An Introductory Lecture to the Course of Institutes of Medicine, &c. Delivered in Jefferson Medical College, November 1, 1841

Robley Dunglison, MD
INTRODUCTORY LECTURE

TO THE

COURSE OF INSTITUTES OF MEDICINE, &c.

DELIVERED IN

JEFFERSON MEDICAL COLLEGE,

NOVEMBER 1, 1841.

BY PROFESSOR DUNGILISON.

PUBLISHED BY THE CLASS.

PHILADELPHIA:
MERRILHEW AND THOMPSON, PRINTERS,
No. 7 Carter's Alley.

1841.
PHILADELPHIA, Nov. 10, 1841.

DEAR SIR,—By a unanimous vote of students of Jefferson Medical College, at a meeting held on Tuesday evening, the 9th inst., it was determined, if your permission could be obtained, to publish your very valuable and interesting Introductory Lecture to the present class. We, the undersigned, being appointed a committee to wait on you for the purpose of obtaining that favor, beg to state that your compliance will be esteemed a compliment the very highest, and the publication of your lecture another memento of your professional character and individual worth.

With sentiments of respect, we subscribe ourselves,

Yours, &c.

D. T. TRITES, of Pa.,
B. F. REA, of Geo.,
G. B. WEISER, of Pa.,
J. E. FORD, of Va.,
H. M. WHITAKER, of Ky.,
J. BRINGHURST, Jr., of Del.,
E. B. RICHMOND, of N. J.,
E. BROWN, of Ohio,
W. H SCOTT, of Pa.

Committee.

To Prof. R. DUNGLISON.

PHILADELPHIA, Nov. 12, 1841.

GENTLEMEN,—It is impossible, on this occasion, to refuse the unanimous desire of the students of the College, conveyed to me in so complimentary a manner by yourselves. My Introductory Lecture will, I trust, have at least one effect on those who may peruse it,—that of impressing them with the entire conviction of its author as to the excellence of the new appointments, and the stability and increased reputation of the school to which we are mutually attached.

Be pleased, Gentlemen, to present my warm acknowledgments to the class for this mark of their attention, and to believe me

Affectionately yours,

ROBLEY DUNGLISON.

INTRODUCTORY.

The revolution of a single year, gentlemen, has wrought sundry changes in the organization of this school. Whilst its exercises were proceeding energetically and in apparent harmony, death deprived us of a respected colleague, who fell from the tree of existence, not as a sere leaf, but full of the freshness and vigour of maturity.

In the last lecture, which I had the honour to deliver from this place, I remarked, that the loss of a colleague so zealous and competent; of a teacher so beloved; of a husband and father so affectionate; of a member of society so correct in all respects, was a sad calamity, and was so regarded by us.

Almost simultaneously with this affliction, the plans of two of my former colleagues were matured; and on the very day on which the remains of my lamented colleague were consigned to the tomb, it was announced to us, that they had transferred their services elsewhere.

The blow came in the midst of the session; and, for a time, it seemed, I doubt not, to the Class, to threaten the stability of the institution. But this feeling was momentary; and as it speedily passed away, and reason usurped the place of emotion, the conviction, that the loss was not irreparable, impressed every bosom; and the Class of the last Session dispersed to their homes in every part of this wide-spread country, satisfied that the institution was destined for a career of prosperity greater than it had ever enjoyed.

As for myself and my remaining colleagues, we had no apprehensions, no misgivings. We felt satisfied that a corps of instructors could be brought together, of congenial sentiments, ample qualifications, untiring industry; and whose honourable and upright deportment and elevated position amongst their medical brethren and the community, would entitle them to the loftiest consideration.

Such was the honest opinion I expressed on the occasion of taking leave of my class at the termination of the last session. After alluding to the death of an estimable colleague, and the secession of others; and expressing my wishes that the new institution in a
sister State, might succeed as it should merit,—I used the following language, at parting, to my young friends:

"It has ever been a part, I will not say of my policy, but of propriety, to entertain the kindliest sentiments towards every respectable institution that is engaged in the great object of medical instruction. It becomes us not to harbour an ungenerous thought towards any honourable member or association of members of our profession. It is easy for two or more institutions to move on harmoniously towards one great goal; and to mutually feel and act—not as bitter rivals endeavouring to injure or destroy each other, but as energetic and devoted members of a profession, which one of the first of the Romans conceived to elevate man nearer to the gods than any other avocation,—competing with each other as to which can render the greatest amount of benefit to mankind. It never can be godlike, or proper, or even politic, to disparage the useful efforts of others. All experience, indeed, proves the impolicy of such a course; and were it even shown, that the number of students in any institution could be augmented by it, success would not be desirable, because it would not be honourable.

"With these feelings on the part of myself, and, I am sure I may add, of my colleagues, it will be an object of anxiety with us to have such an organization of the school, as will enable us to persist in our career of usefulness, indulging the best feelings towards our honorable competitors.

