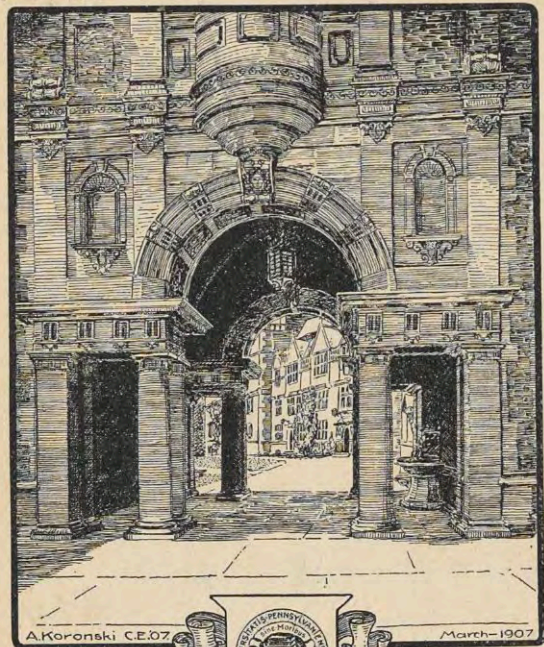


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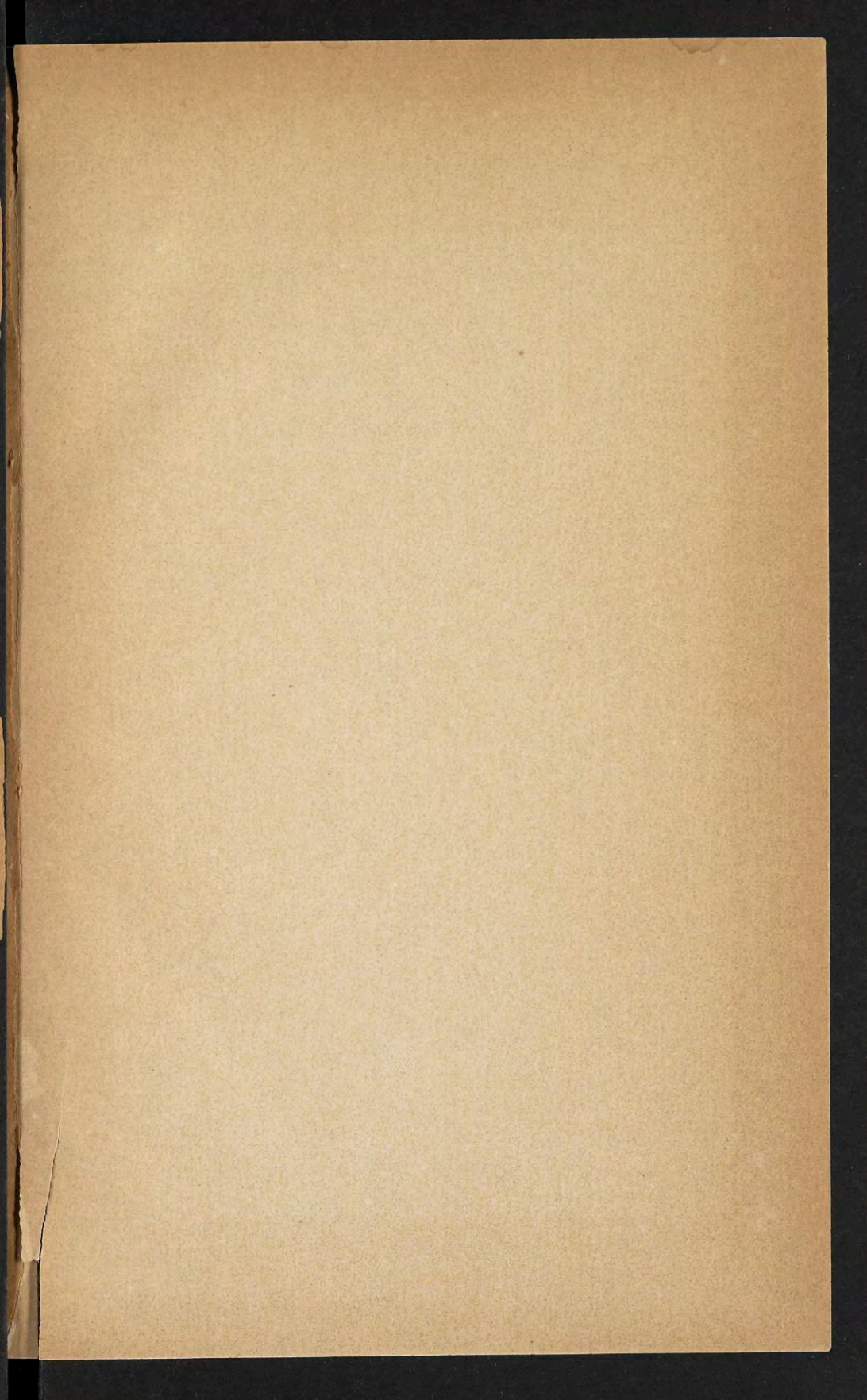
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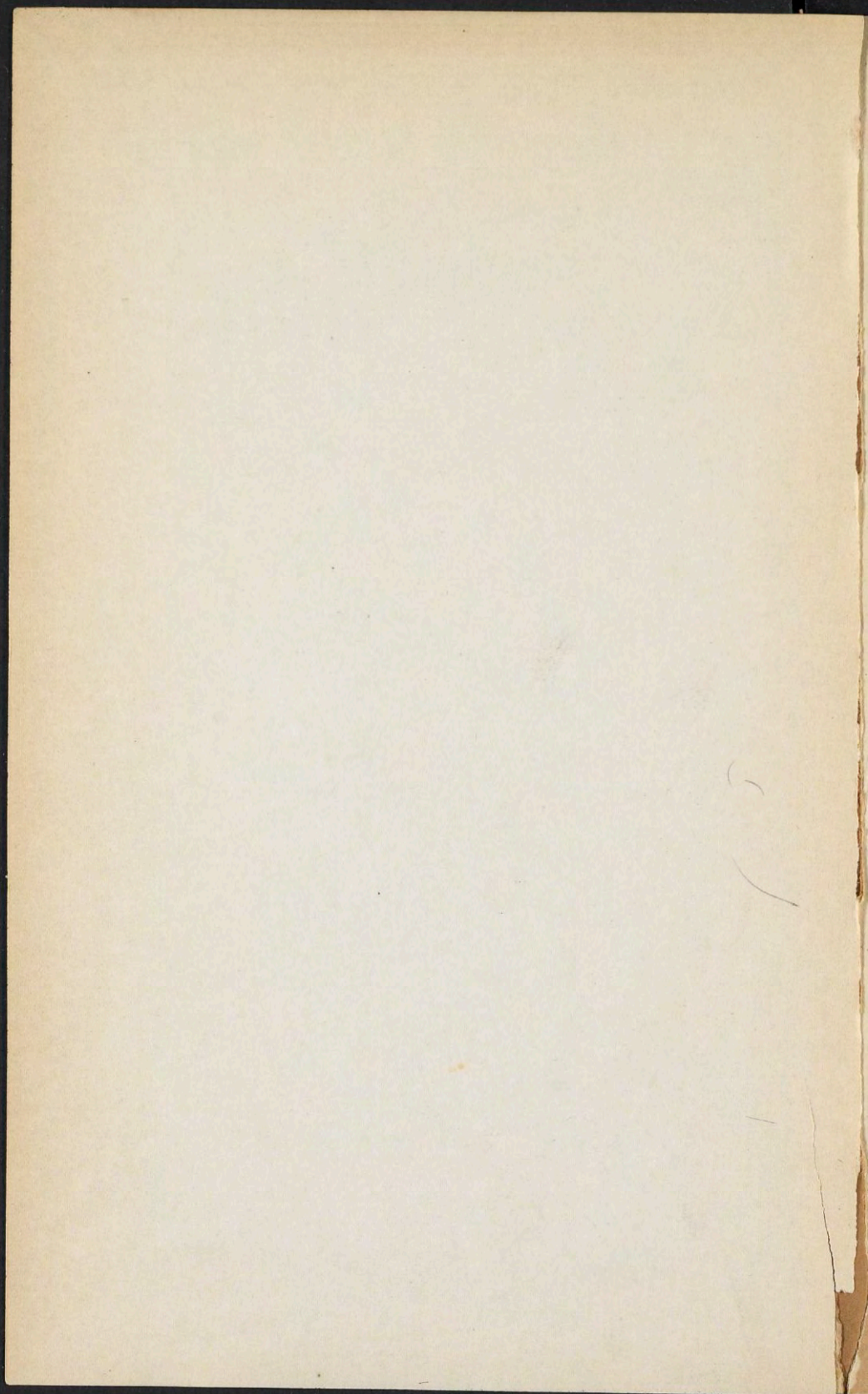
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PRESENTED BY
George E. Nitzsche









