REPORT

OF

THE PROVOST

OF THE

UNIVERSITY OF PENNSYLVANIA

For the three Years ending October 1, 1892.

PHILADELPHIA
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REPORT OF THE PROVOST.

To the Honorable Board of Trustees:

Gentlemen: I have the honor to submit to you the following report of the operations of the University from January 1, 1890, to January 1, 1893. It covers a period momentous in the history of the University for the changes wrought by deaths, resignations, reorganizations and developments, and not less so to you personally for the unusual demands which these have made upon your time and thought as Trustees. The changes in the Board while not numerous have been gravely important. In 1890 the senior member of your board, the Rev. Dr. Henry Jackson Morton, departed this life full of years and honors, having served continuously as Trustee for a period of forty-six years. No brief mention can do justice to the unique position held alike in the University, the Church, and the city by Dr. Morton. In each he was the connecting link between the present and the past, as represented by Bishop White, and it may suffice to say that he worthily inherited the universal esteem once given to that venerable citizen and churchman.

Dr. Arthur V. Meigs was elected to fill the vacancy caused by the late Dr. Hutchinson’s death, and at once began an active career in the work of your Board. As a member of the Committees on Ways and Means and on Medicine, and as Chairman of the Committee on Dentistry, he rendered useful services by time-consuming and painstaking work, one important result of which was the accurate adjustment of the obligations of the University to the conditions of its several trusts. Dr. Meigs resigned in 1892, and on the date of this writing the vacancy thus caused has not been filled. In 1891 Walter George Smith, Esq., was elected to the Board to fill the vacancy caused by Dr. Morton’s death.

On December 2, 1890, Mr. Wharton Barker resigned the position which for nine years he had acceptably filled as
Treasurer of the University, and Mr. Richard Wood was elected Treasurer *pro tempore*, and has continued to be so up to the present time. The office of Treasurer is one of increasing onerousness and responsibility, and when held by a Trustee is of course without remuneration. Your Board owes a debt of gratitude to the gentlemen who have for so many years efficiently borne the burden and responsibility, but it is evident that as the invested funds of the Corporation increase, and the details of administration grow more complex, there must be a system devised which will ask of no one Trustee a service so much out of proportion to that demanded of his colleagues. Intimately connected with the Treasury is the work of the Committee on Ways and Means, of which, until the close of the present month, Mr. Harrison has been the efficient Chairman, but from which, to the great regret of all who are interested, he has just withdrawn. Mr. Harrison's devotion to the interests of the University was conspicuously manifested in his work in this Committee. Within the last two years its efficiency was greatly increased by a plan devised by him and sanctioned by your Board, by which the Committee was divided into sub-committees, respectively on University Accounts, Investments, Maintenance of Trust Funds and Obligation of Legacies, and on Increase of Resources, each with a Chairman and stated times of meeting; and by the appointment of two stated meetings of the General Committee in each month except those of summer. Only the Trustees and the Provost can appreciate the vital importance and grave responsibilities of the work of this Committee. It is the unseen and often unregarded force upon which ultimately depends the maintenance and expansion of every department of University activity, and upon its Chairman and members devolve the chiefest cares and labors of the governing body.

The past three years have also witnessed serious losses from the staff of instruction. In November, 1890, Professor John G. R. McElroy died after a brief illness. Professor McElroy became an instructor in the University in 1867, five years after his graduation, and held successively the posts of Assistant Professor of Rhetoric and History, Adjunct Professor
of Greek and History, and Professor of Rhetoric and the English Language until his death. He was a painstaking and industrious teacher, the author of several works in English which have become standard text-books, and commanded the hearty respect and affection of his fellow Professors.

In April, 1891, Professor A. Sidney Biddle was removed by death. Mr. Biddle became Professor of Practice, Pleading and Evidence at Law, and at once took an active part in the reorganization of the Law School, ultimately taking the title of Professor of Torts, Evidence and Practice at Law, under a rearrangement of the duties of the several chairs. His death in the very prime of life and usefulness was a source of grief profound and universal. To a noble personal life he united distinguished ability as a lawyer and rare efficiency as a teacher, and I am sure that there have been few memorials entrusted to your Board that have been received so gratefully as that which will commemorate his name in the school which he loved and served so well.

The same month witnessed the death of one whose loss was not ours only, but that of the world of science. Joseph Leidy was an alumnus of the University, and may be said to have never left her precincts. His two functions of teacher and investigator were pursued together and chiefly within her walls. I will not venture within these narrow limits the delineation of a character so great that it needed no self-assertion, of a mind so vigorous and so richly stored, of researches and discoveries which won such applause wherever science is pursued. These are known to the world. It is for us gratefully to remember that every increment of power as a teacher and of fame as a discoverer brought profit and honor to the University in whose service his life was spent. His works are his sufficient monument. But will not men in future years ask how it came that the theatre of his achievements contains no visible memorial that here Leidy lived and taught?

In March, 1892, the death of D. Hayes Agnew, M.D., LL.D., Emeritus Professor of Surgery and Honorary Professor of Clinical Surgery closed a career of singular nobility of
personal character and of illustrious fame in the profession of surgery. The influence of Dr. Agnew upon his colleagues and students during his long years of service cannot be estimated, and the tributes to his memory which were paid so abundantly here were almost equaled by those which came from former students now living at a distance. He possessed every quality of an ideal surgeon, and whether as operator or teacher revealed the profound and accurate knowledge, the wise judgment, and the ever controlling conscientiousness which inspired confidence and admiration. You have given your cordial approval to the plan of a memorial to him which will not only tell how he was loved and honored here, but carry on the work always dear to him of alleviating human sufferings by the ministrations of scientific skill.

Professor John J. Reese, M.D., Emeritus Professor of Medical Jurisprudence and Toxicology, died September 4, 1892. Professor Reese had only recently retired from the active duties of his class in the Auxiliary Faculty of Medicine, and on his retirement was given the title of Emeritus as a testimony of the high esteem in which he was held both personally and professionally. His reputation was based not only on his ability as a lecturer, but on the authoritative text-book which he published, and on his skill as an expert in the delicate and critical questions which are included in the title of his chair.

Dr. Henry R. Formad, whose death occurred in June, 1892, was a singularly talented man, and a very efficient teacher in the fields of Pathology and Morbid Anatomy, in which he served as Demonstrator and Lecturer for a number of years. His death was a distinct loss to the Medical Department and to the profession.

During the summer vacation of 1892 Mr. Edmund A. Stewardson lost his life by drowning. Mr. Stewardson was one of the earnest workers to whose professional enthusiasm we owe the rapid development of the School of Architecture, and one of those to whom it looked for valuable help in the growth which is hoped for. He was Instructor in Modeling, and of such personal character and artistic promise as made his early death a keen sorrow to all who knew him.
In addition to these losses by death there have been changes occasioned by the inevitable demands for modifications in the methods and scope of our teaching, as the older subjects require subdivision and expansion, or are found not to be sufficiently in demand to warrant the maintenance of separate chairs. No subject within recent years has so taxed the thought, care and time of the Trustees as the readjustments in the College Faculty which were imperatively required to secure a maximum efficiency within the limits of the means at their disposal; and the evidently good results of your carefully-considered actions do not obliterato the regret that in some cases the reorganization affected the positions of some whose relations to the University have been long and honorable. In other cases members of our teaching force whom we were very unwilling to lose have accepted calls to superior positions in other Colleges, which they could not be blamed for accepting in the view of slender probability of their equivalent advancement in our own staff at any early date. To offset this we have the gratification of noting that several of our most distinguished professors have declined offers of high honor and much greater emoluments through their loyal affection for the University and their conviction of the advantages which their present positions gave them for the prosecution of the special work to which as a high calling, and not a trade, they have devoted their lives. In the reorganization of the College Faculty, and in the filling of vacancies caused by death or resignation, accessions have been made to our Faculties, and while in some cases it is too soon to pronounce a positive judgment, we have every reason to believe that valuable additions have been made to our teaching staff. A detailed statement of deaths, resignations and appointments will be found in Appendix.

The wisdom of the Board in securing the additional land lying to the eastward of Thirty-fourth Street has been more than vindicated by the expansions made during the last three years, and the need, daily growing more apparent, of even more territory for the site of University buildings. Upon a portion of the new ground has been erected the Institute of Hygiene, to which reference will be made later on. Another portion has
been assigned to the Athletic Association, for the construction of a much larger and better equipped athletic ground than that which it now occupies, which is thereby released for other important purposes for which it is fully adapted. The triangular lot lying at the intersection of Woodland avenue and Thirty-sixth street has been conveyed, with the consent of the City, to the Wistar Institute of Anatomy and Biology, upon which the fine building of the Institute is being erected.

The new Library building has been completed since my last report, and has proved in plan and structure all that was hoped for. It was formally opened on February 7, 1891, when eloquent addresses were made by Dr. Horace Howard Furness and Mr. Talcott Williams before a very large and appreciative audience, including many distinguished visitors. The plans for the cataloguing, storage and use of the books is excellent, and the use of the library by students and professors is far greater than before such facilities were provided; the best order is maintained, and the Librarian and his assistants are faithful and efficient in the discharge of their duties. In my last report I stated that the upper rooms of the building would furnish ample room for years to come for the reception of collections of the newly-formed Department of Archaeology in its several sections. It proves that I greatly underrated the vigor of the new Department and the hearty public interest taken in its work. Not only has every available room been filled to overflowing with the several collections, representing many hundreds of thousands of dollars in value, but every possible space upon and under the stairway has been used for the display of portions of the collections; and far sooner than was expected the urgent demand comes upon us for a building having all the fire-proof security of the Library, and specially adapted to the exhibition of these priceless and rapidly-growing collections.

The next great building contemplated was the Institute of Hygiene. It may suffice to say that the construction of this building was under the immediate personal supervision of the donor, Mr. Henry C. Lea, in constant association with Dr. John S. Billings. The result is a structure which is itself an object
lesson in Hygiene, and a model of perfect adaptation to its scientific purposes. It was formally opened on February 22, 1892, when before a large concourse of people, including many eminent hygienists, Dr. S. Weir Mitchell, on behalf of Mr. Lea, formally presented it to the Trustees. I had the honor of accepting it on your behalf, and able addresses were made by Dr. John S. Billings, Dr. Benjamin Lee, and Dr. H. P. Wolcott. Once again the result of careful and scientific forethought is manifested in a building which meets every requirement of teaching and research, and stands a monument not only of the liberality but of the practical wisdom of its donor.

An important and unique structure erected during this period was the Canine Infirmary, in connection with the Veterinary Hospital. The treatment of sick dogs is an important part of the Hospital work, and the special difficulty connected with their contagious diseases made it almost impossible to care for them in the general buildings. It was deemed good economy to erect a substantial two story-building, divided into two absolutely non-communicating sections, and filled up with every convenience and security for the treatment of canine disorders.

Plans are now being made for the construction of a Chemical Laboratory for the College Department, to be erected at the north east corner of Thirty-fourth and Spruce Streets. This convenient location was made possible by a gift from the City of Philadelphia of a small triangle of ground left open on the city plan, the acquisition of which squared our ground and made available for building purposes a portion which would otherwise have been of little use.

One of the most important movements of recent years was the construction of a Central Station for Heating and Lighting, designed to supply these essentials to all the buildings upon the University grounds. Various systems of heating had been employed in the several buildings. In some of these the plant was originally and inherently defective. In others that which had fairly well answered its original purpose had worn out, and speedy renewal was essential. In none of the buildings was there an effective system of ventilation, and in all the only means
of artificial light was the expensive and unsatisfactory city gas. After a careful study of the subject, it was seen that the truest economy, as well as great improvements in the sanitary condition of the buildings, would be secured by the erection of a Central Station wisely planned and to be efficiently engineered, from which ample steam supply, forced ventilation, and electric lighting could be supplied to all the departments. It was recognized that the first cost would be very great, not only in the construction of the buildings and plant, but in the adaptation of the old buildings to receive the new system. But it was also seen that an equitable charge, based upon carefully measured actual consumption by each department, would within reasonable time not only pay current expenses and interest, but gradually refund the principal, and that this charge ought not to exceed that now paid for a far inferior service. The work was committed to Messrs. Wilson Brothers, Architects, associated with Professor Spangler, as the University's expert, and proved to be even more difficult than was at first expected. Coincident with this important improvement came the urgent demand of the Mechanical and Engineering Department for accommodations and facilities to correspond with its phenomenal development, and it was at once apparent that an enlargement of the proposed building, sufficient to adapt it to this incidental demand, would be the wisest course, saving expense, and making the actual working plant a practical laboratory as well. The equipment, as a Heat and Light Station, consists of a boiler house, 100 by 50 feet, equipped with examples of the best modern types of steam boilers. The plant will contain externally and internally fired shell boilers and several water-tube and other boilers of sectional type.

Adjoining this building is the new Engineering Laboratory. This building is 100 by 45 feet and three and one-half stories high. On the first floor are the engines and dynamos used for lighting all the University buildings.

The dynamos to be used for lighting purposes include examples of the best modern types of both direct and alternating current machines. There are several plain slide valve engines of 15 horse-power each, used for running blast and ventilating fans,
in addition to those used for the dynamos, and a carefully constructed system of tunnels and protected piping by which steam and electricity are conveyed to the separate buildings. The steam from each building is condensed and the return water measured, indicating the amount of heat radiated in that building, upon which the charges to each Department are based.

I now beg your attention to the work of the several Departments of the University as exhibited in the appended reports of the Deans, and to a consideration of some of the important changes and developments which have been accomplished in the last few years.

The College Department has shown a steady and gratifying increase in the number of its students, and an equally marked improvement in its organization, equipment and system of instruction. The serious alterations to the building, made necessary for the introduction of the heat and light system, necessitated many changes in the interior of College Hall, and advantage was taken of the repairs to greatly improve the appearance of many of the rooms. The removal of the Mechanical Engineering Department to the new building, and the dedication of its rooms to other departments greatly needing them, required that they should be refitted for their new purposes, and the result is that under the supervision of our architectural professors the building has not only been placed in far better sanitary condition, but made much more attractive in appearance. The early removal of the chemical laboratories to their appropriate building is all that is needed to relieve College Hall of the congestion which has caused portions of the corridors to be cut off for rooms, and to give the whole building an appearance suited to its proper purposes. The administration of the Department has demanded more thorough system concurrent with its growth, and suitable offices have been fitted up for its officers and those of your Board, provided with every convenience for the transaction of business. Important changes have been made in the organization of the Department. Among these, perhaps the most important is the final adoption of four years' technical courses in Architecture, in Mechanical and Electrical Engineering, and in Chemistry,
not as superseding, but as alternative to the former five years' course embracing these subjects, which is still retained. It is a concession to the needs of many students, which has been made without the sacrifice of the high standards hitherto maintained in the matter of scholarship, and it has had a notable effect in increasing the number of matriculates without impairing their quality. The details of the two courses now available and the distinctions between them will be found concisely stated in the Dean's report. Your attention is particularly called to the success of the new School of Architecture, which was the first to urge the adoption of this plan, and which seems to so abundantly justify it by its large accessions of students. Already you are called upon to increase the force of instructors in this growing school for the coming year, and there seems to be every reason why this should be done. The school is fortunate in the warm support which it receives from the members of the profession, and much valuable instruction is given by them gratuitously as lecturers upon special subjects.

The Mechanical and Electrical Engineering course has developed an unexpected strength during the last three years. Through the exertions of Messrs. Merrick and Sellers of your Board a very complete equipment of metal and wood-working apparatus, together with engines for motive and for testing purposes, was procured and placed in suitable apartments in College Hall, which it was supposed would be sufficient for some years to come. But the number of students attracted to the course under the energetic administration of the professor in charge soon made it impossible to conduct the instruction in such limited quarters. Happily, the construction of the Heat and Light Station gave an opportunity, at a minimum of expense, to provide fully for requirements of the Department by the enlargement of that building to the proper extent; and the result is that three floors of 45 by 100 feet are devoted to the purposes of a Mechanical Laboratory in addition to that occupied by the working plant of the station, as heretofore described.

The Department of Chemistry is another in which there have been large accessions of students, and for which the quarters assigned in College Hall have become entirely inadequate.
Apart from its technical course is the increased demand made upon it by every increase in the College itself, and the construction of a separate laboratory has become an imperative necessity. As will be seen in the Dean's report, Mining Engineering, including Metallurgy, has been merged into the departments of Chemistry and Civil Engineering, enabling the College to give instruction equivalent to that formerly offered in these subjects, but with greater economy in administration.

The School of Biology has steadily pursued its useful work with as many students as the laboratory can possibly accommodate. In addition to the regular home work, an important movement was made in 1891, when Mr. Charles K. Landis deeded to the University a valuable lot of ground at Sea Isle City, N. J., for the erection of a seaside laboratory. Upon this ground a substantial frame building was constructed, equipped with pumps, tanks, aquaria and laboratory rooms, and here for two summers classes have been taught, private investigations pursued and interesting collections made under the supervision of members of the biological staff detailed for that purpose. It is earnestly hoped that sufficient funds may be contributed to put this work upon a substantial basis, and to enable it to make full use of the unique facilities which the situation and the plant afford.

The Wharton School of Finance and Economy has continued to demonstrate the wisdom of its founder by attracting increasing numbers of young men to its courses, which have been steadily strengthened in the light of experience. It is seriously debated whether the Wharton School course should not be made a full College course, beginning with the Freshman year, and embracing in the earlier years the general culture studies, so modified as to best qualify the student for the special studies of the two later years. Not only has the work of the School been vigorously prosecuted by the members of the Faculty, but they have taken an active part in enterprises which have indirectly advanced its interests. To them is chiefly due the establishment of the American Academy of Social Science, which, by its widely-extended membership, its interesting sessions
and its able publications, has drawn public attention to the school with which its promoters are identified.

In addition to this, members of the staff have conducted several publications on Political Economy and Public Law and History, which have now reached eleven numbers. These have attracted very wide attention both here and abroad, and indicate the important character of the researches carried on in the seminars of the School.

To the Wharton School may be traced the genesis of the School of American History and Institutions, formally instituted in 1891. For some time previous to this date Professor Francis N. Thorpe, then Lecturer on American History, had been quietly collecting, through the liberality of a few generous individuals, a valuable library of works on American history, comprising an almost complete set of records of the National Government, Laws of States and Territories, State Records and Municipal Ordinances, and now amounting to about 13,000 volumes. With this as a basis of instruction and research, the scheme for a school in this important line of study was carefully elaborated, and placed in charge of Professor McMaster, Professor of American History, and Professor Thorpe, Professor of American Constitutional History. The actual work of the School began in October, 1892, and sufficient time has not elapsed to permit any definite report of its operations, or of its ultimate place in the College system.

The mention of this special library recalls an important movement to meet the needs of Professors and Instructors apart from the provisions of the general Library. It was the purchase, through special funds collected by Mr. Charles C. Harrison, of a series of working libraries for class-room use, consisting of the reference books which are in daily and constant use in the immediate work of the class. For their care and use the Professor is responsible, and the Library is relieved from incessant demands, and the time of teachers and students greatly economized.

I am happy to report a gratifying improvement in the daily chapel services, brought about by assiduous attention of your
Committee on Religious Services to the duty of its appointment. Beginning with January, 1892, these services were entrusted to four chaplains selected from prominent clergymen of different denominations, each of whom serves daily for one week at a time throughout the College year. In addition to the former service of reading, singing and prayer, the Chaplain is expected to deliver a brief address on some important topic, the entire service to be restricted to fifteen minutes of time. The preparation of such brief addresses that shall be at the same time effective demands unusual personal ability, and it is gratifying to note that the gentlemen selected have succeeded admirably in enlisting and maintaining the attention and interest of the students. For an hour after the Chapel service the Chaplain is in attendance in the Faculty room to receive and advise with any student who cares to consult with him on any interest of the social, moral or spiritual life, and it is believed that these conferences are in many cases most helpful to the young men who avail themselves of the privilege offered. The Rev. Dr. George Dana Boardman, the Rev. Dean Bartlett, the Rev. Dr. Charles Wood, the Rev. Dr. J. A. M. Chapman, the Rev. Leverett Bradley, the Rev. Dr. J. A. Lippincott, and the Rev. Dr. John T. Beckley are they who have thus far conducted this beneficent and in some respects laborious work, and they have the satisfaction of knowing that the opportunity for spiritual influence upon young men, the most of whom have influential lives before them, is one which they are meeting with every assurance of success and grateful appreciation. The services have been further improved by a careful organization of the College choir, which has been placed under the able direction of Mr. Frederick B. Nielson as choir-master, and has already attained a high degree of proficiency.

I cannot conclude this review of the operations of the College Department without again calling attention to its most urgent need—that of adequate financial support.

There are in every college pay students and free students, but the difference between them is merely a difference in degree. No man can exhibit receipted tuition bills and say "I have paid for my son's education." He has contributed to the expenses of
that education all that was asked of him, but the education itself has cost in actual money outlay from 30 to 50 per cent, more than the total of his bills. The remainder was paid from the income of gifts and legacies by men and women long dead, to whom this higher education was something of sacred importance, and by a steady stream of gifts from the comparatively few of the living who feel that in the maintenance of institutions like ours they can best promote the highest welfare of their fellow men. Without such resources as these not a college in the land could be maintained. The tuition fees cannot be raised to a sustaining point without debarring from the higher education a large proportion of the very men for whose education the colleges deserve to exist. Without such resources free tuition of those from some of whom will come the highest honor to the college that educated them would be impossible. The need of such resources becomes yearly more urgent.

