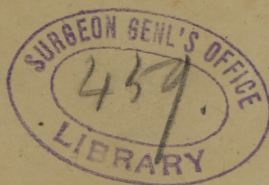


SANFORD (J.F.)

Introductory lectures

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INTRODUCTORY LECTURE,

DELIVERED IN THE

COLLEGE OF PHYSICIANS AND SURGEONS OF THE UPPER MISSISSIPPI.

SESSION OF 1849-50.

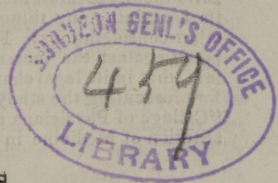
By JOHN F. SANFORD, M. D.

PROFESSOR OF SURGERY.

PUBLISHED BY THE CLASS.

DAVENPORT:
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1849.



At a meeting of the Students of the College of Physicians and Surgeons of the Upper Mississippi, held on Wednesday, Nov. 7th, 1849, RUFUS HOWARD was called to the Chair, and J. FORREST DILLON appointed Secretary. On motion, it was unanimously *Resolved*, That a Committee of five be appointed to wait upon, and solicit of Prof. SANFORD a copy of his Introductory Address for publication.

Whereupon, the following gentlemen were appointed, H. Wilfred Cross, of Missouri, A. H. Kellogg, of Illinois, J. F. Dillon of Iowa, Monroe Dodson, of Wisconsin, and S. H. Craig, of Iowa.

JOHN F. DILLON, *Sec'y.*

RUFUS HOWARD, *Chairman.*

DAVENPORT, Nov. 8th, 1849.

PROF. JNO. F. SANFORD,

DEAR SIR:—

In accordance with the object of our appointment, it affords us great pleasure, we assure you, to solicit a copy of your very able and interesting Introductory Address.

Very Respectfully,

Your Obedient Servants,

H. WILFRED CROSS,

A. H. KELLOGG,

J. F. DILLON,

MUNROE DODSON,

S. H. CRAIG.

} *Committee.*

To MESSRS. CROSS, KELLOGG, DILLON, DODSON, and CRAIG,
Committee of the Medical Class:

GENTLEMEN:

In yielding to your respectful request to be furnished with a copy of my Introductory Lecture, for publication, I am not influenced by my own conviction of its containing any thing so new or striking as to merit that distinction; but by two other considerations: First—It may, to some extent, meet the objection urged by many against the increase of Medical Schools. Second—It will make known the fact, that in its legal character, as well as in the facilities it offers the Medical Student for prosecuting the study of the most important departments of Medical Science; the "College of Physicians and Surgeons of the Upper Mississippi," is inferior to no Institution of Medicine in the West.

Truly and Respectfully,

Your friend and Preceptor,

JNO. F. SANFORD.

College of Physicians and Surgeons of the }
Upper Mississippi, Nov. 9th, 1849. }

INTRODUCTORY LECTURE.

GENTLEMEN:—

The pleasure I derive from meeting so respectable a number of Medical Students upon this occasion, who, in the pursuit of Medical Science, have honored these halls with their presence, can find no adequate expression in words; it is reserved for the heart to treasure in itself the feeling which this circumstance inspires; while the mind, in reverting to it, finds ample justification for its efforts in a laudable enterprize—a realization of sanguine hopes in a work of exalted benevolence.

A year only has elapsed since a Medical Class was first assembled in the great valley of the Upper Mississippi; and, although, during that brief period, no efforts have been made by the faculty or friends of our College, to disseminate a knowledge of its existence or condition, so great is the appreciation awarded to the labors of its founders, that now, at the opening of the Second Session, we have the prospect of a class, larger in numbers, than the Second Class of any institution ever established in the West.

It is customary with those who desire to keep pace with the progress of reform in medicine, to place themselves in the attitude of apologists for any movement which may be regarded as having a tendency to obstruct this progress; and it may be expected that, in deference to a complaint that “the multiplication of Medical Schools has a tendency to impair the dignity of Medical Science,” we will favor the profession with the reasons which have impelled us forward in this enterprise.

