

7
8
AN ADDRESS

TO THE

GRADUATING CLASS

OF THE

MEDICAL SCHOOL IN THE UNIVERSITY AT CAMBRIDGE,

ON WEDNESDAY, MARCH 9, 1864.

BY JOHN A. ANDREW, LL. D., ✓

PRESIDENT (*ex officio*) OF THE BOARD OF OVERSEERS.

BOSTON:
TICKNOR AND FIELDS.

1864.

RIVERSIDE, CAMBRIDGE:
PRINTED BY H. O. HOUGHTON AND COMPANY.

CORRESPONDENCE.

HIS EXCELLENCY, JOHN A. ANDREW,
Governor of the Commonwealth of Massachusetts.

DEAR SIR, — The Medical Faculty of Harvard University thank you most cordially for your kindness in complying with an invitation which your numerous cares and duties might well have excused you from accepting.

They desire to express to you the gratification they have received in listening to your Address; a discourse full of noble sentiments, of wise counsels, of eloquent exhortation, of felicitous illustration, all recommended by the dignity and grace of utterance which have so often won the applause of larger audiences.

That they may preserve a faithful record of the hour you have spared them from the toils of office, and that their departing students may carry away with them the words as well as the spirit of your Valedictory Address, they respectfully ask of you a copy for publication.

| | |
|----------------------|-------------------|
| D. HUMPHREYS STORER, | J. B. S. JACKSON, |
| J. BACON, | E. H. CLARKE, |
| G. C. SHATTUCK, | HENRY J. BIGELOW, |
| HENRY I. BOWDITCH, | C. ELLIS. |
| O. W. HOLMES, | |

COMMONWEALTH OF MASSACHUSETTS.

Executive Department.

BOSTON, *March 12th, 1864.*

GENTLEMEN, — A copy of the Valedictory Address delivered last Wednesday to the Graduating Class of the Medical School, accompanies this reply to your exceedingly indulgent note of the 9th instant, which

I have just received. The manuscript is committed to your disposal, with a grateful sense of the kindness with which an effort necessarily very inadequate, was received by the Class and by yourselves; and, with my best wishes for the prosperity of the School, and with great respect, I am

Your friend and servant,

JOHN A. ANDREW.

To

DR. D. HUMPHREYS STORER,

DR. J. BACON,

DR. G. C. SHATTUCK,

DR. HENRY I. BOWDITCH,

DR. O. W. HOLMES,

DR. J. B. S. JACKSON,

DR. E. H. CLARKE,

DR. HENRY J. BIGELOW,

DR. C. ELLIS.

ADDRESS.

I WISH it were within my power, by an adequate performance of the task, to render a fit return to the gentlemen composing the Faculty of Medicine, for their invitation to deliver to the graduating members of the Medical School, the last words, in the name of the University, addressed to them in their capacity of pupils. Indulgent as I know the gentlemen of the Faculty to be, I nevertheless regard their departure from the annual custom of assigning this honorable duty to one of those who have guided your studies and illustrated your inquiries, simply as a loyal recognition of the relation of the University, in all its branches, to the Commonwealth; and, perhaps, as in friendly consideration of the sincere desire always entertained on my own part to serve the advancement of learning and the liberality of its diffusion.

Were my own studies and pursuits better adapted than they are to the uses of such an occasion, yet I should be compelled to rely on the generosity of an audience of scholars to overlook the incompleteness of the effort. For even then something would need to be pardoned, (if that temerity deserves your indulgence,) in consideration of the circum-

stances of care and distraction amid which it is undertaken. But I confess, gentlemen, that I felt the request to participate in this ceremony of your graduation to be in the nature of a command, and I accept the performance of this duty as an official service, glad to stand in relations so intimate with such a number of educated young men, whose careers are now beginning in the promotion of human welfare by the pursuit of a profession adapted to the protection of man against the ills that flesh is heir to, the just pursuit of which will contribute to elevate mankind as a society of rational beings, as well as to improve their sanitary condition and their physical development.

