XIX

# The Fixed Period

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~~Mr. President, Ladies and Gentlemen:~~

As this is the last public function at which I shall appear as a member of the University, I very gladly embrace the opportunity which it offers to express the mingled feelings of gratitude and sorrow which are naturally in my mind--gratitude to you all for sixteen years of exceptionally happy life, sorrow that I am to belong to you no more. Neither stricken deeply in years, nor damaged seriously by illness, you may well wonder at the motives that have induced me to give up a position of such influence and importance, to part from colleagues so congenial, from associates and students so devoted, and to leave a country in which I have so many warm friends, and in which I have been appreciated at so much more than my real worth. It is best that you stay in the wonder-stage. Who can understand another man's motives? Does he always understand his own? This much I may say in explanation--not in palliation. After years of hard work, at the very time when a man's energies begin to flag, and when he feels the need of more leisure, the conditions and surroundings that have made him what he is and that have moulded his character and abilities into something useful in the community, these very circumstances ensure an ever increasing demand upon them; and when the call of the East comes, which in one form or another ~~comes to all~~ is heard by all of us, and which grows louder as we grow older, ~~when the call comes to a man it may be~~ the call may come like the summons to Elijah, ~~when~~ and not alone the ploughing of the day, but the work of a life, friends, relatives, even fath-

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er and mother, are left to take up new work in a new field. Or, happier yet, if the call comes, as it did to Puran Das in Kipling's story, not to new labors, but to a life "private, unactive, calm, contemplative." There are several problems of university life suggested by my departure. And first, whether the metabolism is active and changing enough in the professoriate body. May not the loss of a professor bring stimulating benefits to a university? We have not here lost very many--this is not a university that men care to leave--but in looking over its history I do not see that the departure of any one has proved a serious blow. It is strange of how slight value the unit is in a great system. A man may have built up a department and have gained a certain following, local or grneral, nay, more, he may have had a special value for his mental and moral qualities, and his fission may leave a scar, even an aching scar, but it will not be for long. Those of us accustomed to the process know that the organism as a whole feels it about as much as a big polyzoon when a colony breaks off, or a hive of bees after a swarm--'tis not always a calamity, oftentimes it is a relief. Of course the sense of personal loss falls heavy on some; the faculty of getting attached to those with whom we work is strongly developed in most of us, and some will realize the bitterness of Shelley's lines:-

"Alas! that all we loved of him should be
But for our grief as if it had not been."

But to the professor himself these partings belong to the life he has chosen. Like the hero in one of Matthew Arnold's poems, he knows that his heart was not framed to be 'long loved.' Change is the very marrow of his existence--a new set of students every year, a new set of assistants, a new set of associates to replace those called off to other fields;- in any active

department there is no constancy, no stability in the human surroundings. And in this There is an element of sadness ~~in it.~~ A man comes into one's life for a few years, and you become attached to him, interested in his work and in his welfare, and perhaps you ~~come~~ grow to love him, ~~perhaps,~~ as a son, and then off he goes!-- ~~it must be as bad as having a daughter married,~~ leaving you with a bruised ~~a scar on your~~ heart. After teaching for thirty years and coming into very intimate contact with my assistants my heart is all cicatrices, ~~covered with one big 'milky patch.'~~ ~~(The medical students will appreciate the allusion.)~~

The question may be asked - ~~is~~ whether as professors we do not stay too long in one place. It passes my persimmon to tell how some good men--even lovable and righteous men in other respects--have the hardihood to stay in the same position for twenty-five years! To a man of active mind too long attachment to one college is apt to breed self-satisfaction, to narrow his outlook, to foster a local spirit, and to promote senility ~~the degenerations of~~ which ~~I shall speak.~~ Much of the phenomenal success of this institution has been due to the concentration ~~congregation here~~ of a group of light-horse intellectuals, without local ties, whose operations were not restricted, ~~and~~ whose allegiance indeed was not always national, yet who were willing to serve faithfully in whatever field of action they were placed. And this should be the attitude of a vigilant professoriate. As St. Paul preferred an evangelist ~~a man to be~~ without attachments, as more free for the work, so in the general interests of higher Education ~~the larger body~~ a University President should cherish a proper nomadic spirit in the members of his faculties, even though it be on occasions a seeming detriment. A well-organized College Trust could arrange a rotation of teachers which would be most stimulating all along the line. We are apt to grow stale and thin mental-