Although we are not unprepared, to vindicate our course, and reconcile the establishment of a School of Medicine at this place, with the highest demands and interests of the profession,—to adduce civil and professional statistics, not only in its justification, as an auxiliary in the great cause of Medical Education; but also, in evidence of its necessity, as a means of developing a spirit of co-operation on the part of the profession in the North-West,—we think the appearance of so large a class, at the opening of the Second Session, a more ample and satisfactory exhibition of the propriety of the movement, as well as of its compatibility with the interests of science.

With reference therefore, to ourselves, and our Medical School, we have but little in the way of apology to say; except that we now consider it endorsed by a portion of the profession, whose numbers and respectability entitle them to be heard. But with reference to the declaration that “the increase of Medical Schools derogates from the character and dignity of the profession,” we may be indulged in more than a passing allusion. Of course it will not be expected that we shall meet this sentiment, considered as an emanation of envy and professional jealousy; because this feeling, more than the increase of Schools, or the thousand causes which oppose the progress of science, degrades the mind of him who cherishes it. But we

wish to take a very brief view of the question, and proceed with other reflections.

What, then, must be regarded as the principal object connected with an institution of medicine? Although motives, by no means allied to the interests of science, may urge forward individuals, in their exertions in connection with an enterprise of this character; these must not be admitted as a general objection. We must first assume that the great object to be attained by the establishment of a Medical School, is the advancement of Medical Science; that in this light they always have had, and must now be regarded as having, an important relation to the progress of learning; and that those who project these Schools are actuated by impulses commensurate in their philanthropy with the benevolent ends of a divine art. If exceptions to this rule occur, they should have no weight against the general fact; and the instances which form them should alone be held accountable, and receive the obloquy, which their heterodoxy may merit.

But the agency of Medical Schools, in developing the resources of our art, from its earliest infancy, to the present time, has a more intimate connection with the question; and, in our humble apprehension, the facts, which a glance at its history reveals, should dispel the fears, which some seem to entertain, that their increase will be inimical to the progress of Medical Science.

We think this view will confirm the declaration, that "Medical Schools gave birth to Medical Science,—have nurtured it amidst the destructive revolutions which have convulsed the world;" when they have declined, it has been covered with the mantle of darkness, and, in proportion as they have multiplied, its resources have been developed, and its interests advanced. We may extend this illustration as far back as the time of Hippocrates, to whom is ascribed the paternity of the healing art, and who unquestionably laid its first rational foundation as a teacher in the temples of Cos. He gave to the Coan School its highest eminence; and the dignity of the art was fully maintained by his sons, Thessalus and Draco, and his favorite pupil, Polybus, who founded the Hippocratean, or Dogmatic Schools, in which, for a time, medicine was cultivated with great zeal. But the death of their founders was the beginning of a decline, which finally resulted in the extinction of their authority; and, as the consummation of this event progressed, a Cimmerian gloom settled upon the science, which enshrouded it in darkness for several hundred years. During this period but little is known of the healing art, except that its practice was confined to the Asclepiades, an ignorant class, who combined the functions of Priests and Guardians in the temples erected in honor of Hippocrates. The first gleam of light, which penetrated this lingering darkness, came from the re-establishment of Medical Schools, especially those of Alexandria. These served not only to dispel some of the error which the authority of former schools had fastened upon the world—one of the highest legitimate functions of new institutions of Medicine—but also contributed greatly to extend the meagre collection of facts before existing. The genius of Erasistratus and Herophilus, who constituted the glory of these schools, marked out new channels of investigation, and achieved triumphs in science which would never have

resulted from the exclusive principles to which their predecessors--the schools of the dogmatists--gave birth.