I gladly welcome you, gentlemen, now that you are passing out from the retirement of the academy to present yourselves among your equals as equal candidates for the employments, the efforts, the achievements, and fortunes of the active world; I welcome you, with kind and cordial words, with open hand, and with a heart of cheerful hopefulness. In behalf of all those with whom you are henceforth to share the responsibilities and rewards of citizenship, and with a proud sense of the strength and honor to the State of your accession to the spheres of manhood, I hail your coming, repeat the welcome, and bid you a hearty, brotherly God-speed.

I may not assume to speak of subjects appropriate to the occasion but demanding the treatment of professional or scientific minds. But the physician regarded as a citizen in a free commu-

nity, is a subject not unworthy your contemplation, nor unbecoming the time or the place; and it is the topic of some brief observations you may be willing to accept from one not bred to your own profession. It is not without some emotion that I call up to my mind's eye the good physician in the character of the patriotic citizen. It is now about three years that it has been a part of my daily duty to share in the most grave and responsible task of attempting to provide for many thousand men, who at one time or another have been in arms, on the field or on the deck, for the defence of their country, the advice and treatment, in the department of medicine and surgery, of able, accomplished, and faithful surgeons and assistants, worthy to stand guard over the sacred citadel where is enshrined a hero's life, competent to assuage the mortal anguish of the brave, and to soften the anxieties of kindred hearts at home. Of a success which no one could have dared to anticipate, in the conduct of a task so delicate, I can speak publicly and without embarrassment. For while I claim for the Commonwealth the honor of having put into the military service a medical staff, up to this day consisting, in all, of one hundred and one surgeons and one hundred and ninety-eight assistant-surgeons, comprising some men of the most eminent merit, of noble patriotism, of distinguished professional acquirements and skill, and presenting, I believe, as a whole, a body of medical officers unsurpassed elsewhere by any similar number in any army,—I can make the claim for Massachusetts, and for the pro-

fessors of the healing art themselves, without the slightest personal assumption. To your profession, gentlemen, belongs the honor of furnishing an array of proficients so numerous and respectable; and to one of its members, in whom are united the characters of the amiable gentleman, the good physician, and the patriotic citizen,—I mean the Surgeon-General of the Commonwealth,¹—and to those other eminent and most liberal minded exemplars of your calling, who have contributed to the State, in the capacity of a Board of Examiners,² their invaluable service,—to them belongs the credit of the selection. And beside the three hundred members of the medical staff of our regiments, more than one hundred gentlemen of the profession, including some of the most distinguished practitioners of surgery, have been sent forward from the head-quarters of the Commonwealth, on notice from the Department of War, to repair to the battle-ground after some of our severest actions. They obeyed our summons without hesitation or delay, and gave their efforts and their skill while the pressing character of a grave exigency continued to need them, receiving

¹ Dr. WILLIAM J. DALE.

² The members of the Medical Commission, from the time of its constitution in April, 1861, as a Board of Examiners of Candidates for appointment as Surgeons and Assistant Surgeons of the Massachusetts Volunteer Regiments, to this date, are as follows:— Dr. JAMES JACKSON, (resigned). Dr. GEORGE HAYWARD, (died). Dr. S. D. TOWNSEND. Dr. JOHN WARE, (resigned). Dr. SAMUEL G. HOWE, (resigned). Dr. J. MASON WARREN. Dr. SAMUEL CABOT, Jr. Dr. RICHARD M. HODGES. Dr. GEORGE H. LYMAN, (resigned). Dr. GEORGE H. GAY. Dr. WILLIAM J. DALE. Dr. JOHN C. DALTON, (died). Dr. ROBERT W. HOOPER. Dr. SAMUEL L. ABBOT.

no reward but that priceless compensation, — the thought of a good man's duty nobly done. A large number, I know not how many, of civil surgeons from Massachusetts, have been employed by the Surgeon-General of the United States as contract-surgeons in the Army; others have, in like manner, served on board our Naval vessels and war steamers; and others still have served under the direction of the Sanitary Commission; — all devoting themselves to the saving of human life, to diminishing the sufferings of war, to restoring the wounded and the diseased, and performing, in the spirit of patriotic citizens, the duties of an enlightened and liberal profession. Many of those who marched from the Commonwealth as members of the medical staffs of Massachusetts regiments have found promotion to the rank of surgeons of brigade, medical inspectors of divisions, directors on the staffs of corps commanders, or chiefs of army hospitals. They have carried with them into the service such ideas of public duty, such principles of honor, and such proficiency in their humane pursuit, as to have attracted universal commendation, reflected credit upon the reputation of the schools and profession at home, and to have made the very commission of a Massachusetts medical officer a passport to confidence and favor.