"To the Board of Trustees of this institution belongs the responsible office of effecting this desirable consummation. My estimable colleagues and myself are desirous of seeing established a strong and efficient corps, composed of individuals whose very names will be a presage of success. To aid in this great object, I may add, that no unworthy considerations of self-comfort will be indulged on our parts; and that, so far as I am concerned, I am willing to accept the most humble position—if there be any one in the school which is more humble than another. With this spirit of self-sacrifice for the good of the whole, success, it appears to me, is inevitable under the judicious determination of our Board of Trustees; and I feel justified in assuming, from what I know of the sentiments of several of its members, that their desire, in making the new appointments and arrangements, will be to ensure, as far as may be in their power, the harmony, stability and reputation of the institution; so that hereafter, and in the lapse of years, her numerous alumni may be enabled to exclaim with pride and exultation: 'It was from this
flourishing and distinguished school that we received the highest honours of our profession:"

Such was the language I held, and such the sanguine anticipations that were cherished by my colleagues and myself, in regard to the re-organization of the school. And how have these anticipations been fulfilled? In a manner which has afforded the most unbounded satisfaction to us all. Most nobly have the Board of Trustees discharged their duty to the School, to the Profession, and to the Country. They were, to adopt their own language, desirous to obtain the services of gentlemen known throughout the country as practiced teachers, and who possess a wide-spread reputation as writers on different subjects of their profession: whose very names would be a source of confidence. With this view, they banished all personal feelings, and, in the appointment of Professors, endeavoured to keep singly in view, that which appeared to them to be most conducive to the continued prosperity of the school.

I may be permitted to congratulate the Board of Trustees, my colleagues, the alumni of this institution, and the profession, on the selection of our new professors. Most cordially do I welcome them to these halls; the theatre, I trust, of a long career of usefulness to others, and of distinction to themselves. Of their eminent qualifications, it becomes me not to speak in their presence; and, fortunately, this would be a work of supererogation. The voice of the profession has pronounced, in language not to be misunderstood, their peculiar fitness; and the fact of the increased numbers, thus far, who have joined this institution, sufficiently exhibits, that its voice has been appreciated in the proper quarter.

Neither is it necessary that I should expatiate on the history of our school. Its annals are short, but eventful. We cannot pride ourselves on a long line of distinguished ancestry; for our existence does not date more than seventeen summers. Yet, like the country which we inhabit, and which now stands forth among the foremost of nations, we appear in the vigour of manhood, determined to permit none to excel us in our honourable endeavours to be useful. Possessed of extensive facilities for teaching the science demonstratively, by the numerous anatomical, pathological and obstetrical preparations, and paintings in the Museum of the College; of diversified specimens of genuine and spurious articles, plates and drawings, in the Cabinet of Materia Medica, and of a most valuable apparatus in the department of chemistry;—having, withal, through the clinical instruction connected with the Dispen-
sary of the College, the Philadelphia Dispensary, and similar eleemosynary institutions; and, still more by the lectures on clinical medicine and surgery at the Philadelphia Hospital, and the Pennsylvania Hospital, ample opportunities for enabling the student to become familiar with disease, it will be his fault, should his progress be unsatisfactory.

Through the liberal arrangement of the Board of Guardians of the Almshouse, the students of this College can be instructed clinically by the Professor of Anatomy and the Professor of the Institutes, and they enjoy every privilege accorded to those of the sister institution.

The Board of Trustees, in the annual announcement of this College on the occasion of its reorganization, have remarked, that with a Faculty thus organized, and bent on harmonious and effective action, they entertain no doubts as to the signal success of the institution; and the Faculty have resolved, that so far as may rest on their exertions, the sanguine anticipations of the Board shall not be disappointed.

Gentlemen, when an honourable and elevated sister institution, which has been successfully engaged in the business of medical instruction for three quarters of a century, "considers it due, as well to the public as to herself, to distribute such information in relation to her as may place her advantages fairly before the profession," I may be held justified, in the peculiar condition of this school, for the brief allusion I have made to the claims which it now has on the favourable consideration of the profession.

The world is perpetually undergoing changes, both morally and physically; some which are scarcely comprehensible to us, in consequence of their minuteness during the brief period allotted for the life of man, but which become marked in the succession of ages. What a change must have come over the face of the earth since the mastodon, and his colossal companions, inhabited our plains; and since the soil, in many of the colder regions, brought forth the products of the more genial climes of the present day.

But if we are lost in wonder at the results of the examinations of the geologist of modern days, we are scarcely less so when we contemplate the changes that have been induced by man, and on man, in the comparatively brief period of which we possess records of his existence; changes which have been effected by the development of those predominant intellectual powers with which he has been gifted by his Almighty Creator. In view of these changes, we can
scarce I y be astonished, that philosophers of eminence, in their strenuous and enthusiastic advocacy of the human race, should have wildly supposed that the time may arrive, when death will be the effect only of extraordinary accidents, or of the destruction—which will gradually become more and more tardy—of the vital forces; and that in effect, the duration of the middle period between birth and this destruction has, in itself, no assignable limit.

When the gigantic intellect of that illustrious man of whom it was said—

“Nature, and Nature’s laws lay hid in night,
God said, “Let Newton be—and all was light,”

developed the “New Philosophy,” as it was termed, the enthusiasm was beyond all bounds, and we cannot be surprised at the prevalent belief, that the world would be filled with wonders. “It may be, some ages hence,” says a philosopher, one hundred and fifty years ago, “a voyage to the southern and unknown tracts, yea, possibly to the moon, will not be more strange than one to America. To those that come after us, it may be as ordinary to buy a pair of wings to fly into the remotest regions, as now a pair of boots to ride a journey; and to confer, at the distance of the Indies, by sympathetic conveyances, may be as usual to future times as to us in a literary correspondence. The restoration of gray hairs to juvenility, and recalling the exhausted marrow, may, at length, be effected without a miracle; and the turning the now comparative desert world into a paradise, may not improbably be expected from late agriculture;”—and he adds, “Now, those that judge by the narrowness of former principles and successes, will smile at these paradoxical expectations. But, questionless, those first inventions, which have, in these latter ages, altered the face of all things, were as ridiculous to former times in their naked proposals, and mere suppositions. To have talked of a new earth to have been discovered had been a romance to antiquity; and to sail without sight of stars or shores, by the guidance of a mineral, a story more absurd than the flight of Daedalus. That men should speak after their tongues were ashes, or communicate with each other in different hemispheres, before the invention of letters, could not but have been thought a fiction. Antiquity could not have believed the incredible force of our cannons, and would as coldly have entertained the wonders of the telescope. In these, we all condemn an-
tique incredulity; and it is likely posterity will have as much cause to pity ours."