The munificence of the Grecian Kings, in founding her institutions of learning, developed an intellectual energy and thirst for scientific achievement and distinction in that classic country, which makes this a most brilliant period in the history of our art. But when the transfer of power, from the Grecian to the Roman States, began to take place; when her treasures were withdrawn from the support of her Schools, and wasted in vain efforts to perpetuate her independence, this feeling gave way to that desire for personal prowess in war, and the development of a physical grandeur, which characterized the early history of the Roman Empire.

Accordingly, we find, as the Schools of Medicine languished, amidst this general neglect, the Science itself began to retrograde. Indeed, it was an especial sufferer in the wreck of letters, which resulted from, or followed, this mutation of power; for it is stated, that the establishment of Medical Schools was prohibited by special enactment; and Pliny informs us that Archagathus, a Peloponnesian physician, who settled in Rome, was not allowed to practice his profession there. The only glimmering of light, which serves to dispel the obscurity, resulting from this declension of schools, is connected with the institutions of the Methodics, who flourished in the latter period of the Empire. By these, some remains of the Science were perpetuated, even through the dark ages; a condition brought about by causes so profound as to operate generally--almost universally--upon the human mind, and oppress every intellectual pursuit.

But Medical Schools, whose multiplication the captious and envious seem so much to deprecate, were destined again to redeem the Science from the rubbish of ages, and place it upon a more substantial basis, than it had occupied before. The revival of Medical literature, which *individual* energy and genius had failed to accomplish, was brought about by the Universities, established in the South of Europe; and what the learning and genius of a single man--or men ununited--could not achieve, was readily effected by the Schools of Salerno, Montpellier, and Bologna.

Great, however, as was the light they shed upon the Science, and important as was the effect of their establishment upon the interests of the healing art, their usefulness was by no means impaired, or the dignity of Medicine compromised, by the establishment of the Universities of Vienna and Paris, or the Schools of Padua, Pavia, Milan, Rome, Naples, and some other cities of Italy, which soon followed. On the contrary, each of these Schools, by the concentrated and united effort of men who have been connected with it, has associated itself with some bright truth, now shining in our annals; and they have all contributed as much to advance the Science, by an ambition to maintain the character and fame of their respective Schools, as by any desire for personal distinction. This, gentlemen, is one of the ways, in which a School may do more for the cause of learning, than an individual. There is a double motive. In one case, our efforts, however great, well directed, or successful, can secure eciat only to ourselves. In the other, this result is not only as gratifying to our personal vanity, or pride, but there is also a common fame, existing by virtue of our corporate organization, to which we all contribute, in which we all participate, and the love of

which, is as strongly implanted in our nature, as the desire for individual distinction. Nay, more so; for a man, when his own powers flag in the contention for fame, will attach himself, with zeal, to an enterprise, whose extended field of operations, and concentrated strength, will secure him a share of the honors his own toil had failed to realize.

But let us pursue the thought a little farther, and bring the illustration more immediately within our own observation. Let us take an example in our own country, and ask the gentlemen, who oppose the multiplication of Medical Schools so strongly, if the establishment of Jefferson Medical College of Philadelphia,—once the great seat of Medical learning in the New World,—proved inimical to the progress of Medical Science in this country. The time-honored institution already existing there, revelling in the honors of the profession, enunciating the laws which governed the Medical literature of America, upon whose altars rested the memory and genius of the illustrious dead, waged a determined opposition to its establishment; and her friends every where declared that Medical Science would suffer thereby. Was this evil prediction of the mercenary and envious realized? Go to the annals of American Medicine, and you will there find that the School, which struggled into existence beneath their opposition, now rivals them in the greatness of its renown, the brilliancy and genius of its Professors, and the extent of its valuable contributions to Medical Science. With the names of Wistar, and Physic, and Rush, the future historian of our art will associate those of Pancoast, Mutter, and Duglison; and the halls which serve as the depository of their respective fame, will be equally venerated by those who study, with appropriate feelings, the principles of our noble and divine art.