Eight gentlemen, of those who entered the service from this Commonwealth, commissioned on our regimental staffs, have yielded up their lives, victims to disease, exposure, and over-toil. To one of them, who was among the earliest in the spring of

1861 to offer himself to the work, I must allude by name. I can never forget the impression his original offer of service, made in person, produced on my own mind. Of mature age,—having passed the time when exposure to life in the Army could often be expected,—of ripe and large experience in some of the most difficult and the most intellectual duties of the profession, the possessor of a fame permanent and wide, a man of great ability and of large acquirements, Dr. LUTHER V. BELL came out, at once, from the retirement and comparative leisure his former labors had richly earned. With youthful ardor, but with the grave and weighty sense of a thoughtful, matured, and philosophic mind, he proposed for himself the hardest and most active service, pointed to his younger brethren the path of duty and honor and led the way. In camp, on the march, in hospital and on the field, he was alike a model of earnest fidelity, of accomplished ability, of modest patience, and of that subordination of self to duty which renders a great man entirely great. And when he had ceased forever from his labors, his remains, reclaimed by his kindred and his neighbors, by the city where he dwelt and the State he had adorned, received those burial rites and funereal honors becoming to one who, as a civilian and a soldier, a man of science and a public servant of the Commonwealth, had illustrated civic virtue in the example of his life and of his death.

Although the surgeons attached to our Army are devoted to a duty sacred as humanity, and serve alike, when humanity requires it, the needs of ene-

mies not less than of friends, we have not, during the existing War of the Rebellion, found that either they, or the ministers of divine mercy, have been permitted to enjoy immunity from captivity and death, although present on the field to alleviate suffering, save the wounded, and soften the travail of mortality. In many instances our surgeons have suffered the hardships of prisoners of war; the wounded and dying been deprived their aid; and five of our own medical staff, falling upon the battle-field, have breathed their last breath by the side of those they had come to rescue or relieve. Thus eight by diseases incident to the exposures of military employment, and five by the perils of battle—thirteen medical officers¹ from our own Commonwealth—during these three years of war, have laid

¹ The names of these medical officers and the corps to which they were attached, are as follows:—

Died from disease or accident, in the line of their duty:—Dr. JOHNSON CLARKE, Surgeon's Mate 3d Regiment Mass. Vol. Militia, detailed as Surgeon of Battalion Massachusetts troops at Fortress Monroe, subsequently organized as 29th Regiment Mass. Vol. Infantry. Dr. LUTHER V. BELL, Surgeon 11th Regiment Mass. Vol. Infantry, promoted to be Brigade Surgeon of Volunteers, afterwards to be Medical Director of General Hooker's Division. Dr. EPHRAIM K. SANBORN, Surgeon 31st Regiment Mass. Vol. Infantry. Dr. ARIEL J. CUMMINGS, Surgeon 42d Regiment Mass. Vol. Infantry, captured at Galveston, held as prisoner by the rebels, died in a rebel prison. Dr. ROBERT WARE, Surgeon 44th Regiment Mass. Vol. Infantry. Assistant Surgeon NEIL K. GUNN, 1st Regiment Mass. Vol. Infantry. Assistant Surgeon JAMES WIGHTMAN, 2d Regiment Mass. Vol. Infantry. Assistant Surgeon NATHANIEL W. FRENCH, 55th Regiment Mass. Vol. Infantry.

Killed by the enemy.—Surgeon S. FOSTER HAVEN, JR., 15th Regiment Mass. Vol. Infantry. Assistant Surgeon ALBERT A. KENDALL, 12th Regiment Mass. Vol. Infantry. Assistant Surgeon JOHN C. HILL, 19th Regiment Mass. Vol. Infantry, died in hospital from wounds received on the battle-field. Assistant Surgeon EDWARD H. REVERE,

down their lives, giving to their country and to mankind the last pledge of patriotism, valor, and conscientious devotion to the behests of duty. Others — not a few — broken in health, disabled for such exacting labors, responsibilities and exposures, have been relieved in season to permit their return, in civil life, to less perilous spheres of usefulness.

