Introductory Lecture to the Course on the Institutes of Medicine, in Jefferson Medical College, Delivered October 8, 1860.

Robley Dunglison, MD

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INTRODUCTORY LECTURE

TO THE COURSE ON

THE INSTITUTES OF MEDICINE,

IN

JEFFERSON MEDICAL COLLEGE,

Delivered October 9, 1860.

BY

PROFESSOR DUNGLISON.

PUBLISHED BY THE CLASS.

PHILADELPHIA:
JOSEPH M. WILSON,
No. 111 SOUTH TENTH STREET, BELOW CHESTNUT.
1860.
CORRESPONDENCE.

JEFFERSON MEDICAL COLLEGE, | 10th October, 1860. |

PROFESSOR DUNGLISON—Dear Sir:—At a meeting of the Students of Jefferson Medical College, held October 9th, 1860, Mr. Emmet Williams, of Mississippi, being called to the chair, and Mr. H. L. Rugely, of Texas, appointed Secretary, the following resolution was read, and, on motion, unanimously adopted:—

Resolved, That a committee of eight be appointed by the Chairman to wait upon Professor Dunglison, and request a copy of his Introductory Lecture for publication.

We, the undersigned, constituting the committee appointed under the foregoing resolution, take great pleasure in performing the agreeable duty assigned us, and earnestly request permission to publish your Lecture.

With the hope that you will accede to the request of the Class, we have the honor to subscribe ourselves,

Very respectfully your obedient servants,

C. B. BLACKBURN, Mississippi.
LUCIEN S. WILSON, Georgia.
WILLIAM C. KING, Tennessee.
JOSEPH HUGG, New Jersey.
MITCHELL H. PICKETT, Pennsylvania.
EBEN. THOMPSON, New Foundland.
W. R. O'BRYAN, Kentucky.
E. D. BOWERS, Ohio.

No. 1116 GIRARD STREET, | October 11th, 1860. |

GENTLEMEN:—I have had the gratification to receive your communication of the 10th inst., asking in the name of the Class that I should furnish a copy of my Introductory Lecture for publication. I cheerfully comply with their wishes. I have often publicly recommended the same rules of action, and inculcated the same principles; and year after year's experience convinces me more and more of their soundness. Let me avail myself of the occasion to express, through you, to the Class how deeply I feel interested in their welfare, and how truly I am

Their faithful friend and servant,

ROBLEY DUNGLISON.

LECTURE.

The revolution of time has again assembled in these halls, dedicated to medical science, the teacher and the pupil,—both full of zeal, I trust; the former to communicate, the latter to imbibe lessons of wisdom, in elucidation of the wonderful mechanism of man, and of the laws that govern him in health and in disease. To some of you the scene and the occupation are new. With others, they are but a continuance of what has been auspiciously commenced.

Hitherto, it has been the custom for each professor to deliver an introductory discourse, and the first week of the session has been wholly dedicated to them; but it has been determined by the faculties of this and the other schools of the city, that there shall be one general introductory lecture by each at the opening of the session, and that the regular lectures shall be commenced on the following day. By this change, one more week is added to the session of didactic lectures.

It has been made my pleasing duty to address you on this occasion; and, in the name of the Faculty, I most cordially salute you, and may this day be to all of you the harbinger of a long career of merited distinction and honor.

The topics which are adapted for an introductory address like the present are so numerous, that the *embarras des richesses*—their very number—renders the selection a matter of some difficulty. It has not unfrequently seemed to me to be appropriate to expatiate on the connection and relative station of the science of medicine with other departments of knowledge; to inquire into its condition at different periods of its history, and to show that it has generally kept pace with other sciences, and especially with physics; to depict the different delusions which have, from time to time, appeared and given place ultimately to other growths of no less fungous luxu-
riance; and to endeavor to deduce the moral, that from all those delusions, howsoever diversified and absurd they may have been, the philosophic mind can scarcely fail to glean some important truth. But, perhaps, I cannot employ your time more appropriately, in a general introductory, than by considering practically the subject of medical study or medical methodology.

The first and principal object of your studies here is, confessedly, the attainment of that knowledge, which may enable you to cure, relieve and prevent disease; a knowledge at once extensive and minute. It demands an attention to all those departments of the science, which constitute the curriculum in this institution, and in all the best medical schools. That curriculum has been devised after profound and mature reflection as to the branches of the science to which the attention of the student can and ought to be devoted for at least two sessions. Such a period, it has been conceived, is required to enable him to attain a sufficient knowledge of them to present himself as a candidate for graduation. Of the subjects to be taught in those different departments, not one of you, it is to be presumed, is wholly ignorant; yet how much have the character, and the mode of teaching them changed since even the commencement of the present century.

Anatomy is no longer confined to the exhibition of the parts of the body as they appear on dissection. An imperfect acquaintance with it would be possessed by one who is ignorant of general anatomy, and especially of histology or the minute anatomy of the tissues, which, in its rapid advances under the microscope and the investigations of organic chemistry, conducted by able and instructed observers, may be regarded as a new department of the science, not dating back very many years.

The whole face of physiology has changed. Fifty or a hundred years ago, although a bright light appeared from time to time, they were few and far between, and served but little more than to render the darkness visible. Formerly, dead anatomy was esteemed the sole foundation of medical study. Since the time of Haller, a knowledge of the living body, of the organism in action—the Anatome animata of that illustrious physiologist, physician, naturalist, philosopher, mathematician, poet—for he was all—has been esteemed essential; and no one of the present day pretends to comprehend the phenomena, and thence to ascend to the laws of
disease, until he has endeavored to fathom the normal phenomena and laws of life. In other words, before an altered state of the tissues and organs can be comprehended, their condition in health must be understood. Biology may be regarded as essentially a modern branch of medical science. The press everywhere has teemed, in recent periods, with contributions of value. Germany led the way; France followed in her footsteps, and the nations of the Anglo-Saxon or Anglo-Norman race succeeded; all vying with each other for its advancement.