ly if kept too long in the same pasture. Transferred to fresh fields, amid new surroundings and other colleagues, a man gets a fillip which may last for several years. Interchange of teachers, national and international, ~~should~~ will prove most helpful. How bracing the Turnbull lecturers have been, for example. It would be an excellent work for the University Association which met here recently to arrange ~~an~~ this interchange of ~~teachers~~ instructors. Even to 'swap' College Presidents now and then might be good for the excheqer. We have an excellent illustration of the value of the plan in the transfer this year of Prof. Keutgen from Jena to give the lectures ~~here~~ on History. ~~N~~ An international university clearing-house ~~could~~ might be organized ~~it would~~ to facilitate ~~be most helpful~~ the work. How delightful it would be to have a return to the mediaeval ~~days~~ practice when the professor roamed Europe, or to ~~the~~ at his sweet will halcyon ~~days~~ Era of the old Greek teachers, of which Empedocles sings:- ~~when, as Empedocles says,~~

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~~and yet~~ "what days were those Parmenides!
When we were young, when we could number friends
In all the Italian cities like ourselves;
When with Elated hearts we joined your train
Ye Sun-born Virgins on the road of truth."

It is more particularly upon the younger men that I would urge the advantages of an early devotion to ~~the~~ a peripatetic philosophy of life. Just so soon as you have ~~put~~ your second teeth think of a change; get away from the nurse, cut the apron strings of your old teachers, seek new ties in a fresh environment, if possible where you can have ~~early~~ a certain measure of freedom and independence. Only do not wait for a fully equipped billet almost as good as that of your ~~old~~ master ~~there is in the country.~~ A small one, poorly appointed, with many students and few opportunities for research, may be just what is needed to bring out the genius--latent and perhaps unrecognized ~~in you~~--that will enable ~~a man~~ you to do well in an unfavorable position

what another could not do at all, ~~not~~ even in the most helpful surroundings. There are two appalling diseases ~~against~~ which only a feline restlessness of mind and body may head off in young men ~~seeking college careers~~ in the academic careers. There is a remarkable bodily condition, known as infantilism, in which adolescence does not come at the appointed time, or is deferred until the twentieth year or later, and is then incomplete, so that the childish mind and form and features remain. The mental counterpart is even more common among us. Intellectual infantilism is a well recognized disease, ~~not unknown among us~~, and just as imperfect nutrition may cause failure of the marvellous changes which accompany puberty in the body, so the mind too long fed on ~~one~~ the same diet in one place may be rendered rickety or even infantile. Worse than this may happen. A rare, but still more extraordinary, bodily state is that of progeria, in which ~~a child,~~ as though touched with the wand of some malign fairy, the child does not remain infantile, but skips adolescence, maturity and manhood, and passes at once to senility, looking at eleven or twelve years like a miniature Tithonus 'marred and wasted,' wrinkled and stunted, a little old man among his toys. It takes great care on the part of any one to live ~~a~~ the mental life corresponding to the ~~ages~~ or phases through which ~~the~~ his body passes. How few minds reach puberty, how few come to adolescence, how fewer attain maturity! It is really tragic--this wide-spread prevalence of mental infantilism due to careless habits of intellectual feeding. Progeria is an awful malady in a college. Few Faculties escape without an instance or two, and there are certain diet~~s~~ which ~~will~~ cause it just as surely as there are waters in some of the Swiss valleys that ~~will~~ produce cretinism. I have known an entire faculty attacked. The progeric himself is a nice enough fellow to look at and to play

with, but he is sterile, with the mental horizon narrowed, and quite incapable of assimilating the new thoughts of his day & generation

