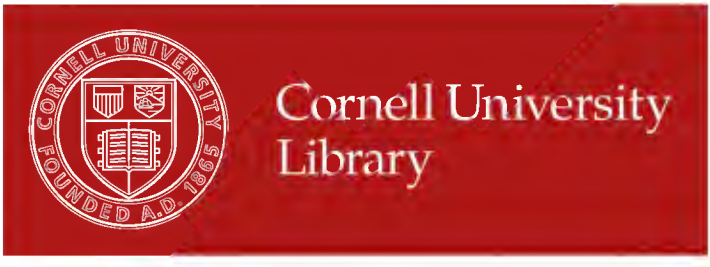

CORNELL UNIVERSITY

ADDRESSES AT THE OPENING OF

THE MEDICAL COLLEGE

BY

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AND

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The Medical College of Cornell University owes its existence to the munificence of Colonel Oliver H. Payne. It was established by the Trustees of the University on April fourteenth, 1898, and its doors were opened to students on the fourth of the following October.

THE CORNELL UNIVERSITY MEDICAL COLLEGE

ADDRESS BY PRESIDENT SCHURMAN

LADIES AND GENTLEMEN:

The origin of the Cornell University Medical College reminds one of the birth of Minerva. That goddess, you remember, sprang full-armed from the brain of Jove. Our Medical College is almost as miraculous a creation. A year ago no one dreamt of its existence. To-day it stands before the world with an actual organization and a potency of achievement which seem to presage its manifest destiny as the American acropolis of Æsculapius.

I know no better illustration of Professor Huxley's saying that "the question of medical education is, in a very large and broad sense, a question of finance." Most assuredly this institution could not have come into existence but for the unlimited capital which a wise head and generous hand have furnished for its foundation and support. That munificent gift is the offering to hu-

manity of one who feels deep sympathy with his suffering fellow-men, and who believes that their lot is to be ameliorated by the elevation of medical education. "I suppose," this generous benefactor once said to me, "we all want to do some good in the world, and I should like to do something by improving the education of that profession which cares for the lives of men, heals their wounds, and alleviates their sufferings." Of such a compassionate heart and intelligent understanding was the Cornell University Medical College born.

By the star of our nativity, therefore, we are dedicated to noble things. With such a consecration, which will prove a never-failing inspiration, let us, in that spirit of fraternal union which gives irresistible strength, strive by zeal, diligence, and wisdom for the fulfilment of the high trust committed to us. Here and now let us resolve that, so far as in us lies, the humane and lofty purpose of our Founder shall be accomplished.

I have no doubt whatever that we shall succeed in our task. If our hopes are sanguine, if our ambitions are high, if we presume to make our aim a goal yet unattained, do we not also set out on our career under circumstances more favorable than have ever smiled upon any similar institution since medical education began with the University of Salerno? Much may be expected of this Medical College, for much has been given to it. I speak not only of capital, which, however, is forthcoming for every reasonable object. Nor have I in mind

material structures, though our local habitation in spacious proportions will soon rise, like a thing of splendor and beauty, to crown this section of our great metropolis. My thought is rather of men. For it is true now, as always, that, though money be the indispensable condition, the real and essential cause of the success of any institution is to be found in the men who are its active soul. If, therefore, my expectations are pitched high for this Medical College, it is primarily because it is organized with a remarkably strong, though still incomplete, staff of instruction—a body of picked men, a corps of physicians and surgeons whose practice puts them in the van of their profession, and whose gifts as teachers, already exhibited in other schools, have won for them the united admiration of rival bodies of students. Personally, I count it a peculiar privilege that I am to have the honor of association with these distinguished gentlemen in the elevation of medical education and the advancement of medical science in this great city of New York. I regret that I am not better qualified to aid them. I am not a physician or the son of a physician. Perhaps, however, your sympathetic imaginations will invest me with at least the semblance of initiation, if I tell you that my *Alma Mater* has on her rolls, not only the name of Huxley, but those eminent medical practitioners and reformers, Sir Henry Thompson, Sir William Jenner, Henry Maudsley, Sir Morrell MacKenzie, and, greatest surgeon of all, and of the century, Sir Joseph Lister. And

you may be kind enough to think that a college which turns out such men is not likely to breed in any of its sons indifference to, or lack of sympathy with, the science and art of medicine.