Yet there is some danger of the important applications of physiology being overshadowed in the experimental methods of modern introduction into the class-room, which are calculated to shed eclat on the skill and dexterity of the teacher, and are so attractive to the young inquirer. Vivisections have sufficiently established the reality of numerous phenomena, which do not require, therefore, hecatombs to ratify them. The great object, during the medical session, should be—to teach "physiology applied;" and it would, assuredly, be a step backward to restrict the expositions of the biological instructor to experiments and their results, or to "operative physiology." It is the province of the professor of the Institutes of Medicine to expound the phenomena and laws of phenomena of the human organism more especially in all their bearings; or to teach what has been, by many, termed, in the aggregate, the "philosophy of medicine,"—a department which, although not in the curriculum of certain of our schools, ought not to be omitted in any that profess to give full instruction in the science, as well as the art of medicine.

Scientific Surgery—of which the Council of the Royal College of Surgeons of England, on a beautiful memorial tablet, recently placed over the site of John Hunter's grave in Westminster Abbey, have pronounced him to be the founder—has proceeded onward in the career of improvement, and operations have been devised within the present century, and in our own days, which are the source of admiration and thankfulness to the philanthropist. Surgical pathology has kept pace in its advancement with its sister branch of medicine; and the improved diagnosis and prognosis, and, I may add, therapeutics of the prudent and instructed surgeon of the present day, have saved not only limbs but lives, by avoiding uncalled-for operations, the performance of which it would have
been deemed years ago the height of reckless imprudence to postpone. One of the most important improvements in modern times has been the conviction, that mutilation is the opprobrium chirurgorum, and that it ought never to be had recourse to, unless, after full and mature deliberation, all attempts to save the part have been found fruitless. The skilful and benevolent surgeon has more heartfelt gratification in saving a limb that has been doomed to the knife than in his most brilliant operations.

As a branch of surgery, and likewise of medicine, Obstetrics has kept pace with the development of the parent stems. The practical part has been simplified in its means and appliances; and the treatment of the pregnant and parturient female has been so much improved, both as regards hygiene and therapeutics, that the value of life has been greatly increased.

Chemistry has experienced such changes in the interval I have mentioned as to exhibit scarcely any of its former characters, and its zealous and enlightened votaries are daily adding to the rich stock of facts which it possesses. It is an important, essential department of medical study, and merits your close attention.

The animal and the vegetable organism are, in fact, but extensive and complicated laboratories, in which chemical composition and decomposition are perpetually taking place; effete matters cast off, and new formations incessantly deposited in their stead. Not a flower can blow, not a leaflet be expanded, not a tissue experience decay or renovation without the intervention of chemical action; and although we may never attain a knowledge of the vital force itself, chemistry, more than any other branch of science, may enable us to better comprehend the nature of many of its manifestations. Yet too much must not be expected from it, as has been occasionally by the enthusiastic. Not unfrequently, indeed, new remedies have been introduced on chemical considerations of which sound experience has exhibited the fallacy. It should be constantly borne in mind, that in the living machine we cannot calculate on the results of chemistry with the same certainty as in experiments performed out of the body; and that when organic chemistry is applied to the elucidation of living actions it may fail. It is only adapted to reveal the nature of the dead tissues and products,—of that, in other words, which may have had life, but is no longer living. It is, however, diffusing its light over subjects that were previously
enveloped in obscurity, and illuminating them with meridian splendor, and we are every day looking more and more to it to explain many recondite physiological and pathological phenomena. Already, the interpretation of many of the functions in their healthy and morbid relations rests on it; whilst materia medica absolutely requires its aid.

It would be a serious error, then, to mistake its importance. The fact, too, that every well educated gentleman is more or less conversant with the truths of chemical science, ought to stimulate the medical student to bestow marked attention upon it; for what physician would tolerate, for a moment, to find himself deficient in a branch, which forms an integrant portion of every scheme for a full medical, and, indeed, general education, and with which, therefore, he ought to be expected to be especially familiar.

Our MATERIA MEDICA or catalogue of therapeutical agents has received rich acquisitions in modern times. It is difficult to estimate the value of one set of remedial agents—anæsthetics—of recent introduction, originating in and radiating from our country, and now employed everywhere. Other energetic agents have been added to the lists, whilst some of the more inert have fallen into merited neglect. We can still spare many that are retained on insufficient titles, and the day must come when a further reduction will be effected. The testimony adduced in favor of many of them, is admitted to be slender and unsatisfactory; yet we are loath to discard them, and they hold their place in consequence of their former reputation.

The department of MEDICAL PRACTICE, hygienical and therapeutical, if not signalized by any extraordinary discovery, has proceeded steadily onwards; and although we may have difficulty in depicting its exact progress from year to year, the change between the middle of the last century and the present period is great and impressive. It is not easy to show, statistically, the improvement that has taken place in our mode of treating disease, yet it has been striking. By the aid of pathological anatomy, and especially of pathological histology; by the introduction of percussion and auscultation, and the other modes of physical exploration, for which the name of Lænnec will flourish illustriously in the annals of our science; and by the better system of observation, and of tracing effects to their causes, that now prevails; we are enabled to diagnosticate disease with
greater certainty; and, knowing the disease, to adapt our therapeu-
tical agents accordingly.

It would be a work of supererogation to lay before you, in this
discourse, examples in corroboration of a position, which will be
amply confirmed in every lecture from the Chair of the Practice of
Medicine, and in every clinical demonstration. Could, indeed, one
of the worthies of our profession, who flourished in the middle of
the last century, be permitted to revisit the earth, how strange
would everything appear around him! Although, like venerable
patriarchs of all ages, he might sigh for "the good old times," and
doubt that all the changes are improvements, he would find it in-
dispensable to renounce his ancient ideas, or consent to be honored
as an obsolete relic of antiquity in the very place in which he had
been formerly looked upon as an oracle.

Public and Private Hygiene and Vital Statistics have been
astonishingly elucidated and advanced in very recent times by the
valuable works which have appeared in France, Germany, Belgium,
England, and this country; and it cannot be esteemed invidious if I
particularize the admirable sanitary reports, which have been issued
under the direction of the British government. The annual report
of the Registrar-general is itself a mine of hygienic information of
the greatest worth; and our own Sanitary Conventions, and the
publications that emanate from them, are yearly enlarging our
sphere of knowledge on these most important subjects.