As ~~in~~ the case ~~with~~ of many other diseases, it is more readily prevented than cured, and, taken early, change of air and diet may do much to antagonize a tendency, inherited or acquired. Early stages may be ~~cured~~ relieved by a prolonged stay at the University Baths of Berlin or Leipzic, or if at the proper time a young man is transferred from an American or Anglican to a Gallic or Teutonic diet. Through no fault of the men, but of the system, due to the unfortunate idea on the part of the ~~religious~~ denominations that in each one of the ~~various~~ ~~different~~ States ~~each one~~ they should ~~try to~~ have ~~its~~ their own educational institutions, collegiate infantilism ~~and progeria are~~ is far too ~~common among us,~~ prevalent; ~~but~~ against which the freer air and better diet of the fully equipped State Universities is proving a rapid, as it is the rational, ~~cure for these two maladies~~ antidote.

Nor would I limit this desire for change to the teachers. The student of the technical school should begin his wanderjahre early, not postponing them until he has taken his M. D. or Ph.D. ~~A student who stays for~~ A residence of four years in the one school is ~~sure~~ apt to ~~be~~ breed prejudice and to ~~have~~ promote mental astigmatism which the after years may never be able to correct. One great difficulty is the lack of harmony in the curricula of the schools, but ~~in time~~ this will ~~be~~ time correct~~ed~~, and, once initiated and encouraged, the better students will take a year or even two years in schools other than those ~~are~~ at which they intend~~s~~ to graduate.

I am going to be very bold and touch upon another question of some delicacy, but of infinite importance in university life; one that has not been settled in this country. I refer to a fixed period for the teacher, either of time of service or of age. Except in some proprietary schools, I do not know of any institutions in which there is a time limit of, say, twenty years service, as in some of the London Hospitals, or in which a man is engaged for a term of years. Usually the appointment is aut vitam aut culpam, as the old phrase reads. It is a very serious ~~thing~~ matter in our young universities to have all of the professors growing old at the same time. In some places Only an epidemic, a time limit, or an age limit can save the situation. I have two fixed ideas well known to my friends, harmless obsessions with which I sometimes bore them, but which have a direct bearing on this important problem. The first is the comparative uselessness of men above forty years of age. This may seem shocking, and yet, read aright the world's history ~~read aright~~ bears out the statement. Take the sum of human achievement in action, in science, in art, in literature,-subtract ~~from it~~ the work of the men above forty, and while we should miss great treasures, even priceless treasures, we would practically be where we are today. It is difficult to name a great and far-reaching conquest of the mind which has not been given to the world by a man on whose back the sun was still shining. The effective, moving, vitalizing work of the world is done between the ages of twenty-five and forty--these fifteen golden years of plenty, the anabolic or constructive period, in which there is always a balance in the ~~vital~~ mental bank and the ~~mental~~ credit is still good. In the science and art of medicine young comparatively young men have made every ~~there has not been an~~ advance of the first rank, ~~which has not been initiated~~

by young or comparatively young men. Vesalius, Harvey, Hunter, Bichat, Laennec, Virchow, Lister, Koch--the green years were yet upon their heads when their epoch-making studies were made. To modify an old saying, a man is sane morally at thirty, rich mentally at forty, wise spiritually at fifty--or never. The young men should be encouraged and afforded every possible chance to show what is in them. If there is one thing more than another upon which the professors of this university are to be congratulated it is this very sympathy and fellowship with their ~~younger~~ junior associates, upon whom really in ~~my~~ many departments, ~~as in many others~~ in more certainly, has fallen the brunt of the work. And herein lies the chief value of the teacher who has passed his climacteric and is no longer a productive factor, he can play the man midwife as Socrates did to Theaetetus, and determine whether the thoughts which the young men are bringing to the light are false idols or true and noble births.