UNIVERSITY OF PENNSYLVANIA

Annual Report

OF

THE PROVOST

TO THE

BOARD OF TRUSTEES

From September 1st, 1900, to September 1st, 1901

PHILADELPHIA
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ANNUAL REPORT OF THE PROVOST.

To the Trustees of the University of Pennsylvania;

GENTLEMEN:—I have the honor to present herewith my report as Provost of the University for the academic year ending August 31, 1901. It has been a year marked by inevitable changes, caused by loss and gain among officers and instructors; and to these I will first call your attention.

Your Board met with very serious loss in the death, on January 6, of Mr. John C. Sims. Mr. Sims was graduated from the College in 1865, carrying with him the warm affection of those who were his associates in college life, and imbued with a very loyal feeling for the University. It was very fitting, therefore, that he should receive the nomination, by the Central Committee of the Alumni, for the vacancy on the Board of Trustees occasioned by the decease of Mr. Eli K. Price, and he was elected a Trustee in 1884. He took a lively and effective interest in all departments of University work and in its Hospital. At the time of his death, Mr. Sims was Chairman of the Committee on Physical Education, and a member of several other committees of the Board. His death came as a shock to those to whom his manhood seemed to be of such a vigorous type; and the loss of his genial presence, his warm heart, and his loyal friendship, was deeply deplored by the whole University.

The Rev. George Dana Boardman has been unable, for the last two years, on account of serious failure of health, to take an active part in the work of the Board. Only by the most strenuous effort could he undertake to prepare and deliver, in November last, that lecture on Christian Ethics

which initiated the series for which his liberality has provided—under the name of the “Boardman Lectureship in Christian Ethics.” Unwilling to hold a position, the duties of which he could no longer perform, Dr. Boardman regretfully tendered his resignation on June 4, 1901, which was received by you with expressions of regret, and of the warm esteem in which he has been held by his colleagues during the twenty-two years of his trusteeship.

The senior Professor in the University, Francis Aristide Jackson, Professor of the Latin Language and Literature, died on April 4, 1901. Professor Jackson was a graduate in the College Class of 1848, and in 1855 was elected to the Adjunct-Professorship of Greek and Latin under the distinguished Professor George Allen. In 1864, he was assigned to the Chair of Latin, and his whole professional life was devoted to that subject. He was a minute and painstaking scholar, devoting the greater part of his work to the grammatical and structural teaching of the language, in the belief that students effectively drilled therein would pursue with pleasure and profit, later on, studies in classical literature. He was a man of wide culture in other fields, of the purest character, and deservedly honored by his fellow-instructors and by a long line of Alumni.

Dr. Charles J. Essig has resigned the Professorship of Mechanical Dentistry and Metallurgy, which he held for twenty-three years. Professor Essig was one of the original Faculty of the Dental School, chosen by reason of his high reputation in the profession and his extensive and practical knowledge of the metallurgical problems incident to dental practice. On him fell a full share of the labors attending the organization of the Department, of which he was the first Dean, and his professional career has always been such as to reflect credit upon the school in which he taught.

Two vacancies in the Board of Trustees have been filled by election. Mr. J. Levering Jones, a graduate of the Law School in the Class of '75—who, without official connection with the University, had been most zealous in its service for several years past, was elected in the place of Mr. Sims.

Dr. Frederick A. Packard, Class of '82 College, and '85 Medical, was elected to fill the place vacated by the death of Dr. Da Costa.

A vacancy still exists, to be filled on nomination by the Central Committee of the Alumni, and it is to be hoped that a speedy election will fill the Board to its full number and greatly strengthen its several committees.

A year ago, Professor Edgar F. Smith was made Vice-Provost *pro tempore*, in order that certain necessary duties of the office might be performed. Since that time it has been so manifestly evident to the entire University body that he was the right person for the office that he was duly elected to it, by the unanimous vote of your Board. The Vice-Provostship, properly filled, is a most helpful adjunct to the administration; and I cannot but express my satisfaction at this appointment, and my deep gratitude to Dr. Smith for his unselfish and manifold services.

Dr. Martin G. Brumbaugh remains at Porto Rico, in discharge of his duties as Commissioner of Education for that island; and until his leave of absence terminates (next year) his work will continue to be provided for by Dr. N. C. Schaeffer.

Professor Emory R. Johnson, having completed his work as a member of the Isthmian Canal Commission, returns to duty as Assistant Professor of Transportation and Commerce.

Among the appointments for the year were those of Dr. Thomas R. Neilson to be Clinical Assistant Professor of

Genito-Urinary Diseases, and of Dr. M. Howard Fussell, as Assistant Professor of Medicine. These gentlemen have been for several years in the service of the University, and enter upon their new offices with the confidence of the members of the Medical Faculty.

I had great pleasure in being permitted to announce, during the year, the name of the donor of that generous subscription for the erection of a Physical Laboratory—which had previously been reported to you, and upon the strength of which our plans for the development of the Department of Physics were based.

I am sure that it was with equal pleasure that you learned that the gift was that of your colleague, Mr. Randal Morgan. We have had valuable personal service from Mr. Morgan, since his election as a Trustee, and when this service was supplemented with so notable a gift of means wherewith to carry out our plans, it impressed all of us with a sense of gratitude—which was but fittingly manifested in unanimously naming the future building and equipment “The Randal Morgan Laboratory of Physics.”

The past year has been most fruitful in evidences of the active loyalty of the Alumni of the University. Among these, I have first to report the various gifts received from classes as memorials of their affection. The Class of '89, College, presented to the Library a collection of books on Philosophy, costing \$1,730.25. The Graduating Class in the Dental Department presented a handsome clock, for Dental Hall. The Classes of the College, a clock for the inner reading-room of the Library; the Class of '99, College, a clock for the entrance of Houston Hall. The Class of '94 presented exquisite gates, for the entrance way of the Memorial Tower. And these beautiful gifts not only enrich the buildings in which they are placed, but are a valued pledge of the con-

tinued interest of the men who gave them in the welfare of the University.