Thus spake Glanvil, who was one of the earliest members and promoters of the Royal Society of London; and how much has been done since the period at which he flourished; and how rapidly is each revolving year carrying us onward in the race of improvement! It is but a year or two, since the problem that had been pronounced impracticable—of crossing the Atlantic by the force of steam—has been solved, and the old and the new world thus approximated to each other; that medals have been copied by the aid of galvanism, even more accurately than by the point of the engraver; and that objects have been delineated by the Daguerreotype with a correctness far exceeding the skill of the most perfect limner. And yet these are but a few of the more prominent improvements which have been made in the present day, and which cannot fail to do honour to their inventors, and to the period in which they flourished.

What a change has spread over our own science, since the period when it was associated with the arts of the astrologer; and since the surgeon was in humble co-partnership with the barber. Yet the disjunction was not accomplished at any distant period. In Great Britain, the barbers were separated from the surgeons in the eighteenth year of George II., and the latter were not erected in England into a Royal College of Surgeons, until the commencement of the present century.

As a point of history, pregnant with valuable deductions, it is good to look back upon the condition of medicine in former times—and in times not very remote from our own—and to compare it with that of its sister sciences, with which, as we shall find, it has always, more or less, kept pace; and when we notice, in our professional ancestors, strange conceits, fantastic reasoning, and singular confusion in tracing the relation between cause and effect, it is well to reflect on the state of mental and physical science at the time; and if we investigate closely, we shall find, that the men, who appear to us so defective in their powers of observation and reflection were but examples of the general learning of the period.

Taught to watch the revolutions of the heavenly bodies, and observing, that the florescence and maturity of plants coincided with particular periods of the year, it is not surprising that certain plants should have been referred to particular constellations, or that sidereal influence should be presumed to be exerted over particular
regions of the body. A malignant aspect of the stars was invoked to account for the different pestilences which prevailed from time to time, and multitudes of superstitious remedies were introduced into medicine, which were addressed rather to the stars than to the disease. "One cause of breeding the pestilence," (i.e. the plague of London,) says a learned writer in Charles the Second's time, "is that corruption of the air, which is occasioned by the influence of the stars, by the aspects, conjunctions and oppositions of the planets, by the eclipses of the sun and moon, and by the consequences of comets."

In ancient times, as with rude, untutored nations of the present day, the physician acted as the magician, and conversely. Physic was an art which was supposed to be most mysterious, and its practisers were presumed to hold communion with the world of spirits: hence, in the mythology of the ancient poets, both Aesculapius and Circe are accounted the children of Apollo. In those times the, word Abracadabra, hung around the neck as an amulet, chased away the ague: an hexameter from the Iliad allayed the agony of gout, and rheumatism yielded to a verse of the Lamentations.

In the times of astrological medicine, the physician had always a loophole by which he could escape. The patient died, but the leech did not lose caste; for he looked wondrous wise, and he proved, that if the leaf of the plant given to his patient had been pulled upwards, according to his express orders, in the quartile of the dominant planet, the disease would have been removed; whereas, unfortunately, the culler of simples had plucked it downwards, and in the sextile.

Many of the superstitions of former times prevail now as they did formerly, but with this difference—that, two or three hundred years ago, the facility for the reception of the marvellous, and the imperfect state of experimental science, occasioned their prevalence in the higher intellects; whilst, at the present day, they are mainly restricted to the vulgar. Those higher intellects were indeed sadly deficient in wisdom. Learned they were in all the scholastic knowledge of the period; but where mystery existed on any subject, instead of submitting it to the test of experiment and observation, they received it as an heirloom from their predecessors, and never dared to dispute the word of the master.

Roger Bacon—the Franciscan—who preceded his great namesake in bursting the bonds that had previously fettered the under
standing, and dissolved many of the idle creations of credulity and superstition, amidst some admirable remarks on the productions of experimental science, observes that the sage pursuer of it profits by the intuitive wisdom of the crow, the serpent and the eagle, whose innate knowledge teaches them to find the means of retarding the termination of their own existence; and, therefore, he argues, the wise have always closely watched the lower animals, for the purpose of stealing from them their knowledge of the powers of herbs and stones and metals.

Early in the seventeenth century, Sir Kenelm Digby—unquestionably a philosopher for the period in which he flourished—composed his sympathetic powder and armatory unguents, which were applied, not to the wound, but to the weapon that had inflicted it; and was most credulous as to the existence of strange and mysterious sympathies between the human body and all that had previously formed part of it; believing, that if a red-hot iron were run into a piece of excrement, the person would experience a sense of burning in the part whence it had proceeded.