My second fixed idea is the uselessness of men above sixty years of age, and the incalculable benefit it would be in commercial, political and in professional life if, as a matter of course, men stopped work at this age. Donne tells us in his Biathanatos that by the laws of certain wise states sexagenarii were precipitated from a bridge, and in Rome men of that age were not admitted to the suffrage and they were called Depon~~ati~~tani because the way to the senate was per pontem, and they from age were not permitted to come hither. In that charming novel, The Fixed Period, Anthony Trollope discusses the practical advantages in modern life of a return to this ancient usage, and the plot ~~turns~~ hinges upon the admirable scheme of a college into which at sixty men retired for a year of contemplation before a peaceful ~~exitus~~ departure

by chloroform. That incalculable benefits might follow such a scheme is apparent to any one who, like myself, is nearing the limit, and who had made a careful study of the calamities which ~~befall~~ may men during the seventh and eighth decades. Still more when he contemplates the many evils which they perpetuate unconsciously, and with impunity. As it can be maintained that all the great advances have come from men under forty, so the history of the world shows that a very large proportion of the evils may be traced to the sexagenarians--nearly all the great mistakes politically and socially, all of the worst poems, most of the bad pictures, a majority of the bad novels, not a few of the bad sermons and speeches. It is not to be denied that occasionally there is a sexagenarian whose mind, as Cicero remarks, stands out of reach of the body's decay, ~~but~~ Such a one has learned the secret of Hermippus, ~~who lived to the age of 153, Quercorum habitu refocillatus et educatus, and the men who escape the penalties are those who constantly live with the young, in which way alone they maintain a fresh outlook on the new problems of the world. Like the vestal virgin,~~ That ancient Roman who feeling that the silver cord was loosening cut himself clean from all companions of his own age and betook himself to the company of young men, mingling with them in their games and studies, and so lived to the age of 153, puerorum habitu refocillatus et educatus. And there is truth in the story ~~that of the~~ The teaching life should have three periods, study until twenty-five, investigate until forty, profess until sixty, ~~and~~ at which age I would ~~then~~ have him retired on a double allowance. Whether Anthony Trollope's suggestion of a college & chloroform should be carried out or not I have become a little dubious, as my own time is getting short. (I may say for the benefit of the public that with a women I would advise an entirely different plan, since after sixty ~~their~~ her influence on ~~the sex~~ her may be most helpful, particularly if aided by those charming accessories, a cap and a fichu).

Since it is only those who live with the young who maintain a fresh outlook on the new problems of the world.

II

Such an occasion ~~such~~ as the present affords an opportunity to say a few words on the work which the Johns Hopkins ~~has~~ foundations done and may do for medicine. The hospital was organized at a most favorable period, when the profession had at last awakened to its responsibilities, the leading universities had begun to take medical education seriously, and to the public at large had come a glimmering sense of the importance of the scientific investigation of disease and of the advantages of well trained doctors in a community. It would have been a ~~very~~ easy matter to have made colossal mistakes with these great ~~foundations~~ organizations. There are instances in which larger bequests have been sterile from the start. But in the history of educational institutions it ~~would be~~ is hard to name one more prolific than the Johns Hopkins University, ~~and not~~ it has not been simply a seed farm, ~~it has proved~~ but it has been a veritable nursery from which the whole country has been furnished with cuttings, grafts, slips, ~~and~~ seedlings, etc. It would be superfluous in this audience to ~~say anything more of~~ refer to the great work which the Trustees and Mr. Gilman did in twenty-five years--their praise is in all the colleges. But I must pay a tribute to the wise men who planned the hospital, who refused to ~~It would have been so easy to~~ establish an institution on the old lines,- a great city charity for the sick poor, but gave it vital ~~without~~ organic connection with ~~the~~ a University. I do not know who was directly responsible for the provision in Mr. Hopkins' will that the Hospital should form part of the Medical School ~~of the University,~~ and that it should be an institution for the study as well as for the cure of disease. Perhaps the founder himself may be credited with the idea, but I have always felt that Francis T. King was largely responsible, as he had strong and sensible convictions on the subject, and devoted the last years of his useful life putting them into execution. As first President of the