Other manifestations were the formation of new local societies of the University Alumni in various parts of the country, and the interesting reunions of those that had been already established.

On October 6, the New York Club of Pennsylvania dedicated a handsome suite of rooms, and new Alumni Associations were formed at Williamsport, at Buffalo, at Harrisburg, at Reading, and at Lebanon. Interesting meetings were held at Chicago and Milwaukee, of the societies already established in these cities. I had the pleasure of attending several of these functions, and at all of them were delegations of our trustees and professors, who were received with the greatest cordiality, and whose reports of existing affairs at the University were listened to with the liveliest interest. I anticipate the most important benefits to the University from the maintenance of these local organizations, and the expressions of approval and encouragement made by you to them have evidently gone far to confirm their purposes of helpfulness to the University.

Another evidence of Alumni interest was the publication, at the expense of two of our recent graduates, of a brief but comprehensive history of the College, written by Mr. Charles Louis McKeehan and Dr. Cornelius Weygandt. It is an attractive and handsomely illustrated volume and is intended to be used in disseminating a popular knowledge and exciting a more general interest in the history and present affairs of the College.

Among the notable events of the year was the meeting, in this city, of the General Assembly of the Presbyterian Church of the United States of America. It was deemed fitting that a gathering which embraced so many representa-

tives, from all parts of the United States, of those whose culture and interest in learning is traditional, should be courteously entertained at the University and made aware of its resources and the work which it is doing. An invitation to luncheon in the Museum Building was cordially accepted, and under the guidance of members of the Faculty, the visitors were escorted through the Museums and to various Departmental Buildings. The expressions of gratification amply justified the attentions of the University.

STATISTICS OF TEACHERS AND STUDENTS.

The number of Professors, Lecturers and Instructors is five greater than that recorded one year ago. The total is 265. There has been a net decrease of 100 in the total number of students—entirely in the Departments of Medicine and of Dentistry. The increased entrance requirements have had the expected effect of reducing, for the time being, the number of successful applicants for admission to these Departments. At the same time, there has been a decided increase in the number of students in the College and in the Law Department.

The statistics classified, as in my last report, and compared with those of the preceding year, are as follows:

PROFESSORS, LECTURERS AND INSTRUCTORS.

	1899-00.	1900-01.
The College	104	107
Department of Philosophy	54	51
Department of Law	14	17
Department of Medicine	94	95
Laboratory of Hygiene	3	4
Department of Dentistry	41	42
Department of Veterinary Medicine	18	24
Emeritus Professors	5	4
	<hr/>	<hr/>
	333	344
Duplications	73	79
	<hr/>	<hr/>
Total	260	265

STUDENTS.

	1899-00.	1900-01.
The College	968	1,006
Department of Philosophy	172	168
Department of Law	312	347
Department of Medicine	682	566
Laboratory of Hygiene	19	18
Department of Dentistry	484	417
Department of Veterinary Medicine	46	60
	<hr/>	<hr/>
	2,683	2,582
Duplications	10	9
	<hr/>	<hr/>
Total	2,673	2,573

I subjoin, as usual, a table giving the geographical distribution of our students for the year 1900-01 :

GEOGRAPHICAL SUMMARY OF STUDENTS.

Africa 1	Indiana 9	North Carolina . . . 8
Alabama 4	Iowa 15	North Dakota . . . 1
Arizona 2	Italy 1	Ohio 53
Arkansas 1	Ireland 3	Oregon 2
Australia 7	Jamaica 3	Pennsylvania . . . 1787
Austria 1	Japan 1	Porto Rico 5
Brazil 2	Kansas 7	Rhode Island . . . 17
California 17	Kentucky 8	Russia 3
Canada 17	Leeward Islands. . 1	Scotland 1
China 2	Louisiana 3	South Carolina . . 6
Colorado 3	Maine 25	Spain 2
Connecticut . . . 33	Maryland 22	Switzerland 3
Costa Rica 4	Massachusetts . . 54	Tennessee 4
Cuba 4	Mexico 4	Texas 8
Delaware 34	Michigan 14	Utah 4
Dist. of Columbia . 4	Minnesota 2	Vermont 2
Ecuador 2	Mississippi 2	Virginia 7
England 8	Missouri 11	Washington 3
Florida 3	Nebraska 1	West Virginia . . . 10
France 2	New Hampshire . . 5	Wisconsin 16
Georgia 2	New Jersey 150	
Germany 5	New Mexico 1	2582
Holland 1	New York 107	Duplications . . . 9
Idaho 1	New Zealand 9	<hr/>
Illinois 21	Nicaragua 1	Total 2573

THE COLLEGE.

Changes in the teaching staff receive the first consideration in the report of the Dean of the College. The one change which perhaps affected the department most deeply was occasioned by the death of Professor Jackson, already noted, who served his Alma Mater continuously for a period of forty-six years. It is a comforting thought to realize that not only those who were his early students, but also those who attended his courses in the latest years of his connection with the department bear loving testimony of him as a faithful, painstaking and patient teacher, scholar and gentleman. The tribute of his colleagues of the College Faculty is further evidence of the high esteem in which Professor Jackson was held by those who came in intimate daily contact with him, and were privileged to note "the tenderness of heart and large charity" characteristic of him.

It is gratifying to observe that the public service performed in Porto Rico, during the year, by Professors Brumbaugh and Rowe, in behalf of education and the reconstruction of the laws of that Island, has been attended with great success, and has received the respectful approval of those acquainted with and most interested in the problems which confronted these men. This work represents one of the many ways in which the University in some measure fulfills its duty as an educational institution. Furthermore, the experience and knowledge gathered by those engaged in such important, external work are ultimately reflected in ways helpful and beneficial to the student body. Comprehensive and cosmopolitan study, through travel and personal observation, broaden teacher and pupil alike.

Promotions to positions of honor and greater responsibilities in other institutions have come to several members of the teaching staff. These are tributes of high order to

their learning and progressive spirit. That these men may continue to labor in their new walks with the same success, credit and respect enjoyed while in our midst is the hope of those from whom they have separated.

Five instructors have been advanced to the grade of assistant professor in the College.

For many years the University has been in sad need of a separate building for the Department of Physics. To-day we may be glad because that want is now admirably supplied by the Randal Morgan Laboratory of Physics. The equipment of this acquisition is excellent. Apparatus of the most modern type has been procured, and College men are now availing themselves of the opportunity to become familiar, as never before, with practical work in a science which enters so largely into the affairs of every-day industrial life. The students show a deep interest in the subject of Physics; the various rooms are rapidly filling up, and the day probably is not far distant when ampler accommodations will be required. The opportunities for research in the present laboratory are many, and it is inspiring to know that investigations of high order are being conducted by instructors and by advanced students as well. The munificence of the donor of this laboratory will receive full return in the great good conferred upon students and investigators alike. The writer cannot refrain from saying that in his judgment, based on personal observation, a new day is breaking over the College in the line of physical research as a consequence of these new and splendid facilities.

Another department of science which has been so fortunate as to come into possession of more complete equipment during the year is that of Geology and Mineralogy. These are subjects, or perhaps it would be better to say fields—in which for many years Pennsylvania has been pre-emi-

ment. The investigations of its professors and students in these subjects have won high respect. The research work of the present staff continues to command confidence, and the additions of valuable collections of minerals as well as of much needed apparatus through the generosity of friends, give enlarged opportunities to the many persons who devote themselves to these studies. Botany and Zoölogy, ever active along the lines of research, have also received similar contributions and are making corresponding advances.