About the same period, it was universally credited by the learned and the unlearned, that grafts of flesh, united to another body, died when the person died from whom they had been taken; and we have a marvellous case, in Thouret's modern work on Animal Magnetism, of a man at Brussels, who had an artificial nose made by engrafting, which nose served every useful and ornamental purpose, until the person from whom it was taken chanced to die, when it suddenly became livid, and fell off. Tagliacozzi or Taliacotius, the great improver of nose-grafting—for it is an ancient Hindoo operation—and whose native city, Bologna, erected a statue, with a nose in its hand, in commemoration of his dexterity, lived in the very era of superstition, (nearly three hundred years ago,) when the simultaneous death of the parent and the graft was universally credited; although the slightest attention to Friar Bacon's rules for experimental research would have shown the fallacy of the belief. Accordingly, the folly has not escaped Butler in his Hudibras.

Sir Kenelm Digby, too, believed fully that "at the approach of the murderer, the slain body suddenly bleeds again,"—a superstition often referred to in our older poets, and which was so universally credited as to give rise to the trial by Bierright, so admirably depicted by Sir Walter Scott in his St. Valentine's Day.

Again, Bacon, the chancellor, with all his philosophy, was dis-
posed to believe in the wondrous virtues of charms and amulets, and admitted the existence of the magical power of the will—a delusion which yet prevails: and, still later—less than two hundred years ago—the learned and the quaint Sir Thomas Browne was an embracer of the wonders of astrology and witchcraft. When asked by a Lord Chief Baron, equally superstitious, "whether the fits of an old woman were from disease or the devil," Sir Thomas replied, that "they were heightened by the devil co-operating with the malice of the witches."

Nay, it is not much more than one hundred years since the efficacy of the royal touch, in curing scrofula or king's evil, was implicitly credited. The first English sovereign who touched for this affection, is said to have been Edward the Confessor, who lived in the middle of the eleventh century; and the last that encouraged it was Queen Anne, who died near the commencement of the eighteenth. One of the very last subjected to the degrading mummerly was the distinguished Dr. Samuel Johnson, who, by the advice of a celebrated London physician, Sir John Floyer, was carried to London in 1712, where he was actually touched by Queen Anne, but without effect.

Much of the success that often followed this practice has been ascribed to the influence of the mind over the body; but Wiseman, one of the fathers of surgery, who lived in the early part of the seventeenth century, and who had the best opportunities for observation, asserts, that a part of the duty of the royal physicians and serjeant surgeons was to select such patients, afflicted with the evil, as showed a tendency towards recovery, rejecting all others; and as full confidence was placed in the effect of the royal touch, the disease was fortunately left to itself, and not officiously interfered with.

It has been said, that these and similar delusions are inevitable—that the improvement of the world is destined to proceed in cycles, and that whenever a new light bursts upon the eye, it requires some time before the organ can discern clearly amidst the unaccustomed blaze. In this, there is truth; and, as the world proceeds, successive cycles and epicycles will doubtless exhibit the fruits of anterior experience. Ages of obscurity, bootless conjecture, and dreamy enthusiasm preceded those of sound sense and rational observation; but they were necessary antecedents, and intimately connected with the results.

It may not be so easy for us to trace the gradual improvement
in any two successive eras, which melt into each other by indefinable gradations; but if we select distant periods—the age, for example, of either of the Bacons and our own—the evidences of mental advancement are signal. Then, the loftiest spirits quailed under superstitious terrors, and the most marvellous credences. Now, these delusions are confined chiefly—not wholly—to those whose minds have been neglected and poisoned in their youth, and whose circumstances in life have not permitted them to receive that mental culture, which could alone prevent the reception of such impressions, or disenchant them if already received.

Who, of the period of either of the Bacons, would have credited that we can draw down the forked lightning from the clouds, and rob the heavens of their artillery? or that the subtle vapour which, when breathed, destroys animal life, but is necessary for the nutrition of the vegetable—which mantles in the cup, and whose base crystallizes in the diamond—could, by the skill of the modern chemist, be converted into a solid, so as to be held in the hand, and transported from place to place? Yet we have seen this done by one of my distinguished colleagues.*

But, whilst science is proceeding with rapid strides, the belief, that the body bleeds on the touch of the murderer, still exists amongst the most benighted of the people. Constantly, in my attendance on the inmates of an eleemosynary institution, I see the protecting amulet placed near the heart; and the public prints of Great Britain, and occasionally of this country, advertise at a high price the caul,—that is, the dried membranes of the fetus, when it is born with them unbroken,—which is supposed to bestow "good luck" on the possessor. Not long ago, the public prints informed us that the body of a blacksmith, a resident of this city, had been found in the Delaware, so mutilated, that it was only recognized by a coffin screw, fastened round the neck for a charm; and a case has recently come to my knowledge, in which the touch of the hand of a dead man was employed to dispel a tumour on a child's face.

How strongly do these irrational practices show the necessity for the diffusion of true knowledge! The wide extent of credulity and superstition affords, indeed, a humiliating subject of reflection, and signally exhibits

"What a reasonless machine
Can superstition make the reasoner man."