There is one other department of our science, which may be
considered as essentially the growth of more modern periods; for,
although a few excellent productions had appeared in former cen-
turies, it is only within the present, that it has received the atten-
tion, which it merits. I allude to Medical Jurisprudence or For-
ensic Medicine,—the application, in other words, of medical
science to legislative and juridical inquiries. It has, not unfre-
quently, been the custom, in the schools, to associate it with
obstetrics; but, perhaps, the main reason for such association has
been, that certain questions of a medico-legal character—infanti-
cide, for example—concern those whose diseased conditions the
obstetrician is often called upon to treat, and with whose normal
state, it is to be presumed, he must be better acquainted than one
engaged in general practice. But the train of observation and
reflection, needed in medico-legal inquiries, is by no means of the
restricted character required in that department of the art. To be a good medical jurist demands, indeed, that the individual should be well-instructed in the whole science of his profession, with all of which it has most important bearings; and hence it is a better appendage, perhaps, to the department of Institutes of Medicine.

It has been urged against making medical jurisprudence a part of the curriculum of medical education in the schools, that it requires the medical witness to be well acquainted with all the other departments, and that if he be so acquainted, he cannot fail to be a good medical jurist. Yet we may be aware of a fact, and have difficulty in applying it in certain and unusual relations, and, moreover, it is easy to forget those facts, which we are not in the habit of making use of, or of seeing frequently applied; and this is especially the case in regard to a number of those that appertain to legal medicine. Hence, the advantage of exhibiting their special bearings, which might otherwise be overlooked. In the absence, however, of a series of distinct lectures on the subject, the student may peruse with eminent advantage, excellent works, that are readily attainable; but this can be done with greater effect after he has been instructed in the other departments of Medicine; and it has been thought, that there may even be advantage in postponing its investigation—in the concrete—until after graduation. Whenever, indeed, a medico-legal case occurs to the practitioner, he must refer to such works, embodying as they do, in epitome, all the relations of the subject, with the history of the different cases of moment, that have been decided in Courts of Justice. Without such preparation, the testimony of the best informed medical witness may be confused and unsatisfactory.

After all, perhaps, the most important improvement, in modern times, has been, and still is, so slowly progressive, that its course is scarcely perceptible from day to day; yet it stands forth in strong relief when we compare the present with times remote from our own.

At one period of medical history, the treatment of disease was regarded as pure empiricism, and the idea is not yet abandoned, even by some of the profession. It was considered to be wholly tentative, and unsusceptible of any general laws being deduced from it, whilst disease was universally esteemed as an entity to be
overwhelmed and destroyed by some antagonistic agency. Hence arose a random battling with it, which, in the times of Molière, and of Rousseau, D’Alembert and Fielding, gave ample foundation for the ridicule so frequently bestowed upon physic and physicians by those and other distinguished writers, some of them even in our own ranks.

For centuries the art was exercised by the many—the ἄλλοι ἰατροὶ—of our profession, and was almost universally regarded by the public, in the darker ages more especially, as a kind of occult practice, for which, it was conceded, certain individuals might have a gift, natural or readily acquired,—a belief which is still prevalent with the vulgar. Attempts were, consequently, made to discover new remedies, “specifics,” and to adapt special agents to annihilate, as it were, special morbid conditions. In all this, we are certainly in advance of our ancestors. Duly impressed with the great truths that the observation of phenomena is to be the basis of all our reasoning in regard to morbid actions, and the most effective means for removing them; and that the essential improvement of our science must be mainly dependent upon the establishment of principles, a better system has been introduced; traditionary follies, which clogged the wheels of the cumbrous vehicle of knowledge, have been discarded; and, as in the progressive condition of every branch of science, comparative simplicity now reigns in the place of confusion.

“Art,” it has been well said by one of the most distinguished of physicists,* “is the application of knowledge to a practical end. If the knowledge be merely accumulated experience, the art is empirical; but if it be experience reasoned upon and brought under general principles, it assumes a higher character, and becomes a scientific art.” “The whole tendency of empirical art is to bury itself in technicalities, and to place its pride in particular short cuts and mysteries, known only to adepts; to surprise and astonish by results, but conceal processes. The character of science is the direct contrary. It delights to lay itself open to inquiry, and is not satisfied with its conclusions, till it can make the road to them broad and beaten; and, in its applications, it preserves the same character; its whole aim being to strip away all technical

* Sir John Herschel.
mystery, to illuminate every dark recess, and to gain free access to all processes, with a view to improve them on rational principles."

"It is in this respect an advantageous view of science, which refers all its advances to the discovery of general laws; and to the inclusion of what is already known in generalizations of still higher orders; inasmuch as this view of the subject represents it, as it really is, essentially incomplete, and incapable of being fully embodied in any system, or embraced by any single mind. Yet, it must be recollected, that, so far as our experience has hitherto gone, every advance towards generality has, at the same time, been a step toward simplification. It is only when we are wandering, and lost in the mazes of particulars, or entangled in fruitless attempts to work our way downwards, in the thorny path of applications to which our reasoning powers are incompetent, that nature appears complicated. The moment we contemplate it as it is, and attain a position from which we can take a commanding view, though but of a small part of its plan, we never fail to recognize that sublime simplicity on which the mind rests satisfied, that it has attained the truth."

Nothing, perhaps, has tended more to the retardation of rational medicine than the position, maintained by all the ignorant, and by too many of the well informed, in our own profession, that observation leading to the accumulation of facts is the only thing needful, and that the consideration of the why and the wherefore is of secondary importance, and, according to some, positively injurious.

It would be a grievous error to suppose, that all science consists in simple observation of phenomena,—or facts as they are commonly designated. Such observation is, undoubtedly, indispensable. To observe and to classify are required to enable us to deduce the laws that are necessary to constitute a science; for where there are no laws of phenomena, there can be no science, no matter what may be the number of phenomena recorded, or the arrangement given to them. He was a mere unsophisticated observer, who

"Saw with his own eyes the moon was round,
Was also certain, that the earth was square;
Because he had journey'd fifty miles and found
No sign that it was circular anywhere."