I must not omit to mention that three of our staff-surgeons have been relieved to accept positions more exclusively military. One is a Major of Cavalry; another is a Captain; and the third¹ accepted a Lieutenancy of Cavalry, only to die by an accidental injury received in the line of his duty before he reached the field. Another Massachusetts physician, who had passed through the war of the Crimea as a Surgeon of Omer Pacha, entered the First Regiment of Massachusetts Infantry Volunteers as a Captain, afterwards commanded the Thirty-Fifth as its Colonel, lost an arm at the battle of South Mountain, and is now in command at Norfolk, Virginia, as a Brigadier-General of Volunteers.

Two of the members of the Medical Commission of this Commonwealth have died while in its service, — Dr. GEORGE HAYWARD and Dr. JOHN C. DALTON.

20th Regiment Mass. Vol. Infantry. Assistant Surgeon FRANKLIN L. HUNT, 27th Regiment Mass. Vol. Infantry, killed by a rebel assassin.

Besides these, Dr. E. G. PIERCE, of Holyoke, and Dr. J. H. MORSE, of Lawrence, employed in the service of the United States as contract surgeons, died of disease contracted in the line of their duty; and Dr. JAMES M. NEWHALL, of Sutton, engaged in the same service, was drowned in a chivalrous attempt to rescue some women and children from on board a sinking transport vessel.

¹ Lieut. EDWARD B. MASON, 2d Regiment Mass. Vol. Cavalry, formerly Assistant Surgeon 1st Regiment Mass. Vol. Heavy Artillery.

The former, an eminent surgeon, a member of the Corporation of the University, was among the earliest of the medical men who came to the assistance of the State, and among the most constant, upright, and efficient. Dr. Dalton's whole heart, also, was in the National cause. When, in 1862, the "Daniel Webster" steamed into port with two hundred wounded soldiers on board, happening to be aware of their arrival he reported to the Surgeon-General with cordial offers of help. "What can I do for you, Doctor?" he asked. He was answered: "Jump on to the box of this ambulance, and help me see these wounded soldiers to the hospital." The venerable patriot, ready to give his heart and hand and distinguished professional aid wherever the exigency of the moment called for him, mounted the box and rode up State Street with his charge. I have heard of much younger and inferior men, whose sense of their own personal dignity would be contented with nothing less than the leading hand in a capital operation.

Another,¹ (whose family name is eminent in divinity as he has himself made it in medicine,) having given his son to his country, (the noble-hearted surgeon of the Forty-Fourth Massachusetts Regiment, who died at his post in North Carolina,) was compelled to retire from the Commission; though he cannot withdraw from the public memory, nor its honor and gratitude.

While I seem to pause in order to pay a respectful tribute to individual men, cultivators of medical

¹ DR. JOHN WARE.

and surgical science, I pray you to remember that although no words of human praise can increase the great reward of those who have passed beyond mortality, and while this passing allusion is only just, alike to the dead and to the living, still its usefulness and intent are for your own encouragement and instruction, are to remind you that for yourselves, also, the country has its duties and its honors.

The return of peace, which, even if delayed beyond our hopes, must nevertheless be comparatively soon, will remit the great body of your profession who will have engaged in the service of the Army or the Navy, to the employments of civil life, in which, after all, the large majority of the whole fraternity will have always been occupied. Nor will the opportunities of peaceful life present less certain, less numerous, or less important, scarcely less brilliant, means and opportunities for lasting and general usefulness to society. But, whether in peace or war, or under whatever circumstances of an external character you may live hereafter, your relation to human society, your membership of that grand corporation, the Civil State, imposes duties and confers privileges, needing only to be understood by all young men, in order to be valued. The secret of happiness, of genuine success, I verily believe lies in the just appreciation of our lives as golden opportunities for industrious, brave, and devoted work.