The work and fame of this Medical College, then, are in the hands of its Faculty. You will agree with me that they are in safe keeping there. But I should not have done justice to my own feelings, or fully described the support of this institution, if I did not mention another feature of its existence, a feature which I may be pardoned for thinking of cardinal importance, as it explains and justifies—especially as nothing I have to say would else justify—the prominence which has been given to my unworthy self in these proceedings. This Medical College is a department of Cornell University. And by that description I mean to say that it is a real, integral, and vital part of the University. In other words the legal corporation, known as Cornell University, has exactly the same rights, powers, responsibilities, and jurisdiction in regard to this new department as it has hitherto exercised in regard to every other department of the University. The only difference is that a wealthy philanthropist gives us an endowment for the conduct of the department of medicine, while many of our other departments are unendowed, and must take their chances of support out of the general funds of the University. This difference is momentous indeed from the point of view of permanent and assured vitality and efficiency. But, considering

the mere fact of organization, I repeat that the Medical College stands on precisely the same footing as the Academic Department, the College of Law, or the Sibley College of Mechanical Engineering. The Faculty, in every case, is charged with the educational administration of its respective College; but all business is conducted, and all appointments are made, by the Board of Trustees of Cornell University. The members of the Faculty of Medicine receive fixed stipends, like the professors in other departments; and as they have nothing to do with the business affairs of the College, so they have no interest in the fees received for tuition, which are turned into the treasury of Cornell University. The Faculty, in a word, is an educational body.

You may ask if it is possible for the Board of Trustees of Cornell University, meeting in Ithaca, to manage wisely the affairs of their Medical College in New York? Let me remind you, by way of answer, that this is an age of telegraphs, telephones, and rapid travel. But not only this. Following a precedent already established in connection with some of the other Colleges of the University, the Board of Trustees have established for the Medical College an advisory council, consisting of the Dean and two members of the Faculty of Medicine, three Trustees (who are residents of New York), and the President of the University, as Chairman, whose duty it is to digest all business affecting the Medical College and make recom-

mendations thereupon to the Board for formal action. This system, which insures a thorough consideration of every question from every point of view, promises the happiest results. The Council meets once a month, on the day following the monthly meeting of the Faculty.

So much for the anatomy and physiology of the Medical College as one of the organs of Cornell University. Let me now turn to the inner and ideal side of this relationship.

Though the physical distance between the Medical College and the other departments of our University is greater than it is in the case of Harvard or Columbia, I believe I am not mistaken in the belief that the connection is really closer. For the men of the first or second years are free to study either here or in the Academic Department at Ithaca, while in the case of the women they are even required to go to Ithaca. It is a characteristic of Cornell University, whose charter consecrates it to both "liberal and practical education," not to draw sharp lines of demarcation between the Academic Department and the professional schools. It has always been recognized that when the curriculum of the classical colleges was enlarged so as to provide for the sciences of nature and the modern humanities—as from the beginning it was enlarged at Cornell—then the Academic Department, instead of withdrawing to the seclusion of an imaginary superiority, in fact became the foundation and the fruitful ally of every technical, scientific, or learned

profession. Nearly half the work of our engineering courses is given in the Academic Department. And we were glad to make a similar arrangement for the medical student. While on this subject of inter-relationship I may add that the graduates of every one of our professional colleges enjoy, equally with the Bachelors of Arts, the privilege of voting for Alumni Trustees. I suppose we may soon expect to see an influx of medical members into our Board!

There is another feature of Cornell University which is of no little importance in the consideration of medical studies. From the beginning we have given prominence to the natural sciences. Of course the physico-chemical sciences were indispensable to the success of our engineering departments. But though we had no medical school, which imperatively called for the biological sciences, these were nourished with equal care and assiduity. I need only mention the name of Professor Wilder as a guarantee of the quality of the work done. But not only were physiology, anatomy, and the kindred sciences cultivated by the University; their indispensable importance to the physician and surgeon was recognized at a time when students at medical schools were accustomed to hear "lectures upon surgery without any knowledge of anatomy, and upon therapeutics while ignorant of physiology." (Dr. Wilder in Boston Medical and Surgical Journal, June 24th, 1875.) Indeed, within two years after its opening in 1868,

Cornell University had arranged a four-year course in Natural History leading to the degree of Bachelor of Science, which was well adapted to the needs of students who contemplated the study of medicine; and, in 1878, for such students as could not take this full course, a shorter two-year course was provided, in which a large amount of time was devoted to practical work in anatomy, physiology, histology, and chemistry. Anyone who knows how these sciences were in those days neglected in the medical schools will perhaps feel that there is a certain propriety or poetic justice in the endowment which Cornell has at last received for the establishment of a great medical department.