Benefactors, who have given generously of their means for the objects mentioned in the preceding lines, need merely visit the University to be convinced by the evidences on all sides of the growth and development which are following their public spirit.

Friends, interested in the work of the students of the College, have established no less than eight prizes during the year. This interest is deeply appreciated by those for whom the prizes are intended.

The officers of instruction in the College have made earnest efforts to bring the University into more intimate relations with the community at large. These efforts have in the past year taken the shape of public lectures, of which twenty, treating of Archæology, Fine Arts, History, Social Science, Literature, Philosophy, Psychology, Physical Science, etc., were delivered in the College Chapel. They attracted large and interested audiences. Their favorable reception has induced those most active in this work to continue the project this year, and from the most recent reports with results that are even more encouraging. The lectures of the Cercle Français happily supplemented the above work.

Very probably no portion of the Dean's report will hold the reader's attention more closely, or occasion greater and

more earnest thought than that following the caption: "The Reorganization of the Courses in Arts and Science, Finance and Economy, and Biology." It brings to every alumnus of the College and to every student food for reflection. The Academic Council advocates a radical departure from a well established course. The aim is to enable students to earn their degrees in three, four or five years. Those desirous and capable can condense the work of the old four years' course into three years. This will permit them to begin the work of the professional schools a year earlier. It is probable that class distinctions will fall, but they may be maintained by those who choose to continue their studies through four years. At the same time those who, for various reasons, require a longer period in which to perform the required work may distribute the same over five years. When the plan shall have been worked out in detail, the proposal will show a combination of the group system as now conducted in the College, with enlarged privileges in the electives. It is very likely that the plan, when put into final operation, will lead to the free elective system, so that the student at the beginning of his academic career will select the subjects for his study. The plan, at present, appeals favorably to both instructors and students.

Finally, the tables attached to the Dean's report contain much valuable information. This relates largely to the inner life of those engaged in the College. Evidences are numerous of the great desire of the Faculty to elevate the standard along all lines of study, keeping ever in view the true aims of a university, while holding the interest and regard of the student body. The latter also is alert to the many forward movements and is responding heartily and cordially. The different student organizations are active and zealous in advancing the cause of their University home

at all times and upon every proper occasion, and it is not too much to say that the prevailing spirit in the entire academic body is wholesome and earnest.

THE GRADUATE SCHOOL.

The report of the Dean is a plain story of a year of successful work. There are the usual tables giving the numbers and geographical distribution of the students. The facts there found will prove not less gratifying than in previous years. I may point out as worthy of careful attention the very full account of the scientific work and publications of the Senior Fellows. It is matter of sincere pride that our system of fellowships should be so fruitful as it now is and has been from the first. During the past year one has been added, a fellowship in Assyriology, and regulations have been drawn up to govern it. Upon the recommendation of Dr. Hilprecht, this fellowship has been filled by the appointment of Dr. Hermann Ranke. Several pages of the Dean's report are devoted to a question of no little importance and difficulty. It concerns the admission to graduate work of many applicants from other colleges.

As is well known, there is no universally accepted standard as to the quantitative content of the college course. The curriculum varies with the college. And so a college graduate, who has received one of the prescribed degrees, will sometimes be found to have covered less ground (in positive knowledge) than is provided in the corresponding course in our own College, or in that of several other colleges. And this difference of quantitative content is itself a variable quantity. Yet, on the other hand, it will at times be found that this would-be student, in spite of his disadvantage in attainments, is qualitatively, in point of maturity of mind and of preliminary appreciation of the nature of scientific work,

quite on a par with his comrade, who has had the fuller college course. Unless then his disadvantage be very pronounced, it would be worse than a hardship should this applicant be peremptorily excluded from graduate work until he had taken another year or so of undergraduate study. Some provision there should be by which we could give him, tentatively at least, the position he can lay some claim to, that of graduate student, while furnishing him the means and opportunity for filling the gaps there may be in his knowledge.

And it should be remembered, here, that the boundary separating graduate from undergraduate work is much of the nature of an imaginary line; we all draw it more or less subjectively, when we draw it at all. It would be hard to give a rational defence of any line that has been drawn. In fact the two kinds of work shade off the one into the other. In the debatable interval the same work may be called by either name. At several colleges these facts have been recognized, and "mixed courses" have been established, open to graduates and undergraduates alike; some primarily for graduates, to which forward undergraduates may be admitted; some primarily for undergraduates, but open to such graduate students, as may be in need of them. This seems a rational solution. It is in no sense, either in intent or in fact, a cheapening of the graduate degrees; for it would simply, in these cases, prolong the graduate course for a year on the average, while avoiding unnecessary duplication of work. But in our University, as the Dean points out, the presence of women in the graduate department causes a difficulty. For it will at times happen, that it is a woman who needs this provision and in a line of work that is not open to women in the College. The problem deserves thought.

Miss F. R. M. Hitchcock, Ph. D., has resigned her position as Director of Women Students. She held it for four years. Those who have had the pleasure of knowing her will not need to be told of her loyal interest in all that touches the welfare of the University of Pennsylvania; but only those who have had opportunities of close observation can fully appreciate the spirit of self-sacrifice and the earnestness with which she took up her work, and the time, thought and labor she gave to it.

I desire again to record my thanks to Dr. Nathan C. Schaeffer for his valuable services in giving the graduate courses in Pedagogy during the absence of Professor Brumbaugh on public service in Porto Rico.

DEPARTMENT OF MEDICINE.

In previous reports attention has been called to the two-fold purposes of a great medical school; on the one hand to provide the best teaching, on the other to infuse the spirit and fact of investigation into the region of the unknown. A great medical school is not doing its work, if it only trains prospective practitioners in the art of medicine and surgery, no matter how advanced this training may be. It must go further. While the practical applications of a science must ever be exhibited, and the manner of use carefully expounded, yet, not less, must the basis of scientific knowledge upon which both art and practice depend be accurately taught. Otherwise the candidate for professional preferment is likely to leave the University with little prospect or possibility of future growth.

The rapid development of medical science within the past generation has so greatly affected medical art, and the field of practice has been so transformed thereby, that the

physician of ten or twenty years ago, who has failed to keep abreast of his times, cannot even grasp the significance of many of the subjects now necessarily included in a modern and progressive medical curriculum. The depth of the change that has come over medical teaching within the last decade or two only indicates greater and more beneficent advances, which the next ten or twenty years have in store. Hence it is that the course of instruction designed for to-day for the candidate for the degree of Doctor of Medicine must include not only a judicious and fastidious selection from the stock of knowledge in hand, but it must equally prepare him for a consistent and normal growth along the lines of advance of medical knowledge.

The time that is now demanded by the so-called fundamental or scientific branches of medicine far exceeds that which, a few years ago, would have been regarded as possible or desirable; and the indications of even greater needs in this direction may be already discerned. Not only should every student be required to do a minimum of work in the laboratories where the instruction is at once scientific and practical, but also the opportunity should be offered to the more able and ambitious to extend this fundamental work into the region of research. It is therefore a matter to be commended, that by a slight rearrangement of the opportunities for additional hours of work, the best students are already availing themselves of the increased advantages.

In my previous report it was stated that an atmosphere of research is the best for the training of students in medicine, in that it brings them, during a portion of their student period, into close association with the advanced thought of their profession; from which they may be led, at later periods of their career, to a more philosophical view of the problems of disease, its prevention and treatment. I am also convinced

that it is equally the purpose of the University to promote, within its walls, research in medicine for its own sake in order that knowledge may be increased and ignorance dispelled. It is therefore proper to take cognizance of the increasing productiveness of the several laboratories of the Medical Department, and to note that in this growth the undergraduate student body is taking part.