* Professor Mitchell.
The belief, that some human beings could attain the power of inflicting ills on their fellow creatures, and of controlling the operations of nature, is one of the highest antiquity. It has appeared in every region of the globe; and, from its extensive prevalence, it is evident that the human mind, especially in its state of ignorance and barbarism, is a soil well adapted for its reception and cultivation. Life has so many evils, which the uninformed mind can neither prevent nor avert, and encourages so many hopes, which every age and condition are anxious to realize, that we can hardly be astonished to find a considerable portion of mankind become the willing prey of impostors, who practise on their credulity by threats of evil and promises of good, greater than the usual course of nature would dispense; nor have the lights of divine revelation, nor the circumstance of their being discountenanced by both civil and ecclesiastical laws, prevented such frauds and absurdities from being encouraged. Their foundation seems to lie deep in the heart’s anxiety about futurity, in its impatience for good greater than it enjoys, and in its restless curiosity to penetrate the unknown, and to meddle with the forbidden.

I know not, as regards our own profession, how this deep-rooted feeling is to be eradicated—if eradicated it can be—unless it be by the dissemination of a greater degree of knowledge respecting the nature and powers of our science, amongst the community. It has always appeared to me, that if the public were acquainted with the rigid system of induction—the careful observation and comparison of facts—required of those of the profession who keep pace with its advanced and advancing condition; if they knew how indispensable it is to be accurately acquainted, not only with the mode in which the functions are executed in health, but with the various derangements they suffer in disease; if they were aware of the nicety of discrimination which is demanded of the practitioner, and the necessity for knowledge derived both from his own observation and from the recorded experience of ages, they would pause before they had recourse to remedies of which they know nothing, and to pseudo-physicians, who, neither by education nor by habits, can possibly be equal to the important functions they assume.

The public are singularly ill-informed regarding the qualifications of the physician. His art, indeed, is presumed to be enveloped in mystery, which no effort of theirs can penetrate. It is this presumption that encourages the hardy empiric to bring forth his noses, trumps, satisfied, that in the mystery which he throws around them,
numbers will have recourse to him; and that, when the delusion is exploded—which, sooner or later, it is sure to be—he, at least, will have reaped his harvest. Where, indeed, are now the vaunted remedies of the Rocks and the Brodums? Where the celebrated Balm of Gilead, which was the foundation of the large fortune and the splendid establishment of a Solomon, in name, not in wisdom? Almost forgotten—certainly scarcely ever used. Yet these quack remedies were, at one time, as extensively employed as any of those that are now ministering to the credulity of mankind, and that will as certainly sink into the insignificance which they merit.

It is unfortunate, that the human mind is so constituted as to incline to place credence in any one, who asserts that he possesses unwonted powers in relieving human suffering, or who is bold enough to place his pretensions to notoriety unblushingly before the public. The unprofessional empiric issues his handbills, and chalks his name on walls, well aware that the mere repetition of his name and address will tend to procure him occupation. Every traveller, not a quarter of a century ago, must have impressed on his memory, "Consult Dr. Eady, No. 45 Frith street, Soho," the affiche on the dead walls in every part of the British metropolis, and for a distance of at least forty-five miles in every direction. The professional empiric—if I may use the expression—does not have his name chalked upon walls, but he selects methods for attaining notoriety which are scarcely more praiseworthy. I wish I could say, for the credit of the noble profession to which we belong, that such unworthy methods for acquiring distinction were unknown amongst us. It is but too true, that they are pursued by many, who care not for the mischief they inflict upon others, provided only they acquire, by their arts, a notoriety which is as unenviable as it is unjustifiable,—forgetful that

All fame is foreign, but of true desert;
Plays round the head, but comes not near the heart:
One self-approving hour whole years outweighs
Of stupid starers, and of loud huzzas;
And more true joy Marcellus exil'd feels,
Than Caesar with a Senate at his heels."

The portals of our profession are wide, and men enter them of the most varied dispositions,—some merely as a means for obtaining a livelihood, and careless of the methods they employ for this object; others worthy of the encomiums passed upon physicians by the great leviathan of English literature, when he declared them to
be "full of liberality and dignity of sentiment, prompt in their effusions of beneficence, and willing to exert a lucrative art where there is no hope of lucre." Pelf seems to be the only object of these mercenary, and self-aggrandizement the only reward they look to. The public, heedless, or not aware of those nice shades, or even of the sharper outlines that distinguish the honourable and the enlightened practitioner from his unworthy brother, forget, if notoriety be acquired, and unmerited success attend in its train, the sinister schemes that led to it; and they are apt to regard the expressed sentiment of the better part of the profession to be founded in envy or jealousy. It is the same feeling that fosters the "new lights," which flicker for a time, like the fire-fly in its season, and pass away, perhaps to be restored in their pristine shape, but more probably after having undergone some unimportant metamorphosis.

Thus, the humble Water Doctor, who practised Uromancy, as it was termed, and who restricted himself to the inspection of the urinal, and, by a kind of divination, not unmixed, perhaps, with some knowledge derived from constant inspection of that secretion, ventured to pronounce upon the malady under which the person was labouring, has almost disappeared from amongst us, and has yielded his very appellation to a novel and bustling sect—more elevated, it is true, because its members belong to the ranks of our profession—who take the pure element as the Magnum Dei Donum, and, under the classical title of Hydropathists, or Hydrosudotherapeutists, profess, like the empirical advertiser, to cure all diseases that are incident to humanity. Already this new light has crossed the Atlantic, where it may find a genial soil for a time; but, like other growths, it will follow in the wake of its predecessors, and perhaps furnish, in the rotation of crops, a better soil for the next product of the imagination. Thus has it ever been; and thus, it is to be apprehended, will it continue to be. "The reign," says a very recent medical traveller, who is speaking of the death of homœopathy in its native land, "of any particular humbug (there is really no name, he adds, so appropriate, albeit coarse,) is short-lived,—though the stock is so extensive that it is never worn out, and the market good enough to make it worth while to keep some article always upon sale."