Hospital Board he naturally did much to shape the policy of the institution, and it is a pleasure to recall the zeal and sympathy with which he was always ready to cooperate. It is sad that in so few years all of the members of the original board have passed away, the last, Mr. Corner--faithful and interested to the end--only a few weeks ago. They did a great work for this city, and their names should be held in everlasting remembrance. Judge Dobbin and James Carey Thomas, in particular, the members of the staff in the early days remember with gratitude for their untiring devotion to the medical school side of the problem which confronted us. To John S. Billings, so long the skilled adviser of the board, we all turned for advice and counsel, and his influence was deeper and stronger than was always apparent. For the admirable plan of preliminary medical study, and for the shaping of the scientific work before the hospital was opened for patients, we are indebted to Newell Martin, Ira Remsen and W.H. Welch. The present excellent plan of study leading up to medicine, in which the classics, science and literature are fully represented, is the outcome of their labors. About this time sixteen years ago Mr. King, Dr. Billings, Dr. Welch and myself had many conferences with reference to the opening of the hospital. I had been appointed Jan. 1st, but had not yet left Philadelphia. As so often happens, the last steps in a great organization are the most troublesome, and after some delay the whole matter was intrusted to Mr. Gilman, who became acting director, and in a few months everything was ready, and on May 7th the hospital was opened. I look back with peculiar pleasure to my association with Mr. Gilman. It was both an education and a revelation. I had never before been brought into close contact with a man who loved difficulties just for

the pleasure of making them disappear. But I am not going to ~~tell the story~~ speak of those happy days lest it should forestall the story I have written of the inner history of the first period of the hospital. ~~I promise you it is most interesting, full of nice details of which the newspapers know nothing. For example, the loves of the surgeons, the trials of the director, Dr. Hurd, the troubles of the nurses are there set down. I have arranged for its publication in time for the centennial of the hospital in May, 1989, and from those of you who may read it I bespeak a kindly consideration.~~ & criticism

At the date of the organization of the hospital the two great problems before the profession of this country were, how to give to ~~medical~~ students a proper education, in other words how to give them the culture, the science and the art commensurate with the dignity of a learned profession, ~~and with the vital importance of the work to the public,~~ and, secondly, how to make this great and rich country a contributor ~~in~~ to the science of medicine ~~as well as in the art of medicine.~~

The conditions under which the medical school opened in 1893 were unique in the history of American medicine. It would have been an easy matter, ~~to~~ following the lead of the better schools, ~~and~~ to have an entrance examination which guaranteed that a man had an ordinary education, but Miss Garrett's splendid gift enabled us to say, no! we do not want a large number of half-educated students; we prefer a select group trained in the sciences preliminary to medicine, and in the languages which will be most useful for ~~the scientific~~ a modern physician. It was an experiment, and we did not expect more than 25 or 30 students each year for eight or ten years at least. As is so often the

case, the country was better prepared to meet our conditions than we thought, and the number of admissions to the school has risen until we have about reached out capacity. Our example in demanding the preliminary arts or science course for admission to the school has been followed by Harvard, and is to be adopted at Columbia ~~is~~ . It is not a necessary measure ~~which is necessary~~ in all the schools, but there has been ~~followed~~ everywhere a very salutary ~~great~~ increase in the stringency of the entrance examinations. Before we took up the work great reforms in the scientific teaching in medicine had already begun in this country. Everywhere laboratory work had replaced to some extent the lecture, and practical courses in physiology, pathology and pharmacology had been organized. We must not forget, however, that to Newell Martin, the first professor of physiology in this university, is due the introduction ~~in this country~~ of practical classes in biology and physiology. The rapid growth of the school necessitated the erection of a separate building for physiology, pharmacology and physiological chemistry, and in these departments and in anatomy the equipment is as complete as is required. Of the needs in pathology, hygiene and experimental pathology this is not the occasion to speak. It is sufficient to say that instruction in the sciences, upon which the practice of the art is based, the school is in first class condition.