But this is not the only instance in which experience contradicts this absurd view, in our own country. We select it as a prominent one, and commend it, together with those which have sprung up in New York, Baltimore, and other places, to the attention of persons who have spoken evil concerning us, in connection with this one idea.

No, gentlemen, the multiplication of Medical Schools, will neither detract from the dignity of Medical Science, nor oppose its progress. Nor will it intrinsically, contribute to either of these results. But if those who project them, are not actuated by mercenary considerations,—if they are impelled by proper motives, if the stringency of scholastic discipline shall not be mitigated, or the standard of requirement in those, who enter the profession through them, reduced; the only effect of their multiplication will be, to shed light upon the true principles of medicine, and bring the facilities of medical instruction within the reach of hundreds, upon whom now rest the important responsibilities of the profession, and to whom these principles are a profound mystery. In looking forward to the farther improvement of the art, we may scarcely expect in a corresponding length of time, so great a number of brilliant, original developements, as those which the genius of man has effected during the last century. Our hopes of the increasing usefulness and efficacy of our art, must depend, as Mr. Allison justly remarks, on the improvement of medical education, and the more uniform diffusion, through the members of the profession, of the knowledge which we already possess. It is to the latter object, the increase of Medical Schools most

powerfully contributes; and it were as irrational to assert the contrary, as to say a nation will sink into ignorance by multiplying her primary schools; a traveller perish from thirst, amidst a thousand gushing fountains; or a famine come upon the land, whose fertile fields are crowned with golden grain.

It would be humiliating to attempt a defence of our Institution against an opposition waged by certain members of the profession, especially those connected with other Schools, and who, from this fact, should abstain from placing obstacles in the way of co-laborers in a noble cause. If we were satisfied that any man, who is capable of appreciating the tendencies of a properly constituted School of Medicine, was candid in his opposition, we would extend these reflections to prove to the world the absurdity of his views. But we are too well assured that other motives, than a desire to contribute to the progress or dissemination of Science, sway a certain class who are ever ready to proscribe those who claim to share with them the honors or emoluments of a respectable calling. We shall therefore view with equal indifference the unfounded declarations of interested journalists—the puerile efforts of hired emissaries, or the wild Utopian schemes of a rival School in the abolition of fees and the abandonment of positions, the orthodoxy of which has ever been recognized by a large majority of the Medical profession.

We are aware that these extreme measures are put in force to attract Students from the halls of other Schools, and until their true object is realized, we shall wish them many happy winters in their labors of disinterested benevolence. We are inclined to await the verdict of the American Association upon these novel proceedings, and until then, affiliate with that large and honorable portion of the American profession in and out of the Schools who believe “the laborer is worthy of his hire.”

This question being disposed of, let us proceed to examine the foundation upon which the expectations of the permanency and usefulness of this institution are based. This inquiry may seem foreign to the legitimate object of an introductory lecture to a class about to enter upon a course of scientific investigation; but it is not so. It has an intimate connection with your success here, as well as your welfare hereafter. The selection of a Medical School is a subject of the greatest consequence to those who adopt the medical profession, and if, upon entering an institution of this kind, we may know that its prospects and system of instruction are commensurate with our ambition, we enter with increased zeal upon our pursuits. If we know that the means of prosecuting a thorough course of investigation in the various departments of Medical Science, await us, we will prepare to profit thereby.

In this respect, gentlemen, we are happy to inform you, that the School you have chosen as your Alma Mater, is not inferior in the inducements it offers, to any institution in the West.