The world's progress is measured by the sum of its beneficent achievements. While moral, intellectual and industrial improvements all operate for the benefit of mankind, an inquiry into the bases of these improvements would confirm the opinion that the most important factor is health. There is growing the conviction that moral obliquity and industrial failure are often the outgrowths and consequences of morbid states of the body that disturb the mind and prevent wholesome action.

Among the most important civilizing works of which man may already be frankly proud, is the concerted effort on the part of individuals, universities and communities to improve the environment and physical condition of the poor of large cities. In a similar manner the improvement in the industrial sanitary conditions of towns and cities, has already yielded valuable returns in the increased healthfulness of communities, in the reduction of the disabilities arising from the accidents of life, and therefore in an increased power of application; which, in its turn, means enlarged production and the greater ability to profit by and enjoy its fruits.

The preservation of health and the prolongation of life have become more and more the profession of the votaries of medicine. It is no exaggeration to say that to-day as much thought on the part of the physician is given to the means of preventing disease as to the manner of its treat-

ment. The great activity that characterizes medical science has for its ultimate aim the suppression and eventual disappearance of many of the diseases that now cause disability, produce suffering, and bring about the largest number of premature deaths.

That this purpose is not chimerical and that it has not been fruitless, is abundantly shown by the steady march and progress within the past ten to twenty years of preventive medicine. That many diseases formerly regarded as unavoidable are now conceived to be due to carelessness or indifference, or have been, to a great extent, entirely abolished, is almost too common an experience to awaken interest in the manner of achievement of these results or their importance from an economic standpoint. And yet these wholesome and invaluable results have been accomplished by the medical profession, which in one sense is directly benefited by the prevalence of disease.

I wish then to draw attention not only to the sacrifice of private advantage to a higher sense of duty which these results demonstrate, but also to the fact that every step made in advancing health and diminishing disease reacts upon the industrial and economic as well as upon the moral value of the individual. The most enlightened men are possessed by a sort of fatalism in respect to disease. While other occurrences of daily life are accepted as operations of law, the matter of health is dealt with as though it were largely outside of such control. It is a well-known fact that the generously inclined promote far more readily the advancement of the mechanical and economic arts and sciences than the advancement of that most important science—the science of medicine. It can be truly said that no better investment for the purpose of extending the useful knowledge of the world can be made than in the endowment and support of the best

medical teaching that carries with it also a wider medical research.

It is logical to conclude that concentrated application is of greater importance in acquiring knowledge than desultory attention. The theoretical objection hitherto urged against continuous application has been the belief that change of subject was beneficial in affording renewed stimulus and avoiding intellectual indifference. A consideration of the subject negatives such a theoretical conclusion. The transferring of thought and attention from one subject to another within a brief interval of time is rather found to lead to dissipation of energy and to correspondingly poor results.

During the past scholastic year the change from the older system of teaching certain subjects in the medical curriculum to a more concentrated form was put into practice. Thus, Chemistry, Bacteriology, Physiology, and Pathology, were concentrated into periods of shorter duration, during which the time of the student was spent on a small number of subjects. While it is perhaps too early to pass upon the ultimate value of the concentrated method as compared with the older system, the statement can be made with truth that there has been no evidence of loss of interest in the subjects, nor of staleness in the students, but on the contrary the general results would seem to indicate a marked improvement.

The many advantages possessed by a large medical school in promoting and teaching the science and art of medicine, make it desirable that others than undergraduate students should be admitted to its benefits. There exists a body of physicians, who, either because their professional lives are spent away from active medical centres or because of original defects in their training, find it difficult or impossible to keep in touch with the progress of medicine. For such of these physicians as may desire to extend, complete,

or revive their past training, a graduate course of study would be of great advantage. The medical school possesses, moreover, the equipment needed to supply such instruction. The facilities provided by hospitals are at command throughout the entire year, and those of the laboratories may also be made available.

On account of the demands made upon the teaching facilities and staff during the regular term by the undergraduate instruction, the graduate course would need to be arranged for such time as would not conflict with the former work. There can be no doubt that a successful adjustment of time and studies, such as will appeal to those physicians seeking these opportunities, can be made.

In my last report I noted an arrangement entered in between the College and Medical Faculties, through which candidates for the A. B. degree, who proposed to take up the study of medicine and had pursued the special preparatory courses leading to that profession while in College, might, during the fourth year in course, combine the studies of the first year in Medicine with certain required subjects of study in the College. The number of students who availed themselves of this privilege was two; but the indications were that, at the next term, a greater number would enter upon this composite work.

The experience gathered thus far is to the effect that such composite studies are entirely feasible. The main advantage of the saving of one year in obtaining the two degrees seems justified. The reduction of age at which completion of professional studies may be expected, and the saving in time and money in securing the two degrees will, it is believed, encourage a greater number of persons to avail themselves of the benefits of the culture and information

provided by the College, before entering upon professional studies.

While it is true that the college years grow progressively more beneficial to the student as he increases in maturity and hence in ability to profit by the instruction, the close affiliation existing between our College and professional schools and the culture value of the scientific branches of medicine, may be made to compensate for any loss that might otherwise be suffered.

It is not improbable that the benefits of such an arrangement may come to be enjoyed by colleges other than our own. There is no reason why the colleges of Pennsylvania and other States in which science courses leading to the bachelor's degree are given, should not also accept the successful completion of the first year in the Medical School as the equivalent of the last year in College, and thus entitle the candidate to the degree.

While the total number of students in the first two classes is below the averages of previous years, the indications favor the belief that the normal matriculation will soon again be reached. Since, therefore, the Medical School is temporarily the sufferer from a reduction in its income—a fact of great moment in view of the absence of endowment—yet the improvement in the personnel of the class fully justifies the movement towards higher standards of education. One of the beneficial effects of the increased requirements for entrance is shown in the fact that a greater number of matriculants possess college degrees. The percentage of Freshmen holding such degrees during the session 1899-1900 was 19.9, and during the session 1900-01, 31.5. Moreover, the number of students repeating the first year's studies, because of failure to advance with the class, has diminished from 24.1 per cent in 1899-1900 to 10.5 per cent

in 1900-01. That the average of work done by the classes is higher than in previous years is generally conceded.

THE DEPARTMENT OF LAW.

The Dean of the Department of Law notices in his report the increase both in numbers and in geographical distribution of the student-body in his Department. There is nothing of the unexpected in this increase. It is entirely natural, for your Board has recently expended nearly four hundred thousand dollars in the new building of the Department, and this home of the School is admitted to be the most beautiful and complete in its appointments of any building occupied by any law school in this country. It would have been wholly strange if the generosity of the University towards the Department of Law, and the dignity with which the Department was opened, had not been received by the public with respect and favor.

There has been a further and noteworthy contribution of the Corporation towards the safeguarding of the future of the school. The new building covers almost the entire lot at Thirty-fourth and Chestnut streets, with its frontage of 150 feet on Chestnut street, and its depth of 220 feet on Thirty-fourth street. To safeguard the expenditure already made, and to provide for the light and comfort and occupancy, and the possible future extension of the Department, the Corporation has bought, within the year under review, the 150 feet on Chestnut street adjoining the Law School Building to the west, so that the University now owns a frontage of 300 feet on Chestnut street by 220 feet in depth, or nearly an acre and a half. It may then be safely concluded that not only the present, but the future of the Department of Law has been protected against all peradventure.