In this spirit writes Sir Thomas Browne, in his "Religio Medici":

“I feel not in me those sordid and unchristian desires of my profession ; I do not secretly implore and wish for plagues, rejoice at famines, revolve ephemerides and almanacs in expectation of malignant aspects, fatal conjunctions, and eclipses : I rejoice not at unwholesome springs, nor unseasonable winters : my prayer goes with the husbandman’s ; I desire everything in its proper season, that neither men nor the times be out of temper. Let me be sick myself, if sometimes the malady of my patient be not a disease unto me ; I desire rather to cure his infirmities than my own necessities : when I do him no good, methinks it is scarce honest gain ; though I confess it is but the worthy salary of our well-intended endeavors. I am not only ashamed, but heartily sorry, that, besides death, there are diseases incurable : yet not for my own sake, or that they be beyond my art, but for the general cause and sake of humanity, whose common cause I apprehend as mine own.”

The rightful claims of mankind upon those who have enjoyed especial advantages of knowledge and intellectual culture, are always of commanding importance. They cannot be disregarded. As the gifts of intelligence and of all intellectual wealth are more precious than any material riches, so also is the capacity of him to whom they are given the more especially fitted to use them. And in their very use in the spirit of a liberal and enlarged beneficence, while he fulfils his trust he also enlarges his store. I beg to remind you, then, that it is not for yourselves alone, nor chiefly, that the light of science, streaming down through all the ages, that the accumulated, concentrated, and select results of study, experience, and discovery, have visited and instructed your understandings. Do not suspect me of preaching, as we sometimes thoughtlessly or even derisively call it when we wish to evade an appeal to the better side of our nature to which the will is

inhospitable. There is nothing more practically and simply true than that success, abiding and secure, the happiness and usefulness of a professional career, is proportioned to the purity, singleness and generosity of the purpose with which it is pursued. No thinking man has lived to middle age who has not seen, with his own eyes, brilliant powers thrown away, capacity for lasting impression on society and for solid happiness as the reward of real good accomplished, made the forfeit of the poor and selfish pursuit of changeful Fortune, or uncertain Fame, or inglorious Ease. What a defeat is such a life! Will you treat your profession as a trade, out of which merely to make your bread, while you indulge every whim or fancy of a mind to which duty is irksome and fruitful toil a mere fatigue? Then you sacrifice the hope of honorable competence, of solid reputation, the sweet and infinite satisfactions of a worthy life. Will you use it as a mere instrument of sordid gain? Then you sacrifice your love for Science, who stands waiting to feed you with immortal food, and to open the rich storehouse of all her truth, while you dwarf your soul to the worship of the very dust she treads under her feet. Will you make your profession only a stepping-stone to preferment? Then you strangle the spiritual and intellectual progeny which might bless your declining age, in order to reign for awhile the heartless, aimless pretender of an hour, in a hollow and deceitful prosperity.

The solicitude with which we naturally contemplate the future, if it does not degenerate into weak

anxiety, is not unreasonable. The desire of excellence is not wholly to be disconnected from a sense of the value of other men's good opinion. A certain yearning for a proper sphere for generous ambition, a true appreciation of the rewards of meritorious effort, a manly tone of self-respect, are all, of course, desirable, nor are they in any sense unworthy. But when one sees so much and so many great and good things waiting to be done, lying unaccomplished only for want of the men of faith, patience, intellect, and action; when we consider the vastness and variety of opportunity opening to the young men of America, who have really fitted themselves to serve their country and to do their part in strengthening or enriching it,—who are willing to buckle on their armor and contend for a brave mastery; I think it seems as if self-interest, even, advises only that they should do justice to their own capacities and the means lying open before them, throw aside all weakness and all narrowness, and be faithful to themselves, generous to mankind, considering how bountiful is the Divine Providence to them. There is a margin for mistake and misadventure for which all of us must allow. But it is usually and on the whole but a margin only. We must be willing to accept our mischances, and even our own errors, reckoning them for what in truth they are to courageous, persevering men, as illustrations of the limitations of everything which is simply human and not supernatural. Gentlemen, as citizens of a country larger than Europe, possessing elements of greater wealth and greater power than Europe, of capacity

to feed and support a population exceeding the present numbers of the human race, you have only to develop yourselves, and to apply your own powers and acquirements. The first duty of the citizen is to regard himself as made for his country, not to regard his country as made for him. If he will but subordinate his own selfhood, his own ambitions, enough to perceive how great is his country and how infinitely less is he, is it not manifest that he presently becomes a sharer in her glory, a partaker of her greatness? He is strengthened by her strength, and inspired by her intellectual and moral life. While he contributes his little to the grand treasury of her various wealth of power and possession, he draws therefrom vigor and support with every breath he breathes. Standing utterly alone, what man is anything? But associated with his fellows, he receives the instruments, the means, the opportunities, and the facilities for action.