We are painfully conscious that the average salaries now paid to professors and instructors are altogether unworthy of the talents, the zeal, the loyalty and the labors that are demanded of one who is at all worthy of such a position. The material equipments needed for our advanced modern education represent a very large capital, and large annual expenditures to keep them abreast with the times. Meanwhile, with the increase of population, and under the stimulus of a more widely-diffused secondary and primary educational system, an ever-increasing number of young men are thronging to our doors. Among them are some of rare promise, to whom even our moderate tuition charges are prohibitory. You have already strained your resources to the utmost in the liberal grant of scholarships to deserving students. To continue them in such numbers as in the last few years is absolutely impossible on existing means. Our one, supreme, and urgent need is that of money. We need first an endowment fund worthy of the work which is committed to our hands. The noble contribution to such a fund made by Mr. John Henry Towne is a memorial of his lofty conception of that work; and as a direct result of that example, and so stated in his will, is the bequest of the late Charles Lennig, Esq., of a like munificent
sum for the very purpose of supplementing his friend's benefaction. The Lennig fund will not be available for some years to come, and meanwhile, or until others shall be moved to create such a fund, we need a maintenance fund created by annual gifts, and adequate to meet the inevitable annual deficit, and the urgent need of expansion and improvement. Such a fund was created by subscription two years ago, to cover a period of three years, and was contributed by a very few of our old and tried friends. A movement is now on foot to establish it in permanent form, and to enlist as contributors to it every available friend, and especially the alumni, and to encourage subscriptions of small as well as of large sums, so that the largest possible number may be interested.

Another and most efficient source of maintenance is in the foundation of scholarships. The very small number of these that have yet been endowed in the University, and they only to the annual value of tuition fees, is in strong contrast to the large number which are offered in some of our larger Colleges, and which present such attractive inducements to the best and ablest young men. Such endowments bear the name of the donor or a name selected by him, and are not only perennial well springs of beneficence, but among the fittest permanent memorials of the benefactor who creates them. They strengthen the University not only by the increase in its income, but by enabling it to extend to deserving students that aid without which they would be unable to pursue their chosen career.

I again refer you to the appended report of the Dean, to whose good judgment and eminent administrative ability the Department owes much of its satisfactory condition, both in improved accommodations for business and instruction, and in the gradual development of its courses and curricula to the highest educational advantage.

The Department of Philosophy is rapidly taking that place in our system which it ought to hold as the distinctive expression of the University idea. It was a wise thought to make the Dean of the College Dean also of this Department. By this appoint-
ment the undergraduate and graduate courses were better co-ordinated, and the order of your Board requiring Professors to give graduate instruction when called upon to do so was made practicable by their release from an equivalent amount of undergraduate work. The rapid increase in the number of matriculates, from 53 in 1890 to 117 in 1892, shows that the unusual facilities which we are able to offer in special lines of study are fully appreciated by the growing number of men and women who find the post-graduate studies essential to their full equipment for their life work. For women form no inconsiderable number of these matriculates. The Graduate Department for Women, which was formally opened on May 4, 1892, finds its instructors and equipment in this Department, and is governed by its rules. The Hall donated by Col. Bennett, after a few alterations to adapt it to the needs of the Department, was completely furnished through the exertion of the ladies on its Board of Managers, and is the home of the resident students. There is need of the endowment of more fellowships in this Department for the maintenance of the full number of women which the Hall is able to accommodate while pursuing the graduate studies which are open to them as freely as to men, and which lead to the same degree, the Doctorate in Philosophy.

The Department of Medicine has had an eventful and most prosperous career during the period covered by this report. Professor James Tyson, to whom the Department owes so much for invaluable services as Secretary, and later as Dean, feeling that the duties of his chair and his increasing practice made it a necessity, resigned his Deanship in 1892, and was succeeded in that office by Professor John Marshall, whose able management of the Veterinary Department indicated his fitness for the position. The mutual pledges between Mr. Henry C. Lea and the University have been happily fulfilled. Within the stipulated time the former has completed and handed over for use the building for the Institute of Hygiene. Dr. John S. Billings has entered upon his duties as Director and established the courses, which while related to all departments, are especially affiliated with that in Medicine. The guarantee fund for a fourth year to be established
in the Medical School has been secured, and the important
announcement is now made that beginning with the fall of this
year the required course for a degree in Medicine will cover four
years. Much care and labor has been expended in re-casting the
curriculum to secure the fullest advantage from this additional
year, and it is believed that the gain will not only be in fuller and
wider instruction in all departments, but in so regulating and dis-
tributing that work as to greatly relieve the stress upon the
students' health and strength.

The increase in the number of students attending the
Department has been so great as to seriously tax the capacity of
its buildings and the possibilities of its roster. Never before in
its history have there been so many upon its rolls. Much of
this increase is no doubt due to the desire of some to take
advantage while they could of the three years' course while it
was still available; but there yet remains the gratifying fact that
the reputation of the school, and consequent value of its
diploma in the eyes of the community have been maintained and
increased, so that earnest students, who aim at the highest attain-
ments in their profession, enter its halls rather than seek elsewhere
for an education which would cost less in time, money, and effort.
It is in faith in the continuance of this spirit that we make the
advances which are demanded by the enlarging fields of medical
science. With each advance there is a temporary falling off in
the number of students; after each ebb there is the surging in
of a larger tide; and I question whether the next expansion
demanded of you be not in the way of enlarged buildings,
increased equipments and a larger staff of instruction.

As on the one side the Institute of Hygiene affords
increased facilities to the Medical School, so on another the newly-
established Institute of Anatomy and Biology enriches it in the
line of Anatomy in its widest scope, and affords opportunity for
the most advanced post-graduate and investigative work. The
proposal of General Isaac J. Wistar to erect a fire-proof building
in which to place securely the historic Wistar Museum with its
constant accretions, and in which there should be space and
facilities for a vastly greater work in Anatomy and its kindred
sciences than Medical Hall could be expected to supply, was gladly accepted by your Board, along with the careful provisions of General Wistar for the perpetual sanctity and security of the building, its uses and endowments. These include the formation of a corporation to which the necessary ground was conveyed and the Museum entrusted, with full safeguards to the University as to controlling management of the Institute, and the remote possibility of reversion. The building is now nearing completion, and promises to be not only a magnificent addition to the University group, but to fulfill the highest expectations of its generous donor as a complete storehouse and workshop for that science of which Dr. Caspar Wistar was so illustrious an exponent.

The Dental Department has had an unexpected degree of prosperity during this period, while laboring under adverse circumstances of peculiar character. The establishment of the three years' course was not attended with the decrease in the number of students entering the first year that was expected, and we are now assured that there will be no lack of students if the high grade of the school be maintained. But this will be impossible unless greatly increased facilities are immediately provided. There is the most urgent need of a building devoted to the special work of the school, and filled with all the appliances needed for the teaching of an art which has made very great developments in the last decade, and which now demands the highest professional and technical training in its practitioners. The public has not yet fully realized the relations of modern dentistry to health and even to the prolongation of life. When these are known there ought to be the same spirit manifested as that to which the medical schools have not appealed in vain, and there should be no difficulty in raising the absolutely necessary funds for the advancement of the Dental School to a position which its importance deserves. I earnestly beg your serious attention to the needs of this Department. The members of the Faculty have reached a point in the development of the school beyond which they cannot go without assistance; to stand still means to fall behind the other leading schools of the
country and to forfeit the position already gained; and an
inspection of the Dean's report will show that with proper
facilities provided there need be no fear that the Department
would not creditably maintain itself from its current receipts.

The reports of the Veterinary School and Hospital exhibit
a steady improvement in buildings, grounds, equipment and
administration, with an equally gratifying increase in the number
of the students. Both represent a profession which has yet to
make its way to a full appreciation on the part of the public.
The high standard of the school and the rigorous requirements
of its curriculum exclude all but capable and diligent students
from the course, limit the number from whom fees might be
derived, and ensure graduates fully competent to serve the com-
munity in a most important interest. Their thorough training
would be impossible without the clinical advantages of an
extensive hospital. The Hospital, primarily for this purpose,
becomes a great charity, in which last year more than 1500
dumb animals were treated without charge to their owners. The
maintenance of this educational and charitable work would be
impossible without generous assistance. The children of the
late J. B. Lippincott, Esq., have continued their liberal gifts to the
school which so largely owes its existence to his warm and hearty
interest, and Mr. J. E. Gillingham, who was associated with him
in the inception of this movement, and continues to occupy the
position of President of the Board of Managers of the Veterinary
Hospital, still manifest a warm and liberal interest in the develop-
ment of this Department. The Legislature is now considering a
bill to extend to the hospital the moiety of an appropriation made in
1889, of which only one-half was then available through lack of
public funds. The State receives a full return for this appropria-
tion in the scholarships placed at its disposal, and it is earnestly
hoped that the moderate endowments suggested by the Dean, in
his report, may be obtained, and the permanent prosperity of the
Department thus assured.

The Law Department presents a most gratifying report. A
gradual but steady increase in the number of enrolled students,
and the generally high averages attained by them in term and
final examinations, indicate a prosperity and effectiveness directly resulting from the energy and enthusiasm of a happily-constituted Faculty, to every member of which the success of the school is dearer than his personal advantage. The establishment of the Algernon Sidney Biddle Fellowship by members of the family of the late honored Professor added one more efficient teacher to the staff, and set a valuable prize for the stimulation of earnest work in the Department. The liberal appropriations from the income of the school for the maintenance of the George Biddle Memorial Library have already added about 30 per cent. to the original number of volumes, and in addition to this the Department has contributed to the general expenses of the University an equitable share of its gross income. The apartments in the Girard Building occupied by the School and Library are attractive, conveniently situated and kept in admirable condition, but it is evident that if the Department continues to increase in numbers of students and teachers as the Library is certain to increase, the need of larger accommodations will surely come, and these should be found in a building of our own, not far from the present location. It might be a wise economy to secure a suitable site before the demand becomes imperative and in advance of an almost certain increase in the cost of property with each succeeding year.

The Department of Physical Education and the Athletic Association of the University constitute together the agency by which the athletic interests of our young men are controlled and fostered. Nothing in late years has contributed so much to bring the several Departments into solidarity as the participation by the students of all in the athletic exercises and contests in which the University has at last gained a creditable position. Determined and effective resistance has been made to the effort to restrict the latter to the undergraduates of the College department and to regulations which would debar men who had previously belonged to other institutions. The broader University idea has prevailed, and it is now almost unanimously admitted that the only condition of participation in inter-collegiate games should be a bona fide scholarship, whether undergradu-
ate or post-graduate, and that the elimination of professionalism and the correction of all other abuses which threaten college athletics may be amply secured by athletic associations composed of students and alumni, whose character and tone could not be questioned, and by a proper supervision by the University authorities over a matter in which the credit of the University is so intimately involved. This is the provision which is made here, and the while we are more concerned with the good results of well-ordered athletics to the physical, hygienic, and moral welfare of our students than with their victories on the field or course, we cannot be altogether indifferent to the triumphs which have inspired such enthusiasm among them and their friends, nor to the zealous co-operation of the alumni, whose activity in the Athletic Association has made such triumphs possible. The assignment of the tract of land east of Thirty-third Street and north of South Street, immediately contiguous to South Street Station, will enable the Association to lay out a much larger athletic field than that now occupied, and give opportunity for the construction of special buildings for which there is no room on the present ground. We may confidently trust that the zeal inspired by the recent successes of our students, and the earnestness with which their efforts are supported by a strong body of graduates, will ultimately secure all that is needed for a full athletic equipment upon the new grounds.

There is as yet no suitable gymnasium. The room devoted to that purpose in College Hall is altogether inadequate, and the apparatus insufficient and much of it out of repair. That there should be a new gymnasium is unquestioned. Whether it should be a distinct building upon or adjacent to the athletic grounds, or whether it should be an adjunct to a larger structure devoted to all the purposes of a Students' Hall, is now open to discussion. For by a spontaneous act of the undergraduates the need of such a hall has been brought to your attention and received your cordial endorsement. The fact that among our two thousand students there is a large proportion from abroad, whose domestic life for three or four years is limited to the meagre accommodation of necessarily low-priced boarding
houses, the cruel exposure to various temptations which this involves, the need of humanizing, refining and moral, not less than of religious, influences during this critical period of their lives—all these plead for such a home centre in the University life as is represented in many colleges by their handsome and well-equipped Young Men's Christian Association Halls. The acceptance of the general plan of these does not necessarily involve either the name or the limitations of that association. In fact, it would seem wiser and more consonant with our traditions to avoid both, and, in accordance with the report of your committee on that subject, to aim at the construction and equipment of a building which would afford rooms for all religious organizations among the students, rooms for reading, recitation and social intercourse, everything, in fact, that would tend to make up for absence from a refined home, and to allure from haunts of vice and dissipation. The students began a subscription for such a building, which immediately received large accessions from those whose heartfelt interest in their best welfare gladly sought this expression; the details of the plan are now under serious consideration, and I confidently hope that the next report will announce the completion and use of a building which will represent in the fullest manner the University's idea of what the life of her sons should be.

Closely connected with this subject is that still unsettled one of dormitories. For one reason and another no progress has been made beyond the approval of a general plan of a building and the arrangement of its apartments. But the demand for such accommodation for our students is steadily growing, and more and more is endorsed by members of the Faculties and others who are most intimately in contact with them, and best acquainted with their needs. Much that I have said in regard to a students' hall applies also to a dormitory, but in addition to that there is the serious argument of the dangers to health to which our students are too often exposed in the boarding houses which they are forced to inhabit. There is no more healthful situation than that occupied by the University and the properties adjacent to it. But, unfortunately, many of the residences in its
neighborhood having been built by speculators at about the time of the Centennial, upon ground not properly prepared and in the cheapest possible manner, the original defects of construction have become more serious by the lapse of time, and are a constant menace to the health of the occupants. From a medical standpoint I cannot overrate the importance of strict hygienic conditions in the apartments in which the hours of study and of sleep are passed, and I cannot feel that our students are cared for as they should be until there be within their reach apartments which we know to be wholesome in construction and surroundings, and which can be kept so by a vigilant supervision on the part of our own authorities.

I regret that I cannot, without unduly enlarging this report, dwell upon the very important work accomplished, and the large accessions to our material for instruction and research secured by the efforts of the faithful co-workers in our auxiliary associations. The University Lecture Association is no longer an experiment, but year by year pursues its interesting work, and offers to the University and the public courses of the highest educational value by the best lecturers obtainable, whether at home or from abroad. Among these are some whose presence on the platform could not be secured by any pecuniary inducement, but whose love for the University, and regard for the earnest men and women who in this way seek its advancement, prevailed upon them to give to its students and the community the choicest fruits of their ripe and cultivated learning.

The Archaeological Association has vigorously prosecuted its work in the maintenance of the Department of Archaeology and Palæontology as now reorganized, and I commend to your careful perusal the excellent report of the Board of Managers of the Museum, which has just been published. The accumulation of valuable material which has been made since 1889 is almost incredible, and in some cases unrivaled in this country. By purchase, by gift, by deposit, and by actual exploration by our own expeditions and collectors, each of the six sections is receiving constant accretions; and unless speedy relief is given by the erection of a museum building there will be no space for them
save in boxes in the basement of the Library. You have agreed to provide a site for the Museum. It remains for those who can appreciate the educational value of the actual and tangible monuments of archaeology and ethnology, grouped in great collections and cared for by learned and zealous curators, to find the means for the erection of such a building as may safely and worthily enshrine them. It seemed desirable that the University should be properly represented among American educational institutions at the Columbian Exposition. In some respects this was a difficult undertaking, for much of the work of the University is incapable of visible representation. But out of the treasures of our Museum it was not difficult to select representative collections which are not mere possessions, but the actual result of enterprises here undertaken and accomplished, and these will form a most attractive portion of the exhibit under the charge of Mr. Mumford, the Assistant Secretary.

In conclusion, I beg to commend to your attention the appendices to this report, which contain detailed information on various matters I have only slightly touched upon, and especially to the abstract of the annual reports of the Treasurer, and to the grateful record there made of the money donations which the University has received during the last three years.

William Pepper,
Provost.
APPENDIX I.

DEATHS.

Nov. 26, 1890. John G. R. McElroy, A.M., Professor of Rhetoric and the English Language.
April 9, 1891. Algernon Sidney Biddle, A.M., Professor of Torts, Evidence and Practice at Law.
April 30, 1891. Joseph Leidy, M.D., LL. D., Professor of Anatomy and Zoology, and Honorary Dean of the Medical Faculty.
Mar. 22, 1892. D. Hayes Agnew, M.D., LL.D., Emeritus Professor of Surgery, and Honorary Professor of Clinical Surgery.
June 5, 1892. Henry F. Formad, M.D., Demonstrator of Morbid Anatomy and Pathological Histology, and Lecturer on Pathological Histology.
July 3, 1892. Edmund A. Stewardson, Instructor in Modeling.
Sept. 4, 1892. John J. Reese, M.D., Emeritus Professor of Medical Jurisprudence.

RESIGNATIONS.

Nov. 5, 1889. Samuel B. Howell, M.D., as Professor of Mineralogy and Geology.
Dec. 3, 1889. Rush Shippen Huidekoper, M.D., V.S., as Professor of Veterinary Anatomy.
Feb. 4, 1890. Louis Starr, M.D., as Professor of Diseases of Children.
June 3, 1890. A. H. P. Leuf, M.D., as Director of Physical Education.
June 24, 1890. George Strawbridge, M.D., as Clinical Professor of Otology.
Oct. 7, 1890. Samuel G. Dixon, M.D., as Professor of Hygiene.
Dec. 2, 1890. Wharton Barker, as Treasurer.
April 7, 1891. James McKeen Cattell, as Professor of Psychology.
May 5, 1891. Hobart A. Hare, M.D., as Professor of Diseases of Children.
Aug. 6, 1891. Thomas W. Richards, A.M., as Professor of Architecture.

Oct. 6, 1891. John J. Reese, M.D., as Professor of Medical Jurisprudence and Toxicology.

Dec. 1, 1891. John B. Roberts, M.D., as Lecturer on Anatomy.

June 4, 1892. George A. Koenig, Ph.D., as Professor of Mineralogy and Metallurgy.

Oct. 4, 1892. Arthur V. Meigs, M.D., as Trustee.

Oct. 4, 1892. Lewis M. Haupt, A.M., C.E., as Professor of Civil Engineering.

Dec. 6, 1892. George E. DeSchweinitz, M.D., as Lecturer on Medical Ophthalmology.

REMOVALS.

June 14, 1892. Robert Ellis Thompson, D.D., as John Welsh Professor of History and English Literature.

June 14, 1892. Charles S. Dolley, M.D., as Professor of General Biology.

APPOINTMENTS.

GENERAL.

March 4, 1890. Arthur V. Meigs, M.D., to be Trustee.

April 7, 1891. Walter George Smith, A.M., to be Trustee.

June 2, 1891. Edward Warloch Mumford, Ph. B., to be Assistant Secretary.

UNLIMITED, OR FOR A PERIOD OF THREE YEARS OR MORE.

COLLEGE DEPARTMENT.

Dec. 3, 1889. Edward D. Cope, Ph.D., to be Professor of Geology and Palaeontology.

" " George H. Horn, M.D., to be Professor of Entomology.

June 24, 1890. Henry M. Spangler, U.S.N., to be Whitney Professor of Dynamical Engineering.

June 24, 1890. Maxwell Sommerville, to be Lecturer on Glyptology.
Dec. 2, 1890. Edward P. Cheyney, to be Assistant Professor of History.

" " Theophilus P. Chandler, to be Director of the School of Architecture.

" " Charles E. Dana, to be Professor of Art.

May 5, 1891. Francis N. Thorpe, Ph.D., to be Professor of American Constitutional History.

June 23, 1891. Felix E. Schelling, A.M., to be Professor of English Literature.

" " Warren P. Laird, to be Professor of Architecture.

April 12, 1892. William A. Lamberton, A.M., to be Professor of the Greek Language and Literature. (Re-election).

June 14, 1892. Arthur W. Goodspeed, Ph.D., to be Assistant Professor of Physics.

" " Edwin S. Crawley, Ph.D., to be Assistant Professor of Mathematics.

" " Hugo A. Rennert, Ph.D., to be Assistant Professor of Romance Languages.

Sept. 13, 1892. Edgar Marburg, C.E., to be Acting Professor of Civil Engineering.

" " John M. Macfarlane, Sc.D., to be Professor of General Biology.

" " James Harvey Robinson, Ph.D., to be Associate Professor of History.

Nov. 1, 1892. J. Hartley Merrick, A.B., to be Assistant to the Dean.

Dec. 6, 1892. E. Otis Kendall, LL.D., to be Flower Professor of Astronomy.

DEPARTMENT OF MEDICINE.

April 1, 1890. Hobart A. Hare, M.D., to be Clinical Professor of the Diseases of Children.

Dec. 2, 1890. B. Alexander Randall, M.D., to be Clinical Professor of Diseases of the Ear.

June 2, 1891. George A. Piersol, M.D., to be Professor of Anatomy.

" " Edward Martin, M.D., to be Clinical Professor of Genito-Urinary Diseases.

" " J. P. Crozer Griffith, M.D., to be Clinical Professor of the Diseases of Children.
June 2, 1892. John B. Deaver, M.D., to be Assistant Professor of Applied Anatomy.

" " John S. Billings, M.D., LL.D., to be Professor of Hygiene.

June 23, 1891. Louis A. Duhring, M.D., to be Professor of Skin Diseases.

DEPARTMENT OF LAW.