The vacillation from sect to sect, which, at one time, was more characteristic of our own profession than it is at present, has perhaps encouraged all this, by teaching the public that we ourselves
have no fixed principles to guide us, and that the unprofessional might accidentally light upon something, which might be more satisfactory for the removal of disease, than the members of the profession itself. They have seen physicians, at one period, believing that almost all diseases are to be treated by stimulants; at others, embracing the view that they require the most powerful antiphlogistics or sedatives; at others, again, referring them to some particular part of the economy—the lining membrane of the stomach, for example; and, after the lapse of a few short years, discarding this view, and becoming—what they ought always to have been—essentially eclectic. They have seen Humorism and Solidism, Brunonianism and Broussaisism, supported in turn, and in turn abandoned, by the self-same persons; and they have felt—what has often been expressed, and with some is considered almost proverbial,—that all medicine—regular medicine—must be uncertain, and consequently not superior to the emanations of empiricism, seductive, as they are, by the array of successful cases, and of successful cases only, that are always brought forward in their support.

It has been properly remarked, that the tendency of the present age is to expansion—expansion in all things; and our science is exhibiting the like spirit. We look to the scientific of all countries for a supply of materials—the result of their observation and reflection. We compare those results with our own, and in that spirit which should characterize every citizen of the great republic of science,—for in science there is but one republic,—we freely furnish them with our own contributions, and we ourselves select from all that which is good. Our journals teem with the observations of our own practitioners, and with the recorded experience of our brethren in every part of the world; and in the space of a few days, I may almost say, after their publication on the other side of the Atlantic, we place in the hands of physicians, in every part of this extensive continent, republications of valuable monographs and general treatises, which have shed light on our science, and drawn down credit on their authors.

The spirit of exclusivism has been abandoned, and we adopt useful suggestions, no matter whence they proceed. The man who has never left his own county, or his own fire-side, may be possessed of all the kindlier sympathies; he may have all the knowledge which his feeble opportunities permit, but he can make no comparisons between it and others; his judgment must be narrowed down to the restricted circle around him, and the small sphere of obser-
vation which he enjoys. When, however, he quits his homestead, and mixes with the busy world around him, he speedily finds that others are at least as happy and as informed as he; and, that new views and new feelings arise from his intercourse with his fellow men; things, which he at one time esteemed indispensable, are now no longer so regarded; and his mind becomes gradually liberalized and expanded.

Such, likewise, is the effect of communion with our brethren of the profession. In the routine system of practice, at one time more extensively pursued than it is now, the physician proceeded from day to day in the same beaten track; consoling himself, should the results of his treatment be unfavorable, that the climate or locality required it, or that the disease was beyond the reach of human skill. In process of time, however, the recorded labors of his professional brethren reached him through the numerous channels of our periodical literature; and principles were gradually instilled into him, which produced expansion of his powers of observation and reflection, and he discovered that the restricted notions he at one time possessed were fallacious, and that to practice his profession 

"jucundè et tutis-simè," a judicious eclectism was indispensable.

In alluding to the liberalizing influence of travelling, it may be proper to remark, that whilst it tends to remove the limited views, which have been engendered in a narrow sphere for observation, there is great danger that under the new impressions thereby induced, older, and perhaps more sober impressions may be swept away, and the charm of novelty may be so attractive as to possess the mind altogether. Especially does this liability exist in youth, and it is one of the objections to the course pursued by many of our young gentlemen, who seek the shores of France and Great Britain, to complete, as it is considered, their medical education. All are not sufficiently fortified to resist the glare that meets their eyes, and the enthusiasm, not always tempered with discretion, which they occasionally witness. Unwonted facilities for observation are considered to bestow unwonted wisdom; and the lessons promulgated from the lips of teachers who are attached to large institutions, and who pronounce the winged words of fancied experience with the authority of the master, sink deep into the youthful heart, and cause him to resign his judgment, and subject himself to the verba magistri. He speedily finds, however, when he returns to his country, and is removed from the mirage with which he was surrounded, that much which was inculcated, and which he implicitly
believed to rest on a sure foundation, has to be rejected when his mind is untrammeled; that more crumbles under the light of true experience; until the superstructure, which he had erected on so fair and yet deceptive a foundation, totters even to its fall. And thus it happens that we occasionally see views which had been embraced in enthusiastic young France, and which had been urged to hearer after hearer by the teacher as worthy of all adoption, gradually impressed in a feeble and feeble tone, until they are wholly abandoned, and ultimately even publicly opposed.

Perhaps, however, the diminished obedience that is now paid to the debates of the masters, and the recommendations to this course that daily emanate from our professional chairs and elsewhere may have led us to pay too little respect to our eminent predecessors and contemporaries; and, to engender the arrogant feeling which is encouraged to a certain extent by our free and equal institutions, that each individual is as capable of profiting by observation and reflection as his neighbor. Nothing can be more erroneous; as in reasoning on other subjects, so is it with reasoning on medicine. Some men are endowed with more rapid conceptions, and with better powers of observation and reflection than others. Such individuals will necessarily be distinguished above their brethren; but no sound practitioner will be presumptuous enough to rely altogether upon his own fallible judgment, without comparing it with the recorded results of the experience and judgment of others, as contained in the many excellent productions of the press, that are always, or almost always within his reach.