Looking at this, as the most important requisite to success, the faculty have been indefatigable in their efforts to accumulate for your benefit, all the necessary means of instruction. Our efforts to provide for those departments strictly demonstrative, Anatomy and Chemistry, we believe we can say to you, have been especially successful. We will be able to disprove to

your satisfaction the common saying, with medical men, that a School out of a large city cannot teach Anatomy successfully? We are fully aware that upon this rests the whole superstructure of Medical Science,—that without Anatomy there is no Physiology, no Pathology, no Surgery, no Medicine. Our efforts have therefore been directed to this point. We have provided for you ample *material*, and hope to be able to convince you, that, as the wonderful machinery of man, from the powerful muscle, in which the strength that subdues a world to his will resides, down to the ultimate molecule of the tenderest tissue, is no less perfect here, than in the most favored regions of the globe: the Scalpel, a steady hand, acute vision and a patient soul, can reveal the most beautiful and profound structures of this intricate and noble fabric, even in these ends of the earth.

In regard to the other department of Medical Science, which we named,—so interesting in its relations with the healing art, so important to the Physician, and one which cannot be successfully taught without the most ample means of demonstration, we hope we shall meet your highest expectations. The laws which govern the physical world, are the same in their operation throughout the Universe. They may be as clearly developed in these halls, now dedicated to Science, as in institutions whose altars time has made sacred. The great truths of a Davy, the surpassingly brilliant conceptions of a Dalton, the manipulations of a Berzelius, may be shown, and admired, repeated, and applied as well here, as in the most populous city in the world.

In reference to the other departments, I can only give you a general assurance, that the means of illustration are not wanting; and that, in the department of Clinical Medicine, you will not be unoccupied.

But there is another view in which the selection of a Medical School is of great importance to you. It is in reference to the legality of its organization. The Physician should know that the institution, from which he derives his legal privileges and professional authority, possesses in itself the power to grant them. This is not only necessary with reference to professional reputation, but questions involving interests beyond this, may require that your Diploma shall rest upon the highest legislative sanction.

Impressed with the importance of this fact, early after the re-organization of the Rock Island Medical School under the law of Iowa, authorizing general incorporations for literary purposes, I addressed letters of inquiry to several of the most eminent jurists of the State, requesting their opinion in regard to the validity of our articles of incorporation under the law referred to. The questions related principally to the application of funds arising from the courses of instruction, and to our right to confer degrees in Medicine. In each case a satisfactory answer has been obtained.

Furthermore, I have conversed with many members of the legal profession; and it is satisfactory to know, that no difference of opinion exists among the best legal minds, in regard to our full, and ample authority to carry out every legitimate object connected with a Medical Institution.

Our articles of association, drawn up by competent legal gentlemen, in conformity with the statute law, are on record in the Court of this County, and open to the inspection of all who may feel interested.

But there is a further guarantee of perpetuity and usefulness, to which we wish to make allusion. It is our intention to be *orthodox*, not only in our courses of instruction, but also in our efforts to co-operate with the regular Medical Schools of the country in carrying out those principles in Medical education, so essential to preserve the respect and dignity of the profession. We also desire to aid in the establishment of all reforms which may be clearly enunciated by the great body of Physicians who compose the American Medical Association. This body is engaged in a Herculean, but noble effort to rejuvenate American Medicine, and in compliance with its most urgent requisition we are compelled to declare a rule which should possess at least one attribute of the Medo-Persian Code—*immutability*. We refer to the prerequisites for our degree. Many circumstances require that degrees shall be given only to the worthy. Our professional brethren throughout the country have a right to expect, and demand, that the interests of Medicine shall be well guarded in this way; that testimonials of competency should be given only to those who are competent; and that an institution, located in their midst, shall afford to them the same *real* honors and rewards as those to be obtained from similar institutions elsewhere. If those, who have not sufficient love for the profession to forsake its active practical pursuits for more than a month or two, or whose means are insufficient to enable them to spend more than half that time in a Medical College, can wear its honors, and enjoy the immunities which their possession confers; what encouragement has the industrious and scientific student to toil on? What pride can he feel in the possession of an honor which is scattered around upon the worthy and unworthy alike? There are hours of darkness, even in researches so noble as those which engage the attention of the Medical Student; days of sadness and discouragement occur to him as to other mortals; and, were it not for a bright gleam from the future, which, even in the surrounding gloom, shoots athwart his pathway, how often would he not faint by the way! But place before him a bright reward, which he may wear as the crown of his labor,—a reward to be bestowed by a cherishing mother who never gives them to the undeserving, and which will be a guarantee to the world, upon whose stormy sea he is about to embark, that he is fully prepared for the responsibilities of his vocation, and he enters with new zeal into investigations where the greatest difficulties await him.