June 2, 1891. George M. Dallas, LL.D., to be Professor of Torts, Evidence, and Practice at Law.

DEPARTMENT OF VETERINARY MEDICINE.

June 2, 1891. Leonard Pearson, V.M.D., to be Assistant Professor of Theory and Practice of Veterinary Medicine.

DEPARTMENT OF HYGIENE.

Feb. 3, 1891. John S. Billings, M.D., LL.D., to be Director of the Department.

" " Alexander C. Abbott, M.D., to be First Assistant in Hygiene.

May 21, 1891. Albert A. Ghriskey, M.D., to be Assistant in Hygiene.

DEPARTMENT OF PHILOSOPHY.

Nov. 3, 1891. John S. Billings, M.D., LL.D., to be Professor of Hygiene.

" " Felix E. Schelling, A.M., to be Professor of English.

" " Edmund D. Cope, Ph.D., to be Professor of Palaeontology.

" " George Horn, M.D., to be Professor of Entomology.

GRADUATE DEPARTMENT FOR WOMEN.

Oct. 6, 1891. Miss Ida Wood, Ph.D., to be Secretary.
ANNUAL, OR FOR A PERIOD LESS THAN TWO YEARS.

COLLEGE DEPARTMENT.

June 3, 1890. Randolph Faries, M.D., to be Director of Physical Education.

Oct. 6, 1891. Hugo A. Rennert, B.S., to be Instructor in French and German.

Sept. 13, 1892. Benjamin Franklin, B.S., C.E., to be Instructor in Civil Engineering.

June 3, 1890. Charles Herman Haupt, B.S., C.E., to be Instructor in Civil Engineering.

June 23, 1891. Milton J. Greenman, Ph.B., to be Instructor in General Biology.

June 3, 1890. Roland P. Falkner, Ph.B., to be Instructor in Accounting and Statistics.

June 3, 1890. Lee K. Frankel, B.S., P.C., to be Instructor in Analytical Chemistry.

June 23, 1891. Charles Meredith Burk, M.D., to be Instructor in Zoology.

June 23, 1891. Francis Newton Thorpe, Ph.D., to be Lecturer on American History.

June 3, 1890. William R. Newbold, A.B., to be Lecturer on Philosophy and Instructor in Latin.

June 23, 1891. Daniel B. Shumway, B.S., to be Instructor in English.

June 3, 1890. Amos Peaslee Brown, B.S., E.M., to be Instructor in Mining and Metallurgy.

June 23, 1891. David R. Griffith, to be Instructor in Mechanical Engineering.

June 3, 1890. George F. Stradling, A.B., to be Instructor in Physics.

June 23, 1891. Lewis L. Forman, A.M., to be Instructor in Greek.

June 3, 1890. Lightner Witmer, A.B., to be Assistant in Psychology.
June 3, 1890. H. F. Keller, B.S., to be Instructor in General and Organic Chemistry.

June 3, 1890. J. A. Montgomery, A.B., to be Instructor in Hebrew.

Oct. 6, 1891. Randolph Faries, M.D., to be Director of Physical Education.

Sept. 13, 1892. J. Orie Clark, to be Instructor in Drawing.

June 3, 1890. J. Percy Moore, to be Assistant Instructor in Zoology.

June 23, 1891. John Harshberger, to be Assistant Instructor in Analytical Botany.

June 3, 1892. Frank Miles Day, B.S., to be Lecturer on Architecture.

Dec. 1, 1891. Wilson Eyre, Jr., to be Lecturer on Architecture; Instructor in Pen and Ink Drawing.

Dec. 1, 1891. Barr Ferrée, B.S., to be Lecturer on Architecture.

Dec. 6, 1892. Frank Furness, to be Lecturer on Architecture.

Dec. 1, 1891. Addison Hutton, to be Lecturer on Architecture.

June 4, 1892. John Stewardson, to be Lecturer on Architecture.


June 4, 1892. Edwin R. Keller, B.S., M.E., to be Instructor in Mechanical Engineering.

Nov. 4, 1890. Clayton W. Pike, B.S., to be Instructor in Electrical Engineering.

June 23, 1891. James D. Steele, A.M., LL.B., to be Instructor in Hebrew.

Nov. 4, 1890. Walter J. Keith, Ph.G., to be Instructor in General Chemistry.

June 4, 1892. J. J. Morris, to be Assistant Instructor in Mechanical Engineering.

June 4, 1892. David Jayne Bullock, to be Assistant Instructor in Zoology and Curator.
April 7, 1891. James Harvey Robinson, to be Lecturer on European History.
June 4, 1892. Arthur B. Woodford, Ph.D., to be Instructor in Political Science.
June 2, 1891. Hugh Walker Ogden, A.B., to be Instructor in Latin.
June 23, 1891. Frederick W. Moore, Ph.D., to be Instructor in Sociology.
June 4, 1892. Sidney Sherwood, Ph.D., to be Instructor in Finance.
June 2, 1891. L. K. Stein, A.M., to be Assistant in the Wharton School.
June 23, 1891. Julian Millard, to be Instructor in Architecture.
June 4, 1892. Julius Ohly, Ph.D., to be Instructor in Chemistry.
June 23, 1891. James Clark Irwin, B.S., C.E., to be Instructor in Civil Engineering.
Oct. 6, 1891. George Francis James, A.M., to be Lecturer on Modern Literature.
Oct. 6, 1891. Walter B. Skaife, Ph.D., to be Lecturer on Modern History.
Oct. 6, 1891. Albert S. Bolles, Ph.D., to be Lecturer on Banking Law and Practice.
Nov. 3, 1891. Willis Boughton, Ph.D., to be Lecturer on English.
June 4, 1892. Edmund A. Stewardson, to be Instructor in Modeling.
Sept. 13, 1892. Homer Smith, A.M., to be Instructor in English.
Sept. 13, 1892. Robert Beale Burke, A.B., to be Instructor in Greek.
Sept. 13, 1892. Josiah Harmar Penniman, A.B., to be Instructor in English.
Sept. 13, 1892. Herbert E. Everett, to be Instructor in Drawing.
Sept. 13, 1892. John Quincy Adams, Ph.B., to be Instructor in Political Science.
Sept. 13, 1892. Joseph Adna Hill, Ph.D., to be Lecturer on Finance.
Sept. 13, 1892. Abraham H. Wintersteen, to be Lecturer on Business Law.
Oct. 4, 1892. Rev. Leverett Bradley, to be Chaplain.
Nov. 1, 1892. Walter L. Webb, C.E., to be Instructor in Civil Engineering.
Nov. 1, 1893. Charles Worthington, C.E., to be Instructor in Civil Engineering.

" " A. William Schramm, B.S., M.E., to be Instructor in Electrical Engineering.

" " H. W. Huffington (U. S. N. A.), to be Instructor in Mechanical Engineering.

" " Lucien E. Picolet, to be Instructor in Mechanical Engineering.

" " William J. Shields, A.M., to be Instructor in Physics.

Dec. 6, 1892. James Warrington, to be Instructor in Accounting.

MEDICAL DEPARTMENT.

June 3, 1890. Adolph W. Miller, M.D., to be Lecturer on Materia Medica and Pharmacy.

May 5, 1891. Roland G. Curtin, M.D., to be Lecturer on Physical Diagnosis.

June 4, 1892. Charles K. Mills, M.D., to be Lecturer on Mental Diseases.

June 3, 1890. Samuel D. Risley, M.D., to be Instructor in Ophthalmology.

May 5, 1891. Samuel D. Risley, M.D., to be Lecturer on Ophthalmology.

June 4, 1892. Henry F. Formad, M.D., to be Demonstrator of Morbid Anatomy and Pathological Histology, and Lecturer on Experimental Pathology.

June 3, 1890. Carl Seiler, M.D., to be Instructor in Laryngology.

May 5, 1891. Albert L. A. Tolboldt, M.D., to be Assistant Instructor in Practical Pharmacy.

June 4, 1892. Henry R. Wharton, M.D., to be Demonstrator of Surgery, and Lecturer on Surgical Diseases of Children.
John B. Deaver, M.D., to be Demonstrator of Anatomy, and Lecturer on Topographical Anatomy.

Francis X. Dercum, M.D., to be Instructor in Nervous Diseases.

Hobart A. Hare, M.D., Lecturer on Physical Diagnosis, and Demonstrator of Experimental Therapeutics.

Thomas R. Neilson, M.D., to be Assistant Demonstrator of Anatomy and Instructor of Genito-Urinary Diseases.

Thomas R. Neilson, M.D., to be Lecturer on Diseases of the Rectum.

Edward W. Holmes, M.D., to be Assistant Demonstrator of Anatomy.

Richard H. Harte, M.D., to be Demonstrator of Osteology.

Judson Daland, M.D., to be Instructor in Clinical Medicine.

John B. Deaver, M.D., to be Lecturer on Topographical Anatomy and Demonstrator of Anatomy.

J. P. Crozer Griffith, M.D., to be Instructor in Clinical Medicine.

William H. Taylor, M.D., to be Instructor in Clinical Gynaecology.

Gwillym G. Davis, M.D., to be Assistant Demonstrator of Surgery.

Edward Martin, M.D., to be Instructor in Clinical and Operative Surgery, and Lecturer on Emergency Surgery.

W. Frank Haehnlen, M.D., to be Instructor in and Lecturer on Clinical and Operative Obstetrics.
John K. Mitchell, M.D., to be Instructor in Clinical Medicine.

George H. Chambers, M.D., to be Assistant Demonstrator of Normal Histology.

James K. Young, M.D., to be Assistant Demonstrator of Surgery, and Instructor in Orthopaedic Surgery.

Henry W. Cattell, M.D., to be Assistant Demonstrator of Chemistry.

Henry W. Cattell, M.D., to be Demonstrator of Morbid Anatomy.

John B. Roberts, M.D., to be Lecturer on Anatomy.

Allen J. Smith, M.D., to be Assistant Demonstrator of Morbid Anatomy and Pathological Histology, and Lecturer on Urinology.

Arthur A. Stevens, M.D., to be Instructor in Physical Diagnosis.

Benjamin F. Stahl, M.D. to be Instructor in Physical Diagnosis.

George E. De Schweinitz, M.D., to be Lecturer on Ophthalmology.

Harry C. Deaver, M.D., to be Assistant Demonstrator of Anatomy.

John C. Heisler, M.D. to be Prosector to the Professor of Anatomy; to be Assistant Demonstrator of Obstetrics.

Charles B. Penrose, M.D., to be Instructor in Clinical Surgery.

Walter D. Green, M.D., to be Assistant Demonstrator of Surgery.

Walter Chrystie, M.D., to be Instructor in Physical Diagnosis.
Frederick A. Packard, M.D., to be Instructor in Physical Diagnosis.

Richard C. Norris, M.D., to be Demonstrator of Obstetrics.

J. Aubrey Davis, M.D., to be Assistant Demonstrator of Obstetrics.

John L. Hatch, M.D., to be Assistant Demonstrator of Morbid Anatomy and Pathological Histology.

William B. Jamison, M.D., to be Assistant Demonstrator of Anatomy.

Milton B. Hartzell, M.D., to be Instructor in Dermatology.

W. Constantine Goodell, M.D., to be Instructor in Clinical Gynaecology; to be Instructor in Gynaecology.

Charles D. Potts, M.D., to be Instructor in Electro-Therapeutics.

James M. Brown, M.D., to be Instructor in Otology.

Joseph Leidy, M.D., to be Assistant Demonstrator of Morbid Anatomy and Pathological Histology.

David Cerna, M.D., to be Assistant of Physiology and Demonstrator of Experimental Therapeutics.

Lecturer on Experimental Therapeutics.
May 5, 1891. Robert Formad, M.D., to be Assistant Demonstrator of Normal Histology; to be Demonstrator of Histology.
June 2, 1891.
June 4, 1892.
Nov. 4, 1890. Walter J. Pennock, M.D., to be Assistant Demonstrator of Anatomy.
May 5, 1891.
June 4, 1892.
June 3, 1890. Leon Brinkmann, M.D., to be Assistant Demonstrator of Anatomy.
May 5, 1891.
June 4, 1892.
June 3, 1890.
May 5, 1891. John A. Boyer, M.D., to be Assistant Demonstrator of Anatomy.
June 4, 1892.
May 5, 1891. J. Howard Reeves, M.D., to be Instructor in Laryngology.
June 4, 1892.
June 4, 1892. Herman B. Allyn, M.D., to be Instructor in Physical Diagnosis.
June 2, 1891. James Wallace, M.D., to be Instructor in Ophthalmology.
Nov. 3, 1891. William Schleif, M.D., to be Assistant Demonstrator of Pharmacy.
June 4, 1892.
Nov. 3, 1891. William S. Carter, M.D., to be Assistant in Physiology.
June 4, 1892.
May 5, 1891. Charles G. Stivers, M.D., to be Assistant Demonstrator of Histology.
June 4, 1892. Guy Hinsdale, M.D., to be Lecturer on Climatology.
Jan. 5, 1892. M. Howard Fussell, M.D., to be Instructor in Clinical Medicine.
June 4, 1892.
Jan. 5, 1892. Samuel W. Morton, M.D., to be Instructor in Clinical Medicine.
June 4, 1892.
Jan. 5, 1892. Alfred C. Wood, M.D., to be Instructor in Clinical Surgery.
June 4, 1892.
June 4, 1892. Charles L. Leonard, M.D., to be Assistant Instructor in Clinical Surgery.
March 1, 1891. George C. Stone, M.D., to be Assistant Demonstrator of Histology.
June 4, 1892.
Jan. 5, 1892. Ellwood R. Kirby, M.D., to be Assistant Instructor in Clinical Medicine.
June 4, 1892.
Jan. 5, 1892. Charles S. Leonard, M.D., to be Assistant Instructor in Clinical Medicine.
Jan. 6, 1892. Joseph McFarland, M.D., to be Assistant Demonstrator of Pathological Histology.

June 4, 1892. Joseph McFarland, M.D., to be Demonstrator of Pathological Histology.

Sept. 13, 1892. Joseph McFarland, M.D., to be Demonstrator of Pathological Histology.

June 4, 1892. John H. Riera, M.D., to be Assistant to the Professor of Gynaecology.

“ " Carl A. Hamann, M.D., to be Assistant Demonstrator of Anatomy.

“ " Robert G. J. Mitcheson, M.D., to be Assistant Demonstrator of Anatomy.

“ " William W. Ashhurst, M.D., to be Assistant Demonstrator of Surgery.

Nov. 1, 1892. David B. Birney, M.D., to be Assistant Demonstrator of Surgery.

“ " Joseph P. Tunis, M.D., to be Assistant Demonstrator of Surgery.

Dec. 6, 1892. John L. Wethered, M.D., to be Assistant Demonstrator of Pathological Histology.

AUXILIARY DEPARTMENT OF MEDICINE.

Nov. 4, 1890. John J. Reese, M.D., to be Professor of Medical Jurisprudence and Toxicology.

Nov. 4, 1890. Joseph T. Rothrock, M.D., to be Professor of Botany.

Nov. 3, 1891. Joseph Leidy, M.D., LL.D., to be Professor of Comparative Anatomy and Zoology.

Nov. 4, 1890. Edward D. Cope, Ph.D., to be Professor of Mineralogy and Geology.

Nov. 5, 1889. Samuel G. Dixon, M.D., to be Professor of Hygiene.

Nov. 3, 1891. William Powell Wilson, Sc.D., to be Professor of the Anatomy and Physiology of Plants.

Nov. 4, 1890. Seneca Egbert, M.D., to be Lecturer on Hygiene.

June 2, 1891. Harrison Allen, M.D., to be Professor of Comparative Anatomy and Zoology.

Nov. 3, 1891. John S. Billings, M.D., LL.D., to be Professor of Hygiene.
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<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 3, 1890</td>
<td>Robert Huey, D.D.S.</td>
<td>to be Lecturer on Operative Dentistry.</td>
</tr>
<tr>
<td>May 5, 1891</td>
<td>Harry B. McFadden, D.D.S.</td>
<td>Assistant Demonstrator of Mechanical Dentistry.</td>
</tr>
<tr>
<td>June 3, 1890</td>
<td>Ambler Tees, Jr. D.D.S.</td>
<td>Assistant Demonstrator of Mechanical Dentistry; Demonstrator of Continuous Gum Work.</td>
</tr>
<tr>
<td>June 3, 1890</td>
<td>R. Hamill D. Swing, D.D.S.</td>
<td>Assistant Demonstrator of Mechanical Dentistry.</td>
</tr>
<tr>
<td>May 5, 1891</td>
<td>Frederick W. Amend, D.D.S.</td>
<td>Assistant Demonstrator of Mechanical Dentistry.</td>
</tr>
<tr>
<td>June 3, 1890</td>
<td>Horace McCanna, D.D.S.</td>
<td>Assistant Demonstrator of Mechanical Dentistry.</td>
</tr>
<tr>
<td>June 3, 1890</td>
<td>Edward C. Kirk, D.D.S.</td>
<td>Lecturer on Operative Dentistry.</td>
</tr>
<tr>
<td>May 5, 1891</td>
<td>John G. Fuller, D.D.S.</td>
<td>Assistant Demonstrator of Mechanical Dentistry.</td>
</tr>
<tr>
<td>May 5, 1891</td>
<td>Frederick A. Peeso, D.D.S.</td>
<td>Assistant Demonstrator of Mechanical Dentistry; Demonstrator of Crown and Bridge Work.</td>
</tr>
</tbody>
</table>
June 3, 1890. John D. Thomas, D.D.S., to be Lecturer on Nitrous Oxide.
May 5, 1891. Luther M. Weaver, D.D.S., to be Assistant Demonstrator of Operative Dentistry.
June 4, 1892. James G. Lane, D.D.S., to be Assistant Demonstrator of Crown and Bridge Work.
June 3, 1890. June 4, 1892. Robert Formad, V.M.D., to be Demonstrator of Histology.

VETERINARY DEPARTMENT.

“ “ ” Guldin R. Hartman, V.M.D., to be Demonstrator of Anatomy.
June 3, 1890. Charles Williams, V.M.D., to be Lecturer on the Practice of Veterinary Medicine.
Nov. 4, 1890. Alexander Glass, V.M.D., to be Lecturer on Therapeutics and Materia Medica.
June 2, 1891. June 14, 1892. Henry F. Formad, M.D., to be Demonstrator of Pathology and Morbid Anatomy.
Nov. 4, 1890. Chalkley H. Magill, V.M.D., to be Demonstrator of Veterinary Surgery.
June 2, 1891. June 14, 1892. Robert Formad, V.M.D., to be Lecturer on Sanitary Science and Demonstrator of Normal History.
Nov. 4, 1890. Nov. 4, 1890. Edwin S. Muir, Ph.G., V.M.D., to be Demonstrator of Pharmacy.
Nov. 4, 1890.  William H. Ridge, V.M.D., to be Demonstrator of Veterinary Obstetrics.
June 2, 1891.  Jeremiah P. Zuill, V.M.D., to be Assistant Demonstrator of Veterinary Anatomy.
Nov. 4, 1890.  Garrett Edwards, to be Farrier.
Nov. 3, 1890.  Leo Breisacher, V.M.D., to be Demonstrator of Comparative Physiology.
Nov. 3, 1891.  Harry D. Entrikin, V.M.D., to be Demonstrator of Veterinary Anatomy.
June 14, 1892.  B. Frank Senseman, V.M.D., to be Assistant Demonstrator of Veterinary Anatomy.
June 14, 1892.  Zachariah R. Scholl, to be Demonstrator of Forging and Horseshoeing.

LAW DEPARTMENT.
April 7, 1891.  George Stuart Patterson, to be Fellow.
Oct. 4, 1892.  George Wharton Pepper, LL.B., to be Algernon Sidney Biddle Fellow.

DEPARTMENT OF HYGIENE.
June 4, 1892.  James Homer Wright, M.D., to be Thomas A. Scott Fellow in Hygiene.

APPENDIX II.
REPORT OF THE DEAN OF THE COLLEGE FACULTY.