It has always been a pleasing topic with me, and it is german to the subject of this discourse to advert to a few (and our time will admit of a few only) of the improvements that so eminently distinguish the middle or an approach to the middle of the present century, from the same period, and even from the termination of the last.

Commencing with Anatomy, which is the basis, but only the basis of the other departments of the science, we find it, instead of being limited to a knowledge of the organs exhibited on dissection, as it was in those days, now embracing an acquaintance with the absolute and relative situation of the various organs, or what has been termed Surgical or Topographical Anatomy; depicting the relations which the parts bear to surgery and pathology; unravelling their intimate texture and arrangement; their correlations, the origin and formation of the human body, the character of its numerous constituents, and the changes that supervene in the different stages of existence—
constituting what has been termed *General Anatomy*; and investigating the relative importance of organs; their presence or absence in the animal series; and from such investigation establishing great general analogies and fundamental laws, that may be applicable to all,—or what has been termed *Philosophical or Transcendental Anatomy*.

The doctrines of Histogeny, or of the mode in which the tissues are formed, even from the cytoblast or "germinal cell," have been a subject of interesting study with the more recent anatomists; and the works, that are now issued from the press on this subject, show a degree of enlightened microscopic research unknown except in very recent periods. The first part of the Elements of Physiology of Wagner exhibits a depth of investigation on this subject, and on the development of the new being, which cannot but astonish those who are unacquainted with the profound labours of modern embryologists. These, however, will form subjects of contemplation for you hereafter.

Of comparatively recent origin, too, is *Pathological Anatomy*, one of the greatest aids to diagnosis or to the knowledge of disease, but still an aid only; forming, indeed, but a link in the chain of evidence, and very often exhibiting to us the result, rather than the nature, of the diseased action; yet worthy of all attention from him who would desire to know his profession in the manner in which it ought to be known.

When we pass from Anatomy to *Physiology*, how manifest are the changes that have occurred in the period we have chosen for our survey! Fifty or a hundred years ago, although a bright light was here and there apparent, 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*—the *Anatome animata* of that illustrious physiologist, physician, poet, philosopher and mathematician, for he was all—has been added as an essential prerequisite; and no one now pretends to comprehend the laws and phenomena of disease, until he has endeavoured to fathom the laws and phenomena of life. It is obvious, indeed, that before an altered condition of the organs and tissues can be understood, we must be familiar with the healthy condition that preceded it. *Physiology* is a modern science. The medical press teems with new productions of value. Germany led the way; France followed in her footsteps; and the nations of the Anglo-
Saxon race succeeded; all vying with each other for the advancement of this important branch of the science.

We hear no longer of such questions as were propounded by the learned Sir Thomas Browne, whether, for example, a woman could be impregnated by bathing in the water that had been used by a man a short time previously; and if we occasionally meet with instances like those afforded by such men as Richerand—the most fanciful, by the way, of all modern physiologists—who considers that the reason why the languages of northern Europe contain more consonants than those of the south, is, that the mouth may not be too widely opened, and thus the cold air be prevented from getting, in too large quantities, into the stomach,—we mark them down as mere individualisms, which have no influence on the steady forward course of the science.

Surgery has proceeded onwards in the career of improvement. Operations have been devised within the last fifty years, which must be the source of admiration to the mere philanthropist. Within the last few years, she seems to have had her era of signal inventions, if they may be so termed. The operation of crushing the stone in the bladder, and that for the division of tendons in cases of deformity, would of themselves signalize the period at which they were introduced.

It is strange, gentlemen, that the latter operation had not attracted extensively the attention of surgeons until deep in the second quarter of the nineteenth century. Of old, a dread was entertained of dividing all fibrous structures, and it was considered hazardous to incise the bladder in cases of lithotomy: that dread soon passed away; yet apprehension, until within the last few years, appears to have been entertained of serious inconvenience from the division of tendons. It is now shown to be a harmless operation. The results have, indeed, been triumphant; deformities of the most distressing character have been rectified, and much mental misery has been removed. Yet the enlightened and humane surgeon is not led to operate more frequently than formerly, or to make constant theatrical displays of his dexterity, with the view of obtaining fame to himself. One of the most important improvements in modern times has been the conviction, that mutilation is often unnecessary, where, in former periods, recourse to the knife would have been regarded as indispensable. Since the introduction of rail-roads, a new form of accident has become common, and has greatly augmented the necessity for amputation: yet this is never had recourse
to unless, after full and mature deliberation, all attempts to save the limb are considered fruitless. The skilful and benevolent surgeon has more gratification in saving a single 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 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 in the way of hygiene and therapeutics, that the value of life has been surprisingly increased amongst the most interesting part of creation.

Chemistry has experienced such changes in the interval I have selected as to exhibit scarcely any of its former characters. Its nomenclature, although necessarily unfixed in consequence of the improved and improving acquaintance with the constitution of chemical compounds, has wrought an important change in the science; and its followers are daily adding to the rich stock of facts and principles which it possesses. It is an interesting and important department of medical study, and merits your close attention. We are every day looking more and more to Chemistry to explain certain physiological and pathological phenomena in our own bodies. Without it, indeed, we could not readily account for several pathological aberrations,—the depositions that take place from the urine, for example, with the appropriate methods for preventing them. The action of antacids in obviating acidity of the stomach, and of disinfectants in destroying contagious, and other miasmas or effluvia, look likewise for their elucidation to Chemistry. The whole subject of Toxicology, in its relation to tests and antidotes, belongs to Chemistry; and, in modern times, we are indebted to it for most valued gifts to Therapeutics, which infuse certainty into our prescriptions in some cases, and in others furnish us with articles adapted for the better combating of disease. I need but specify the active principles of the bark, of opium, and of the nux vomica; and the simple body—iodine—which we administer with so much success in many diseases.