No paragraph

The great difficulty is in the third part of the education of the student; viz., the art. In the old days when a lad was apprenticed to a general practitioner he had very good opportunities of picking up the essentials of a rough and ready art, and the system produced many self-reliant, resourceful men. Then with the multiplication of the medical schools and

The rapidity with which the scientific instruction in ~~the~~ our medical schools ~~of the country~~ has been brought to a high level is one of the most remarkable educationsl features of the past ~~quarter of the century~~ twenty years. Even in ~~the~~ small unendowed ~~schools~~ colleges admirable courses are given in bacteriology and pathology, and ~~even~~ sometimes in the more difficult subject of practical physiology. But the demand and the necessity for these special courses has taxed to the utmost the resources of the private schools. The expense of the new method of teaching is so great that the entire class fees are absorbed by the laboratory ~~expenses~~. The consequence is that the old proprietary ~~school is~~ colleges are no longer ~~a~~ profitable ventures, certainly not in the north, and ~~it~~ fortunately ~~is driving~~ the~~y~~ ~~schools~~ are being forced into closer affiliation with the universities, as it is not an easy matter to get proper endowments for private corporations.

The great difficulty is in the third part of the education of the student; viz., ~~the~~ his art. In the old days when a lad was apprenticed to a general practitioner, he had ~~very~~ good opportunities ~~of~~ to picking up the essentials of a rough and ready art, and the system produced many self-reliant, resourceful men. Then with the multiplication of the medical schools and

increasing rivalry between them came the two year course ~~arose~~ expanded?, which for half a century lay like a blight on the medical profession, retarding its progress, filling its ranks with half-educated men, and pandering directly to all sorts of quackery, humbuggery and fraud among the public. The awakening came about thirty years ago, and now there is scarcely a school in the country which has not a four years course, and all are trying to get clear of the old shackles and teach rational medicine in a rational way. But there are extraordinary difficulties ~~in the way of~~ in teaching the medical students ~~their~~ his Art. It is not hard, for example, to teach ~~a man~~ him all about the disease pneumonia, how it prevails in the winter and spring, how fatal it always has been, ~~how frightened New York and Chicago have become~~ of it, all about the germ, all about the change which the disease ranges in the lungs and in the heart--he may become learned, deeply learned, on the subject ~~of pneumonia~~,-but put him beside a case, and he may not know which lung is involved, and ~~and~~ as he does not know how to find out, and ~~when~~ if he did find out, he ~~may not know~~ might be in doubt whether to put an ice-bag or a poultice on the affected side, whether to bleed or to give opium, whether to give a dose of medicine every hour or none at all, and he may not have the faintest notion whether the signs look ominous or favorable. So also with other aspects of the art of the general practitioner. A student may know all about the bones of the wrist, in fact he may carry a set in his pocket and know every facet and knob and nodule on them, he may have dissected a score of arms, and yet when he is called to see Mrs. Jones who has fallen on the ice and broken her wrist, he may not know a Colles' from a Pott's fracture, and as for setting it secundum artem, he may not have the faintest notion, never having seen a case. Or he may be called to pre-

