply this most desirable means of instruction, and in the establishment of
which I need not enumerate, which place such students on a par with the former in regard to their chances of success. The influence of preliminary education is great on the standing and success of a physician, and I would recommend those who are about to enter upon its study with but slight advantages of education, either during its course or before entering upon it, to make themselves acquainted with the principles of Geometry, the use of Algebraic signs, and with the Latin and French languages. The cultivation of literature or the fine arts is by no means incompatible, as numerous examples show, with a thorough practical knowledge of the Science of Medicine.

The influence of the manners of a physician on his success is undeniably great, deciding, if not the extent of his practice, at least the class among whom it is to be exercised. It is a point worthy of attention, as the retired habits of students are calculated to exercise an unfavorable influence in this respect. Still it is probable that the influence of what is called popular manner is greatly overrated by careless observers. Let it never be supposed that they can take the place of real skill, or that the most dexterous trimming to popular favor can inspire confidence. While he yields to a reasonable extent to public opinion, the physician should be governed in all important matters by fixed principles, and in the smallest by self respect, scorning the success obtained by unworthy arts, and trusting if need be, to time to do justice to his character. The principle on which are founded all the arts of managing men in the profession is, that the public is not competent to judge of their qualifications. This, however, is not the case. The ultimate judgment of men on the character and skill of physicians, is almost invariably just, as much so at least, as in the case of other individuals. This should never for a moment be forgotten by the younger members, whose hope it should be for a reward for all their labors.

In addition to these circumstances of birth and education, it should not be forgotten that there are natural differences in the constitution of men's minds, which fit them for particular pursuits. The natural qualities most requisite for a physician are, talent of observation, industry, resolution, and a benevolent disposition.

The power of observing is more essential to a physician than that of profound reasoning; it is a faculty depending on the original constitution of the mind, but once possessed in a moderate degree, it may be improved by exercise to the highest state of excellence. In this degree it distinguishes the eminently skilful medi-
cal man, and enables him at a glance, and as by intuition, to distinguish those characteristics of disease which seem obscure to another.

Industry, the key to success in every pursuit, is especially necessary in the study and practice of medicine; a study which consists in a great measure in learning and retaining unconnected facts, and a practice which always requires his personal attendance and which is made up of an infinity of details. These, joined to an invincible resolution, an ambition that knows no bounds, a love of knowledge above all other objects, are the requisites, and the only requisites, for success.

We have thus enumerated some of the influences which affect the character of the physician, and the talents and branches of knowledge necessary to his success. There are others that might be named. The manner in which the studies should be directed is one of these. In general, it is my opinion that too many subjects are embraced. After having gained a good knowledge of the principles of medicine in general, the student should select that branch for which he may think himself best suited, and embrace it in all its details. He will thus possess the advantage of having a more perfect knowledge of a branch, and be qualified also for all the duties of a practitioner. Every improvement moreover is the result of studies confined to some particular subject.

The length of time to be spent in his studies is another of these circumstances. Students should be aware that the short term of two or three years is hardly sufficient to give a knowledge of the elements of medical knowledge, that it is far better for them in the result to devote a larger period to the study before entering upon their practical duties, but that in any case they are by no means to consider their studies ended at graduation. It will be seen that we have enumerated, as the requisites for a good physician, acquirements and virtues sufficient to raise him to a high rank in any pursuit. Yet have I expressed but faintly and imperfectly those with which his character should be adorned. Whatever grace of thought, force of intellect, or goodness of heart can bestow, should be his. Raised above considerations of personal advantage, he should seek the advancement of science, the amelioration of the sufferings of humanity, as his sole good. Feeding his thoughts with the works of the illustrious of other times, and forming his character upon their example, he should aim at nothing less than a merit as great as theirs.

It were now well to ask what reward the profession holds out to such persons. The answer would be various from those of different dispositions of mind. To those who are fond of popular excitement, who wish to mingle in the turbulent scenes of political strife, who wish fame, not pure and lasting, but popular and instantaneous, to such it offers but few attractions. But to those who delight in the more quiet retreats of thought and study, whose hearts are set on the developing and perfecting their own characters, who prefer self respect to momentary popularity, and solid to transient reputation; to such a man nobler study than the science of medicine does not exist. It is known that Napoleon often asserted that if he were not an Emperor he would devote his life to science, rather than be a dependent upon courts. It is not so generally known, that after the Battle of Waterloo he purposed carrying this intention into effect, and chose Arago, a kindred mind, for his companion and instructor in his contemplated retirement in our own country.

We have already spoken of the beneficial effects of the study of the sciences, that they enlarge and strengthen the mind; and compared with literature, give a manliness to the character. It remains to be enquired if there is any effect of the study of science less favorable than those we have mentioned. Upon the imagination, sensibility, and the religious sentiment, its effect has been supposed to be less beneficial. Its effects, however, in this respect, have, we think, been exaggerated. Theology and science have often had occasion to look with jealous eyes upon each other. But this state of things exists no longer, the province of each has been better defined, the objects of science are better understood.

How, for example, can an enlightened, religious person, think lightly of the study of Anatomy, the first step in the knowledge of man. Combined with Physiology, it embraces the most perfect description of his animal nature, a species of knowledge essential to those who would know him as a moral and intellectual being.

It is Anatomy also which guides the hand of the surgeon, inspiring him with a happy boldness which searches in the deep parts of the system, the vessel to be tied or the tumor to be removed. It is the science of all others which most excites our curiosity. If the mineralogist is delighted with a stone, if the botanist is enamored of a flower, if the enthusiasm of science leads them to undertake long and dangerous voyages in search of new species, how much greater should be our ardor for the study of man
the crowning work of creation, whose structure, at once so delicate and so strong, exhibits such harmony in its combinations, and such perfection in its details. Celsus, in his admiration of this structure exclaimed, that "a book of Anatomy is the noblest hymn in honor of the Creator," and his words have found an echo from century to century in the bosoms of the wisest and best of the profession.

The study of Botany, again, is peculiarly calculated to inspire us with a love for rural beauties. In its pursuit the student goes forth into the pure air, among the forest shades, by the river's side—he learns in the laboratory of nature, bis amphitheatre the fields and the sky. The flowers are his books, emblems of purity and beauty, the mind of man can receive nothing but good from their contemplation. In his daily walks scenes still more beautiful presents themselves to the physician. The tender care and watching around the bed of the suffering, speak of love and duty in language deeply affecting to the heart.

On the other hand, what physician but is aware that medicine is indebted for all that is most valuable and certain in its principles to Christianity? Whence have sprung those brilliant discoveries that have made of it a new science? From the Hospitals; institutions that owe their origin to Christian charity, piety, and benevolence. From the best authorities it appears that the first Hospital establishment was erected at Rome, in the 6th century, by Fabriola, a Christian lady, the friend of St. Jerome. It is clear that the greatest improvements in the science have been the result, unexpected perhaps, but yet more important, of these religious establishments. It is in them that the most eminent teachers have been formed, it is thither that students still resort, and in them are centred our hopes, for the future progress of our art. How then, can a physician aim a blow at that venerable trunk, under the shade of whose branches his own favorite science has been nurtured?

There is another reproach which has often been addressed to the physician, more justly I fear than the former; it is the state of continual hostility in which its members are so often found. It cannot be denied that personal quarrels and ill will prevail to a greater extent among them than among other professional men. After making every allowance for the peculiarity of their position which may give rise to such ill feeling, it must, I think, be admitted, that there is something in the practice of medicine, calculated to produce an irritable temper.

Professional character is the property, too often the only pre-