The Dean refers to the large increase of students from localities outside of the State of Pennsylvania, and to the large increase in the number of States represented in the student-body. For the first time in the history of the school over fifty per cent of its students come from places outside of Philadelphia; and forty-three per cent of the total attendance are college graduates. The statistics submitted show the usual result—that the best prepared men hold the highest places; and the question will undoubtedly soon have to be considered by the Faculties concerned, viz: the College Faculty and the Law School Faculty, and by your Board, as to the policy of exclusiveness; that is to say, shall the Law School be open—in the course of a few years, and as soon as the financial question may be out of the way—only to graduates of accepted colleges.

Discussions have been taking place, during the year under review, between the Academic Council and a Committee of the Law Faculty, upon a question germane to this requirement of peculiar preparation—which the Dean advocates with sincerity.

I am not sure that the comparison between the student-use of the Biddle Library and that of the General Library is a reasonable one. The Biddle Law Library is the particular laboratory of the Department of Law and contains the tools—without which the student cannot do his work. The General Library of the University is not so particular or necessary as a laboratory, but more as an elective addition to the work which the student, anxious for the refinements of culture, may appoint for himself.

There is one feature of the Dean's report which has given me a great deal of concern, and as to which I do not feel entirely competent to speak with authority. It refers to the large number of students who are dropped from the

Department in the course of the academic year. In the year under discussion twenty per cent of the First-year Class were dropped, and twenty-one per cent, in addition, failed to appear for their examination. In brief, sixty-four students who entered with the First-year Class, at the term beginning August 31, 1900, were unable to go on with the Second-year Class. This is not the case in other professional Departments of the University, where the same purposes are supposed to prevail. I am not at all sure but that the failure of a large number of students is—partially, at least,—due to the administration of the Department, as well as to the individual student, and his effort at success. I sincerely wish that your Board would undertake to invite competent and impartial visitors to report upon the work of every Department under the responsibility of the Trustees of the University. I would like to see the work of every section in the College and of every department in every Professional School critically studied by able and competent men of public spirit, who would give to us, for the benefit of the teaching-body, and of the student-body as well, the result of such inspection—and it should be an inspection of the most radical character.

I note with much pleasure the record which the Dean has made of the appointments, in the Law Department, of University of Pennsylvania men. Mr. Roberts, Mr. McKeehan and Mr. Biklé have the welfare of the University at heart, as well as that of the Department in which they are specially engaged.

DEPARTMENT OF VETERINARY MEDICINE.

The report of the Dean of the Department of Veterinary Medicine calls attention to a decided increase in the

number of students. The percentage of increase is so considerable as possibly to be construed as the evidence of an awakened interest in Veterinary Medicine as a career. There is no doubt but that the value of veterinary science to the live-stock industry and the public health of the country is not as thoroughly understood and appreciated as it should be.

As the curriculum of this Department contains fundamental studies which are taught in common to its students and to students in Medicine, the system of concentrating these studies into shorter periods than heretofore, as in force in the Department of Medicine and already referred to, has been adopted by the Faculty.

The Dean refers to the desirability of courses in subjects pertaining to general animal hygiene and animal husbandry, but shows that, in order to give courses in these subjects, an increase in expenditure will be necessary; and then refers in general to the limited financial resources of the Department and the urgent need of a larger income. This larger income the Dean would particularly devote in increasing the salaries of professors and instructors, so that the salaries of at least a few of the teachers may be such as to enable them to devote more of their time to work in the school and hospital. These are important propositions, and it is hoped that means may be found for their accomplishment. It is a source of great regret that individuals who are interested in animals from the commercial side, and persons who have a deep humanitarian interest in animals, do not take more interest in Veterinary schools and contribute more largely to their support. In this connection, it is a genuine pleasure to say that the children of the late Mr. J. B. Lippincott continue the annual gifts which have lasted through so many years of the history of the school; and that

Mr. Harrison K. Caner has also been a benefactor during the year under review.

Important researches in subjects bearing upon Veterinary Sanitary Science have been prosecuted for several years in the laboratory and hospital of the school, and the results of one research in particular, "On the Comparative Virulence of Bovine and Human Tubercle Bacilli," were presented at the British Congress for the Study of Tuberculosis, in July, 1901, and received earnest approval. These researches were under the direction of and were made possible by funds provided by the Pennsylvania State Live-Stock Sanitary Board.

THE LABORATORY OF HYGIENE.

Owing to a change in the order of studies in the Department of Medicine, the teaching staff of this Laboratory was obliged to give instruction in Practical Bacteriology to the First and Second-year Classes of that Department, in addition to instruction in Practical Bacteriology to a class from the Department of Dentistry. This occupied so much of the time of the teaching staff that little time seems to have been left for the prosecution of original research. As this condition applied solely to the year just past, and next year normal conditions as to the number of classes receiving instruction in the Laboratory will prevail, it is hoped that research work in the fruitful fields of Hygiene and Bacteriology will be vigorously prosecuted.

It is gratifying to note that so many students in Departments in the University other than the Department of Medicine, and graduates of other institutions, were here engaged in special work. With its facilities and equipment, the

Laboratory should attract an annually increasing number of students for work in special courses and in original research.

In addition to the courses given to the students in the Departments of Medicine and Dentistry, it is noteworthy to remark that didactic courses in subjects pertaining to the profession of Architecture were given to students of that Department in the University. In this, the Laboratory is filling a useful University function.

The suggestion of the Director, that a systematic course of instruction in Public Health, leading to a degree or diploma, should be established, deserves serious consideration. There certainly is abundant room in this country for the employment of men who have been properly trained in matters pertaining to public health. Municipalities need such civic help, and ample provision should be offered in the University for giving this instruction. Fortunately, the Laboratory of Hygiene, in conjunction with other Departments of the University, is now adequately prepared for this duty. Similar courses are in successful operation in several schools in Great Britain.

THE WISTAR INSTITUTE.

The work of the Wistar Institute has thus far consisted chiefly in laying the foundations for the advanced work which will be done there, when its unequalled facilities and opportunities are more widely known.

Not only are the original anatomical and biological collections being steadily augmented, but their preservation, classification and arrangement for systematic study are being provided for; more completely perhaps, than in any other museum of the kind.

With the completion of our new Medical Laboratories, there will be a fresh impulse to research work, for which the indispensable material will be found only in the Wistar Institute; and it will be found there in such abundance, and under such systematic care, as to be most useful to the investigator; and the quiet work now going on will greatly facilitate the special labors of those who are solving anatomical or physiological problems.

THE FLOWER OBSERVATORY.

There is perhaps no part of the University's work, which would so little impress the layman, and no part more deserving of praise for its high scientific quality and the patient toil which it requires than that of the astronomical staff.

Discarding the temptation to make the Observatory a show place, or a subject of varied newspaper paragraphs, Professor Doolittle has wisely decided upon the line of investigation, for which the Observatory and its location are best fitted; and confining himself and his staff to that line, by night after night of observation and day after day of calculation, contributes those data to astronomical science which may involve the elements of some future discovery, or make more accurate the measurements of time and space, on which the practical usefulness of astronomy depends.

It is desirable that sufficient funds should be contributed to secure for the Observatory the telegraphic facilities needful for the determination of the fundamental condition—its exact longitude; for on this determination depends the publication of the delayed first volume of our astronomical series.