It is not our intention, gentlemen, to institute invidious comparisons between our own and other Schools of Medicine, or profess peculiar excellence in our policy and plans of instruction. But we believe a course has been pursued by some of our Western Schools which may, if continued, prove highly prejudicial to American Medical literature. We refer to the facility with which individuals, destitute of any of the qualifications which are suited to adorn, or dignify a learned profession, obtain their honors. So great has been the delinquency in this respect, on the part of some of those engaged in teaching, that a diploma, which should at once be a surety for the highest qualification of its possessor, has lost much of its influence upon the public mind; and the fact that so many receive these honors, who disgrace them, is referred to by pretenders and empirics, as an evidence that their possession carries with it no real advantage.

Against this abuse of legal privilege, we not only protest, but, acting in the spirit of reform which is beginning to pervade the American profession, we have resolved to correct it as far as our influence may contribute to this end.

We adopt this resolution, knowing that, for a time, it will be inimical to our pecuniary interests; yet we are strong in the faith, that the profession, and the Schools, will ultimately appreciate its necessity.

How may we remedy this evil? By requiring, as some have in their zeal proposed, every candidate for graduation to be well versed in the Latin and Greek languages, and familiar with every department of a Collegiate education? In our humble apprehension, this is by no means essential to a good physician. The man, who is so fortunate as to have acquired this knowledge, has our admiration and respect, and an additional source of profit and pleasure to himself. But it is not to be concluded, therefore, that he is more justly entitled to our confidence as a physician. The English language may be made the vehicle of every profound and beautiful thought pertaining to Medical Science; and the Medical Student, who correctly understands this, has a source of instruction inexhaustible and pure, from which he may, by patient industry, derive a knowledge of every thing necessary or useful in his profession. Medical Scholars have translated the labors of Medical philosophers of every age and every country into our own rich and beautiful tongue; and we can there find the teachings of an Hippocrates, a Galen, an Avicenna, a Boerhaave, Haller, Bichat, Muller, or Magendie, as correctly and eloquently laid down, as they were when first uttered in the temples of Cos, the groves of Pergamus, the Schools of Arabia, or in the Universities of Germany and France. It is not this that we require as a prerequisite in our candidates for graduation. Besides the period of private pupilage, suggested by the American Medical Association, and due attendance upon lectures in a legal institution, it is expected that they will be well versed in the system and principles of our own language; and that they will, in all respects, have taken due advantage of the means of improvement presented to them. If this is done we have no doubt but that they may pass the most difficult ordeal the interests of Science may require us to establish.

Having thus spoken of our institution, and the grounds upon which we predicate our hopes of success, it becomes our duty, in conclusion, to address a few words to you, gentlemen, for whose benefit it has been erected, and with whom we expect to sustain, during the coming Session, the relation of teacher and pupil. It is important that your attention should be directed at the beginning of your labors to some methods of investigation, which will not only curtail your toil, but enable you to attain greater proficiency in your pursuits.

Two methods have obtained in the study of the Sciences. The first is that which held sway over the world, from the first intellectual development of the human race, until about the beginning of the 17th century. It is called the *SYNTHETIC* method, and consists in assuming certain general principles to be true, and in the formation of hypotheses, by which we may be enabled to explain all the principles and facts which are known to exist in relation to any department of Science. A familiar illustration of this

mode of reasoning is to be found in the explanation of the peculiar and varied changes which are constantly occurring throughout the material world, upon the hypothesis of the Ancients, who believed there were but four elementary bodies, and who attributed to a modification of these, all the phenomena exhibited by matter. The humoral pathology, as it is termed, was an offspring of the Synthetic philosophy, and to illustrate its effect upon the mind, and show you how far absurdity can go, I will refer you to a corollary deduced from their doctrines, which you may find in the writings of one of their eminent men. "You are to dose so much of the Medicine as is spent upon the stomach directly as the constitution, and so much as is carried into the blood as the square of the constitution, and this sum into the person's size, is the quantity required."