I have, elsewhere, remarked, that in the tentative or experimental methods of the day, there is, in all sciences, a marked improvement.
Instead of vague and disconnected observations, unsuggested by rational hypothesis, the philosopher now—as he ought always to have done—sets out with a preconceived idea, the result of profound thought, and careful examination of every fact or phenomenon, that can have any—the most remote—bearing on the subject of his inquiry. He observes, and compares the recorded observations of others with his own, and if, after a sedulous examination into every possible source of fallacy, he finds, that observation confirms and establishes his hypothesis, he correctly infers, that he is justified in regarding that, which was, at first, put forth hypothetically, to be a law of phenomena, and a solid addition to science. If, on the other hand, the results of reiterated observation of phenomena do not support—and, a fortiori, if they negative—his preconceived hypothesis, he unhesitatingly rejects it, and substitutes another, which has to be subjected to the same scrutiny; and thus he proceeds, until, at length, he succeeds in framing and establishing one, that receives unquestionable support from observation.

Yet it is easy to see how much more popular simple observation may be with the masses. All are, to a certain extent, capable of observing, and, in this way, of gaining some eclat, whilst comparatively few are possessed of the higher attribute of generalizing on the phenomena observed; and many an humble investigator of nature, on this account, acquires a reputation as a naturalist, to which he is but little entitled, if we employ the term ‘naturalist’ in the more elevated sense of one versed in Natural Science in all its scientific bearings. So is it, unfortunately, in medicine, which may be regarded as a branch of Natural History. Our Medical Journals teem with recorded observations of the adaptation of special drugs or medications to special morbid conditions, which are seized hold of with avidity by the unreflecting, and the name of the propounder is transferred into the periodicals at home and abroad; whilst the discovery, and discoverer, of an all important principle of therapeutics may receive but little attention, or be altogether unheeded.

It is, indeed, humilitating to reflect upon the legion of so-called facts, which have been brought forward from time to time, absorbed the attention of the practitioner for awhile, and soon sunk into merited oblivion. Who, at the present day, would have been familiar with the name of Churchill, of hypophosphite notoriety, had it
not been associated with the numerous advertisements of a remedy for pulmonary consumption, supported upon faulty chemical considerations, and fallacious experience, which led him to the rash and untenable assertion. — "I know that they [the hypophosphites] will prove as sure a remedy in consumption as quinine is in intermittent fever, and as effectual a preservative as vaccination in smallpox;" yet, already, have they nearly run their short lived career and are doomed, inevitably, to be soon forgotten.

Perhaps there has been no sect or system, which has offered us so many examples of faulty observation as that of the homœopathicists; for we are compelled to refer many, at least, of their so-called facts or "provings," as they term them, either to this cause — faulty observation — or to positive deception.

In a volume, issued by the Hahnemann Publishing Society of London, we are gravely assured, on the faith — be it borne in mind — of positive observation, that the presence of "a delusion, that thieves are in the house" is a symptom of arsenic having been taken; a "delusion, that men are swine" a symptom of henbane; an "imaginary vision of cats" an effect of aethusa; an "imaginary vision of rabbits" an effect of stramonium; that "pretending to crack nuts" is a symptom of henbane; "pretending to count money" a symptom of belladonna; "pretending to drive away peacocks" a symptom of hyoscyamus; that if the patient "eats his shoes," it is an evidence that he has taken veratrum; that "to try to climb up the stove" is an effect of henbane; "to dance in a churchyard" a symptom of stramonium; and "an inclination to pull peoples' noses" a symptom of mercury.

We smile at the absurdity of these assertions of reputed experience, and cannot doubt their fallacy. Yet they are brought forward with an imposing array of authorities, and are sanctioned by a Society, which must reckon among its members a number of well-educated and, on other subjects, rational observers and thinkers.

To the followers of Hahnemann great influence has been ascribed in aiding in the abandonment, by the profession, of those heroic and perturbing means and appliances, which were, formerly, so generally and, at times, so injuriously, had recourse to in many maladies; and the recovery of the sick under what has been termed their "marvellous exiguity of doses" may certainly have tended to the more rational therapeutics, which now prevails; but the main
results have, undoubtedly, been owing to a better appreciation, on
the part of the physician, of the play of those instinctive actions,
of which we have perpetual evidences in the maintenance and pre­
servation of the animal economy, and in the removal, by the natural
powers, of morbid conditions when within certain limits.

But even if benefit has resulted from homeopathy by its non­
interference with those actions without which the efforts of the
physician must be vain, there has been an overwhelming evil in the
encouragement given by it to the vulgar belief, that there is a spe­
cial remedial agent for every special diseased condition—for every
symptom, indeed, of such condition—a belief, which the non-pro­
fessional generally entertain, and which is too much encouraged by
many—perhaps most—of our regular brethren; yet by none, it is to
be hoped, to the same extent as by the professed homœopathist.

In the "Domestic Physician" of one, who, not long ago, was
regarded as the great apostle of Hahnemannism in this country, but,
since then, I believe a schism has taken place in the fraternity, and
I know not how he is classed, at this time, in the scale of orthodoxy
or of heterodoxy, we have numerous examples of ludicrous
credences. In that strange work, a remedy is presented for
for every aberration—mental as well as corporeal. Thus—in the
words of the author—"If anger and vexation produce mental
alienation, give Platina. When little children get into so violent a
rage as to lose their breath or fall into convulsions, give Chamomile.
If they shriek, and weep violently, with frequent attacks of
coughing, give Arnica. If they continue to cry, and will not be
pacified, give Belladonna; and if this does no good, give Hep,
[Hepar sulphuris calcis?]; the latter medicine but once."

It is said to have been the foible of an early and enthusiastic
superintendent of the Patent Office to fancy, that he had conceived
the idea of almost every patent that was presented for his consi­
deration. A distinguished friend of his—aware of his peculiarity—
determined to experiment upon this foible, by asking him for a
patent for a process for making plank out of sawdust, of which he
said he was the inventor,—a proposition, by the way, which really
—although probably not known to the more modern propounder—
was one of the earliest problems offered for solution by the Royal
Society of London. "Oh," said the ready Superintendent, "I have
long had that idea, and, in fact, the sounding board of my wife's
piano is formed of plank made out of sawdust." "But"—replied his friend—"I propose to make pine plank out of oak sawdust."