To the Provost,

Dear Sir: I have the honor to present my report as Dean of the College Faculty, covering the period from the close of the first term of the year 1889-90, to the beginning of the second term of the present year, 1892-93. The following tables show the number of students in college during that time, and their rank and distribution among the different courses:
<table>
<thead>
<tr>
<th></th>
<th>1889-90</th>
<th>1890-91</th>
<th>1891-92</th>
<th>1892-93</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Regular</td>
<td>Special</td>
<td>Total</td>
<td>Total</td>
</tr>
<tr>
<td><strong>Arts:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshmen</td>
<td>44</td>
<td>4</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>Sophomores</td>
<td>21</td>
<td>6</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Juniors</td>
<td>17</td>
<td>4</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Seniors</td>
<td>23</td>
<td>2</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td><strong>Science:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshmen</td>
<td>47</td>
<td>13</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Sophomores</td>
<td>38</td>
<td>20</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Technical Courses:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Freshmen.</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In Chemistry</td>
<td>4</td>
<td>9</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>In Civil Engineering</td>
<td>18</td>
<td>4</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>In Architecture</td>
<td>4</td>
<td>9</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td><em>Sophomores.</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In Chemistry</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>In Civil Engineering</td>
<td>5</td>
<td>2</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1889-90.</td>
<td>1890-91.</td>
<td>1891-92.</td>
<td>1892-93.</td>
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<tr>
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</tr>
<tr>
<td></td>
<td>Regu-</td>
<td>Special</td>
<td>Total</td>
<td>Regu-</td>
</tr>
<tr>
<td></td>
<td>lar.</td>
<td>or Partial</td>
<td>Total</td>
<td>lar.</td>
</tr>
<tr>
<td><strong>Juniors.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In Chemistry</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>In Mining</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>7</td>
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<td>In Civil Engineering</td>
<td>5</td>
<td>6</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>In Mechanical Engineering</td>
<td>5</td>
<td>5</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>In Architecture</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>33</td>
</tr>
<tr>
<td><strong>Seniors.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In Chemistry</td>
<td>5</td>
<td>6</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>In Mining</td>
<td>4</td>
<td>3</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>In Civil Engineering</td>
<td>4</td>
<td>9</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>In Mechanical Engineering</td>
<td>8</td>
<td>1</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>In Architecture</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Post-Seniors.</strong></td>
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<td></td>
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<tr>
<td>In Chemistry</td>
<td>3</td>
<td>2</td>
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<td></td>
</tr>
<tr>
<td>In Mining</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>In Civil Engineering</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>In Mechanical Engineering</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>In Architecture</td>
<td>14</td>
<td>13</td>
<td>27</td>
<td>12</td>
</tr>
<tr>
<td><strong>Wharton School:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juniors.</td>
<td>14</td>
<td>13</td>
<td>27</td>
<td>12</td>
</tr>
<tr>
<td>Seniors.</td>
<td>7</td>
<td>3</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>First Year</td>
<td>Second Year</td>
<td>Third Year</td>
<td>Fourth Year</td>
</tr>
<tr>
<td>----------------------</td>
<td>------------</td>
<td>-------------</td>
<td>------------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>Undergraduate</strong></td>
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<tr>
<td>Philosophy:</td>
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<td>4</td>
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<tr>
<td>Juniors</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>2</td>
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<tr>
<td>Sophomores</td>
<td>32</td>
<td>32</td>
<td>23</td>
<td>12</td>
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<tr>
<td>Juniors</td>
<td>5</td>
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<td>5</td>
</tr>
<tr>
<td>Seniors</td>
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<td>1</td>
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<td>Biology:</td>
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<tr>
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<td>12</td>
</tr>
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<td>Second Year</td>
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<tr>
<td>Fourth Year</td>
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</tr>
<tr>
<td>Music:</td>
<td></td>
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</tr>
<tr>
<td>First Year</td>
<td>2</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Second Year</td>
<td>2</td>
<td>2</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Third Year</td>
<td>4</td>
<td>3</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Fellows:</td>
<td>2</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Special Course</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>in Architectural</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drawing and Painting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total number</td>
<td>430</td>
<td>479</td>
<td>565</td>
<td>617</td>
</tr>
</tbody>
</table>
The following table shows the number of instructors and students in each year for the last twenty years:

<table>
<thead>
<tr>
<th>YEAR</th>
<th>73-74</th>
<th>74-75</th>
<th>75-76</th>
<th>76-77</th>
<th>77-78</th>
<th>78-79</th>
<th>79-80</th>
<th>80-81</th>
<th>81-82</th>
<th>82-83</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructors,</td>
<td>28</td>
<td>31</td>
<td>32</td>
<td>34</td>
<td>33</td>
<td>36</td>
<td>30</td>
<td>24</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>Students,</td>
<td>215</td>
<td>215</td>
<td>240</td>
<td>236</td>
<td>264</td>
<td>279</td>
<td>286</td>
<td>296</td>
<td>335</td>
<td>356</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR</th>
<th>83-84</th>
<th>84-85</th>
<th>85-86</th>
<th>86-87</th>
<th>87-88</th>
<th>88-89</th>
<th>89-90</th>
<th>90-91</th>
<th>91-92</th>
<th>92-93</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructors,</td>
<td>31</td>
<td>38</td>
<td>39</td>
<td>42</td>
<td>47</td>
<td>48</td>
<td>56</td>
<td>68</td>
<td>75</td>
<td>88</td>
</tr>
<tr>
<td>Students,</td>
<td>416</td>
<td>381</td>
<td>388</td>
<td>375</td>
<td>352</td>
<td>406</td>
<td>430</td>
<td>479</td>
<td>565</td>
<td>616</td>
</tr>
</tbody>
</table>

It will be noticed that the growth of the College has been marked and continuous, from 430 to 616 in three years, and that this increase, with few exceptions, is due to growth of all departments. The Course in Arts apparently has not shared in this general progress, but with some variations (97, 109, 121, 106, 94, 110) has remained stationary. It should be remembered that the schools of Biology and Finance and Economy are closely related to the Arts Course and are elective to Juniors in Arts, so that a proportion of the students now in these courses, having spent the earlier years in the Arts Course, may be properly regarded as in the department. The students in the Science courses have increased in numbers from 203 to 373. In 1889-90, 85 of the 203 were taking technical scientific courses; of the 373 now on the rolls, 224 are taking technical courses. This increase is due in part to the establishment of the four year technical courses, which have drawn away from the five year course in General Science, as will be noticed from the fact that while the Freshman class, as a whole, is larger than ever, the number of Freshmen in the General Science Course has fallen from 75 last year to 39, about the whole number for 1887-88, and that the Freshmen in the technical courses proper have increased from 13, in 1890, to 69.

The following table presents a recapitulation of the students in the technical scientific courses, for a period covered by the last four years:
RECAPITULATION.

<table>
<thead>
<tr>
<th>Technical Students,</th>
<th>1889-90</th>
<th>1890-91</th>
<th>1891-92</th>
<th>1892-93</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Arts,</td>
<td>121</td>
<td>106</td>
<td>94</td>
<td>110</td>
</tr>
<tr>
<td>In Chemistry,</td>
<td>19</td>
<td>24</td>
<td>36</td>
<td>55</td>
</tr>
<tr>
<td>In Civil Engineering</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>39</td>
</tr>
<tr>
<td>In Mechanical Engineering</td>
<td>21</td>
<td>39</td>
<td>69</td>
<td>85</td>
</tr>
<tr>
<td>In Architecture,</td>
<td>5</td>
<td>30</td>
<td>53</td>
<td>58</td>
</tr>
</tbody>
</table>

The Wharton School has nearly doubled in numbers since 1888, and now reaches 66. The Course in Natural History has increased from 5 to 8. The special two year course in Biology Preparatory to Medicine increased in 1890–91 from 44 to 65, and fell off last year to 56, and again this year to 44. This loss, which was less than the radical change introduced by the lengthening of the Medical Course, led us to expect, is more than made up by the increased number of students in the other College departments electing courses in Biology. The students in Music have just doubled in numbers during the last three years.

The number of new students admitted at the beginning of the present year is 219; of these 146 are pursuing the work of the Freshman class, the remaining were admitted to advanced standing or to the special courses in Biology, Music and Architecture. In 1887–88 the Freshman class numbered 69.

The following table shows the growth of the Freshman class during the past four years:

<table>
<thead>
<tr>
<th>Freshmen:</th>
<th>1889–90</th>
<th>1890–91</th>
<th>1891–92</th>
<th>1892–93</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Including Partial Students working with Freshmen class, but excluding Special Students in Biology, Architecture and Music.)</td>
<td>113</td>
<td>109</td>
<td>140</td>
<td>146</td>
</tr>
</tbody>
</table>
It is interesting to note that the increase in the whole number of students is associated with an increase in the number who come to us from places outside of Philadelphia. In 1889–90, 21 per cent. of the undergraduates were not residents of Philadelphia. This class has increased to 23 per cent. in 1890–91, 27 per cent. in 1891–92 and 30 per cent. in 1892–93.

There are this year 186 such students in the College, of which number 96 are from Pennsylvania and the rest from 21 other States and Territories and 5 foreign countries.

The following is a list of the schools at which the matriculates have been prepared for college. The number received each year since 1889 is also given:

<table>
<thead>
<tr>
<th>NAME OF INSTITUTION (OR TUTOR) FROM WHICH STUDENT CAME.</th>
<th>YEAR OF MATRICULATION.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1889</td>
</tr>
<tr>
<td>Abington Friends' School, Pennsylvania</td>
<td></td>
</tr>
<tr>
<td>Altoona High School, Pennsylvania</td>
<td></td>
</tr>
<tr>
<td>Amherst College, Massachusetts</td>
<td></td>
</tr>
<tr>
<td>Robert Andersen, Philadelphia</td>
<td></td>
</tr>
<tr>
<td>Ardmore High School, Philadelphia</td>
<td></td>
</tr>
<tr>
<td>Arms' Academy, Douglassville, Pa</td>
<td></td>
</tr>
<tr>
<td>Baltimore City College, Baltimore, Md</td>
<td></td>
</tr>
<tr>
<td>Loring W. Batten, Philadelphia</td>
<td></td>
</tr>
<tr>
<td>W. S. Blight's School, Philadelphia</td>
<td></td>
</tr>
<tr>
<td>Alonso Brown's School, Philadelphia</td>
<td></td>
</tr>
<tr>
<td>H. H. Brown's School, Philadelphia</td>
<td></td>
</tr>
<tr>
<td>R. B. Burke, Philadelphia</td>
<td></td>
</tr>
<tr>
<td>W. H. Burk, Philadelphia</td>
<td></td>
</tr>
<tr>
<td>Bucknell College</td>
<td></td>
</tr>
<tr>
<td>Baltimore Training College, Baltimore, Md</td>
<td></td>
</tr>
<tr>
<td>Bloomfield (N. J.) High School</td>
<td></td>
</tr>
<tr>
<td>Buchtel College</td>
<td></td>
</tr>
<tr>
<td>Canada (Upper) College, Toronto, Canada</td>
<td></td>
</tr>
<tr>
<td>Ralph Carson, Philadelphia</td>
<td></td>
</tr>
<tr>
<td>Central High School, Philadelphia</td>
<td></td>
</tr>
<tr>
<td>Cheltenham Academy, Philadelphia</td>
<td></td>
</tr>
<tr>
<td>Chelten Hills Select School, Pennsylvania</td>
<td></td>
</tr>
<tr>
<td>Chester High School</td>
<td></td>
</tr>
<tr>
<td>Edward P. Cheney, Philadelphia</td>
<td></td>
</tr>
<tr>
<td>Chickering Institute, Cincinnati, O.</td>
<td></td>
</tr>
<tr>
<td>Classical Gymnasium, Sophia, Bulgaria</td>
<td></td>
</tr>
<tr>
<td>Columbian University</td>
<td></td>
</tr>
<tr>
<td>Cowelland School, Lakewood, N. J.</td>
<td></td>
</tr>
<tr>
<td>Edwin S. Crawley, Philadelphia, Pa.</td>
<td></td>
</tr>
<tr>
<td>Cedar Rapids (Iowa) High School</td>
<td></td>
</tr>
<tr>
<td>Carlisle Normal School, Philadelphia</td>
<td></td>
</tr>
<tr>
<td>Cornell University</td>
<td></td>
</tr>
<tr>
<td>NAME OF INSTITUTION (OR TUTOR) FROM WHICH STUDENT CAME</td>
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The requirements for admission to the Courses in Science and Arts remain practically unchanged, but there is no longer a separate examination upon English Etymology. We have every reason to be satisfied with the requirements; they are sufficiently exacting, and the examinations are carefully and thoroughly conducted.

As the question of admission by certificate is under consideration, it does not seem proper to refer to it in this report.

The Course in Arts has been changed but slightly.

In Freshman year the number of hours of instruction has been reduced from twenty to seventeen, by taking one hour from each of the courses in English, Latin and Greek. In Sophomore year the hours have been reduced from twenty to sixteen, by taking one hour from the Course in Mathematics, omitting the Course in Hygiene, and transferring the Course in Chemistry to the Junior year. The Instruction in Physics now begins with the first term and continues through the year, instead of beginning with the second term, as heretofore.

In Junior year the Course in Physics of four hours has been made elective, and Astronomy three hours and Chemistry three hours put upon the list of required studies. Additional electives in History, Philosophy and the Sciences are now offered Juniors and Seniors.

In the Senior year the only change has been effected through the removal of Astronomy to the Junior year.

A more careful grouping of the elective studies seems desirable, and a Committee of the Faculty has several plans under consideration.

An important change has been made in the earlier years of the Course in Science. In Freshman year each student is required to take one modern language five hours a week instead of two languages for seven or eight hours. The instruction in Latin has been dropped from this course, as it has been thought unnecessary and undesirable to give Latin of lower grade than that required by the Arts Course. The student who has the Arts entrance requirements in Latin and desires to continue the study of that language, together with a modern language, may do so in the Course in Natural History. The number of hours in Mathematics required of Freshmen in Science has been reduced from five to four, making the total reduction from twenty-one or twenty-two to eighteen, including the hours of drawing.

In the Sophomore year each student continues the language elected in Freshman year for three hours per week, the Courses in
History and Hygiene hitherto required are omitted, and the Course in Physics is begun with the first term. Students who do not intend entering a technical Science Course in the Junior year may substitute courses in History, pure Mathematics or Biology for the Courses in Descriptive Geometry and Drawing. The number of hours for Science Sophomores has been reduced from twenty-four or twenty-five to seventeen or nineteen, according to the election made.

In Junior year the student is required to take only one of the three subjects offered, Philosophy, English Literature or History.

In Senior year the Course in Astronomy has been made elective for students in Mechanical and Electrical Engineering.

The establishment of the four-year technical courses marks an important departure. Hitherto the student who proposed to fit himself to follow the profession of chemist or of civil or mechanical engineer was required, before entering upon the more technical part of his course (which extended through three years, viz.: The Junior, Senior and Post-Senior years) to spend the Freshman and Sophomore years in general study; most of which, while undoubtedly of great value in mental training, did not bear directly upon the object in view. As a result of this requirement it was found that a large number of good students, sufficiently prepared in Mathematics and Physics to enable them to enter as special students in the Junior class, chose a partial course and, after three years' work, received the certificate of proficiency. Those who were not prepared to enter the Junior class as special students did not find in the Freshman class, in the General Course, what they wanted, and either spent several years in preparing, outside of the University, for advanced standing, or went to institutions which offered definite professional courses. Another disadvantage of these requirements was that the student who had spent four years in College (two in general study and two in technical work), and had received the degree of Bachelor of Science, was not disposed to return to take the Post-Senior year, which has always contained the more important and finishing studies of the course. In this way many good students have failed to avail themselves of the admirable opportunities offered, and these departments were in constant danger of being held responsible for the men who, although in one sense graduates, had not actually completed the prescribed work. Such explanation seems necessary to show why it has been considered best to depart from the plan of technical instruction, which has been consistently pursued by the University through a series of years.
The change is not so radical as would at first appear, since the five year courses are still given and must always be the best courses, when the student is young or is undecided as to his choice of a profession. The first two years still form a fitting preparation for the Junior and Senior years in the Wharton School or the School of Biology. The requirements for admission to these four year technical courses are practically the same as for the Science Course, the difference being that, in the Engineering Courses, one language is omitted and Trigonometry and Elementary Physics substituted in its place. For the Courses in Chemistry and Architecture but one language is required, and the Arts requirement in Mathematics is accepted. In the courses an attempt has been made to give a fair amount of instruction in the general culture studies, in English and the languages, but the distinctive feature is the introduction of the technical work proper with the Freshman year.

To distinguish between the students who have taken the four years of the General Science Course, and those who have graduated from the four year Technical Course, the latter are awarded the degree of Bachelor of Science in the technical study, viz.: In Chemistry, in Chemical Engineering, in Mechanical Engineering, in Civil Engineering or in Architecture. The student in the old five year course who completes the Post-Senior year will be awarded the general degree of Master of Science, and may receive the appropriate technical degree after two years spent in active professional work. The graduates of the four year technical courses (which, so far as the scientific studies are concerned, cover the same amount of ground as the five year course) are also awarded the technical degree after three years of successful professional life and the presentation of a satisfactory thesis.

The first of these courses, that in Architecture, was opened in 1890; the second, in Mechanical Engineering, in 1891; the third and fourth, in Chemistry and Civil Engineering, at the beginning of the present year, and the fifth, in Chemical Engineering, is announced for next year. The result of the change is already manifest. The number of special students has been reduced, and the entrance to the lower classes largely increased.

In my last report I spoke of the pressing need for a complete reorganization of the instruction in Drawing and Architecture. With the aid of an advisory committee, composed of some of the leading Philadelphia architects, this has been successfully accomplished. In
January, 1891, Mr. Warren P. Laird, who had received his professional training at Cornell University, and who has had practical experience in his profession in one of the best known offices in the country, was called to the chair of Architecture, and given charge of the new school. Upon him has fallen the burden of planning the courses of instruction and the lines to be pursued for the best development of the school; and to his indefatigable zeal, clear perception and good judgment is due the gratifying success already achieved. The lively interest taken by the Advisory Committee in the organization of the school has been continued, and an important feature in the method of instruction are the courses upon practical matters given by these gentlemen. Mr. Charles E. Dana was elected professor of Art, and has had immediate charge of the classes in water colors. These classes have been opened to the public with certain necessary restrictions. In October, 1891, Mr. Millard was appointed instructor in Architectural Drawing, and, at the beginning of the current year, Mr. Everett took charge of the classes in Freehand Drawing and Sketching.

The department has suffered a severe loss in the death of Mr. Edmund H. Stewardson, for one term an instructor in Modeling, whose distinguished ability and conscientious performance of duty added unusual strength to the course.

As will be seen from the tables already given, the success of the school has been immediate and pronounced. In 1889 there were five students in Architecture. With the opening of the new course the number rose to twenty-nine; last year it increased to fifty-seven; and this year to fifty-eight. It has been found necessary to provide new accommodations for this school, and, during the past summer, a suite of six rooms, properly decorated and furnished, has been assigned to the department. They consist of an office, a lecture room, a library, two drawing rooms and a special studio for instruction in Sketching and Water Coloring.

The department of Mechanical and Electrical Engineering has been strengthened by the addition of more instructors and the number of students largely increased, from twenty-one in 1889–90 to forty in 1890–91, to sixty-nine in 1891–92, and to eighty-five at the beginning of the present session. The Board of Trustees has wisely taken advantage of the erection of the University Central Heat and Light Station to provide this department with a laboratory building of its own. This building was carefully planned, and is
admirable adapted to the purpose of instruction, but it is very evident that it will require enlargement within a short time to accommodate the growing classes. The boiler house, which adjoins the laboratory, and which contains eight boilers of various patterns, not only furnishes steam for motive and heating power, but is used by the engineering classes in their practical work. The laboratory building proper contains on the first floor the wood and metal shops, the engines and dynamos; on the second, the mechanical laboratory, class rooms, the reading room, the office and necessary closets; on the third, the draughting rooms, the electrical laboratory, class rooms and the assistants' offices; while on the fourth floor is the studio for blue printing, and some space as yet unassigned. It is a source of sincere gratification to be able to report that the work of this department is eminently satisfactory—reflecting great credit upon the Professor in charge—and that it has done much to enhance the reputation of the University.

Not less gratifying is the progress made in the department of Chemistry. This department occupies a position different from that held by the other technical departments, since upon it is thrown a large part of the required and elective studies in the General Courses in Science and the Course in Art, and it enters more largely into the instruction of students belonging to the other technical schools. More than 250 students are now receiving laboratory instruction in Chemistry in periods amounting to from three to thirty hours per week. Of this number, fifty-five are in the Course in Chemistry proper, either as special students or as candidates for the baccalaureate degree. Last year these students numbered thirty-six; in the year before, twenty-four; and in 1889, as shown by my last report, nineteen. The department has entirely outgrown the present laboratory, and it has been found necessary to assign each desk and working space to three students. It has been a serious question whether, under present conditions, we can conscientiously admit more new students. A new laboratory building is urgently needed, as it is not practicable to handle these large classes in the present small rooms situated on three floors of the College building. It has been found impossible to confine the fumes and gases generated in the laboratory, and many other departments have been put to serious inconvenience and possible danger.

The reorganization of the department of Civil Engineering has been too recent to permit of any specific statement here. It is con-
fidently expected, however, that, under the gentleman wisely selected by the Board as the head of the department, and by the introduction of the new four year course, it will increase as rapidly and strongly as the other technical departments. Indeed, most excellent progress has already been made, since, notwithstanding the uncertainty which necessarily existed during the period of reorganization, the number of students has increased twenty-five per cent. It has been thought best to divide the work in Mining Engineering between the departments of Civil Engineering and Chemistry until such time as there can be established a strong School of Mines. The Courses in Mining are still given to the few students who have selected this branch of professional preparation.

One of the most important actions taken by the Faculty during the past two years was the change introduced into the system of marking for scholarship. The difference between the work of the students, owing to the elective system, and the increase of separate distinct courses of study rendered the method of ranking in classes very difficult and in some cases unjust. It was decided, therefore, that the grades received in the different courses should not be combined to give the student a numerical rank in the class, but that, at the end of the Sophomore and Senior years, students who had received the highest grade attainable in two-thirds of all the marks given during that period, both for term and examination work, should be awarded Sophomore and Senior honors respectively, and that Special Mention at the end of any year might be given students for excellence in one or more subjects. In certain departments, candidates for this "Special Mention" are required to take additional courses.

The Wharton School of Finance and Economy has been successfully conducted during the three years past. The increase in the number of students has called for additions to the corps of instructors, and experience has dictated some minor changes in the course. Last year some rearrangement of the work was rendered necessary by the illness of Prof. James and the absence of Prof. Falkner.

So great is the demand for the instruction in subjects taught in this school that it becomes a serious question for consideration whether it would not be desirable to extend the course in Finance and Economy from a two year course, open only to Juniors and Seniors, to an independent course of four years, beginning with the Freshman year. It will be seen from the tables already given that there are on the rolls a large number of special students, students
taking all the courses prescribed, but who in most cases have not had
the preparation which we regard as equivalent to that which they
could gain from our Freshman and Sophomore years, and who cannot,
therefore, be regarded as candidates for a degree.