In no community in the world is there brighter promise for competent young men than there is here. For the sphere is so vast, the ways are all open, and all possibilities are free to all men.

It is only necessary that a young man of education should be willing to serve faithfully, to waste no time in dreams and passionate longings, but to make the most of himself, by being useful and by proving his capacity, as occasions naturally occur. His time will surely come. There is never a surplus of competent and trustworthy men. They are always in request. Places are always in waiting for them. But the men themselves do not always at the right

time appear. Suppose that the Commonwealth of Massachusetts should avail itself of its privilege to hold the lead in intellectual enterprise, and should establish on a broad foundation, on a liberal plan, an institution of science and learning, adapted, in the words of the Act of Congress, "to provide colleges for the benefit of agriculture and the mechanic arts," "to teach such branches of learning as are related to agriculture and the mechanic arts, . . . in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life,"—then a staff of professors would be demanded, competent to teach, competent to erect and maintain a high standard of excellence in the college. Suppose, also, a military academy, which ought not longer to be omitted from our scheme of public education, and a plan for which has been recently delineated and the argument ably and clearly set forth by a Commission at the head of which is an eminent citizen of Massachusetts whose whole life is an illustration of how much and in how many ways a citizen may serve the State,—and suppose that this, too, shall present its claim for intellect, manhood, and virtue, embodied in officers fit to direct the studies and form the minds of the youth on whose instructed intelligence, cultivated powers, vigorous arms, pure and manly hearts, the safety of a National life may one day repose. Consider how many and how diverse are the branches of knowledge which thus would require professors for their illustration. Remember, indeed, that nearly, if not quite, the whole circle of the

sciences would demand representatives in the staff of lecturers and teachers these institutions ought to command. And then, for a moment, imagine yourselves set to the task of finding the men — even though you were free to select them from the entire country — whose services you could control, and in whom those offices would find power and adornment. I assure you, gentlemen, that I believe that while your applicants might be ever so many, you would find but few superior candidates not already well placed and advantageously occupied.

In this very connection allow me to remark, that the special cultivation of some one or more of the natural sciences, such as Natural History, Chemistry, (general and agricultural,) Zoölogy, Animal Physiology, Mineralogy, Botany, and the like, pursued in connection with the study and practice of medicine and surgery, offers not only the attraction of intrinsic interest, but of appropriateness and usefulness, in such a professional career. Thus, with greater effect will the practitioner be able to perform his fitting share in one of the greater duties of the citizen, namely, to assist in the unspeakably grand and ennobling work of the education of the people. A faithful and painstaking medical adviser, well instructed in his duties, an expert in his own calling, is what the sick and anxious patient covets by his bedside. One who can hope for him when he is himself discouraged, who can seem to clear away the mists which disease gathers about him. But the jaded, frightened, anxious patient, struggling for a straw of promise, clinging to any

hope, however flimsy and foundationless, regards your profession as a mystery and not a science. The mere pretender who promises much, will often displace the patient student and watchful practitioner, to whose clear, instructed mind no promise comes which, on his conscience, he can hold out. Empiricism, blind, ignorant, reckless, pretending, and presumptuous, scatters its pills, spreads its balsams, pours out its universal catholicons, promises life, health, rejuvenation; and, unconscious indeed how bottomless is the abyss of folly out of which all such pretensions rise, cheats, ensnares, and at last destroys a thousand victims, while honest learning, sincerely appreciating the limitations of human power to grapple with disease, is devoutly saving a single one. The time will come when a better state of public information concerning elementary truths of natural science will dig the grave of every such superstition—for superstition it is—and the trade of the charlatan, who plays for money, making human health and human life the forfeit, must pass away. But the profession of medicine must first be true to the character which belongs to it. You must be liberal cultivators of liberal studies. You must promote the sciences, you must diffuse their knowledge, you must take the uninstructed into your confidence. You, *you*, must break the spell, by never playing the quack yourselves. You must take plain, simple men and women into your *confidence*. You must break the spell of folly, by making war on ignorance, not only as doctors, but as citizens and philosophers. Go