THE DEPARTMENT OF ARCHÆOLOGY.

During the past year the word "Paleontology" was dropped from the title of this Department, since the science of Paleontology was not properly in the scope of the Museum, while it was amply provided for in other departments of the University. The simplifying of the title is a distinct gain, and the proper work of the Department has been carried on in an effective and gratifying manner. The Museum, now so rich in its varied collections, mutely appeals for that support which will make it richer still, and the popular lectures on Archæological and Ethnological subjects which are given in the building do much to maintain the public interest upon which contributions depend. Once more we are indebted to Mr. John Wanamaker for funds enabling the Curator to visit important points, and to make purchases of articles which in a few years will be unpurchasable at any price. The day is, I believe, not far distant when the Museum will have to be enlarged by the erection of another pavilion, in accordance with the comprehensive plan which has been adopted.

THE BOTANIC GARDEN AND VIVARIUM.

The biological work of the University is now amply provided for by these two departments, under the care of efficient directors who have succeeded in bringing both of them to a high degree of perfection.

The warm interest taken by friends outside of the University in the botanical work has influenced handsome donations of growing plants, and the greenhouses are filled with material, often of great rarity and value, and always of importance to the student.

The Vivarium has proved successful beyond expectation, and the skill with which it was planned and is conducted

is plainly evident from the fact that living creatures flourish there as vigorously as in their native environment.

These schools of natural history not only serve for the purpose of education, but as an ornament to the University equally attractive to the learned and to the unlearned. I am happy to say that the planting of trees and shrubbery throughout the University grounds has been entirely successful, and imparts an ever increasing beauty to the University property.

THE LIBRARY.

The report of the Librarian shows that the Library of the University now contains over two hundred thousand volumes, and 50,000 pamphlets; an increase of over twelve thousand during the past year.

There are three sources from which the Library secures its growth: First, there are endowments bearing the names of the donors, such as the Norris, Lippincott, Wharton, Pepper, Seybert, Wagner, Krauth, and Comegys funds. Secondly, the collections on special subjects; the gifts of organizations or individuals, such as the Agricultural, the Pathological, the Musical, and Dramatic Libraries. And lastly, individual gifts of money or of books. Unfortunately the total income from invested endowments is a very small sum, after the expenses of administration are paid, and the amount available for the purchase of books is not nearly so much as the Library should have.

Through the Exchange Bureau many valuable additions to our Library are received from other institutions of learning in exchange for our own publications, and this indicates the wisdom of providing liberally for the publication fund. The Exchange Bureau has also secured valuable pub-

lications of the United States Government, of many States and Municipalities, Foreign Governments, Railroads, Corporations, and other Libraries.

The work of cataloguing the Library has been possible only through the generous benefaction of a friend of the University; for it has been done on so large a scale, and with such a system of cross references, as to largely increase the usefulness of the collections. It is still going on, so that all the special collections will soon be available to students in any branch of University work.

A considerable increase in circulation, and in the use of the reading-room and of the Departmental Libraries, shows that the facilities afforded are fully appreciated by our own teachers and students, as well as by others to whom its privileges are extended.

The Librarian makes grateful acknowledgment of the steady stream of individual benefactions, and of the contributions of students, of the Society of the Alumni, and the several College classes. No better memorial of a class can be made than that of permanent additions to the Library, either directly of books, or of a fund large enough to provide an income for annual expenditures.

The Library of the University of Pennsylvania while not so well endowed as that of some other universities, has kept pace with the growth of the University and its departments, but only through the generosity of individual donors, or responses to urgent calls for special needs. An endowment, that will secure the Library an income of its own, would go far to relieve the University and its friends from the need of these constant appeals, and be in its way, an endowment of all departments; for all of them depend for their effective work upon the resources of the Library.

THE DEPARTMENT OF DENTISTRY.

The history of the Department of Dentistry shows that the limit of entrance requirements has been, for the time being, reached, while the rigor of the required work in the three years' course continues. These two conditions have resulted in a reduction in the number of students able to enter the Department and to earn the degree of Doctor of Dentistry at this University.

The reputation of the school has, meanwhile, increased and now extends over long radii; so that a reference to the representation in the Department discloses the fact that fifteen per cent of the entire student-body come from foreign countries—England, Germany, New Zealand, Australia, and other distant quarters of the globe sending numerous students for the advantages here only to be enjoyed.

The question of numbers in the Department of Dentistry is one wholly at the pleasure of the Faculty, subject to the approval of your Board. I have no doubt that the unanimous view of the Dental Faculty, in which the Dean sympathizes, will meet your approval upon each of the questions: In the first place, that only those students should be invited or permitted to enter the Department of Dentistry who are desirous and willing to recognize that the fundamental sciences in General Medicine are important as well to the dental practitioner as to the medical practitioner. Naturally, very many students enter a dental school more for the sake of the technical or practical experience there to be gained, than for the acquisition of the medical sciences of Physiology, Chemistry, Anatomy and others, upon the foundation of which the student of Medicine builds his medical education. If we are to consider Dentistry at all as a reasonable subject of University inquiry, it certainly must be considered from a scientific standpoint, and the Faculty of Dentistry must

be upheld in their determination to admit only to the school such students as are prepared to become dental physicians, and to understand the basic sciences upon which, in fact, their calling hangs. As well might a carpenter be called an architect as a student be graduated from the University as a Doctor of Dental Surgery, without the fullest scientific training. His profession calls for the science and the art of practising it—just as that of the architect does, and just as that of the physician does. I sincerely hope that the Dean and his Faculty will be absolutely unyielding in these respects; and I entirely commend to your Board the extension of the course, from and after the time suggested by the Dean, from three years to four years.

SPECIAL EVENTS OF THE YEAR.

The important event of the year, and that which all of us will regard as the source of present strength and the hope of the University in the future, is the awakened spirit of our Alumni. The progress which the University has made and the rank which it has taken have filled its graduates with a spirit of loyalty and pride which I am sure has never before been reckoned with. However it has come to pass, the fact stands evident to-day that graduates, undergraduates, and faculties as well, are full of enthusiasm for Pennsylvania. To know that from the Pacific Coast to the Atlantic our graduates are grouping themselves into Alumni Societies, and standing each by the other—because graduates of the University—makes everyone who is in administration feel the desire to work even harder than ever. One of our Alumni expressed the general feeling, when he said, in an Alumni meeting, "I have trodden nearly every quarter of the globe, during the forty years since I was graduated at

Ninth and Chestnut streets, and never have I had cause for other than thankfulness that I am a son of the University of Pennsylvania."

The continued strengthening of the College—which is sure to progress, not only in numbers, but in the wide geographical distribution of College students—will make this pride in and affection for the University more deep-rooted and life-long, and will be hereafter a source of certain, if yet, uncounted, strength and help.

Within the year under review, further important additions have been made to the property of the University. The large tract of ground, covering about an acre and a quarter in area, at the northwest corner of Thirty-ninth street and Woodland avenue, has been bought from the estate of Eli K. Price, deceased, and is to be occupied by the Department of Veterinary Medicine. The ground has been paid for by moneys raised by private subscription, and is without debt. No better location could have been selected for the Department of Veterinary Medicine, which, in its old home, was being rapidly closed in and obscured from public notice by the development of the University. The buildings now occupied by this school are temporary buildings, and are to be replaced as rapidly as the plans can be drawn with intelligence and certainty, and the funds secured. So that the Dean might have the fullest knowledge of the development of Veterinary science in Europe, the University sent Dr. Pearson, during the summer, to study the subject for which he will be, practically, responsible—in connection with the architects, Messrs. Cope & Stewardson.