This is the attitude of Cornell University to the sciences of nature; this is what she has done for the scientific preparation of students for work in the medical schools. Is not her spirit and aim wonderfully congenial with the spirit and aim of your profession? What is needed for the training of physicians and surgeons to-day? I answer, first, science; secondly, science; thirdly, science. If, two or three generations ago, medicine was, on the side of theory, pretty much where Harvey had left it in the 17th century, and, on the side of practice, scarcely in advance of that of Celsus or Galen, the last half century has wrought an entire change. As Sir Joseph Lister recently said, in his presidential address before the British Association for the Advancement of Science, "the practice of medicine, in every department, is becoming

more and more based on science, as distinguished from empiricism." Recall only the discovery of the functions of the spinal cord, of reflex action, of anæsthetics, of the antiseptic method, of the germ theory of disease; think only how the prolongation of life and the lowering of the death-rate (in the City of New York, from 32.2 to 19.5 in forty years) has been effected by scientific hygiene; enumerate only such instruments as the stethoscope, the ophthalmoscope, the laryngoscope, the plexímeter, the cardiograph, the spirometer, and the sphygmograph;—consider the significance of these essential facts of the healing art of to-day, and you will agree with me that modern medicine has been "scientificized." Now I do not claim that Cornell University has, in any special way, contributed to this transformation of empirical into scientific medicine. But I do assert that from the day of her origin she has observed the change, welcomed it, and endeavored to give her students the training necessary for the understanding of, and participation in it. And so, to-day, she says to every one of these students: Master your sciences, or you can never be a physician or a surgeon worthy the name. As Huxley once put it in an address to the students of my *Alma Mater*: "I do not believe that all the talking about, and thinking of, medical education will do the slightest good until the fact is clearly recognized, that men must be thoroughly grounded in the theoretical branches of their profession." And these theoretical branches Huxley reduces to

the minimum of physics applied to physiology, chemistry applied to physiology, physiology and anatomy.

Some of you will say that it is impossible to master the scientific bases of medicine in the one or two years—at most two years—which the medical schools assign to those subjects. This is my belief, too. And so I say, take more time. But not only for mastery of your sciences. A man educated merely in the sciences of nature, a man whose mind has not been opened, elevated, and enlarged by art, letters, and philosophy, is a good deal of a Philistine. Liberal culture, like virtue or religion, has its own intrinsic value. I shall not, however, stop to argue a thesis so manifest, and so universally accepted. But I do desire to ask you if it is not true that a liberally educated man —a man whose powers and faculties have been disciplined, chastened, strengthened, and enlarged by letters, philosophy, and science—will not have a great advantage over the man of mere professional education, even in the practice of his profession? He will have deeper insight, a greater comprehensiveness and versatility of intellect, a surer faculty of seeing things as they are and disentangling what is irrelevant and sophistical. This is what gives such profound truth to the saying of Jowett—the greatest educator of his generation—that to be a good engineer a man must be more than an engineer. And I find this same sentiment among the most distinguished physicians. You will see

it expressed in Sir Morrell MacKenzie's essay on "The Relation of General Culture to Professional Success." And the celebrated Dr. Stokes, a generation ago, laid it down as a maxim that "We must trust far less to the special than to the general training of the mind." My own observations and reflections as an educator and a student of the human mind have led me to the same conclusion. Generally stated, my view is that the mind, in order to know anything well, must know far more than that thing—and the more extensive and intensive that "more" is, the better will the narrower specialty be understood, and the readier will be the power of applying it. I have had striking confirmations of this principle in my intercourse with professional men. The leader of the American bar once told me that he owed his success in his profession to his college work in philosophy and the languages. The Nestor of American journalism assured me that whatever reputation he had achieved was due to his college training in classics and mathematics. And as I scan the biographies of the men who were eminent in the medical profession, I find that Harvey devoted five years to academical studies at Cambridge before he went to Padua to study anatomy; that Richard Bright studied philosophy under Dugald Stewart; that Sir James Y. Simpson was a student both of mathematics and of ethics; and that Sir Joseph Lister took his A.B. at the University of London five years before he came up for his medical degree.

To every prospective medical student I should like to say: Go thou and do likewise.