"Well," rejoined the Superintendent, "all you have to do is to add a little turpentine!" Unhappily this anecdote does not apply only to the homeopathist. In our own ranks, we too often witness this so-called "fertility of resources"—a gift, as concerns the patient, rather, I think, to be deprecated than desired.

"Nothing"—says the same homoeopathic authority—"should be given for constipation in childbed, even though it last a fortnight—as it is, at all times, a very good sign, and promotes the strength of the patient. After a fortnight, one of the remedies recommended under constipation, particularly Bry. [Bryony], may be given; if it produces no effect in twelve hours, try it once more, and if, after the second dose, no evacuation takes place in a couple of hours, give an injection of lukewarm water."

Why, this reminds me of a most estimable and accomplished professional friend—now no more—who, when laboring under gastric disturbance, told me he was determined to trifle no longer, but—to use his own expression—"to take the bull by the horns," and he had, therefore, taken a feidlitz powder!

But what shall we say of the success of homoeopathic treatment in smallpox. "Smallpox"—observes the same writer—"is so easily cured by one or a couple of doses of Sulph. [Sulphur] or Rhus, that this disease," [the much and properly dreaded smallpox,] "should no longer excite any uneasiness."

My object in giving you these extracts from the works of professed and oracular followers of Hahnemann is not to attack the system—for I have long been satisfied, that nothing but evil can result from the furious denunciations of it that have occasionally been made by those who—like ourselves—are regarded, by the public, as interested agitators; and yet I may be permitted to make the incidental remark, that there never has been—in my opinion—since the creation of the world, a tissue of more silly and baseless conceits. It is probably, however, as harmless as any that has been devised; and, as there must apparently be some tub thrown out to amuse the whale, it may be tolerated with as much equanimity as any. It will strike you, that an inconceivable and impracticable amount of observation was required to determine, with anything like certainty or probability, the presumed adaptation of those homoeopath...
articles to the special morbid conditions, and the confident tone in which such adaptation is promulgated; and—as I before remarked—there must have been in most, if not all of the cases, either faulty observation or positive deception and misstatement. Too many of the examples I have given—and I might have extended them almost indefinitely—belong, I fear, to the latter category—deception and misstatement; whilst numbers of so-called facts, recorded by the regular profession, may, unhesitatingly, be referred to the former or to faulty observation.

It was splenetically, and, in the language of hyperbole, affirmed by a distinguished ornament of the Edinburgh school, whose teaching was the source of great delight and instruction to me as it was to every pupil of that celebrated seat of medical learning, that “ninety-nine in a hundred of medical facts are medical lies;” strong language, but intended probably only to convey, aphoristically, his impression of the prevalent want of correct observation—the experience verain medical investigations.

How essential, then, that, from the very outset, the young inquirer should be aware of those difficulties that beset his path, and of the proper mode of obviating them!

Doubtless your first and principal object of study is to attain that true knowledge which may enable you to comprehend, cure, relieve and prevent disease; yet there is another, properly considered subordinate, but still of moment,—to wit; a degree of general mental culture appropriate to the medical character, and which, it is admitted, has often more to do with a man’s success in his profession, and, if not, certainly with the consideration in which he is held as a member of society, than his mere medical qualifications.

From time immemorial, physicians have been regarded as a learned class, and in all ages medicine has been esteemed one of the three learned professions. Amongst the renowned sages of antiquity, there were few of whose philosophy medicine did not form a considerable part. Celsus, indeed, affirms, that our art originated with them, because their intellectual pursuits gave occasion to diseases unknown to the illiterate, who were exempt from everything but casualties and the effects of age. Philosophers were, consequently, impelled to study medicine for the relief of
their own maladies; and when others became similarly affected, they were naturally applied to for assistance.

The most celebrated of the ancient writers on medicine were held in the highest estimation for their general attainments. A distinguished medical historiographer* thus speaks of some of the Greek physicians: "If we compare any of the Greek writers in our faculty, from the very first of them, Hippocrates, with the very best of their contemporaries of any art or profession whatever, they will be found not at all inferior to them, either in the disposition of their matter, the clearness of their reasoning, or the propriety of their language. Some of them have even written above the standard of the age they lived in; an incontestable instance of which is Aretæus." "Galen himself was not only the best physician, but the best scholar and writer of his time. So great an honor have these authors done their profession, by being versed in other arts and sciences as well as their own."

In the middle ages, our profession still maintained itself above the vulgar level. The art was, indeed, chiefly practised by the clergy, who were the depositaries of nearly all the knowledge of the day. Since the revival of learning, and up to our own times, erudition and science have been, in general opinion, attached to the medical character.

And is it not incumbent upon us to preserve inviolate this heirloom of reputation for learning, which has descended to us from almost primeval periods; and to take care—each of us—that the republic of physic shall not suffer from our individual deficiencies?

From this very moment, if you have not already so decided, determine, that your best endeavors shall be put forth to sustain and elevate the character of the profession of which you are destined to form a part. It has been said, "that there never was a time, perhaps, when this claim was so strong as it is at the present day, and when the progressive tendency of the age, the love of novelty, and the decreasing tendency to rely upon prescription and authority, are weakening the hold, which the profession has possessed over the public mind. We do not see the ignorant and gullible alone deserting our standard, and enlisting themselves among the followers of

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* Dr. Freind.
empirics. It is the astounding fact, that among the votaries of quackery at the present time, are to be found some of the most intelligent and highly educated of the community; and that even most respectable and well informed members of our own profession have become advocates of systems opposed not merely to the current doctrines of medical science, but (as appears to most of us) to the simplest dictates of common sense."

Yet history sufficiently shows that it has ever been so; and, perhaps, we exaggerate such mental obliquities, because they are brought more immediately home to us. Undue faith—unbounded credulity—in drugs has prevailed at all times; and, I fear, will persist forever, in spite of our boasted progress in knowledge.