It is true that great care has been exercised in the admission of
this class of students, and, as a rule, they are able to pursue the course
with profit, but in most cases they would be much better placed in a
lower class, and the quality of the courses given to the upper-class men
would be improved. It has never been the policy of the Faculty to
admit, as special students, young men direct from the fitting schools
who are only prepared for the Freshman class in Arts or Science.
They are advised to enter this class, but as they are unable to obtain
the instruction peculiar to the school, they often prefer to begin at
once upon the study of law or enter business life. This is peculiarly
the case with the students who feel they can give but two years in
preparation for their life work. For these, a course through Freshman
and Sophomore years would be of far more advantage than the almost
purely technical course as at present given. If a four year course
were established, it should be strong in English, Modern Languages,
American and European History, Business Law and Practice, with at
least one laboratory Scientific Course. Mathematics and related
subjects need not be carried so far as in the other courses.

Since my last report, the School of American History has been
established, and this year is the first in which the course is in active
operation. The wide-spread interest in all that concerns our national
life, and the increasing desire manifested by many students for special
work in these fields will, no doubt, justify the formation of this de-
partment. The School has a double function in offering both
graduate and undergraduate courses. The latter are elective in the
Arts Course, and have also been grouped with other closely allied
subjects into a two year course, open to students at the close of the
Sophomore year. There are already twenty graduate and undergrad-
uate students in the school, not counting students who are classified
in other courses.

The recent action of the Board of Trustees with reference to the
special instruction of College students preparing to study Medicine,
has an important bearing upon the future of the Courses in Biology.

With the approval of the Medical Faculty it has been voted that
students who shall take in their College Course biological and related
studies about equivalent in amount to those required in the special
two year course preparatory to Medicine now offered by the School of Biology, and who receive the baccalaureate degree, shall be admitted, with certain slight conditions, to the second year of the four year Course in Medicine.

It was not thought wise to extend this privilege to special students not candidates for a degree, who take but two years in the School of Biology. While this action will decrease the number of these special students—as many of this class cannot afford to give two years to preparatory work and then spend four years in Medical study—it should be an inducement to more students intending to study Medicine to take a complete College course.

The first number of the contributions from the Botanical Laboratory has just been issued. This embraces seven important papers by professors and advanced students. A similar publication, containing the results of investigations in Zoology and Comparative Anatomy, is in press and will appear before the close of the year.

The Laboratory of Marine Biology was established in 1891. It grew out of a desire on the part of the Faculty and students for opportunities to investigate living forms, especially the aquatic, at the seasons of their greatest functional activity, and under the best natural conditions. It was felt also that facilities for instruction in Biology could in this manner best be brought within the reach of that class of students whose occupation during the winter months precludes them from continuous laboratory study.

After careful consideration of a number of localities, Sea Isle City, N. J., was selected for the site of the laboratory, as being rich in marine life, of easy access to several large cities and not too far removed from the parent school at the University. A plot of ground and the laboratory building were presented to the school by Mr. C. K. Landis, of Vineland, N. J. The work of the summer of 1891 was mainly of a preliminary and organizing nature. During the past summer the aquarium was completed and thrown open to the public, and the courses of instruction given nearly as published in the announcement. Dr. Greenman was in charge of the school, and the instruction in Botany was assumed by Prof. Macfarlane, and in Zoology by Prof. Ryder with Messrs. Moore and Calvert. There were fifteen students in these courses, and some good original work was done. It was decided that, as the summer work was under the charge of the Biological Faculty, successful completion of the courses offered might be counted by students as part of their work toward the
degree. The charges for current expenses and salaries were met by contributions from a few gentlemen interested in the School of Biology. The outlook for the future is excellent, and there can be now no doubt of the active demand for such facilities, or of their usefulness to the students of this and other schools. At present there is no money in the hands of the treasurer, and arrangements must be made before another season to secure either an adequate endowment or annual subscriptions sufficient to meet the fixed charges.

The instruction in Physical Culture has been faithfully given. This consists in weekly lectures on Hygiene and kindred topics, of physical examinations, and of exercises in gymnasium prescribed for all Freshmen and Sophomores. The gymnasium has been under the charge of a capable instructor, and the results appear to be as satisfactory as the insufficient space would permit.

The increasing attention given to athletic sports by the students cannot be said to be given to the detriment of the proper intellectual work of the institution. It has, without doubt, introduced a more manly spirit.

The general order in the College has been excellent, and the relations between teachers and students have been most cordial.

The ready response by the students to all measures suggested with a view to secure larger results to the institution has added greatly to the pleasure of College life, and has greatly lightened the burden of the Dean, on whom the responsibility of handling so large a body of students naturally falls. The annual cane rush has been given up, and efforts have been made to convert what class rivalry is desirable into ambition to excel in scholarship and legitimate athletic contests.

There have been few cases of discipline before the Executive Committee during the past years, and these few have been on charges of using dishonest means in the examinations. In all such cases, when the offense has been clearly shown, the punishment has been severe. Of intentional discourtesy to any member of the Faculty there has not been a single case.

The election of a Board of University Chaplains has done much to stimulate the religious life of the College. The Board, as at present constituted, consists of four clergymen, representing the Episcopal, the Presbyterian, the Methodist and Baptist denominations. They serve each one week in turn, conducting the chapel exercises, and remaining for two hours in the Chaplains' room, when they may be consulted by the students, either on personal or general College matters.
The chapel services occupy about fifteen minutes, and consist of a hymn, reading of the Scriptures, short address and prayer. The choir has been carefully selected, and is under the charge of an instructor who conducts two rehearsals each week and reports to the Dean. The interest taken in the chapel exercises is marked, and the attendance and conduct of the students most satisfactory. I would again urge the desirability of a separate chapel building, in which not only the morning exercises but also appropriate evening and Sunday services could be held, and which might become the home of the now scattered religious societies.

We are more than ever embarrassed with the problem of how to care properly for our students who come from abroad, and for whom homes must be found in Philadelphia. It is a problem which grows more important each year as the evolution of the College from a local to a national Institution compels us to assume larger responsibilities to the parents who entrust their sons to our guardianship. In the absence of dormitories, it was thought advisable this year to personally examine a number of boarding places, and to choose such as could be confidently recommended. This was done with thoroughness by a special committee of the Faculty, which has been named the Committee on Residence.

It is to be hoped that some better provision will be made in the future, if not by actual dormitories, at least by renting a certain number of good houses, and by encouraging the formation of students' clubs.

The dining hall, built and put in operation three years ago, has been the subject of much thought and anxiety. Several plans of conducting it have been tried, none of which have been entirely satisfactory. For the first year a caterer was engaged upon a salary, and the University received the money and paid all the bills. The service was, on the whole, good, but the year's business was conducted at a loss of upward of $2000 to the guarantor.

The next year a new arrangement was effected, by which the caterer was to operate the business himself, the University furnishing the hall, gas, coal and heat free of charge. Two new men were tried successively during the year and dismissed for unsatisfactory service.

Last year it was thought advisable to attempt to furnish luncheon only in place of a regular dinner. This was not favorably received by the students, and there was not enough patronage to cover expenses, and so there was no profit to the caterer and a loss to the University.
This year we have returned to the plan of two years ago, but the caterer has entered into a written contract with the University to furnish meals of specified quality and quantity at a definite price, of twenty-five cents for each meal, or $3.50 for weekly board, in return for which the University furnishes the plant, coal and gas. At the present date the arrangement is working well, and for the first time a number of students, some fifty or more, are taking all their meals in the dining hall.

I desire to call particular attention to the conspicuous lack of endowment funds which can be used for the aid of deserving but needy students. With the exception of the Baird Scholarship, yielding about two hundred dollars, there is absolutely not a dollar at our command for this purpose. It has always been the custom for a special committee of the Board of Trustees to admit each year a certain number of free students. This, of course, diminishes the College income materially, and until last year, when a reorganization in methods was introduced, this gift by the University from its income was not shown upon the Treasurer's books.

Leaving out of consideration the City Prize and the Penn Scholarships, this year over eleven thousand dollars will be granted from this so-called students' aid fund. It becomes a serious question whether, with the demands upon the income from all sides, it will be possible to continue this liberality—certain it is that it cannot be further extended. The creation of a capital fund to cover this and a greater expenditure would widen our field of usefulness to a class of students who need some assistance, and thus increase the total number of undergraduates and put the College finances in excellent condition. If this is true of scholarships, it is not less true of fellowships. We have but one income-yielding fellowship open to men. In many institutions the possession of endowed fellowships renders much possible from which we are excluded.

It is a source of constant astonishment to those who are most familiar with the financial condition of the College Department, that without these material aids so much has been accomplished.

In very many departments of College instruction there is more than one instructor and but one lecture or recitation room. A conflict within the department for the use of the room is unavoidable, and it is necessary at times for one department to use the rooms of another. This is extremely undesirable, as the special equipment of the department, the books, maps, blackboards and illustrative material of all
kinds are rendered unavailable. It is even at times impossible for
the instructor to meet the same class always in the same room, which
is a source of annoyance to the instructor and very detrimental to the
class discipline. An effort has been made to avoid that difficulty by
dividing some of the larger rooms and the ends of the halls have
been cut off into class rooms, and space has been gained by the
removal of the Archaeological collections to the Library and the
withdrawal of the Department of Mechanical Engineering to the new
building, but the growth of the work in all departments has more than
neutralized this gain. It will be absolutely necessary to provide more
accommodation before another year.

The buildings under my charge have been kept in good repair
and such improvements made as were judged absolutely essential.
During the past summer the entire steam heating and ventilating
systems in College Hall have been renewed in order to connect them
with the Central Heating Plant, and the building has been wired for
electric light. This work has been somewhat destructive to the
appearance of the building, and it will be necessary to repaint a
number of the rooms. The oversight of this work has been put in
the hands of the Architectural Department, and a method of decora-
tion and color scheme has been adopted for the whole building. By
next autumn it is hoped that the work may be finished.

Very Respectfully,

HORACE JAYNE,
Dean.

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APPENDIX III.

REPORT OF THE DEAN OF THE DEPARTMENT OF
PHILOSOPHY.

DEAR SIR:—The recent appearance in the University Bulletin
of a detailed account of the Department of Philosophy renders an
extended statement of that school unnecessary. Since the publication
of your last report the growth of the department has been in every
way most gratifying.

In 1887, there were 7 students on the rolls; in 1888, 39; in
1889, 42; in 1890, 48; in 1891, 72; and this year, 117.
The requirements for admission, the possession of a college degree or the presentation of a full equivalent, has been most carefully enforced, and all the students are residents at the University—this is, attending definite formal exercises.

The present matriculates have graduated, or pursued graduate courses at the following institutions:

- Amherst College.
- Antioch College.
- Berlin Gymnasium.
- Berlin University.
- Bonn University.
- Brethren's College (Huntington, Pa.).
- Brown University.
- Calvin College (Cleveland, O.).
- Colby University.
- Columbia College.
- Columbia University.
- Cornell University.
- Fisk University.
- Franklin and Marshall College.
- German Theological Seminary.
- Hampton College.
- Harvard University.
- Illinois Wesleyan University.
- Johns Hopkins University.
- Kenyon College.
- Leipzig University.
- Leitz Gymnasium (Prussia).
- Mitau College (Russia).
- Mühlenberg College.
- Riga Polytechnic School (Russia).
- Roanoke College.
- St. Stephen's College.
- Swarthmore College.
- Thiel College.
- University of Pennsylvania.
- University of Toronto.
- University of Michigan.
- University of Wisconsin.
- University of Missouri.
- Ursinus College.
- Wellesley College.
- Mittenberg College.

During the last two years the methods of instruction have been improved, and the hours of each instructor assigned upon the roster. Courses covering 273 hours per week were offered this year, of which 180 hours per week were selected and put upon the roster.

The following table show the branches of instruction and the number of students selecting them as the major or minor subjects of their courses:
<table>
<thead>
<tr>
<th>SUBJECTS</th>
<th>MAJORS</th>
<th>MINORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 American Archaeology and Linguistics</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>2 American History</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>3 Botany</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>4 Chemistry (Organic and Inorganic)</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>5 Comparative Philology and Sanskrit</td>
<td>—</td>
<td>4</td>
</tr>
<tr>
<td>6 English Language and Literature</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>7 European History</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>8 Experimental Psychology</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>9 German Language and Literature</td>
<td>—</td>
<td>5</td>
</tr>
<tr>
<td>10 Greek Language and Literature</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>11 Latin Language and Literature</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>12 Legal Institutions</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>13 Mathematics</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>14 Mineralogy</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>15 Political Economy</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>16 Political Science</td>
<td>—</td>
<td>15</td>
</tr>
<tr>
<td>17 Philosophy</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>18 Physics</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>19 Romance, Philology and Literature</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>20 Semitic Languages and Literature:</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Assyrology</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Hebrew</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Arabic</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>21 Zoology</td>
<td>3</td>
<td>—</td>
</tr>
</tbody>
</table>

Thirty-nine of the present 117 students are not candidates for the master's or doctor's degree and take special courses only in the following subjects:

<table>
<thead>
<tr>
<th>SUBJECTS</th>
<th>NUMBER OF STUDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>American History</td>
<td>7</td>
</tr>
<tr>
<td>Chemistry</td>
<td>1</td>
</tr>
<tr>
<td>Comparative Philology and Sanskrit</td>
<td>1</td>
</tr>
<tr>
<td>English Language and Literature</td>
<td>3</td>
</tr>
<tr>
<td>European History</td>
<td>2</td>
</tr>
<tr>
<td>Experimental Psychology</td>
<td>2</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>Political Economy</td>
<td>14</td>
</tr>
<tr>
<td>Political Science</td>
<td>1</td>
</tr>
<tr>
<td>Philosophy</td>
<td>5</td>
</tr>
<tr>
<td>Physics</td>
<td>1</td>
</tr>
<tr>
<td>Hebrew (Semitic Languages and Literature)</td>
<td>—</td>
</tr>
</tbody>
</table>
APPENDIX IV.

REPORT OF THE DEAN OF THE FACULTY OF MEDICINE.

TO THE PROVOST OF THE UNIVERSITY.

DEAR SIR:—As Dean of the Department of Medicine I beg to submit the following report:

During the session of 1889–90, four hundred and eighty-five students attended the instruction in this Department. Of these—

6 were students of the fourth year,
149 " " third "
151 " " second "
177 " " first "
2 were special students, or a total of 485.

During the session of 1890–91, five hundred and eighty-two attended:

6 were students of the fourth year,
165 " " third "
191 " " second "
211 " " first "
9 were special students, or a total of 582.

During the session of 1891–92, there were six hundred and ninety-three students in attendance, made up as follows:

8 were students of the fourth year,
197 " " third "
241 " " second "
241 " " first "
6 were special students, or a total of 693.

At the opening of the session of 1892–93 there were 847 students in attendance, made up as follows:

13 were students of the fourth year,
252 " " third "
260 " " second "
311 " " first "
11 were special students, or a total of 847.

It will be seen that there has been a rapid increase in the classes of each year. Until the session of 1890–91, the largest class was that of 1859–60. This was exceeded in 1890–91, in the session of 1891–92, and in the session just opening.
The number of graduates in 1889 was 128, in 1890, 115, in 1891, 135, and in 1892, 154. The total number of graduates up to the present time is 10,612.

The fourth year continues insignificant, as must be the case as long as it is voluntary. Fortunately this state of affairs can only last for a short time longer, since the compulsory four-year course goes into operation with the session 1893-94.

Of the Freshman class for the session 1889-90, numbering 177, 55, or 31 per cent., were admitted on degrees in Arts or Science, 111 on certificates, and 11 on examination in Physics and English. Of the first year class of 1889-90, numbering 177 men, 55, or 31 per cent., were admitted on degrees, 98 on certificates, and 24 after examination.

Of the Freshman class for 1890-91, numbering 211, 73, or 34½ per cent., were admitted on degrees, 91 on certificates and 40 after examination. Of the Freshman class of the session 1891-92, numbering 241, 46, or 11 per cent., were admitted on degrees, 164 on certificates, and 37 after examination. Of the Freshmen class of the session 1892-93, numbering 311, 78, or 25.2 per cent., were admitted on degrees.

I append a table showing how many of the first-year class held degrees in Arts or Science at date of admission in each of the last thirteen years, since the compulsory three-year course was established:

<table>
<thead>
<tr>
<th>YEAR</th>
<th>TOTAL CLASS</th>
<th>DEGREES</th>
<th>PER CENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1877-8</td>
<td>136</td>
<td>19</td>
<td>13.9</td>
</tr>
<tr>
<td>1878-9</td>
<td>125</td>
<td>29</td>
<td>22.8</td>
</tr>
<tr>
<td>1879-80</td>
<td>133</td>
<td>33</td>
<td>25.2</td>
</tr>
<tr>
<td>1880-81</td>
<td>129</td>
<td>34</td>
<td>26.6</td>
</tr>
<tr>
<td>1881-2</td>
<td>98</td>
<td>24</td>
<td>25.2</td>
</tr>
<tr>
<td>1882-3</td>
<td>115</td>
<td>33</td>
<td>28.7</td>
</tr>
<tr>
<td>1883-4</td>
<td>110</td>
<td>43</td>
<td>39.8</td>
</tr>
<tr>
<td>1884-5</td>
<td>101</td>
<td>38</td>
<td>37.6</td>
</tr>
<tr>
<td>1885-6</td>
<td>131</td>
<td>35</td>
<td>26.7</td>
</tr>
<tr>
<td>1886-7</td>
<td>137</td>
<td>43</td>
<td>31.4</td>
</tr>
<tr>
<td>1887-8</td>
<td>128</td>
<td>28</td>
<td>22.0</td>
</tr>
<tr>
<td>1888-9</td>
<td>139</td>
<td>42</td>
<td>30.0</td>
</tr>
<tr>
<td>1889-90</td>
<td>177</td>
<td>55</td>
<td>31.0</td>
</tr>
<tr>
<td>1890-91</td>
<td>211</td>
<td>73</td>
<td>34.5</td>
</tr>
<tr>
<td>1891-92</td>
<td>241</td>
<td>46</td>
<td>19.0</td>
</tr>
<tr>
<td>1891-93</td>
<td>311</td>
<td>78</td>
<td>25.2</td>
</tr>
</tbody>
</table>

At this time the Medical Department is in possession of a large number of excellent microscopes; the outfit of the Histological Laboratory includes one first-class Zeiss instrument, stand IV with iris diaphragm, Abbe condenser, and lenses a5, BB, DD, and 34 and 5.
66

1/2 apochromatic objectives, three ordinary, three compensating and one projecting ocular, and an Abbe drawing apparatus. The remaining instruments include fifty-six Zentmayer's microscopes, each with double nose piece, an 8/10 inch and 4/10 inch objective and A and B oculars; and an additional Beck "Star" microscope, with one inch objective and A and B oculars. In the Pathological Laboratory, one Zeiss microscope for micro-photography, one apochromatic immersion objective and accessories; sixty Zentmayer's microscopes, each with 4/5 and 4/6 objectives and B ocular; fourteen A eye pieces, sixty double nose pieces, two class-microscopes without objectives; and in the Clinical Laboratory at the Hospital, one Leitz stand, equipped with a 4/5, a 4/6, and a 4/8 oil immersion lenses, eye-pieces A and C, iris diaphragm and Abbe condenser; also a Zentmayer's histological stand, provided with an 8/6 inch and 8/8 inch object glass, eye-pieces A and B, iris diaphragm and Abbe condenser.

Since my last report another pavilion has been added to the Maternity Department of the Hospital of the University, erected through the liberality of the State, furnishing, with the first pavilion, a capacity of ten confinements a month, all of which are availed of for the instruction of the graduating class.

The appended table indicates the subjects taught and the number of hours per week devoted thereto in the past winter's session, 1891-92 by the professors and instructors:

<table>
<thead>
<tr>
<th>Instructors</th>
<th>Subjects</th>
<th>Exercises per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prof. Piersol</td>
<td>Descriptive Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>Prof. Piersol</td>
<td>Histological Demonstration</td>
<td>1</td>
</tr>
<tr>
<td>Prof. Deaver</td>
<td>Applied Anatomy</td>
<td>2</td>
</tr>
<tr>
<td>Drs. Holmes, Neilson, H. C., Deaver, Jameson, Brinkmann, Boger and Pennock</td>
<td>Practical Anatomy (Dissection)</td>
<td>10</td>
</tr>
<tr>
<td>Drs. Robert Formad, Chambers and Stout</td>
<td>Histology, laboratory instruction</td>
<td>10</td>
</tr>
<tr>
<td>Dr. Miller</td>
<td>Mat. Medica and Pharmacy, lecture</td>
<td>1</td>
</tr>
<tr>
<td>Drs. Toboldt and Schleif</td>
<td>Practical Pharmacy, laboratory exercises</td>
<td>2</td>
</tr>
<tr>
<td>Prof. Wornley</td>
<td>General Chemistry, including Chemical Physics</td>
<td>2</td>
</tr>
<tr>
<td>Prof. Marshall and Dr. Cattell</td>
<td>Practical Chemistry, laboratory</td>
<td>3</td>
</tr>
<tr>
<td>Prof. Reichert</td>
<td>Physiology</td>
<td>3</td>
</tr>
<tr>
<td>Prof. Guiteras</td>
<td>General Pathology</td>
<td>1</td>
</tr>
<tr>
<td>Prof. Billings and Dr. Abbot</td>
<td>Hygiene</td>
<td>1</td>
</tr>
<tr>
<td>Profs. Pepper and Ashhurst</td>
<td>General Clinics, Medical and Surgical</td>
<td>2</td>
</tr>
</tbody>
</table>
Second Year.