around into the country schools and bear testimony against a crowded, heated room, a fetid atmosphere, against the confinement of children, crooked down behind their desks, without exercise or oxygen; insist on vital air for human lungs, on exercise for human limbs and muscles, on rest and variety for the little frames and brains of children; condemn, condemn the fatal devastating headaches, the lassitude, the torpor, of violated nature; declare that there is in all God's universe no *elixir vitæ* but his own free air; declare in the name of science, of a knowledge which you can demonstrate as you go,—and take care that you do demonstrate it to all who have the capacity to receive knowledge,—that you cannot cure, and cannot even try to cure, by drugs or lotions, such disease. In this way alone will the terrible evil of senseless, criminal, and destructive tampering with life and health, by ignorant drugging and quack remedies, be ever exterminated. In this way only will your calling vindicate itself, by rising to the height of its own occasion. But if, mystifying your own calling, and indulging the whims of prejudice and the exaggerations of the uninitiated, you exercise yourselves in the *spirit* of empiricism, in the high office you are about to assume, you will accomplish your own degradation; you will invite the competition of every universal quacksalver, every conjuror, every healer by magic or by second sight, and you will be forever worsted in such a contest. In the mutual appeal to heated, helpless, perturbed imaginings, to charms and prestidigitation, the professors of such necromancy can always win against you.

But, beside presenting a view quite so professional, I urge in behalf of the claims of society on young men of your calling, upon much more general grounds, the influence of your example and the power of your assistance in the cultivation and dissemination of scientific truth. *How* to observe and *how* to think; how to use and appropriate what nature places before our eyes, under our feet, into our hands; *how* to collect and arrange facts, reduce them to order, observe their series, extract their laws;—of all things that is what we need to know. The medical profession can do more to put education in the best direction, by the fact of the tendency of their proper studies to the cultivation of positive knowledge and real science, than can any other body of citizens in our American society. If I am thought to overrate that class of studies, the value of that kind of knowledge, which, alas! I myself can only admire,—standing at the gate of the temple I may not enter!—I pray you and every objector to remember that there is no province in the vast domain of human thought which does not depend upon the knowledge learned through the sciences of the natural world. Can metaphysical inquiry and abstract speculation be relied on without the guidance of exact science? Let some of the speculations of Plato, of Aristotle, themselves misled by misconceptions of nature, stand for the answer. Ask the degradation of religion, of worship, of ideas, of the intellect itself; the substitution of gross, vulgar superstition for knowledge; the sham miracles, the sorcery, the charm-cures of the Middle Ages, from

which the Christian Church and Christian society had to be delivered by the Jews and the Saracens, who studied nature, cultivated natural philosophy, mathematics, chemistry, and medicine. There is scarcely an error of speculative philosophy which a more adequate perception or understanding of man and nature, in their visible conditions and visible relations, might not avert or help correct.

It was Lord Bacon himself, when contemplating "the art of interpreting nature," who declared in words which you would have deemed the language of enthusiasm, if they had not been uttered by the Great Master of Philosophy:

"The introduction of famous discoveries appears to hold by far the first place among human actions; and this was the judgment of the former ages. For to the authors of inventions they awarded divine honors; while to those who did good service in the State (such as founders of cities and empires, legislators, saviours of their country from long-endured evils, quellers of tyrannies, and the like) they decreed no higher honors than heroic. And certainly if a man rightly compare the two, he will find that this judgment of antiquity was just. For the benefits of discoveries may extend to the whole race of man, civil benefits only to particular places; the latter last not beyond a few ages, the former through all time. Moreover, the reformation of a State in civil matters is seldom brought in without violence and confusion; but discoveries carry blessings with them, and confer benefits without causing harm or sorrow to any.

"Again, discoveries are as it were new creations, and imitations of God's works; as well sang the poet:—

"To man's frail race great Athens, long ago,
First gave the seed whence waving harvests grow,
And *recreated* all our life below."

The power and the habit of observing is one which, in the practice of medicine, you will never

overrate. The diagnosis of disease will task to the utmost the best powers of critical and analytic observation. But while you are improving your own capacity to observe, enlarging and enriching your own stock of knowledge, by cultivating and extending the studies of science among the youth at school and all learners whom you may influence, the effect on the movement of human society, of which you may be agents, will be forever immeasurable. You may lay mankind under a contribution of gratitude which time will never repay.