"James's Powder,"—says the "prince of epistolary writers," and certainly most accomplished gossip—Horace Walpole, a century ago, in one of his letters to Sir Horace Mann,—"is my panacea; that is, it always shall be, for thank God! I am not apt to have occasion for medicines; but I have such faith in this powder, that I believe I should take it if the house were on fire." And yet, notwithstanding this panacea, he was, at the very time, and continued to be, throughout his protracted existence, a martyr to gout. For it, however, he had almost as implicit faith—for a time at least—in his bootikins, of the efficacy of which he speaks in glowing terms, in letters to various persons of quality. He gives no description of them, and some years ago I asked, through "Notes and Queries," an English Periodical devoted to such inquiries, if any one could throw light on the matter; but, thus far, have received no reply. It has been suggested, that they were only gloves, with a partition for the thumb, but no separate partitions for the fingers, made of oiled silk—a kind of mittens—and were adapted to the feet as well as the hands.

All these aberrations, whether popular or professional, ought to be met, not by intolerant abuse or unwise invective, but by fullness of knowledge; by an elevation of tone; propriety of deportment, and a promulgation of due confidence in the vast resources of our profession, which could never, at any preceding period of its history, be so conscientiously entertained; and, under such circumstances, may we not be authorized to unite in the conviction expressed by an eminent physiological writer and teacher,* on an

* Dr. Carpenter.
occasion similar to the present, "that as soon as the public shall be satisfied that we are sedulously applying ourselves to the advancement of our science, and to the improvement of our art; that we are carefully examining into the foundations of the doctrines current amongst us, with a perfect freedom from all disposition to cling too closely to the wisdom of our ancestors; and with a readiness to examine, in a fair and candid spirit, all and any suggestions, howsoever they may arise, and from whatsoever quarter they may come, it will return to its ancient allegiance, and will trust its health to our keeping, as in old time."

I have not the opportunity, even if I had the inclination, to enter at large into the question as to what general preparation and mental discipline are necessary for the medical student, or what knowledge ought to be preliminary to the investigation of the medical sciences. It will not be contested, that the education of the youth, who is intended for the medical profession, should be essentially that adapted for the well educated gentleman. With you, the period has passed in which your strictly preliminary education had to be obtained; but, with some of you, branches of learning may have been neglected, for want of opportunity or inclination, an acquaintance with which is still within your reach; and, with all, there is yet ample time to improve your knowledge of educational matters, which ought properly to have been preliminary.

To restrict your acquaintance with the Latin language to at least so much Latin as may enable you to translate or write a prescription—to employ the language of the American Medical Association—would be as injudicious as it would be unsatisfactory. In fact, the writing of a prescription in our ordinary mode requires rather a knowledge of technical terms than of Latin; and hence, every apothecary's boy soon learns all that is required by the Association of the professional student, whether his attention at school or college has been directed to the humanities or not. It would have been more to the purpose, if that body, which assumes to represent the profession of the country, had recommended that the youth, intended for the medical profession, should have the intellectual and moral training that befits the well educated gentleman; and all will be prepared to admit that the Greek and Latin languages form an integrant part of such training.

The rich stores of information, contained in the classical writings
of the Grecian and Roman fathers of our art, it would be well to be able to read in the languages in which they were originally couched; and yet, in the pursuit of such a luxury, it would be unadvisable to dissipate the time, which ought to be devoted to the attainment of what is strictly necessary. It is true, that where translations exist, the English language communicates to the mind of the inquirer the thoughts and spirits of the Greek and the Roman. As regards too many, perhaps most, of the best works on professional subjects that appear in the various Teutonic and Romanic tongues, they are speedily transferred to our own. Still, what a treasure is contained in the literature, medical and general, of Greece and Rome, and in that of modern France and Germany more especially, which must, forever, escape one who is unacquainted with the languages of those countries; and hence, a knowledge of them, and, if practicable, of the Italian and Spanish, becomes, certainly not indispensable, but as certainly most advisable.

It was properly urged by one of the most learned and venerated physicians of the British metropolis,* and his observations apply with even greater force to this country, that in laying down any scheme of education, we must take care to make it suitable to the majority of those who are to be educated. "There may be circumstances in their condition and objects, rendering that education which is the best in itself, not the best for them. Such circumstances belong, in an especial degree, to our profession. Very few enter it, who are not to live by it; very few who are not required to exercise its practical duties early, from the necessity they are under of beginning, as soon as possible, to support themselves; so that the majority cannot wait to be made philosophers before they become practitioners. These are homely considerations, but they are true, and most important to be borne in mind; so important, that they, above all other considerations, ought to regulate the kind and extent of knowledge which should generally constitute the education of medical men in this country." (Great Britain.)

* "The necessity under which the majority find themselves of exercising their profession early, requires, that they should be made practitioners in the easiest and the nearest way. Their knowledge should be of things obviously and confessedly necessary, and this

* Dr. Latham.
knowledge ought to be rigidly exacted, and nothing more; for if you go beyond this you ruin the purpose you wish to serve. There are, doubtless, many things out of the profession, by the previous knowledge of which, the things within the profession are better understood. Such previous knowledge you may recommend; but you must not demand it. You may recommend, that every man, before he enters upon the study of physic, should obtain the best general education within his reach; but you must specify nothing as absolutely necessary but what bears immediately upon professional use.

Entitled to it by professional position, you are destined to take your place in society in intimate association with the cultivated and the best, and no pains must be spared to fit yourselves for so important a station. Undoubtedly, your profession should be the main object of your assiduous culture; but strive, in addition, to make yourselves distinguished for your general information. Neglect not polite literature. Keep pace with the improvements of general science, as far as may be, without detriment to your chief pursuit. With the ancients, the fabulous Apollo was not only the god of Physic but of Poetry and Eloquence, and in the ranks of our profession have flourished some of the most exalted ornaments of physical and moral science.

Yet although no class of the community is expected to be more generally and better informed than physicians, the extra professional are apt to be jealous of their devotion to any pursuit, which may seem calculated to divert them from what is considered to be the practical exercise of their own; and so convinced have not a few distinguished physicians been of the existence of this feeling, that they have carefully concealed their extraneous accomplishments, until their reputation in their profession had been established beyond cavil. Nay, farther, I am acquainted with accomplished and estimable physicians, who have been unwilling that their sons, destined to become members of the medical profession, should cultivate music, under the apprehension that it might absorb too much of their time and attention, and thus interfere with professional study. Such has not been my feeling and recommendation; on the contrary, there is, in my opinion, no more ennobling form of recreation than music; and I have often observed, that moments of leisure have been agreeably and profitably spent by the student in that
manner, which, otherwise, might have been devoted to less worthy pursuits.