Professor Piersol: Anatomy 3
Professor Deaver: Applied Anatomy 2
Drs. Holmes, Neilson, Jameson, Brinkmann, Boger and Pennock: Dissection 10
Professor Wormley: Medical Chemistry, lecture 1
Professor Marshall and Dr. Catlett: Laboratory Exercises in Medical Chemistry 3
Professor Reichert: Physiology 3
Professor Guiteras: General Pathology and Morbid Anatomy 2
Drs. H. F. Formad, Hatch, and Macfarland: Laboratory Exercises in Pathological Histology 5
Professor Musser, Drs. Stevens, Packard and Stahl: Physical Diagnosis, practical instruction, 5
Professor Wood: Therapeutics 2
Professor Pepper: Theory and Practice of Medicine 3
Professor Ashhurst: Obstetrics 2
Professors Pepper, Ashhurst, Tyson and White: General Clinics, Medical and Surgical 4
Professors Wood, Norris, Goodell, Duhring and Randall: Special Clinics (Nervous Diseases, Diseases of the Skin, Eye, Ear, Diseases of Women) 5

Third Year.

Professor Guiteras: General Pathology and Morbid Anatomy 3
Professor Guiteras: Autopsies and Bacteriology 1
Dr. H. F. Formad: Demonstrations in Morbid Anatomy 5
Professor Wood: Therapeutics 2
Professor Pepper: Theory and Practice of Medicine 3
Professor Ashhurst: Surgery 3
Professor Hirst: Obstetrics 2
Drs. Wharton, Davis, Young and Green: Operative Surgery, Minor Surgery and Bandaging, 1 lecture per week, 2 hours' practice 3
Professor Hirst: Obstetrics 3
Professor Hirst: Operative Obstetrics, 1 hour practice, ½ term 3
Professor Goodell and Dr. Taylor: Gynecology, 1 lecture per week, 3 hours' bedside teaching 4
Professors Tyson and Drs. Daland, Mitchell, Griffith and Morton: Bedside Instruction in Practical Medicine 3
Professor White and Drs. Martin, A. C. Wood, Kirby and Leonard: Bedside Instruction in Practical Surgery 3
Profs. Pepper, Ashhurst, Ty- 
son and White 

Profs. Wood, Norris, Duhr- 
ing, Goodell, Willard, Griff- 
ith, Martin and Randall 

General Clinics, Medical and Surgical 4 

Special Clinics (Nervous Diseases, Dis- 
eses of the Skin, Eye, Ear, Gyneco-
logy, Children, Genito-urinary Dis-
cases, Orthopedics 6½

Fourth Year.

Profs. Pepper and Tyson and 
Drs. Musser, Daland, Mit-
chell and Reeves 

Profs. Ashhurst, White and 
Martin 

Prof. Martin 

Prof. Martin 

Prof. Wood and Drs. Der-
cum and Potts 

Dr. Mills 

Prof. Goodell and Dr. Tay-
lor 

Prof. Griffith 

Prof. Duhring and Dr. Hart-
zell 

Prof. Randall and Dr. Brown 

Prof. Norris and Dr. Wallace 

Dr. Haehnlen 

Drs. Willard and Young 

Clinical Medicine and Physical Diagnos-
isis, including Laryngology—practi-
cal instruction 4 before Jan. 1. 

Clinical Surgery—clinical lecture, prac-
tical instruction 5 after Jan. 1. 

Operative Surgery and Genito-urinary 
Diseases—practical instruction 3 

Clinical Instruction in Genito-urinary 
Diseases 1 after Jan. 1. 

Nervous Diseases and Electro-Thera-
peutics—clinical lecture, practical in-
struction 3 until Jan. 1. 

Mental Diseases 2 after Jan. 1. 

Gynecology—didactic lecture, clinical 
lecture, practical instruction 1 

Diseases of Children—1 hour clinical 
lecture 1 until Jan. 1. 

Dermatology—didactic lecture, clinical 
lecture, practical instruction 2 until Jan. 1. 

Otology—didactic lecture for half session, 
practical instruction for half session 1 until Jan. 1. 

Ophthalmology—didactic lecture, cli-
cial lecture, practical instruction 1 after Jan. 1. 

Clinical and Operative Obstetrics—practi-
cial instruction for half the session 3 

Orthopedic Surgery—didactic lecture for 
half session, practical instruction for 1 until Jan. 1. 

half session 1 after Jan. 1. 

The Trustees and Medical Faculty of the University, recognizing 
that the field of medical study is constantly enlarging, so that it is no 
longer practicable to give an adequate course of instruction in the 
limited space of three years, have adopted a Four-year course, begin-
ning with the session of 1893–94. It is expected that through this 
change the student may not only receive more thorough and system-
matic instruction, but at the same time will be enabled with less bur-
den to himself to assimilate the information imparted.
The first year of the new course will be largely occupied with work in the various laboratories of Chemistry, Pharmacy, Osteology, and Histology, and in Dissection. The first-year student may also attend clinical lectures in General Medicine and General Surgery. In the second year, in addition to didactic and clinical teaching, practical instruction is given in Medical Chemistry, Pathological Histology and Physical Diagnosis. Dissection is continued. Throughout the second, third and fourth years the student is required to attend the general medical and surgical clinics at the University and Philadelphia Hospitals, and during the third and fourth years the clinics in special departments at the former. Special bedside instruction in Clinical Medicine, including Physical Diagnosis, and in Clinical Surgery, is given in the third year. During the fourth year, in addition to special bedside instruction in Clinical Medicine, in Clinical Surgery, and in Gynaecology, practical instruction is given in operative surgery, and operative obstetrics, in diseases of the nose, throat, eye, ear, and skin, in genito-urinary diseases, and in nervous diseases. For this purpose the third- and fourth-year classes are divided into sections, each of which receives direct personal instruction.

At the beginning of the fourth year the student must select two branches from the following electives, and pursue the study of the two branches as special studies: Electives—Neurology, Orthopaedic Surgery, Advanced Ophthalmology, Dermatology, Otology, Advanced Hygiene, including Bacteriology, Advanced Anatomy, Advanced Physiology, Advanced Pathology, Advanced Medical Chemistry, including Toxicology; Pediatrics, Genito-Urinary Surgery, and Experimental Psychology. At the end of the fourth year the student will be examined in the two special branches in addition to the regular examinations of that year.

The course of instruction is so arranged as to permit the constant introduction of new material, while retaining the repetition of essential subjects aimed at by the older method. The laboratory instruction is so co-ordinated with the oral teaching as to illustrate the subjects of the lectures.

I herewith append an outline of the new Four-year Course:
FIRST YEAR.

Anatomy.—Three lectures per week, ten hours Dissection, including Osteology (alternating with practical Histology).¹

Histology.—Two hours laboratory instruction, one hour demonstration.

Materia Medica and Pharmacy.—One lecture per week, two hours laboratory.

General Chemistry, including Chemical Physics.—Two lectures per week, three hours laboratory.

Physiology.—Three lectures per week.

General Pathology.—One lecture per week.

Medical History, Terminology, Ethics, etc.—One lecture per week.

Physical Diagnosis.—One lecture per week.

General Symptomatology and Diagnosis.—One lecture per week.

Bandaging.—One lecture per week, one hour practice until December 15.

General Clinics.—Medical and Surgical.

Final examinations at the end of the course: General Chemistry, Elementary Anatomy with especial reference to Histology and Osteology, Materia Medica and Pharmacy, Elements of General Pathology and Physical Diagnosis.

SECOND YEAR.

Anatomy.—Three lectures per week, ten hours evening dissection.

Applied Anatomy.—Two lectures per week.

Medical Chemistry.—One lecture per week, three hours laboratory.

Physiology.—Three lectures per week.

General Pathology and Morbid Anatomy.—Two lectures per week, one and a half hours laboratory.

Physical Diagnosis.—One hour per week demonstration.

Therapeutics.—Two lectures per week.

Surgery.—Three lectures per week.

Obstetrics.—Two lectures per week.

General Clinics, Medical and Surgical, including Philadelphia and Pennsylvania Hospital Clinics.

Special Clinics.—(Nervous Diseases, Gynaecology, Diseases of Skin, Eye, Ear, alternating with Physical Diagnosis and Pathological Histology.)

¹ In the distribution of anatomical material at the beginning of the session, students of the second year are first supplied, and students of the First-year may not receive material until about December 1.
Final examinations at the end of the course: Medical Chemistry, Anatomy, including Embryology; Physiology and Physical Diagnosis.

THIRD YEAR.

Applied Anatomy.—Two lectures per week.
General Pathology and Morbid Anatomy.—Two lectures per week.
Bacteriology.—One lecture per week for six weeks.
Demonstrations in Morbid Anatomy, including Autopsies.—Two hours per week.
Therapeutics.—Two lectures per week.
Theory and Practice of Medicine.—Three lectures per week.
Surgery.—Three lectures per week.
Minor Surgery and Fracture Dressings.—One lecture per week, two hours practice.
Obstetrics.¹—Three lectures per week.
Gynaecology.—One didactic lecture per week.
Bedside Instruction in Practical Medicine, including Physical Diagnosis.²—One hour per week.
Bedside Instruction in Practical Surgery.²—One hour per week.
Dermatology.—One didactic lecture per week until January 1, one hour per week clinical lecture.
Ophthalmology.—One didactic lecture per week, one hour per week clinical lecture.
Otology.—One didactic lecture per week until January 1, one hour per week clinical lecture.
Laryngology.—One didactic lecture per week after January 1.
Genito-Urinary Diseases.—One hour per week practical instruction after January 1.

General Clinics, Medical and Surgical, including Philadelphia and Pennsylvania Hospital clinics.
Special Clinics (Nervous Diseases, Pediatrics, Gynaecology, Diseases of the Skin, Eye, Ear at both University and Philadelphia Hospitals).

Final examinations at the end of the course: Applied Anatomy, General and Special Pathological Anatomy, Therapeutics, Surgery, Obstetrics and Ophthalmology. The examinations include questions

¹ Students also receive individual practical instruction in pelvimetry and abdominal palpation in addition to the lectures on Obstetrics.
² For these courses the class is divided into sections, so that each student shall receive direct personal instruction.
on Diseases of the Skin and the Ear from lists furnished by the Clinical Professors of those branches:

FOURTH YEAR.

Theory and Practice of Medicine.—Three lectures per week.
Clinical Conference in Medicine.—One hour per week.
Clinical Medicine.—Two clinical lectures per week, two hours per week bedside instruction.
Clinical Surgery.—Two clinical lectures per week, one hour per week bedside instruction.
Operative Surgery.—One lecture per week and one hour practical instruction after January 1.
Operative Obstetrics.—One hour practice per week until January 1.
Nervous Diseases and Electro-Therapeutics.—One clinical lecture per week, one hour per week practical instruction.
Hygiene.—One lecture per week.
Gynaecology.—One didactic lecture per week, one clinical lecture per week, one hour per week practical instruction.
Pediatrics.—One clinical lecture per week until January 1.
Dermatology.—One clinical lecture per week, one hour per week practical instruction.
Ophthalmology.—One didactic lecture per week, one clinical lecture per week, one hour per week practical instruction.
Otolaryngology and Rhinology.—One hour per week practical instruction.
Autopsies.—One hour per week practical instruction.
Clinical and Operative Obstetrics.—One hour per week practical instruction.
Orthopedic Surgery.—One clinical and didactic lecture per week, one hour per week practical instruction until January 1.
Genito-Urinary Diseases.—One hour per week practical instruction after January 1.

General Clinics, Medical and Surgical, including Philadelphia and Pennsylvania Hospital Clinics.

Final examinations at the end of the course: Theory and Practice of Medicine, Clinical Medicine, Operative Surgery, Clinical Surgery, Operative Obstetrics, Gynaecology and Hygiene, and examinations in two of the following branches which the student must have elected as special studies at the beginning of the fourth year: Neu-
APPENDIX V.

REPORT OF THE DEAN OF THE FACULTY OF DENTISTRY.

Prof. William Pepper, Provost,

Dear Sir:—I have the honor to report to you the condition of the Department of Dentistry at the present time, and also to exhibit the progress made during the last three years.

The following statistics will give a general idea of the results obtained:

1889-90.

The number of students matriculated, 1889-90: 159
Of these there were students of the first year: 87
" " " " " " " " second year: 72
Number of new matriculates, including those admitted to advanced standing: 104

1890-91.

The number of students matriculated, 1890-91: 206
Of these there were students of the first year: 112
" " " " " " " " second year: 93
Special student: 1
Number of new matriculates, including those admitted to advanced standing: 128

1891-92.

The number of students matriculated, 1891-92: 169
Of these there were students of the first year: 62
" " " " " " " " second year: 107

The number of new students matriculated, including those admitted to advanced standing

<table>
<thead>
<tr>
<th></th>
<th>1889–90</th>
<th>1890–91</th>
<th>1891–92</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students in full attendance</td>
<td>537</td>
<td>534</td>
<td></td>
</tr>
<tr>
<td>Special student</td>
<td>5</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

**SUMMARY, 1889–90 TO 1891–92.**

Of these there were admitted upon presentation of certificate

<table>
<thead>
<tr>
<th></th>
<th>1889–90</th>
<th>1890–91</th>
<th>1891–92</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admitted upon examination</td>
<td>13</td>
<td>20</td>
<td>13</td>
</tr>
</tbody>
</table>

Those admitted to advanced standing presented certificates and diplomas from the following institutions:

<table>
<thead>
<tr>
<th></th>
<th>1889–90</th>
<th>1890–91</th>
<th>1891–92</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philadelphia Dental College</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>New York College of Dental Surgery</td>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Ohio College of Dental Surgery</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Owen's College, England</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Royal College of Dental Surgery, Ontario, Canada</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>McGill University, Montreal, Canada</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Dental Department, Medical Faculty, Rio Janeiro, Brazil</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>National Dental Hospital, London, England</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Royal College of Surgeons, Edinburgh, Scotland</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>University of Leipzig</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>&quot; &quot; Michigan</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>&quot; &quot; Pennsylvania, Medical Department</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>&quot; &quot; Berlin</td>
<td>3</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>&quot; &quot; Zurich</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>&quot; &quot; Geneva</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>&quot; &quot; Berne</td>
<td>0</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>&quot; &quot; Breslau</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>&quot; &quot; Vienna</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>&quot; &quot; Utrecht</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>&quot; &quot; Wurzburg</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

The countries represented in the Department are as follows:

<table>
<thead>
<tr>
<th></th>
<th>1889–90</th>
<th>1890–91</th>
<th>1891–92</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle States</td>
<td>79</td>
<td>111</td>
<td>95</td>
</tr>
<tr>
<td>New England States</td>
<td>15</td>
<td>17</td>
<td>6</td>
</tr>
<tr>
<td>Western States</td>
<td>20</td>
<td>18</td>
<td>16</td>
</tr>
<tr>
<td>Southern</td>
<td>12</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>Pacific</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Austria</td>
<td>0</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>
The number of students admitted to advanced standing or, what might more appropriately be termed, a post-graduate course, remains without material change.

There is a slight falling off in numbers from Switzerland, which is due to the fact that a recent change in the law there requires, it is understood, seven years attendance at the university before graduation. This will probably force students of that country, in dentistry, to forego any advantages they might receive from an American training.

The amount of work performed in the operative and mechanical branches has been as follows:

<table>
<thead>
<tr>
<th></th>
<th>1889-90</th>
<th>1890-91</th>
<th>1891-92</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operative:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of operations</td>
<td>17,154</td>
<td>19,817</td>
<td>21,186</td>
</tr>
<tr>
<td><strong>Mechanical:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of operations</td>
<td>728</td>
<td>981</td>
<td>794</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>17,882</td>
<td>20,798</td>
<td>21,980</td>
</tr>
<tr>
<td>Amount of gold used for stopping, exclusive of that used in mechanical work</td>
<td>72 ozs. or 6 lbs.</td>
<td>72 ozs. or 6 lbs.</td>
<td>69 ozs. or 5 lbs. 9 ozs.</td>
</tr>
<tr>
<td>Number of patients</td>
<td>8184</td>
<td>8977</td>
<td>8536</td>
</tr>
<tr>
<td>Number of students in the graduating class</td>
<td>72</td>
<td>93</td>
<td>107</td>
</tr>
<tr>
<td>&quot; &quot; &quot; who received the degree,</td>
<td>69</td>
<td>91</td>
<td>89</td>
</tr>
</tbody>
</table>
The number of students in each of the three years, together with the amount of work performed, shows a regular increase. The importance of the clinics in the training of the students cannot be overestimated; indeed, they constitute the life of the Department, and are, therefore, carefully guarded in every respect.

This training on the living subject is a form of education peculiar to dental colleges, and originated with the first college established in this country in 1839. Its value as a means of professional education has been thoroughly established, and any change is neither looked for or desired.

**Course of Instruction, Sessions 1889-90 to 1891-92.**

Length of session, seven months—from October 1st to May 1st.

**Lectures on Mechanical Dentistry** ........................................ 2 hours each week.

- " Operative " ..................................................... 2 " " "
- " Dental Pathol. Ther. and Mat. Med " .................. 2 " " "
- " Anatomy " ..................................................... 3 " " "
- " Chemistry " ..................................................... 2 " " "
- " Physiology " ..................................................... 3 " " "

Instruction in General and Special Histology .................................. 2 " daily.

Chemical Laboratory, first year students .................................. 4 hours each week.

Mechanical Laboratory, under care of Demonstrators .................. 24 " " "

Dental Infirmary, under care of Demonstrators ............................ 36 " " "

The Infirmary and Mechanical Laboratory are open daily from 9 A.M. to 4 P.M. for practical work.

The history of the Department for the past three years covers a period of interest in that there has been a progressive advance in the standard both as to the curriculum and time required.

The organization of the National Association of Dental Faculties, composed of delegates from all the Colleges and Departments of Dentistry in the United States and Canada, has made it possible to enforce rules bearing equally and impartially upon all.

This unifying process has been accomplished with a minimum amount of friction. This body decided, at Saratoga, 1889, "That attendance upon three full regular courses, of not less than five months each in separate years, shall be required before examination for Graduation," and that all the Colleges should commence this Course at the beginning of the Session 1891-92.

This period was anticipated with some anxiety. The first effect was observed in 1889-90, and 1890-91, in largely increased classes, so that the latter session brought the number of matriculates to 206.
This was greatly in excess of normal development, and while satisfactory in a financial sense was otherwise in an educational, as it strained the facilities of the Department to the utmost.

The training of a Dental student requires personal and direct supervision, mere didactic teaching will not avail, hence the system adopted demands a large corps of Demonstrators, a force very difficult to secure and to hold.

The decrease in students at the beginning of the Three-Years' Course was not as great in the attendance upon the first year as had been anticipated; the number of sixty-two in the Freshmen class means, at the expiration of the three years, a combined class fully equal to that of 1890–91. If this increase continues in direct proportion, and there seems no reason to question it, the possibility of successfully managing it with our present facilities seems more than doubtful.

Changes in the course of study were made necessary by the extension to three years, and it was decided to adopt the following:

**Outline of the Course, Session 1891–92.**

**First Year.**

The First Year students will be required to attend the following branches and pass final examination upon Materia Medica, Chemistry, and Histology, at the close of the term. If the student fail to pass, a second examination is afforded him at the beginning of the next Winter Session.

1. Chemistry, in the Chemical Laboratory, three hours Thursday morning, and the lectures on this branch Monday and Tuesday of each week.

2. Dental Materia Medica. One lecture. Saturday of each week.

3. General and Special Histology, in the Histological Laboratory, two hours, and Anatomical Demonstrations one hour each week.

4. The morning hours not otherwise occupied will be devoted to practical work in the Mechanical Laboratory.

5. On the afternoon of each week-day, except Saturday, the students of the First Year Class will be trained in Operative work, either out of the mouth on extracted teeth or in simple cavities in the living subject.

6. They will, in addition to subjects named, attend lectures on Anatomy, Physiology, Operative and Mechanical Chemistry.
Second Year.
1. Students of the Second Year will repeat Anatomy and Physiology, Operative and Mechanical Dentistry, and add thereto Dental Pathology and Therapeutics.
2. They will repeat Operative and Mechanical work, with the privilege of the operating room and appliances, during the morning as well as the afternoon clinics.
3. The final examinations of the Second Year, at the close of the term, will be upon Anatomy and Physiology.

Third Year.
1. Students of the Third Year will repeat the practical work in Operative and Mechanical Dentistry and the lectures on these subjects, together with Dental Pathology and Therapeutics.
2. At the close of the term they will be required to pass examinations in these branches.

The addition of Histology to the studies of the First Year was made to harmonize as near as possible to that of the Department of Medicine in the first year. It cannot be considered wholly satisfactory, as it creates final examinations in this year on three important studies, and subjects the student at the very beginning of his work to a serious mental strain, but at present there seems no possibility of making satisfactory changes.

The course as previously outlined gives the student a very good foundation in the work of his profession for the time spent, but it is surmised that the three years at present required will be found to be inadequate for the proper acquirement of a dental education, and that we will be obliged to contemplate eventually a four-years' course.