A great painter learned his best combinations of colors from the wings of butterflies. The best mechanic's bit is said to have been invented by copying the tool for piercing or boring wood, supplied by nature to a little insect. The invention of the suspension bridge, by Sir Samuel Brown, sprung from the sight of a spider's-web hanging across the path of the inventor, observed on a morning walk, when his mind was occupied with the idea of bridging the Tweed, for which purpose he was endeavoring to find the best kind of structure. Following the hint of the spider's instinctive ingenuity, Science hangs across Niagaras fabrications of human art capable of supporting whole armies on their march. A lobster's shell on his dining-table suggested to Watt the model of the iron tube through which he afterwards carried water along the river's bed under the Clyde. The little ship-worm taught Brunel how to construct the tunnel under the Thames. Galileo, in his youth, noticed the measured beat of a swinging lamp hanging from the roof of the Cathedral at Pisa, whence his

fertile, keen-eyed genius inferred a method of measuring time. The idea, half a century later, like the fulfilment of a prophecy, reappeared in his invention of the pendulum. The old verger had left his oil-lamp carelessly swinging, daily, no doubt for many a year, and countless visitors had observed its motion, but had seen no law of nature in its movement, nor even perceived the equality of its oscillations. Galileo, but eighteen years old, a student of medicine, then without any knowledge of mathematics, studying his Galen and Hippocrates in the pursuit of his profession, guided by the predestination of genius, caught the hint of an idea afterwards wrought out in years of progress and ripened in the maturity of his greatness, which introduces to the knowledge of man the very mysteries of the starry spheres.

The progress now making in agriculture, in the application of science to mechanics, in all the useful arts, is at once proof and encouragement. Down from the very skies drop blessings on more fertile fields, into happier homes, into wiser councils of town and State,—the reward of any people who enter into communion with Nature, listen to her voice, and study obediently her laws.

The concurrent pursuit of some department of learning not in the direct line of your necessity as medical men, I hold moreover to be wanted, for the integrity and health of your own minds. It calms, elevates, restores the jaded powers, clears the intellect, cools the judgment, and raises the moral tone. It makes life less a drudgery, and more a

liberty and a joy. From morbid anatomy,—from human physiology, which you must perforce study always, in connection with disease,—from the thought of sick men and mortality, from professional reward and anxiety, turn aside for some precious moments, every day, and be devout, happy scholars and freemen of the universe.

Gentlemen, to-day, as doctors of medicine, fully admitted to the honors of the profession, life opens before you, all anew. Having bid you welcome to its cares and privileges, it remains for me, in behalf of the University, to bid you now farewell. Hereafter and elsewhere you will meet those who have taught you here, on that broader stage where all alike will stand before the criticism of your contemporaries, will await the reward of history, and the merciful judgments of Heaven. Let me venture to advise you that it well befits us younger men, in shaping our own careers, to follow somewhat, with becoming veneration, the examples of those who have been permitted by length of days, by intellectual and moral eminence in their professions, to be crowned with that cordial, grateful honor gladly paid by society to venerable age fruitful in wisdom and works and made beautiful and serene by virtue. I might have spared you these, my many words, content with directing your ingenuous minds for an example of diligence and fidelity, success and honor, to the character and the life of that most genuine man and most wise physician, for so many years Professor in this Medical School, of the

Theory and Practice of Medicine,¹— the beloved and venerable Nestor of your profession. Of whom, in honest eulogy, could ever have been more truly written the touching, manly lines, in which Johnson embalmed the memory of his friend, THE GOOD PHYSICIAN:—

“ When fainting nature called for aid,
 And hovering death prepared the blow,
 His vigorous remedy displayed
 The power of art without the show.

“ In misery’s darkest cavern known,
 His useful care was ever nigh ;
 Where hopeless anguish poured his groan,
 And lonely want retired to die.

“ No summons mocked by chill delay ;
 No petty gain disdained by pride ;
 The modest want of every day
 The toil of every day supplied.”

Your lives, gentlemen, will have been worthy, happy, and useful indeed to mankind, if they may deserve such an epitaph.

¹ Dr. JAMES JACKSON.