side at one of those awful domestic tragedies--the sudden emergencies, some terrible accident of birth or of childhood, that require skill, technical skill, courage, the courage of full knowledge, and if he has not been in the obstetrical wards, if he has not been trained practically, if he has not had the opportunities that are the rights of every medical student, he may fail at the critical moment, a life, two lives, may be lost, sacrificed to ignorance, often to helpless, involuntary ignorance. By far the greatest work of the Johns Hopkins Hospital has been the demonstration to the profession of the United States and to the public of this country of how medical students should be instructed in their art. I place it first because it was the most needed lesson, I place it first because it has done the most good as a stimulating example, and I place it first because never before in the history of this country have medical students lived and worked in a hospital as part of its machinery, as an essential part of the work of the wards. In saying this Heaven forbid that I should obliquely disparage the good and faithful work of my colleagues elsewhere. But the amphitheatre clinic, the ward and dispensary classes, are but bastard substitutes for a system which makes the medical student himself help in the work of the hospital as part of its human machinery. He does not see the pneumonia case in the amphitheatre from the benches, but he follows it day by day, hour by hour, he has his time so arranged that he can follow it; he sees and studies similar cases and the disease itself becomes his chief teacher, and he Knows its phases and variations as depicted in the living; he learns under skilled direction when to act and when to refrain, he learns insensibly principles

of practice ~~action~~, and he possibly ~~he~~ escapes ~~the~~ a nickel-in-the slot attitude of mind, which has been ~~which has a drug for each symptom~~. the curse of the ~~physician~~ in the treatment of disease And the same with the other branches of his art; he gets a first hand knowledge, which, if he has any sense, may make him wise unto the salvation ~~sensation~~ of his fellows. And all this has come about through the wise provision that the hospital was to be part of the medical school, and it has become for the senior students, as it should be, their college. Moreover they are not in it upon sufferance and admitted through side-doors, but they are welcomed as important aids without which the work could not be done efficiently. The whole question of the practical education of the medical student is one in which the public is vitally interested. Sane, intelligent physicians and surgeons with culture, science, and art, are worth much in a community, and they are worth paying for in rich endowments of our medical schools and hospitals. Personally, there is nothing in my life in which I take ~~no~~ greater pride than in my connection with the organization of the medical clinic of the Johns Hopkins Hospital and with the introduction of the old-fashioned methods of practical instruction. I ~~could~~ desire no other epitaph--no hurry about it, I may say--than the statement that I taught medical students in the wards, as I regard this as by far the most useful and important work ~~of my life.~~ I have been called upon to do.

The second great problem is a much more difficult one, surrounded as it is with obstacles inextricably connected with the growth and expansion of a comparatively new country. For years the United States had been the largest borrower in the scientific market of the world, and more particularly in the

sciences relating to medicine. To get the best that the world offered, our young men had to go abroad; only here and there was a laboratory of physiology or pathology, and then equipped as a rule for teaching. The change in twenty years has been remarkable. There is scarcely today a department of scientific medicine which is not represented in our larger cities by men who are working as investigators, and American scientific medicine is taking its rightful place in the world's work. Nothing shows this more plainly than the establishment within a few years of journals devoted to scientific subjects; and the active participation of this school as a leader ~~in this~~ is ~~best~~ well illustrated shown by the important publications which have been started by its members. The Hospital Trustees ~~from the start~~ early appreciated the value of there scientific publications, and the Bulletin and the Reports have done much to spread ~~the~~ reputation of the Hospital as a medical centre throughout the world. But let us understand clearly that only a beginning has been made. For one worker in pathology ~~in this country~~--a man, I mean, who is devoting his life to the study of the causes of disease--there are twenty-five at least in Germany, and for one in this country there are a dozen laboratories of the first class in any one of the more important sciences cognate to medicine ~~for one here.~~ It is not ~~only~~ alone that the money is lacking ~~in this country~~; the men are not always at hand. When the right man is available he quickly puts American science into the forefront. Let me give you an illustration. Anatomy is a fundamental branch in medicine. There is no school, even amid sylvan glades, without its dissecting room; but it has been a great difficulty to get ~~in this country~~ the higher anatomy represented in ~~our~~ American universities. Plenty of men have always been available to teach the subject to medical students, but when it came to questions of morphology