The words of the great dramatist depicting, as they do, the prevalent sentiment in regard to the necessity of devotion to one pursuit, should be received with many grains of allowance.

"To know
That which before us lies in daily life
Is the prime wisdom; what is more is fame,
Or emptiness or fond impertinence,
And renders us in things which most concern,
Unpractis'd, unprepared, and still to seek."

Similar apocryphal sentiments are unhappily also entertained in regard to the accomplished lawyer. "It is a most singular circumstance"—says an excellent and learned jurist*—"that eminence in general literature should, in the public mind, detract from a man's reputation as a lawyer. It is an unworthy prejudice, for certainly the science of jurisprudence may borrow aid, as well as receive ornament, from the cultivation of all the other branches of human knowledge. But the prejudice exists; and yet one would think, that the public had witnessed so many examples of men, who were great scholars and great lawyers likewise, that the prejudice might be, at this day, disarmed of so much of its quality as is apt to do injustice to the reputation of living men. Lord Mansfield was a most eminent scholar in general letters, but he was, also, unsurpassed in jurisprudence. Sir William Blackstone was so elegant a scholar, that his Commentaries are models of pure English prose; but they are none the less the invaluable mine of the laws of England. Lord Stowell, the friend and executor of Dr. Johnson, was, in various attainments, exceeded by few, but his knowledge of general jurisprudence was greater than that of any man of his day. Some of the proudest names, now on the English benches, are some of England's best scholars. But there, as well as here—though certainly it is far greater here—the public prejudice almost denies to a great scholar the right to be eminent as a jurist."

To be ignorant of all but medicine would be a sad misfortune to you, and I know of no greater compliment that could be paid you than the admission, that whilst you are thoroughly informed in your

* Judge Story.
own profession, you are familiar with the liberal arts and sciences. Necessarily thrown amongst the various classes of society, and—as I have remarked—placed in intimate association with the most accomplished, it should be the aim of the candidate for professional distinction so to augment his general knowledge as to enable him to carry on, with due intelligence, an interchange of ideas on topics of general, and even of special, interest.

The most active professional life affords numerous opportunities for improvement, provided a proper system be observed. My great maxim has been,—"Take care of the minutes, and the hours will take care of themselves." Commence early to employ well those minutes, and you will be astonished at the amount of mental acquisition and production which you are capable of effecting. Some of the most valuable of the works of Sir Astley Cooper were composed and appeared at a time when he was as much occupied as any professional person had, perhaps, ever been; and if we are astonished at the productive powers of certain of our contemporaries, how completely are they cast in the shade by those of our predecessors. Frederic Hoffmann, who made the important addition to theory of the influence of the nervous system on the phenomena of life, wrote many folio volumes, the titles alone of which, as detailed by Haller—himself an illustrious example of immense learning and industry—in his 'Bibliotheca Medica,' extend to no less than thirty-eight quarto pages!

I have stated, that the first and principal object of medical study is the attainment of that knowledge, which may enable you to cure, relieve and prevent disease; and it is emphatically for this object that you are congregated here. To empower you to attain such knowledge, the plan which prevails in this and other elevated Institutions for medical instruction has been devised, after lengthened experience and mature reflection.

The three great methods for acquiring medical knowledge are reading, attendance on lectures, and personal observation. Between reading and attending lectures there is not that difference which, at first, may appear. Views must be the same, whether delivered orally or recorded in writing; and there is more of affectation than of philosophy in the lecturer's discomfit— as has been done —books, whilst he solicits attention to his own oral expositions,—
which are really but leaflets from the book of his own brain. Observation, or the noticing of facts or phenomena, as they occur, leads to experience, which, after all, must be regarded as the great and—as I have shown—the "only ultimate source of our knowledge of nature and its laws." By this, however, is not meant the experience of one man only or of one generation, but the accumulated true experience of all mankind in all ages, registered in books or transmitted by tradition; ever bearing in mind—to employ the language of the late Professor Liston—that the greatest number of well assorted facts on a particular subject constitutes experience, whether these facts have been culled in five years or in fifty.

The object of reading—it has been well said*—is to present you with that which either you could not have learned at all, or which, at all events, you could not have learned so soon, and with so little cost without it. "It is intended to give you the result of the observation of others, without the fatigue which they incurred in obtaining and digesting it, and in making the proper inferences from it. Reading saves you a prodigious expenditure of time, even supposing you could have ascertained and discovered as much as the authors, under similar circumstances. It prevents you from repeating toilsome investigations, terminating in the same results, as what you now obtain more easily and expeditiously; and it gives you the starting places from which you may, if so inclined, push onwards in new careers of invention. It is true, that many powerful minds have allowed themselves to become entangled in the mazes of the mere literature of science, when they ought to have been laboring in fields of observation. You will do wisely to take warning from such examples; but, on the other hand, beware of falling into a habit of despising recorded facts and opinions, and of imagining, that all which is necessary to be learned you can teach yourselves; and of listening to that cant which tells you to rely, solely, upon your own experience, and to allow of no guide but nature. There cannot be greater folly or arrogance than to neglect the stores of experience, because we had no share in accumulating them."

During your attendance here—and to this point I must mainly restrict myself—lectures are judiciously made to take the place of books, but not wholly so; and, hence, a difficulty is often felt, at the

* Dr. Symonds.
commencement of your attendance, in so arranging the two as to reap full advantage from them. Too frequently, the course adopted is calculated rather to retard than facilitate progress. Most of you, perhaps, are impressed with the idea, that it is essential for you to read over, at night, in approved works or 'text books;' the subject-matter of all the lectures delivered during the day.

Nearly a quarter of a century ago, in an *ex professo* publication, intended for the guidance of the professional tyro, and called the "Medical Student," which has been long out of print, I stated the objections to this course; and subsequent—and not limited—experience has strengthened me in my then conviction, that nothing can be more inexpedient, and, indeed, injurious. Dr. Samuel Johnson, the leviathan—as he has been called—of English literature, estimated the time, that may be daily employed in study with advantage, at five hours; and Lord Coke held, that six hours in the day are as much as can generally be employed, profitably, in the study of the law.