Undoubtedly this will make large demands upon the time of the student. Now it is not necessary that any young man should be a physician or surgeon; but if he decides to become one, he should aim at nothing less than the first rank. Here, too, as at other points, Cornell University will give him aid and encouragement. In our Academic Department the student has absolute liberty in the choice of studies. So that if our future medical student enters that course he may, without neglecting letters or philosophy, master thoroughly his anatomy, physiology, histology, chemistry, physics, and botany, and at the end of four years receive his A.B. degree. There then would remain of the medical curriculum only the professional branches, which he could compass in the next two years, in New York City. Thus, thanks to our elective system, he would win both the A.B. and the M.D. degree in six years—though each separately requires four years.

It will, then, be to the advantage, not only of the University and its Medical College, but of the student and the general public, if the relationship between our Academic and Medical Departments become closer and more constant. I hope to see it the rule for our students of medicine to spend four years at Ithaca in the study of letters, philosophy, and science—the latter covering in a thorough way the theoretical parts of the medical curriculum—

and then two years here for instruction in the practical part of the curriculum, for which this great city offers unsurpassed opportunities. The Faculty of Medicine would, I am sure, rejoice if this arrangement were the general and normal one. Our Founder would rejoice, for his aim is, not to attract numbers, but to offer superior training for those, be they few or many, capable of receiving it. And if, along with this ideal of high intellectual standards, we entertain a just conception of the inherent nobility of the medical profession—whose aim now and always is to discover and use the laws of nature for the relief, healing, and protection of mankind—we shall in this new Medical College, which we now open, erect a temple whose foundations are truth, and whose superstructure is charity and philanthropy. And upon it and all its members I reverently invoke the blessing of God, who is at once both Truth and Mercy.

ADDRESS BY DEAN POLK

"There is a divinity which shapes our ends, rough hew them as we may"

Herein lies the explanation of the success which has attended the conception and creation of this medical school; and we who are the instruments employed have but one feeling, an all-pervading feeling, especially on this the opening occasion of our educational work; and this is a deep sense of our responsibilities to our benefactor, our University, and to you. It might be supposed that the distinction which these factors in our existence have bestowed upon us would create an elation which would warrant a desire for the triumphal car and its attendant glories, but I know that, so far from this being the state of our minds, a spirit of seriousness possesses us, in keeping with renewed effort rather than effort accomplished. It is evident that this argues well for the execution of the trust placed in our hands.

In this wonderful country of ours a considerable number of men have been produced who, through the exercise of natural powers upon the opportunities before them, have acquired the means wherewith to bestow munificent gifts. With the thousands of impecunious enterprises continuously

projected, it is evident that these men are never free from solicitation to contribute to this, patronize that, or endow the other. Hence it is scarcely to be wondered at, that more than the ordinary discrimination is needed to avoid bestowal in wrong direction and apply it in the right. When, therefore, after proper inquiry and deliberation, such a bestowal is made, it carries with it more than the usual obligation that the recipient shall in all things live up to the expectation of the benefactor.

In the construction of any undertaking, ideals may be priceless, and they are priceless, if they personify the highest, installed upon a basis of common sense. Such ideals contribute working formulæ, and can, therefore, be readily used in promoting an undertaking; and the greatest good fortune attends upon the enterprise which possesses such an ideal and has at hand the means with which to reach toward it. It is doubly fortunate if, with the means, comes hand in hand the ideal. You know we have the means, and infer we have the ideal, but you do not know that the same hand which bestowed the means unconsciously brought with it the ideal. For this gift was in reality a protest against intrigue and deception, and a proof that faithfulness is as essential to lasting success in the great things of life as in the smallest. And yet this was not all. It was not enough to give us this ideal, but a place in which to exercise and develop it in all its bearings was also given, in putting us within the folds of a great University.

If you will go with me to the town of Ithaca, you will there see grouped upon the hills overlooking the head of one of the most extensive and beautiful of the many lakes peculiar to the interior of this State, a wonderful sight:—a great University, the result of thirty years of growth. And, questioning as to the source of such a development, we find the answer in the words of its distinguished President: "It lies in its constitutive idea." "Every college and university is an organ of the highest knowledge. Its function is the consecration of liberal culture. This was the accepted view held a generation ago, and it was deemed sufficient. Cornell University went further: it associated practical education with liberal. It ranked professional training among its functions; and it enlarged the notion of learned or scientific professions so as to include, along with the traditional trio of law, medicine, and theology, whatever calling rests on science or scholarship." In the words of its Founder, it is "an institution where any persou can find instruction in any study." "Hospitable to all the learned and scientific vocations of modern times, it yet, at the same time, enlarges the conception of liberal culture itself so as to give the sciences of nature and the modern humanities a place beside the ancient disciplines of Greek, Latin, and mathematics."[1]

The eminently American character of the University is clearly defined in its democracy of liberal

[1] "A Generation of Cornell."

and scientific schools, and the vigor which characterizes its administration is perpetuated in the love and loyalty of its large classes, and the marvelous *esprit de corps* of its numerous and influential alumni. This is the inheritance we have been bidden to share, and in taking our place do so with a deep determination to lend our minds and bodies to the fulfilment of its ideals.