and embryology and the really scientific study of the innumerable problems connected with them, it was only here and there and not in a thorough manner that the subjects were approached. And ~~ast~~ the young men had to go abroad to see a completely equipped, modern working anatomical institute. There is today connected with this university a school of anatomy of which any ~~country~~ land might be proud, and the work of Dr. Mall demonstrates what can be done when the man ~~contr cls~~ fits his environment. ¶ It is a hopeful sign to see special schools established for the study of disease such as the Rockefeller Institute in New York, the McCormick Institute in Chicago and the Phipps Institute in Philadelphia. They will give a great impetus in the higher lines of work in which the country has heretofore been so weak. But it makes one green with envy to see how much our German brethren are able to do. Take, for example, the saddest chapter in the history of disease--insanity, ~~probably~~ the greatest curse of civiliz~~ation~~ life. Much has been done in ~~this country~~ the United states for the care of the insane, much in places for the study of ~~its causes~~ the disease, and I may say that the good work which has been inaugurated in this line at the Sheppard Hospital is attracting attention everywhere; but what a bagatelle it seems in comparison with the modern development of the subject in Germany with ~~the~~ its great psychopathic clinics connected with each university, where early and doubtful cases are skilfully studied and skilfully treated. The new department for insanity connected with the University of Munich has cost nearly half a million of dollars! ~~One~~ Of the four new departments for which one side of the hospital grounds lies vacant, and which ~~I trust~~ will be built within the next twenty-five years, ~~will~~ one should be a model psychopathic clinic to which the acute and curable cases may be sent.

The second, a clinic for the diseases of children. Much has been done with our out-patient department under Dr. Booker, who has helped to clarify one of the ~~great~~ dark problems in infant mortality, but we need a ~~M~~ building with fine wards and laboratories in which may be done work of a character as notable and world-wide as that done in Dr. Kelly's division for the diseases of women.(f) The third great department for which a separate building must be provided is that of Syphilis and Dermatology. Already no small share of the reputation of this hospital has come from the good work done in these specialities by the late Dr. Brown, by Dr. Gilchrist, and by Dr. Hugh Young; and lastly, for diseases of the eye, ear, and throat, a large separate clinic is needed, which will give to these all important subjects the equipment they deserve.

Bowy

(1) It is most grafifying to know that the Harriet Lane Johnston Hospital for children will be ~~on the grounds of~~ associated with the Johns Hopkins Hospital and will meet the requirements of which I have spoken.

For how much to be thankful have ~~these of us~~ we who have ~~been permitted to~~ share in the initiation of the work ~~initiated by these~~ of these two great institutions ~~foundations.~~ We have been blessed with two remarkable Presidents, whose active sympathies have been a stimulus in every department, and whose good sense has minimized the loss of energy through friction between the various parts of the machine,-a loss from which colleges are very prone to suffer. ~~One of the most remarkable~~ A noteworthy feature is that in so motley a collection ~~of men~~ from all parts of the country the men should have fitted into each others lives so smoothly and peacefully, so that the good fellowship and harmony in the faculties has been delightful. And we have been singularly blessed in our relationship with the citizens, who have not only learned to appreciate the enormous benefits which these great trusts confer upon the city and the state, but they have come forward in a noble way to make possible a new era in the life of the university. And we of the medical faculty have to feel very grateful to the profession, ~~through~~ to whose influence and support much of the success of the hospital and the medical school is due; not only to the physicians of the city and of the state, who have ~~welcomed us warmly,~~ dealt so truly with us, but to the profession of the entire country, and more particularly, to that of the Southern States, whose confidence we have enjoyed in ~~a most~~ such a practical way. Upon a maintainence of this confidence the future rests. The character of the work of the past sixteen years is the best guarantee of ~~its continuance.~~ its permanence

What has been accomplished is only an earnest of what shall be done in the future. 'Upon our heels a fresh perfection must tread, born of us, fated to excel us.' We have but served and have but seen a beginning. Personally I feel deeply grateful to have been permitted to join in this noble work and to have been united in it with men of such high ~~and~~ human ideals