The action of the various State Boards of Dental Examiners has been such as to cause grave anxiety. In many of the States the laws require re-examinations. This duty is given to men in many instances with unknown qualifications, and whose work we have no right to traverse; the result of these State examinations has been in several instances the rejection of our Graduates on first examination when the grade has been specially high in this Department. In other instances our Graduates have been subjected to humiliating procedures and long delays before securing the right to practice.
This condition of things has caused much disturbance in the National Association of Dental Faculties, and a demand was made upon the National Association of Dental Examiners, at Saratoga, 1891, that the State Boards shall furnish the Deans and Secretaries of Dental Colleges and Departments of Dentistry of Medical Colleges and Universities with the character of the examination given each student. This has been in part complied with, but the question still needs further adjusting to avoid antagonism.

In view of this condition, and also that some of the State Boards demand 75 per cent. in examination, it was deemed best by the Faculty of this Department to raise the standard from fifty to sixty in a possible 100.

The preliminary examination still remains in the unsatisfactory state it was left at my last report. Until the general public school education is raised throughout the United States, and especially in Pennsylvania, from its present imperfect condition, any change may be regarded as impossible and perhaps unwise.

The difficulties the Department has labored under since its organization in lack of room facilities has been apparent to yourself and Faculty.

We possess one of the largest and probably the best appointed operating room on this continent, but there is needed something more than this not possible in our present building, or in Medical Hall. A properly-arranged dental school should be furnished with reception rooms, laboratories, etc.; these are but imperfectly provided for at present.

Acting upon your suggestion, the Faculty have taken the initiatory steps toward the erection of a building designed to cover all present needs and future possibilities. There are many financial difficulties to be overcome in the accomplishment of this, but it is anticipated that these will be conquered by persistent effort in the near future.

It is presumed that the really philanthropic work accomplished by this Department is not well understood. The large number of patients treated in the last three years, over 25,000, and the good thereby accomplished is worthy of more serious consideration than has generally been given to it.

To extend this work, and make it more creditable to the great University of which it is a part, it must have a building worthy to rank with those already erected.
In this way only can the Department hope to maintain the high position already attained.

Appended is a condensed statement of income and disbursements for the last three sessions.

1889-90.

INCOME.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition, Matriculation, and Graduation Fees</td>
<td>$17,595.00</td>
</tr>
<tr>
<td>Fees from Previous Years</td>
<td>80.00</td>
</tr>
<tr>
<td>Operative and Mechanical Clinics</td>
<td>5,276.65</td>
</tr>
<tr>
<td>Total from Students and Clinics</td>
<td>$22,951.65</td>
</tr>
<tr>
<td>Unexpended Balance, 1888-89</td>
<td>32.94</td>
</tr>
<tr>
<td>Total Income from all Sources</td>
<td>$22,984.59</td>
</tr>
</tbody>
</table>

Less Fees returned                                   | 30.00      |

Total Income from all Sources                       | $22,954.59 |

Disbursed as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Expenses of Session</td>
<td>$6,833.66</td>
</tr>
<tr>
<td>Salaries of Professors and Demonstrators</td>
<td>7,000.00</td>
</tr>
<tr>
<td>Principal and Interest on Laboratory Building</td>
<td>585.00</td>
</tr>
<tr>
<td>Surplus paid Professors, Demonstrators and Board of Trustees</td>
<td>6,000.00</td>
</tr>
<tr>
<td></td>
<td>$20,418.66</td>
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</tbody>
</table>

SUMMARY, 1888-90.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Income from all Sources</td>
<td>$22,954.59</td>
</tr>
<tr>
<td>Expenditures, Session 1889-90</td>
<td>20,418.66</td>
</tr>
<tr>
<td></td>
<td>$2,535.93</td>
</tr>
<tr>
<td>Amount transferred to Income, Session 1890-91</td>
<td>35.93</td>
</tr>
<tr>
<td>Balance to the Credit of Dental Department, 1889-90</td>
<td>$2,500.00</td>
</tr>
</tbody>
</table>

1890-91.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition, Matriculation, and Graduation Fees</td>
<td>$22,645.00</td>
</tr>
<tr>
<td>Fees from Previous Years</td>
<td>95.00</td>
</tr>
<tr>
<td>Receipts of Operative and Mechanical Clinics</td>
<td>5,417.40</td>
</tr>
<tr>
<td>Total from Students and Clinics</td>
<td>28,157.40</td>
</tr>
<tr>
<td>Unexpended Balance, Session 1889-90</td>
<td>35.93</td>
</tr>
<tr>
<td></td>
<td>$28,193.33</td>
</tr>
<tr>
<td>Less Fees returned</td>
<td>110.00</td>
</tr>
<tr>
<td>Total Receipts from all Sources</td>
<td>$28,083.33</td>
</tr>
</tbody>
</table>
Disbursed as follows:

Current Expenses, Session 1890-91 ........................................ $8,422.93
Salaries of Professors and Demonstrators ................................. 7,000.00
Principal and Interest on Laboratory Building .......................... 560.00
Amount of Surplus paid Professors, Demonstrators, and Board of Trustees 7,800.20

$23,783.13

Summary, 1890-91.
Total Income from all Sources ............................................. $28,083.33
" Expenditures, Session 1890-91 ........................................... 23,783.13
Balance to Credit of Dental Department, 1890-91 ........................ $4,300.20

1891-92.
Tuition, Matriculation, and Graduation Fees .............................. $18,465.00
Fees from Previous Years .................................................. 295.00
Receipts of Operative and Mechanical Clinics ............................ 4,897.10
Total from Students and Clinics .......................................... $23,657.10
Less Fee returned ..................................................................... 50.00
Total Receipts from all Sources ............................................. $23,607.10

Disbursed as follows:
Current Expenses, including Salary of Clerk, Assistant Secretary of Board of Trustees, and Assistants ................................. $7,728.56
Salaries of Professors and Demonstrators ................................ 6,950.00
Principal and Interest on Laboratory Building ............................ 535.00
Surplus to Professors, Demonstrators and Board of Trustees ........ 5,946.76

$21,160.32

Summary, 1891-92.
Total Income from all Sources ............................................. $23,607.10
" Expenditures, Session 1891-92 ............................................ 21,160.32
Balance to Credit of Dental Department, 1891-92 ........................ $2,446.78

Respectfully submitted,

JAMES TRUMAN,  
Dean.
APPENDIX VI.

REPORT OF THE DEAN OF THE FACULTY OF VETERINARY MEDICINE.

To the Provost of the University,

Sir: I have the honor of submitting the following report of the operations of the Department of Veterinary Medicine during the three years from October, 1889, to October 1, 1892.

During the three years above mentioned the department has steadily progressed in teaching facilities, and the number of students in attendance has shown an annual increase.

The desire to furnish a course in veterinary medicine as complete as possible in all particulars, together with the annual increase in the number of students, has necessitated the appointment of additional members to the staff of teachers. With this in view, in 1889 the Board of Trustees, on the recommendation of the Faculty, created a Professorship of General Biology in the department, and appointed Dr. Charles S. Dolley to the position. During the same year the Board of Trustees appointed Dr. Simon J. J. Harger, formerly Demonstrator of Veterinary Anatomy in the department, to the Assistant Professorship of Veterinary Anatomy, and in 1891 to the full Professorship of Veterinary Anatomy and Zootechnics.

In 1891 Dr. Leonard Pearson was added to the Faculty as Assistant Professor of the Theory and Practice of Veterinary Medicine.

Thus while the Faculty, during the session of 1888–89, consisted of ten members, it consisted during the session just past (1891–92) of twelve members.

During the period above referred to an increase was also made in the number of Lecturers and Demonstrators by the creation of the following Lectureships and Demonstratorships with the appointment of teachers to fill them:

Lectureship on the Theory and Practice of Canine Medicine, and the appointment thereto of Dr. Alexander Glass.

Lectureship on Veterinary Sanitary Science and Demonstratorship of Normal Histology, and appointment thereto of Dr. Robert Formad.

Demonstratorship of Veterinary Obstetrics, and the appointment thereto of Dr. Wm. H. Ridge.

Demonstratorship of Comparative Physiology, and the appointment thereto of Dr. Leo Breisacher,
The number of teachers constituting the teaching staff of Lecturers and Demonstrators was increased from eight in 1888–89, to ten in 1891–92, making a total of twenty-two teachers in the department. Since the session of 1888–89 there has been a steady increase in the total number of students in attendance, as may be observed by the following exhibit:

<table>
<thead>
<tr>
<th>Session</th>
<th>Total Number of Students in Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1887–88</td>
<td>57</td>
</tr>
<tr>
<td>1888–89</td>
<td>58</td>
</tr>
<tr>
<td>1889–90</td>
<td>64</td>
</tr>
<tr>
<td>1890–91</td>
<td>70</td>
</tr>
<tr>
<td>1891–92</td>
<td>76</td>
</tr>
<tr>
<td>1892–93</td>
<td>92</td>
</tr>
</tbody>
</table>

In 1889 a one-story building was erected adjoining the farriery, to be used as an assembly room by the students, and granolithic and flagstone pavements were laid around the triangular grass plot of the courtyard of the department. At the same time the partition between two small rooms situated east of the main gateway was removed, and the single room thus made converted into an office to be used by the clerk to the Faculty.

In the same year the Pharmaceutical Laboratory, which occupied the room directly above the main lecture room, was transferred to the adjoining room, and the room vacated was converted into a lecture room. The collections of the Museum, which occupied part of the room, were not removed, but additional cases were constructed for their accommodation and better display.

In 1890 a building was erected in the space directly west of the main gateway to serve as a room for the meeting of the Faculty and as an office for the Dean.

Much has been done in the past three years toward making a better roadway for vehicles in the courtyard, removing the embankment, planting grass and trees, and otherwise improving and beautifying the grounds.

In increasing the equipment of apparatus, fifteen Leitz compound microscopes and four Zentmayer simple microscopes have been purchased, thus leaving in the possession of the department at the present writing thirty-three compound microscopes, of which eighteen are of Zentmayer’s manufacture and fifteen of Leitz’s manufacture. Of simple microscopes (Zentmayer’s manufacture) the department possesses twenty-six.

For illustrating the lectures on Physiology the most improved form
of kymographion has been purchased, as well as several pieces of apparatus from Cambridge, England. Many additions have been made to the apparatus for teaching Physiology practically in the laboratory.

The Pharmaceutical Laboratory has been furnished almost entirely with a new outfit of apparatus.

The income derived from tuition fees, together with the liberal contribution which is annually accorded the department by the generosity of the children of the late J. B. Lippincott, Esq., one of the founders of the school, is sufficient to afford reasonably fair compensation for the services of part of the teaching staff, but for those who teach the special veterinary branches alone, and are not connected with, and receive no compensation from other departments of the University, the salaries are by no means what should be accorded. It is to be hoped that the many humane people of Philadelphia who are so deeply interested in the welfare, and in the humane and skillful treatment of animals, will interest themselves in securing permanent endowments for the professorships in the special veterinary branches, thus, by the increased compensation, enabling the holders of the chairs to devote more time to original research in the hospital and laboratories in the direction of the alleviation and cure of sick and injured animals.

I have the honor to remain very respectfully yours,

JOHN MARSHALL, Dean.

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APPENDIX VII.

REPORT OF THE VETERINARY HOSPITAL.

Because of the impossibility of oral communication between the practitioner and the patient, practical work in the Hospital is considered the most important part of the instruction in a course of Veterinary Medicine.

The Veterinary Hospital, in affiliation with the Department of Veterinary Medicine, has been conducted by the Board of Managers during the past three years, as nearly as conditions will permit, on lines similar to those observed in hospitals of human medicine.

A Hospital Staff of Veterinarians, consisting wholly of members of
the teaching staff of the School, has been appointed, and free dispensary clinics are held daily (except Sunday) from 8 until 10 A.M. A graduate in Veterinary Medicine has been appointed House Surgeon and resides in the building, making it possible for the animals to be constantly under the care of a practitioner.

During the year ending August 31, 1891, 1578 animals were treated in the Hospital without charge for professional services. During the year ending August 31, 1892, 1825 animals were treated in the Hospital.

The Hospital and its surroundings have been much improved under the direction of the Board of Managers. Plank floors laid on concrete have been substituted for the brick floors formerly in the wards, and two large box stalls have been constructed. A plank floor has been laid in the operating room, and the Pharmacy has been partially reconstructed and general repairs have been made to the roof and other parts of the building. Three offices have been provided for the accommodation of the Hospital Staff, and a large room has been furnished as a sleeping room for the detail of students who act as assistants to the House Surgeon.

An ambulance of the most approved design has been constructed for conveying sick and injured animals, and two horses for use in the ambulance have been purchased. A large shed has been erected in which to keep the ambulance and to afford shelter for the carriages of the Hospital Staff.

The embankment south of the Hospital has been sufficiently removed to permit of the construction of a wide roadway fronting the entire length of the Hospital building.

At the western end of the Hospital a two-story building, which is to be used as a Hospital for dogs, is now being erected. Much thought has been bestowed upon the plans for this building by the Board of Managers of the Hospital and by the members of the Hospital Staff, and when completed it will be the only Hospital in this country built for, and devoted exclusively to, the treatment of dogs and small animals, and unexcelled in completeness in Europe.

There is urgent need of endowments for stalls and kennels in the wards, so that the usefulness of the Hospital in caring for the sick and injured animals of persons unable to pay board may be increased.
APPENDIX VIII.

REPORT OF THE DEAN OF THE FACULTY OF LAW.

WILLIAM PEPPER, M.D., LL.D., PROVOST,

SIR: I have the honor to submit my report as Dean of the Department of Law for the scholastic years 1890–91 and 1891–92:

THE FACULTY.

Instruction was given during the year 1890–91 by the following professors and fellows, and in the following subjects: By Professor Parsons, in the Law of Partnership and of Decedent Estates; by Professor Bispham, in the Principles of Equity, Pleading and Practice; by Professor Biddle, in Torts and Evidence; by Professor Hollingsworth, in the Law of Contracts; by Professor Graham, in Criminal Law; by Mr. Pepper, the senior fellow, in Pleading, and by the Dean, in Constitutional Law and in the Law of Real Property.

During the year 1891–92, lectures were delivered by the same professors and fellows upon the same subjects, with the exception that, Professor Biddle having been succeeded by the Hon. George M. Dallas, the lectures upon the Law of Torts and Evidence were delivered by Professor Dallas; and, during the year, Mr. Pepper also delivered a course of lectures upon the Law of Corporations; Mr. Charles Cooper Townsend delivered lectures and gave instruction in the Law of Real Property and in the Law of Contracts, and Mr. George Stuart Patterson delivered lectures and gave instruction in Constitutional Law and in the Principles and Practice of Equity.

During the year 1891–92 from twenty to twenty-five lectures of an hour in length were delivered during each week that the school was in session.

The Hon. George W. Biddle having given to the University a fund as a memorial of the late Professor Biddle, the Trustees of the University have created a senior fellowship to be known as the Algernon Sydney Biddle Fellowship, the incumbent to be annually elected by the Board of Trustees upon the nomination of the Law Faculty; to hold office for one year; to perform such duties of instruction as may be designated by the Dean of the Law Faculty, and to receive an annual compensation of $500 to be paid out of the income of the endowment made by Mr. Biddle.
The Faculty have nominated as the first incumbent of this fellowship George Wharton Pepper, Esq., who, by his distinguished services as a fellow of this school during the last three years, has merited any honor which the Faculty may have it in their power to bestow.

THE STUDENTS.

In 1890–91 there were on the rolls 176 students, of whom 52 were in the third class, 46 in the second class, 68 in the first class, and 10 were special students; and in June, 1892, the degree of Bachelor of Laws was conferred upon 50 graduates. Of the students in attendance 6 held scholarships under the contract between the University and the City of Philadelphia, and 3 held scholarships granted by the Faculty.

During 1891–1892 there were on the rolls 190 students, of whom 40 were in the third class, 65 in the second class, 72 in the first class, and 13 were special students. In June, 1891, the degree of Bachelor of Laws was conferred upon 38 graduates. Of the students in attendance, 6 held City scholarships and 7 held Faculty scholarships. Of the 190 students on the roll in 1891–92, 39 came from counties in Pennsylvania other than Philadelphia, and 19 came from States other than Pennsylvania. Of the 190 students enrolled, 12 failed to attend; and of the 178 students in attendance during 1891–92, 13 held scholarships, 57 paid $105 each, 88 paid $100 each, 18 paid $55 each, 2 paid $50 each, and 4 paid only matriculation fees, making the total receipts from tuition fees $15,895.

The following comparative table shows the increase in the years given in the number of Professors and Fellows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Dean</th>
<th>Professors</th>
<th>Fellows</th>
<th>Third</th>
<th>Second</th>
<th>First</th>
<th>Special</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1883–4</td>
<td>1</td>
<td>4</td>
<td>34</td>
<td>60</td>
<td>7</td>
<td></td>
<td>101</td>
<td></td>
</tr>
<tr>
<td>1884–5</td>
<td>1</td>
<td>4</td>
<td>44</td>
<td>63</td>
<td>2</td>
<td></td>
<td>109</td>
<td></td>
</tr>
<tr>
<td>1885–6</td>
<td>1</td>
<td>4</td>
<td>52</td>
<td>69</td>
<td>2</td>
<td></td>
<td>123</td>
<td></td>
</tr>
<tr>
<td>1886–7</td>
<td>1</td>
<td>4</td>
<td>54</td>
<td>73</td>
<td>2</td>
<td></td>
<td>129</td>
<td></td>
</tr>
<tr>
<td>1887–8</td>
<td>1</td>
<td>4</td>
<td>64</td>
<td>78</td>
<td>7</td>
<td></td>
<td>149</td>
<td></td>
</tr>
<tr>
<td>1888–9</td>
<td>1</td>
<td>4</td>
<td>55</td>
<td>84</td>
<td>5</td>
<td></td>
<td>144</td>
<td></td>
</tr>
<tr>
<td>1889–90</td>
<td>1</td>
<td>5</td>
<td>55</td>
<td>51</td>
<td>19</td>
<td></td>
<td>125</td>
<td></td>
</tr>
<tr>
<td>1890–1</td>
<td>1</td>
<td>5</td>
<td>52</td>
<td>46</td>
<td>68</td>
<td>10</td>
<td>176</td>
<td></td>
</tr>
<tr>
<td>1891–2</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>40</td>
<td>61</td>
<td>66</td>
<td>11</td>
<td>178</td>
</tr>
</tbody>
</table>
The following is a summary of the results of the Annual Examinations of 1891–92.

In the graduating class 3 students attained graduating averages between 90 and 95; 5 students attained graduating averages between 85 and 90; three students attained an average for the year of between 95 and 100; ten students attained an average between 90 and 95; 3 students attained an average between 85 and 90; 22 students attained an average of over 50 and less than 90; 2 students failed in their examinations and were not recommended for a degree, and 38 students were graduated.

In the second year’s class 2 students attained averages of between 95 and 100; 4 students attained averages of between 90 and 95; 3 students attained averages of between 85 and 90; 34 students attained averages of between 50 and 90; 9 students were conditioned in one subject; 4 students were conditioned in two subjects; 5 students having been conditioned in three or more subjects were dropped from the class; and 43 students were passed without conditions into the graduating class of 1892–93.

In the first year’s class 1 student attained an average of more than 95; 1 student attained an average of between 90 and 95; 2 students attained an average of between 85 and 90; 42 students attained an average of between 50 and 90; 4 students were conditioned in one subject; 5 students were conditioned in two subjects; and 11 students having been conditioned in three or more subjects were dropped from the class; and 46 students were passed without conditions into the second year class of 1892–93.

The prize lists and honor lists of 1890–91 and 1891–92 are printed in the annual catalogues of the University.

**THE GEORGE BIDDLE MEMORIAL LIBRARY.**

This Library was founded by the gift of 5,077 volumes by the family of the late George Biddle, Esq. Effingham B. Morris, Esq., has deposited in the Library 1,127 volumes; H. LaBarre Jayne, Esq., has given 192 volumes; sundry donors have given 61 volumes; the Faculty have provided by gift or purchase 1,958 volumes, and the Library now numbers 8,415 volumes.

The Department has since 1886–87 annually set aside 12 per cent. of its tuition fees and amounting, to 1891–92 inclusive, to the sum of $7,888.61, and disbursed that amount for the maintenance of the
Library, including the purchase of books and the salary of the librarian and janitor, and the purchase of library stationery.

Mr. S. Stanger Iszard, the Librarian, has managed the Library with ability and fidelity since it has been under his charge.

**The Financial Relations of the Department to the University.**

The University loaned to the Department the sum of $2,500 to defray the expenses of furnishing the Lecture Rooms and Library Room in the Girard Building. The interest upon this loan at 5 per cent. has been paid to the University, and $1,032.26 has been repaid to the University on account of the principal of the loan, reducing that principal to $1,467.74.

Since the removal of the Department to the Girard Building the Department has paid from its own receipts the rent of its Library Room and Lecture Rooms, and the salaries of its Dean, Professors, and Fellows, and the University has been at no charge for the operation of the Department other than the Department's share of the salaries of the Provost and Secretary of the University, and the Department's share of the expenses of the Annual Commencement.

Beginning with 1887 the Department has paid to the University net receipts (exclusive of the payment of interest upon and principal of the furniture loan) aggregating, to 1891-92 inclusive, $7,045.82, as follows:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1886–87</td>
<td></td>
<td>$377 60</td>
</tr>
<tr>
<td>1887–88</td>
<td></td>
<td>945 20</td>
</tr>
<tr>
<td>1888–89</td>
<td></td>
<td>1,002 00</td>
</tr>
<tr>
<td>1889–90</td>
<td></td>
<td>838 00</td>
</tr>
<tr>
<td>1890–91</td>
<td></td>
<td>1,942 08</td>
</tr>
<tr>
<td>1891–92</td>
<td></td>
<td>1,940 94</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>$7,045 82</strong></td>
</tr>
</tbody>
</table>
CONCLUSION.