As has been said, an essential part of this ideal is the practical, and herein lies the core of what we deem our duty to you, the students.

At the risk of wearying you with repetition of what you have already learned from our circular of information, I must say something of the manner in which we propose to meet the demand for the practical in your instruction. After a good many years devoted to medical education, we have arrived at the conviction that clinical demonstration, upon a broad basis of laboratory instruction, is the only way in which to prepare students for the degree of Doctor of Medicine. This has been forcibly borne in upon all undergraduate teachers by the universal demand for post-graduate instruction in details, without which a graduate is in reality unfitted for the practice of this profession. The first question that had to be answered related to the disposition of the didactic teaching, that part of the course which offered the preliminary knowledge of the theory of medicine as an introduction to the practical. After no small amount of labor and experimentation, we reached the conclusion that recitation

from text-books, conducted, under the direction of the Faculty, by a trained corps of instructors, afforded a better basis of theory than the didactic lecture. This arrangement had also another advantage of even greater merit, in that it freed the older and more experienced teacher, so that he could give his time to the practical or clinical demonstration of the theory. To do this properly, it was evident that he must have more time and opportunity than the so-called clinic of the amphitheatre afforded. This could only be found in closer and more frequent contact between the student and patient than was possible at such clinics; hence the plan finally adopted, namely, to break up the classes into small sections, and scatter such sections through the wards of hospitals and dispensaries, each under the guidance of a trained clinician, whose object would be less the display of his own learning than the eliciting of the student's knowledge, with a view to its correction and enlargement. Given then this broad basis of laboratory instruction, text-book drilling, with clinical demonstration superimposed, and presented to such small subdivisions of the class as to insure the direct impress of the teacher upon each student, we feel we have advanced a long way toward presenting the best instruction that can possibly be given to the medical undergraduate of to-day. To meet fully the demands of such a system, it is evident that patients are a necessity. The hospitals to which we have access, though many and commodious, by no

means meet the requirements. This can come only from the control of a large outdoor or walking clinic.

For many years those of us who believed in this method of conducting medical education dreamed of a college building which would be a dispensary, surrounding and enveloping a medical school; a dispensary in which, beside space for consultation with patients with every conceivable disorder, there should be at hand space for the accommodation of students, who could thus have ready access to every opportunity for demonstration. With room for each department to conduct its own clinical microscopy; one or more large lecture-halls for such lines of teaching as might still require didactics; museums filled with every required model or specimen needed for demonstration; workrooms for every kind of teaching for which the cadaver may be required; space where all that pertains to physiology may be unfolded; and rooms for chemistry, to show not only what pertains to the inorganic of medicine, but all that is known or can be known upon the subject of animal or physiological chemistry.

This was our dream, and now when we awake and find this dream practically a reality—when we see rising before us all that our imagination so long pictured, and look back upon the years so vexatiously spent in making brick without the straw—we enter, as few have entered, into the feeling of the people of Israel, as they turned their

eyes to the land which Joshua and Caleb had told them of. And in a spirit of deep appreciation we begin here our part in the completion of the edifice which typifies the spirit and the body of our University.

With imposing presence it lifts itself upon its bed of rock, suggestive of some great cathedral. We see its minarets, its spires and towers reaching heavenward, each marking the position of some component part or school, and telling in degree the sum of effort and perfection put forth and attained by each. Moving among its massive pillars and beneath its solemn arches, student and teacher alike approach its altar, and there find the visible presence of that sacred spirit of amity, unity, loyalty, and friendship which touches every soul that enters within its portals. Upon and within this stately edifice, our place as yet is scarcely more than indicated. But, filled with the spirit of that loyal faith given us in the example of our benefactor, imbued with the power of that high-souled aggression characterizing our University, and strong in the force of our own purpose, we engage to build for you as fair, as firm, as grand a spire as ever reared its head toward heaven. Faithful, aggressive, strong, we one and all pledge you our best and ever-increasing effort.