Our Materia Medica, or catalogue of therapeutical agents, has received rich acquisitions in modern times. It has gained some energetic articles, and it has lost some of the more inert. It can still spare many that are retained on insufficient titles, and the day must come when it will be greatly reduced. Already the testimony adduced in favour of many of the agents, is admitted to be slender
and fallacious: yet we are loath to discard them, and they hold their place in consequence of their former reputation.

A comparison of the excellent Dispensatory of my friends, Professors Wood and Bache, with that of Quincy, so long the standard, will exhibit the signal difference between the condition of Pharmacology now, and at a former period; and I trust, that the revised Pharmacopoeia of the United States, assigned to the same able hands, with the assistance of the Colleges of Pharmacy of this city and elsewhere, and any feeble aid that I may be able to render, will be an additional evidence of the advanced condition of the same important department of medical science among us.

Lastly; 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 tracing its 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 for us to prove statistically the improvement that has taken place in our mode of treating disease; yet it has been striking. By the assistance of pathological anatomy—by the introduction of auscultation, and the other physical signs, for which the name of Laënnec 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 therapeutical agents accordingly.

It would be impracticable for me, in the course of this lecture, to bring forward instances in proof of this position, which will be ably and amply confirmed by every lecture of my friend and colleague, the Professor of the Theory and Practice of Medicine. Could 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 the venerable patriarchs of all ages, he might sigh for "the good old times," and doubt that all the changes were improvements, he would find it necessary to renounce his ancient ideas, or consent to be honored merely as a Rip Van Winkle relic of antiquity, in the very place in which he had been formerly looked upon as an oracle.

Gentlemen, the remarks that I have made in the course of this lecture exhibit one gratifying fact in full relief,—that the characteristic of the present period, as distinguished from the one which I
have selected as a point of comparison, is, that the intellectual faculties are now more employed, and that the empire of thought predominates over that of the senses. It is generally admitted, that the progress of medicine has been retarded by an exuberance of 'facts,' and that therapeutics has suffered immeasurably from the credulity of observers. In my last introductory lecture, I adduced the case of meteorology—a branch of purely physical science, in which, did we possess the requisite data, we should be able to calculate even the shape of to-morrow's clouds—as a subject in which the wide distinction between facts, the result of observation, and principles, the result of thought, is clearly shown. Observers, I remarked, have gone on registering the condition of the barometer, the thermometer, and the hygrometer, ever since those instruments were first invented; and, as Dr. Samuel Johnson sarcastically observed, "they have registered the changes of the wind, and died fully convinced that the wind is changeable;" yet, notwithstanding all the tables that have been collected and published, how few are the principles that can be looked upon as established!

Facts—the results of correct observation—form the basis of every science: without them no science could exist: but it is equally true, that they are but the basis, and that the science itself is wanting, until, from those facts, principles have been deduced. To establish those principles, or to apply them to the phenomena presented by the animal economy, in health and in disease, and to the means of preserving and restoring health, requires a knowledge of all those departments, that constitute the curriculum of study in this institution. It requires, withal, accurate and sustained powers of observation. Yet observation which demands mainly the employment of the perceptive faculties, furnishes but the materials for thought, whilst sound therapeutics require both. To treat disease understandingly is the end and aim of the profession which you have embraced; and observation—accumulated observation—is an essential element, but still an element only.

The present mode of teaching medicine offers great facilities to the student. His mind is not burthened with the numerous, and often irrational and flimsy speculations of predecessors and cotemporaries. His reason is now addressed more than his memory: He is encouraged to think, and is furnished by his preceptors with the materials for thought. But in proportion to the facilities afforded to him, are the difficulties that surround them. Appearing daily, for weeks and months, before an intelligent auditory; feeling
deeply the responsibility they are under to that auditory; impressed with the dignity of the science, with its importance to mankind, and the necessity for infusing correct principles into the minds of those who are to be a blessing, or the contrary, to the profession of their selection, and to the community; their solicitude must be overwhelming. It may be felt, but it cannot be expressed. It is a feeling, however, which prompts to zealous and untiring exertion.

For yourselves, some of you entering at the threshold of the temple of science; others who have been received into its sanctuary, and who expect, in a short time, to be permitted to sacrifice at the altar—what, in conclusion, shall I say to you? Of the responsibilities of your dignified and honourable profession, you formed some estimate before you determined to embrace it; and are already aware, that to become thoroughly informed in it demands close application. The public speak of a man being "born a physician," and, at this very day, and not far distant from this enlightened city, an itinerant mountebank offers his services for the cure of disease on the ground that he is the "seventh son of a seventh son." Strange to say, that even in the 19th century, there are some who consider, that this accident confers on the individual peculiar aptitude for treating disease. Such a feeling can, however, exist only with the most ignorant of mankind. It is admitted, by the informed, that no study requires more careful inquiry, none a greater union of moral and physical reasoning. The pathway for distinction is narrow, but it is open to all; and which of you will hesitate to pursue it, or consent to be laggard in the race?

"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?"