However senseless this jargon may sound upon your ears, it once went forth as a high dogma from the orthodox temples of Science, and sentiments, kindred to this, swelled the strains of eloquence in which were promulgated the principles of a noble Science for thirteen hundred years! The result of this method could not have been otherwise than to involve the principles of Medicine in inextricable confusion, because it extends only to the *effects* displayed in connection with disease, leaving the *causes*, which are the first legitimate object of Scientific research, unexplained, or supplying their explanation by the wildest vagaries of fancy. A system like this can only apply to the observed phenomena in the wide field of physical science, and although *observation* is essential in collecting the truths which constitute, in the aggregate, the Science of Medicine, it must be related to causes which can only be known by systematic induction.

The best evidence of the insufficiency of this plan, to realize the legitimate object of investigation, is the absurd and vague systems of the ancient Medical philosophers which were founded upon it, and we should not have deemed an allusion to it necessary, were it not for the fact, that many Students of Medicine, unmindful of its treacherous tendency, are yet led by its inviting ease.

The other method of prosecuting your researches is called the **INDUCTIVE** method, and to it I wish to direct your attention. It was first proposed by Bacon in his "Novum Organum," and, after its founder, has been called the Baconian method.

According to the inductive philosophy, nothing is to be taken for granted. No proposition in Science is to be admitted, until *experiment* has established its legitimacy. The operations of nature are not to be explained upon any mere hypothesis; and no Scientific fact can be developed by receiving, as true, any thing which is not clearly susceptible of demonstration. In this sense, Science is not opinion, or conjecture: it is *knowledge*. And no achievement of the intellect,—no fabric of the human mind, can be regarded as a Science, unless it rest upon truths established by induction. In this way a fact, ascertained by accurate observation, allies itself to other facts which have been developed by demonstration; and in cases where we pause to explain a novel, or anomalous development in the progress of disease, we may refer it to a general principle or law, already established, by which its true cause may be known.

Newton adopted these rules in his researches in Science, and some of the

noblest developments of modern times resulted from his application of them. He laid down three general propositions, which embody the principles of the inductive philosophy, as follows:

1st. We are to admit no more causes of natural things, than such as are both true and sufficient to explain their appearances.

2nd. To the same natural effects we must, as far as possible, assign the same causes.

3rd. In experimental philosophy, we are to lock upon propositions, collected by general induction, as accurately, or very nearly true, notwithstanding any contrary hypothesis that may be imagined; till such time as other phenomena occur, by which they may either be made more accurate, or liable to exceptions.

These rules of study cannot be too strongly impressed upon the Student of Medicine, and I earnestly urge you, gentlemen, to adopt them before entering upon the courses of instruction which are about to commence. Their application, as before remarked, has revealed to the zealous inquirer after truth, the brightest gems of Science, and opened upon the world a flood of glowing light. The mind of a Newton, guided by these laws, analyzed the stupendous machinery of the heavens; a Davy revealed the hidden resources of our own planet; and a Dalton conceived his profound and beautiful views of the Atomic theory. And you, gentlemen, although you do not sit in halls whose fame has come down from a former age, may realize achievements such as have crowned the labors of those who have trodden these paths before you. Imbued with the spirit of this philosophy, you will set about your investigations with zeal and industry, and with a determination to analyze, with care, every difficulty that may obstruct your way. A superficial knowledge of your profession will not satisfy your aspiring ambition. You will not be content to skim along upon the surface of Medical Science. You will penetrate its depths: you will exhume from the recesses, where its hidden treasures lie buried, the most beautiful and enduring truths.