Now, at least six full hours will be daily occupied by you in attendance on lectures. In following a course of law—as usually conducted, and as understood by Lord Coke—the neophyte is presumed to read for that number of hours; whilst in following a course on medicine, he is lectured or read to; and there can be but little difference between reading yourselves for six hours, and in being read to for the same period; excepting, indeed, that most persons receive ideas communicated orally with less fatigue than by reading; and all must find it an agreeable change of occupation to employ the ear as well as the eye.—"Leval lassitudinem etiam laboris mutatio."

Were I, then, to advise you to read for several hours at night, after having been occupied in reading or in being read to, for so many hours during the day, the required amount of reading would strike every one as far beyond what can be desirable or proper. Such a plan would teach you to read, but not to think; and there is as marked a difference between reading and thinking or studying, as there is between eating and digesting. Instead, therefore, of reading at night on all the subjects of your lectures, I would urge, that you should think or reflect on the main topics to which attention had been directed by the several professors during the day, and refer only to approved text books, should doubts or difficulties
arise, that may require removal. Time will, then, be permitted for proper exercise, and rational recreation, and for opportunities of improvement by communion with those who are able to augment your stock of information and virtue.

Especially is the objectionable plan of cramming apt to be pursued by those who are expecting to present themselves, at the end of the Session, for the honors of the Institution. In their solicitude they deprive themselves of their necessary repose, in endeavoring to read up daily with the professors; and when the period of trial arrives, their minds are in the condition of a well-stocked, but miserably arranged, warehouse, in which nothing can be found at the time it is needed. In the language of Milton,

``Who reads
Incessantly, and to his reading brings not
A spirit and judgment equal or superior,
Uncertain and unsettled still remains—
Deep vers'd in books, and shallow in himself.''

Infinitely better than this is the custom of forming examination classes, in which, by competent interrogation, the topics that have been illustrated by the different professors are constantly and agreeably revived, and re impressed upon the minds of the members of the class,—not simply before the period of examinations for a degree, but throughout the session.

To assist you in your evening recapitulations, it may be well to make brief notes, catch words or heads; certainly not to attempt to take down everything the lecturer says. General experience testifies to the beneficial results of such brief notes or heads; and if there be truth in the suggestion, that they, mechanically, fix the attention, and induce regular attendance, by the unwillingness, which a person feels to see a hiatus in his own manuscript, they are of additional importance; but if the student is unable to follow the lecturer closely, or to make a record of one observation without losing its successor or disturbing his trains of thought, they ought not to be attempted. The heads of my whole course of Lectures on the Institutes of Medicine are comprised in the small packet which I hold in my hand.

The third method of study is observation,—of which I have already said so much—to be employed not only whilst you are here, but throughout your professional existence. During the session, it will
be exercised by you in the illustrations of the different lectures; in dissections; in demonstrations; in the museum; in the hospital, and at the excellent clinic attached to this institution, in which the true rules of observation will be taught you in a manner not to be misunderstood.

It is unaccountable to me, that animadversions should have been publicly made, by estimable persons of the profession, on these College Clinics. They were originally introduced as adjuncts, and have never been made antagonistic to hospital attendance. It is notorious, however, that bedside observation, where immense classes are in attendance, is impracticable,—such bedside attendance, that is, as will enable the student to examine for himself, and watch the progress of the different cases, practice physical diagnosis, &c. Humanity would, indeed, forbid the last method of investigation in numerous acute cases,—in pneumonia, for example,—except to a few; and hence the plan, generally pursued during the winter in our hospitals, is to have the medical cases of the acute kind carried into the amphitheatre, examined, and made the subject of a lecture before the class, precisely in the same manner as is done in the amphitheatre of the college in our College Clinics.

As regards surgical cases and operations, the course of procedure in the Hospital and the College Clinic is absolutely identical; and, after all, the main difference between the two, considered in the abstract is, that in the hospital, the acute, whilst in the college clinic, the chronic cases predominate. The latter are representatives of the daily office patients, and are, in general, confessedly of more difficult diagnosis and treatment than the acute forms of disease. The unprejudiced inquirer must, it seems to me, admit that the great principles and methods of diagnosis and therapeutics can be well elucidated on them; and hence, the Faculty of this College have annually proclaimed in their "Announcement," that throughout the Session, "the Clinics of the College form a prominent, and, in their estimation, a most important element of the educational course." Numerous practitioners, from various parts of the country, have carefully followed them, and I have never heard a dissentient voice as to their great practical value.

Had a detailed record been kept of them since the first establishment of the clinic, the number of cases treated would have been a matter of astonishment; and if the modesty of my surgical col-
leagues had not interfered—for I assume that this has been the
only obstacle—the profession might have been furnished with a
history of signal surgical triumphs of the most instructive character.
It has been my office to take part in the clinical teachings here for
nearly a quarter of a century; and I have annually, and in all
honesty, declared to my clinical class, on different occasions, in
taking leave of them when my term of duty had expired, that the
student of the present day enjoys opportunities for clinical instruc-
tion infinitely superior to those of former periods, when college
clinics were unknown. Educated in those periods, I could speak
on the matter with full understanding.

Let us enter, then, together zealously on our session of study—
for we are all students—in this temple of true science; the Faculty
ergetic and unremitting in the important office assigned to them,
with means and appliances for successful teaching never more ample
and diversified; and you, with an unwavering determination to
permit nothing to prevent you from availing yourselves of every
opportunity for improvement, not simply to enable you to exercise
the ordinary duties that must devolve upon you in the practice of
your honorable avocation, but to excel.

There never was a time when greater advantages were afforded
in the best schools for its successful study. Doubtless, as I have
often said, the pathway to high professional distinction is not wide,
but it is open to all; and which of you will hesitate to tread its
steep ascent, or permit himself to be regarded as a laggard.

"Who, that surveys this span of earth we press;
This speck of life in time's great wilderness;
This narrow isthmus 'twixt two boundless seas,
The past—the future—two eternities,
Would sully the bright spot, or leave it bare,
When he might build him a proud temple there?"

Oct. 31, 1861.