My colleagues, the Professors and the Fellows, have rendered faithful, intelligent, and self-sacrificing services to the University, and the results of their work are seen in the continued growth and prosperity of the school.

I am, with sincere respect,

Your obedient servant,

C. STUART PATTERSON,
Dean.

APPENDIX IX.

REPORT OF THE DIRECTOR OF THE LABORATORY OF HYGIENE.

The Laboratory of Hygiene was formally opened on February 22, 1892, and a course in Elementary Bacteriology, covering three months, five days each week, from 9 to 12 A.M., was given, and attended by five students, three of whom were graduates in medicine. A course of Lectures upon General Hygiene was given to the first class in the Medical Department, including one lecture a week throughout the academic year, a course of Lectures on Ventilation, House Drainage, etc., was given to the Class of Architects and Engineers, and a course of Six Lectures upon the Hygiene of Apartments occupied by the Sick was given to the Training School for Nurses in the University Hospital.

Bacteriological examinations were made in seven cases in the University Hospital, in several cases in the Church House for Children and in the Children's Hospital, and in a number of cases presented by physicians for positive diagnosis in suspected diphtheria, anthrax and hydrophobia.

Inspection of premises, examination of water supply, plumbing, etc., were made in several cases, including an outbreak of typhoid in a large boarding school, and in a village, and advice given in each case.

Examinations of, and experimental work upon, the milk and tissues from milch cows suspected of being infected with tuberculosis, experiments upon the value of certain disinfectants, bacteriological
studies upon various bottled table or mineral waters, examinations of samples of suspected drinking water and of milk, and consultations in a case of leprosy, several cases of diphtheria, and an outbreak of anthrax among cattle in Delaware have also occupied the time of the Laboratory Staff during the spring and summer of 1892.

With the beginning of the academic year 1892–93, the Laboratory announced a course in Practical Hygiene, a course of Elementary Bacteriology, a course in Clinical Bacteriology and Chemistry, a course in Advanced Bacteriology, and a course in Physiological Chemistry, with special attention to the products of Bacterial Growths.

The first two of the courses above mentioned began October 3, and are to last eight weeks, five days in the week, from 9 A.M. to 12 M., with the privilege of continuing work until 5 P.M.

Thus far the courses in Elementary and Advanced Bacteriology are the only ones to which students have applied for admission. In the elementary course there are six students, and in the advanced course two students. Of the six students in the elementary course, one is a candidate for the degree of Doctor of Philosophy, and has studied Bacteriology as one of the minor subjects.

In connection with the instruction in Bacteriology, the main difficulty experienced by the Laboratory is in obtaining continuous attendance on the part of the students. The work is of such a nature that satisfactory progress can only be made by individual attention to the work during the time the course is given; a day lost in the middle of the week will frequently so disarrange the work of the week as to necessitate a repetition of all that might have been done in the days preceding. The character of the work is such that by the continuous application of the student for but a relatively short time, much more can be accomplished, and far greater progress made, than by irregular and discontinuous attention to work for a very much longer period.

There are few departments in which it is more essential for this to be borne in mind by the student than in the Department in Bacteriology. The hours of instruction are from 9 A.M. to 12 M. in the autumn course, and from 2 to 5 P.M. in the spring course, between which hours instructors will be in the Laboratory, and will direct and assist in the work of the students.

In September, 1892, Dr. Hill Sloane Warwick, College of Physicians and Surgeons, New York, Ph.D., University of Pennsylvania, was appointed Assistant in Chemistry. The work of Dr. Warwick will consist in assisting in the course of Practical Hygiene,
in the course in Clinical Chemistry and Bacteriology, and in the course in Physiological Chemistry.

In September, 1892, the Fellowship endowed by Mrs. Scott, as a memorial of the late Thomas A. Scott, Esq., of Philadelphia, was filled by the appointment of James Homer Wright, A.B., Johns Hopkins University, Baltimore, and M.D., University of Maryland, Baltimore.

The work of Dr. Wright, now being conducted in the Laboratory, and which will continue through the academic year, will consist in a detailed chemical and bacteriological study of the drinking water supply of Philadelphia. In addition to this, Dr. Wright will present at some time during the year a contribution in which will be embodied the results of his work. He will also probably deliver a short course of lectures upon the subject of domestic water supplies.

The regulations governing the Thomas A. Scott Fellowship in Hygiene are hereto appended:

REGULATIONS GOVERNING THE THOMAS A. SCOTT FELLOWSHIP IN HYGIENE.

1. Applications must be made in writing to the Provost of the University of Pennsylvania, and should be forwarded prior to May 1 of the year of the candidature.

2. The holder of the Fellowship shall not be more than thirty years of age at the time of his appointment.

3. The application must be accompanied by evidence of a liberal education, such as the diploma of a college of good repute (the appointment being regarded as an equivalent to the baccalaureate degree), by evidence of decided taste and ability in the direction of special study and scientific work, such as an example of some work already performed, and of good moral character, such as testimonials from his last instructors.

4. The holder of the Fellowship will be expected to perform such duties as may be allotted to him by the Director of the Laboratory in connection with his course of study, to act, when called upon, as examiner or assistant examiner; to use his influence for the promotion of the objects and good order of the Department, and, in general, to forward the efficiency of the University as far as may be in his power.

5. He will be expected to devote his time, under the direction of the head of the Department, to the prosecution of special studies having relation to the causation and prevention of disease, or to the
improvement of health, and before the close of the year to give evidence of the progress he has made by presenting a thesis, the report of the results of his research, the delivery of special lectures, or some similar method which will be satisfactory to the electors.

6. While holding the Fellowship he will not be permitted to engage in any work other than that directly bearing upon the interests of the Department.

7. All work performed is to be considered the property of the Laboratory, and to be published only with the consent and approval of the Director of the Department.

8. The Fellow will be expected to aid in the instruction at the Laboratory by lectures or otherwise, as may be directed, but will not be permitted to teach in any other institution during the time of holding the Fellowship.

9. He may be reappointed at the end of the year, but only for exceptional reasons.

10. The holder is exempt from tuition fees. In case of resignation, promotion or removal from the Fellowship, payments will be made for the time during which the office shall have been actually held.

11. The Electors have the right to declare the Fellowship vacant if its holder prove in their opinion unworthy, and no further salary shall be paid to the person thus removed.

APPENDIX X.

REPORT OF LIBRARIAN.

William Pepper, M.D., LL.D., Provost.

The past three years, covered by this report, are among the most memorable in the history of the Library.

Until the close of the College session of 1889–90 the great bulk of our books were stored, in very inadequate quarters, in the College Department; but at the end of that term they were transferred to our new Library building, which was opened October 1, 1890, and, more formally, with appropriate dedicatory proceedings, February 7, 1891. Our very beautiful edifice was an experiment in library architecture, both in the construction of the book-stack, particularly as
lighted from above, and in the introduction of several new devices in the reading hall and cataloguing room. It is matter of congratulation that the experiment has proved successful, and that, after two years' use of the building, we find little to alter or improve.

The increase of the Library during these years has been most gratifying, and altogether worthy of its new domicile. The total number of accessions amount to 48,986 bound volumes and 24,412 unbound volumes and pamphlets, exclusive of periodicals regularly subscribed for or presented.

Chief among these additions is the library of the late Professor Ernst von Leutsch, of Göttingen, comprising over 20,000 volumes, besides his own valuable manuscripts, purchased with money contributed by friends and alumni of the University through the zealous efforts and earnest recommendations of Professor F. A. Jackson. Added to our Allen and Pott Libraries, and works derived from other sources, it forms, it is believed, the finest classical library in the country.

Next in importance, probably, is the Library of the School of American History and Institutions, acquired largely through the interest and exertions of Professors J. B. McMaster and F. N. Thorpe. This consists of about 12,000 volumes, distributed as follows: United States documents, 4,500; State laws, 2,100; other State documents, 1,500; municipal documents, 500; Canadian documents, 550; the Jameson Library of Constitutional Conventions, 400; and miscellaneous books, 2,450. In connection with other United States documents in our Library, this constitutes one of the three largest such collections in existence.

Another valuable addition to our shelves is a choice Library of German literature, numbering 1,552 volumes, purchased with funds procured by Professor Oswald Seidensticker.

With money contributed for that purpose a good Library of Psychology is forming, comprising already 106 volumes.

The William Pepper Library has been founded, and comprises at present 538 volumes, chiefly on medicine.

The Isaac Norris Library has been liberally endowed, and purchases of 24 volumes have recently been made out of that fund.

The J. B. Lippincott Library has been created by a gift of $10,000 from the family of Mr. Lippincott for the acquisition of works of English literature. It numbers at present 1211 volumes.

Out of the fund contributed by Mr. Joseph Wharton 200 volumes have been bought, relating to Finance and Economy.
The classes in the College Department have continued their praiseworthy custom of presenting books to the Library on occasion of their graduation, and have given as follows: The Class of 1888, 1 volume (additional to those already reported); the Class of 1890, 34 volumes; the Class of 1891, 21 volumes; and the Class of 1892, 25 volumes.

There have been added to the Krauth Library of Philosophy 16 volumes, to the B. B. Comegys, Jr., Library of Philosophy, 55 volumes, and to the Henry Seybert Library of Modern Spiritualism 107 bound volumes and 57 pamphlets.

The Tobias Wagner Library has been increased 611 volumes.

The George Biddle Memorial Law Library has received accessions to the number of 3116 volumes, and contains at present 8418 books.

Conspicuous among the many gifts to the Library is the large and valuable collection of books on Geology, Palaeontology and Natural History, which belonged to Dr. Joseph Leidy, presented by Mrs. Leidy.

Mrs. Charles A. Ashburner presented the geological library of her husband, numbering 656 bound volumes, 867 unbound pamphlets and periodicals, and 110 maps.

Mr. Francis Campbell Macauley gave 221 volumes, chiefly French, Spanish, and Italian literature.

Mr. Brinton Coxe contributed 25 volumes of Sacra Rotae Romanae Decisiones, and other works of Canon Law.

The Rev. Frederic M. Bird presented the original manuscripts of his father's, Dr. Robert Montgomery Bird's, novels, "Nick of the Woods," "Calavar," and "Hawks of Hawk Hollow," and a portion of that of "Robin Day," as well as Dr. Bird's medical lectures.

The Rev. Dr. William H. Furness gave 44 volumes on Slavery.

From Mr. Richard Henry Bayard Bowie we received 229 volumes of Chinese literature, and 194 books on other subjects, from the fine library of his father, the late Richard Ashhurst Bowie.

From Mrs. Horace Binney Hare, 274 bound volumes and 130 unbound volumes and pamphlets, chiefly medical and chemical.

From Professor Alfred Stillé, M.D., 371 bound volumes, and 118 unbound volumes and pamphlets, medical and miscellaneous.

From the family of Major-General George Gordon Meade, 325 bound and 232 unbound miscellaneous books.

From Mr. Archibald R. Montgomery, 278 bound volumes, and 56 unbound books and pamphlets.
From Mrs. Arthur Biddle, 147 books.
From Mr. Clarence H. Clark, a fine copy of the Medallic History of the Netherlands, in 27 volumes.
From Mrs. H. H. Smith, 160 volumes from the surgical library of her husband, the late Professor of Surgery in the University.
From Mr. Philip S. P. Randolph 541 bound, and 46 unbound books, constituting the medical and surgical library of his great-grandfather, Philip Lyng Physick, M.D., Professor of Surgery and Anatomy in the University.
From Mr. Philip S. P. Randolph 541 bound, and 46 unbound volumes and pamphlets, medical, historical and miscellaneous.

In addition to the above, gifts specially worthy of mention have been received from Dr. Horace Howard Furness, Dr. S. Weir Mitchell, Mr. J. Vaughan Merrick, Hon. Henry Reed, Mr. John C. Sims, Jr., Mr. Charles Hare Hutchinson, Professor W. P. Wilson, Professor Fairman Rogers, Major-General S. W. Crawford, Professor O. Seidensticker, Dr. J. H. Musser, Mr. Craig D. Ritchie, Mr. J. Dickinson Sergeant, Mr. Charles Chauncey, Dr. H. C. Wood, Mr. Stuart Wood, Mr. Stewart Culin, Dr. C. C. Abbott, Dr. Charles Schäffer, Rev. James W. Robins, Mr. Joseph Hartshorne, Dr. Horace Jayne, Mr. C. C. Roberts, Dr. James Collins, Dr. William Savery, and Mrs. Charles P. Keith.

The cataloguing of the Library has proceeded as usual, and during the past three years 96,854 cards have been written, representing 38,637 volumes and 43,192 works.

The Library is open daily, except Sundays and Legal Holidays, during the College session, from 8.30 A.M. to 5.30 P.M., and, from the close of the College term in June till the reopening in October, from 9 A.M. to 5 P.M.

Respectfully submitted,
GREGORY B. KEEN,
Librarian.

APPENDIX XI.

REPORT OF COMMISSION TO THE TERCENTENARY OF THE UNIVERSITY OF DUBLIN.

To the Board of Trustees of the University of Pennsylvania:

Having been honored with the appointment of clerk to the delegation designated by your honorable body to represent the University
of Pennsylvania at the Tercentenary Celebration of the University of Dublin, I beg leave to present the following report:

On Tuesday, the 5th day of July, 1892, the guests and delegates, in full academic costume, were received by the Provost in the Examination Hall. After the reception, which lasted about an hour, the procession was formed in the quadrangle and marched through the gaily decorated and crowded streets to St. Patrick’s Cathedral, where the celebration was duly inaugurated by a special service appointed for the occasion. The sermon was by the Very Reverend Henry Jellet, D.D., Dean. At four o’clock in the afternoon the Fellows’ Garden was the scene of one of the most beautiful and interesting ceremonies of the week, when Miss Salmon, daughter of the Provost, planted in the presence of more than four thousand invited guests a mulberry tree as a companion to the ancient tree that has graced the gardens for so many centuries. During the planting a beautiful Latin ode, written by Prof. Tyrrell expressly for the occasion, was sung. At nine in the evening the Tercentenary Ode was performed in the Leinster Hall by the University Choral Society, before a brilliant and enthusiastic audience. The day’s festivities were then brought to a close by a ball at the Mansion House, tendered by the Lord Mayor and Lady Mayoress to the University and her guests.

At noon on Wednesday the Senate of the University met in the Examination Hall to confer honorary degrees upon certain of the more distinguished of her guests. The honorary graduates led the procession as it entered the hall, and were followed by the Professors, Fellows, and by the University Caput, consisting of the Earl of Rosse, Chancellor of the University; the Rev. Dr. Salmon, Provost of the University, and the Rev. J. T. Barlow, Senior Master non-Regent. The honorary degrees were then conferred upon eighty-three distinguished men, each group being welcomed by Prof. Tyrrell with an appropriate Latin speech setting forth the services of Art, Science or Literature that were thus recognized by the University. When the degree of Doctor of Medicine was conferred upon John Shaw Billings, of Washington, Professor of Hygiene in the University of Pennsylvania; Thos. Bryant, Pres. R.C.S.; Sir Andrew Clark, Bart., Pres. R.C.P.; Adolf Gusserow, of Berlin; Jonathan Hutchinson, of London, and Thos. Grainger Stewart, of Edinburgh, Prof. Tyrrell said:

"Ad Doctoratum Medicinae accipiendum presto sunt viri fama omnes super æthera noti. Utinam omnes laudibus idoneis efferre
vacaret. Sed Hippocratem illum, huius artis saluberrimae et vene-randissimae paene auctorem, videor mihi videre adstantem et admo-nentem jucundo hoc munere esse supersedendum, brevem enim esse vitam, longam artem."

Other Americans who received honorary degrees were: Prof. I. H. Hall, of New York; Prof. J. H. Thayer, of Cambridge; Prof. O. C. Marsh, of New Haven; Simon Newcomb, of Washington, and Gen. F. A. Walker, of Boston.

On Wednesday afternoon a garden party was given by the Lord Lieutenant and Countess of Zetland at the Vice-Regal Lodge, at which more than a thousand guests were present. On Wednesday evening the Tercentenary Banquet was given in the Leinster Hall. The chair was occupied by the Earl of Rosse, Chancellor of the University. At his right were His Excellency the Lord Lieutenant, the Lord Chancellor of Ireland, the Lord Primate, the Marquis of Londonderry, Lord Kelvin, Sir Frederick Leighton, the Rt. Hon. David Plunkett, and Dr. Ingram, F.T.D.C. On the left of the Chairman were the Provost of Trinity College, Dublin; General Viscount Wolseley, the Lord Mayor of Dublin, the Lord Archbishop of Dublin, the Marquis of Dufferin and Ava, Prof. Lannelongue, of Paris, the Bishop of Derry, the Master of Trinity College, Cambridge, and Mr. Lecky. Among the toasts of the evening were: "The Universities," proposed by Dr. Ingram, to which the Bishop of Oxford and Prof. Lannelongue responded; "Trinity College, Dublin," proposed by the Master of Trinity College, to which the Provost and the Hon. David Plunkett and Mr. Lecky responded; "Science, Literature and Art," proposed by Lord Dufferin, to which Lord Kelvin responded on behalf of Science, the Bishop of Derry on that of Literature, and Sir Frederick Leighton on that of Art.

On Thursday, July 7, the guests and delegates, Faculty, Fellows and Caput of the University, formed in the quadrangle and proceeded to the Leinster Hall, where the addresses of congratulation were presented to Trinity College, Dublin, by the visiting delegates on behalf of the universities and other learned bodies there represented. One representative of each country made a short speech, and in this capacity President Gilman, of the Johns Hopkins University, gracefully and suitably voiced the sentiments of America. Professor Edmund J. James being unfortunately unable to appear, the University of Pennsylvania was represented by Professor John Shaw Billings and Dr. Wm. Romaine Newbold. The congratulatory
address, presented by Professor Billings on behalf of the University, was as follows:

**Universitas Pennsylvaniensis Universitati Inclitae Dublinski.**

S. P. D.—Pergratum fuit nobis quos ad dies festos ob elapsum Universitatis Vestrae celeberrimae saeculum tertium concelebrandos nos invitavistis. Cum ab omnibus quamvis rudes in philosophia ac litteris in memoria habentur habebunturque semper nomina illa clarissimorum civium vestrorum Berkelei et Burkei, ita ab Americanis precipue qui hominum eorum semper gaudent recordari beneficia patriae sunt data, illis quidem honestissima sibi autem utilissima. Neque liberalitatis oblivisci possumus nos quidem civium Dublinski in Praefectum nostrum illo tempore cum schola nostra, tum primum institutae, opem atque auxilium petebat, humanitatisque in eundem gravi et periculo morbo laborantem, postremo precipue honoris ei ab Universitati Dubliniensi habit. Theologiae enim doctoris dignitatem Praefecto Smithio cum pro meritis ejus clarissimis tribuit Universitas vestra tum maxime propter operam quam dedit ut apud nos quoque terrarum novarum atque prae nonnullarum incolas studium litterarum augerat, quo nostratibus doctrinam illam praeberet in omnibus artibus liberalibus quae apud vos tunc floreat, ut nunc quoque floret ad magnam gloriam patriae civiumque omnium utilitatem.

Floreat in multa etiam saecula Universitas Dublinskiensis, tot virorum illustrium Mater illustriissima.

VALETE.


On the afternoon of the same day the guests and delegates were most hospitably entertained by Lord Wolseley, at the Royal Hospital, Kilmainham, and in the evening two plays were presented at the Gaiety Theatre by the graduates and undergraduates of the University.

On Friday, at eleven in the morning, certain of the guests addressed the students in the Examination Hall. Among those who spoke were Gen. F. A. Walker, of Boston; Prof. Waldeyer, of Berlin; Prof. Vambery, of Buda-Pest, and Prof. Max Muller, of Oxford. The festivities of the week were then concluded by a brilliant ball given by the University in the Leinster Hall.

On Monday, Wednesday and Friday afternoons athletic contests of
various kinds took place on the college grounds, and were witnessed by vast throngs of people. On Friday afternoon the Earl and Countess of Ross entertained the delegates at Birr Castle, and on Saturday many of the visitors, by special invitation of the Royal Society of Antiquaries of Ireland, accompanied the members of the Society on an excursion to Kells, County Meath.

In concluding this report your delegates wish to express their profound appreciation of the courtesy that was extended to them and others by the people of Dublin, and more especially by the authorities of the University, the learned societies and social clubs of the city, and by those gentlemen whose hospitality they enjoyed. It is the sense of your delegates that no attention which courtesy and hospitality could suggest was omitted, and circumstances so happily co-operated with the efforts of the authorities as to make the Tercentenary Celebration of Trinity College, Dublin, in the judgment of all those who had the privilege of taking part in it, as brilliant a success as its promoters could have wished.

JOHN SHAW BILLINGS, EDMUND J. JAMES, Delegates.

For the delegation,
WM. ROMAINE NEWBOLD.

NOTE.

It was intended to insert as an appendix abstracts from the Annual Reports made by the Treasurer to the Board of Trustees, including lists of money donations received by him for the various interests of the University. Circumstances have prevented the publication of his last report at this date, and it has been decided to defer the general financial statement to a later publication, in which fuller details will be given than would be possible in the limited space of these appendices.
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REPORT

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For the three Years ending October 1, 1892.

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