An important advantage, which results from this method of study, is its agency in dissipating the blind adherence to *authority*, which is so common to our profession. This will lead you to discard all belief in the divinity of individual right. It will convince you that mankind are born to no intellectual inheritance; that the mind, whose buoyancy and strength elevate its possessor to the highest pinnacle of fame, and enable him to include the vast Universe in his happy conceptions, may be no exotic to the humble fireside; and that he, whose early thoughts pertain to the humblest things of earth, guided by these principles, may acquire a spiritual resiliency which will cause his mind to expand, and spread, and illuminate the world.

No votary of the inductive philosophy can be swayed by the authority of the great, or dazzled by the eloquence of the learned. He has a touchstone which will divest truth of the most brilliant creations of fancy,—an agent, which, like Ithuriel's spear, will turn whatever it touches into gold. He will himself aspire to a place in the temple of fame; and knowing that a celestial fire burns upon his heart, which, like light upon the Statue of Memnon, will elicit harmony from every thing upon which its genial rays may fall, he will press forward boldly in the faith of its accomplishment.

And now, gentlemen, as we are about to enter upon a course of instruction, which will render a sojourn of a few months necessary in this beautiful little City of the West, let me invoke your attention to those social duties, and to that moral conduct, so essential in rendering your stay here happy and agreeable. You are now in the midst of a community whose love of peace, and high religious tone, are known and admired, as far as is the beautiful spot upon which their habitations stand, and the people, in anticipation of your coming, have prepared to receive you with all the demonstrations of friendly greeting. It is your duty to appreciate those acts of kindness,—to express your sense of the hospitality and attention thus displayed, by reciprocal manifestations of courtesy and respect.

Let me express a hope, profound and sincere, that, not only in your relations with the great moral requirements of social law, and the demands of a peaceful and sublime religion, but in every department of that “amicable collision,” as lord Shaftsbury calls it. “which rubs off and smooths down those rough corners which mere nature has given to the smoothest of us,” you may illustrate the highest dignity of men, and that no outrage, or violence on the part of our Medical Classes, may disturb the quiet and peace of the community. Hoping that your success here will enable you to realize the assertion of the great Boerhaave that “the art of healing, in common with all elevated pursuits, under proper regulation, is capable of purifying the affections, and spiritualizing the mind;—that it is an indication of a higher destiny that awaits us, and disciplines the intellect for the sublimest enjoyment,” it only remains for me, gentlemen, as the organ of the Faculty, to welcome you to our Institution, and to the facilities with which we have labored to supply you.

COLLEGE OF PHYSICIANS & SURGEONS, OF THE UPPER MISSISSIPPI.

COMMENCED ITS ANNUAL COURSE OF LECTURES NOV. 5TH, 1849. The new and commodious College Buildings, having been completed—extensive additions made to the means of instruction in the various departments, and Dispensary arrangements for adequate Clinical instruction having been secured, this School offers to Physicians and Students inducements second to no other institution in the North West.

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J. F. SANFORD, M. D., *Prof. of Surgery.*

M. L. KNAPP, M. D., *Prof. of Materia Medica and Therapeutics.*

S. G. ARMOR, M. D., *Prof. of Physiology, Pathology and Med. Jurisprudence.*

GEO. W. RICHARDS, M. D., *Prof. of the Theory and Practice of Medicine.*

ORPHEUS EVERTS, M. D., *Prof. of Chemistry and Pharmacy.*

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The fee for each ticket is \$10. Matriculation fee, \$5. Graduation \$20. Dissecting ticket \$5. Ample opportunity for Practical Anatomy. Subjects furnished free of charge.

There will be a Spring Course of Instruction in the above Institution, commencing on the Second Monday in March, continuing sixteen weeks. Degrees will be conferred on *the first Wednesday in July.*