In all the large undertakings which the University has completed in recent years, we have found that the old adage, "The more haste, the less speed," has come well into play; and we have never found cause for regret at not hurrying

the plans for a new and permanent and costly University building. What may have seemed to be delay has wholly been caution; and so far, the results have entirely justified this deliberate action in erecting University buildings.

The removal of the Veterinary Department to its new location has vacated the old buildings erected many years ago, and these will be torn down. The dismantling of them has already taken place. Upon the same site will immediately be erected the new Laboratories of the Medical Department. Many changes have been made in the interior plans of this building, as patient and careful study has been given to the subject, and the Medical Faculty now feel that they will be able to exhibit a work as perfect as human design can attain. I am informed by the architects (Cope & Stewardson) that not only are the drawings completed, but that the specifications are practically finished, and by the time this report is out of the hands of the printer, they will have been submitted to selected builders—from whose bids the Trustees will no doubt choose the lowest and best.

As has already been referred to, in the report of the work of the Department of Law, the Corporation has bought the lot immediately adjoining the new building of the Law School—150 feet on Chestnut street by 220 feet in depth to Sansom street; so that the property in land of the University at Thirty-fourth and Chestnut streets embraces a tract 300 feet on Chestnut street by 220 feet in depth to Sansom street. These additions increase the estate of the University in West Philadelphia—wholly dedicated to educational purposes—to fifty-eight acres, within the building lines.

In the last report submitted to your Board, reference was made to the purchase of the property theretofore known as the "Foulke and Long" property. We have already

moved the Department of Physics into "The Randal Morgan Laboratory of Physics," and the work, both original and didactic, proceeding from this new Laboratory, will soon take rank with that which has so long issued from the Laboratory of Chemistry. The establishment of these two sciences, Chemistry and Physics, upon so firm a foundation, has logically led your Board to the consideration of the necessity of strengthening our Engineering Schools—those of Mechanical, Electrical and Civil Engineering. These have entirely outgrown the provision made for them twelve to fifteen years ago. To anyone who will be at the pains of studying this question minutely will be disclosed the fact that there is no engineering school of the highest rank in the State of Pennsylvania; in the State which is, to an unusual degree, the home of engineering operations, and where every university facility should be offered for the education and training of the accomplished engineer. No provision, in any adequate sense of the word, is to be found within its limits. One goes east of the Hudson River to find institutions which attract not only students from their own neighborhoods, but those from the State of Pennsylvania, the United States and Europe, as well. It has seemed to some of us hardly less than grotesque that such a condition should continue. The general question has within the year received the very careful attention of the College Committee, and in particular of the Professors of Mechanical and Civil Engineering. Encouraging progress has been made in two relations—that of a proper site and that of financial support. With great good judgment, the proposed Gymnasium—which was to have been erected upon the eastern end of the "Foulke and Long" property—will be erected upon the westernmost side of Franklin Field, and the new Engineering Building will occupy the ample site previously set apart for

the Gymnasium. This adjustment has been brought about with entire unanimity and concord of opinion, and affords a useful solution of what, for the time being, appeared a difficult problem to solve. In the matter of the money necessary to erect the building, nearly two hundred thousand dollars have already been pledged.

The Memorial Tower and new Dormitories have been completed and are filled with students. With Houston Hall, they add a unique and indispensable spirit to the life of the University.

The twenty-second of February—Washington's Birthday—was observed according to our custom as "University Day." The orator was the Rt. Rev. Henry C. Potter. Upon Commencement Day, June 12, 1901, the Hon. James M. Beck, Assistant Attorney-General of the United States, delivered the oration.

Amongst the events of the year which may not attract as wide attention as a noble building, but which exert an influence of equal or greater importance, I wish to record the elevation in purpose and administration of the publications of the University. In previous years, a Medical Magazine, carrying advertisements, had been the organ of the Department of Medicine. This magazine had always been subject to the temptations of taking advertisements for the income to meet its expenditures. It was the subject of just criticism on the part of Medical Alumni and of the medical profession generally. It has now been superseded by the *University of Pennsylvania Medical Bulletin*—a publication issued monthly, without advertisements, and whose deficit is guaranteed by a friend of the University. Both in the quality of its contributions and in the manner of their presentation, it has, during this, its first year, reflected credit and honor upon the University, upon its editor and his collab-

orators. It seems to me to be the best evidence that could be presented of the activity of the Department of Medicine, and it is presented to Alumni of the Medical Department in a way which must win their respect.

The *Alumni Register*, the organ of the graduates of the University, has added to its staff a literary editor, from the Department of English in the College. Its circulation is now about two thousand five hundred, and it is a monthly magazine which should be taken by every alumnus. It is one of the most interesting, as well as one of the best edited, of any monthly publication.

Finally, without at all impairing or impeding the zeal or earnestness of the undergraduate body, the daily *Pennsylvanian* appears, for the first time, under the quiet supervision of the Department of English. This Department has selected a representative, to be the companion and help of the editor-in-chief and his assistants, in publishing a paper which may be the open door for recording the daily occurrences in the complex life of the University.

CONCLUDING STATEMENTS.

The cash receipts between September 1, 1900, and August 31, 1901, from donations from all sources for University purposes, are reported by the Treasurer to have been \$477,836.16; and the aggregate of contributions paid in cash during the present administration, up to August 31, 1901, is \$3,813,310.15. In addition thereto, the Treasurer has, in his safe-keeping, subscriptions soon to be paid, or payable in annual instalments, in the coming few years, and binding upon heirs, executors and assigns, to the amount of over six hundred thousand dollars.

In his last report, the Treasurer of the University stated that no re-appraisal within recent years had been made of the

securities, libraries, museums, apparatus and other property of the University, and that such re-appraisal would be made in the near future. During the academic year, of which this report is the partial record, a re-valuation has been made, and the Treasurer's Statement, which will be found as one of the appendices, gives, as closely as possible, the present value of the property of the University. You will observe that it aggregates nearly ten million dollars.

While the total of the sums which have been annually subscribed appears to be large—averaging, as has been the case, more than five hundred thousand dollars per annum—they fall far short in supplying our just needs and requirements.

The State of Pennsylvania has a larger population and greater wealth than all the six New England States together—and yet, there are several single institutions in New England, each one of which has a larger income producing working capital, upon which to transact its University business, than the University of Pennsylvania and all the institutions for the promotion of learning, exclusive of Girard College, in the entire State of Pennsylvania. This ought not so to be; and while it is in one sense a discouragement that the University must wait so long and must work so hard to meet, one by one, its many needs, and to assemble annually the sum of \$500,000 in addition to its fixed receipts—there is, nevertheless, the basis of the highest encouragement in the fact that the State of Pennsylvania has the population and has the wealth; and we may hope and believe, is awakening to the intention that there shall be one place in the State, with unexcelled opportunities—the University of Pennsylvania.

As Trustees of the University, and responsible as Trustees to the great number of its benefactors, your Board has

adopted the custom of having all the accounts of the University and all its financial transactions annually examined by expert accountants. This examination is not a matter of form, but is a most searching investigation—from the receipt of the fee of each individual student to the securities in the hands of the custodians of the University. Every dollar received and every dollar expended, and the proper appropriation thereof, are included in this audit. You will find the certification of the public accountants at the foot of the Treasurer's report, and their written statement of the duty performed. Both will be found in the appendices.

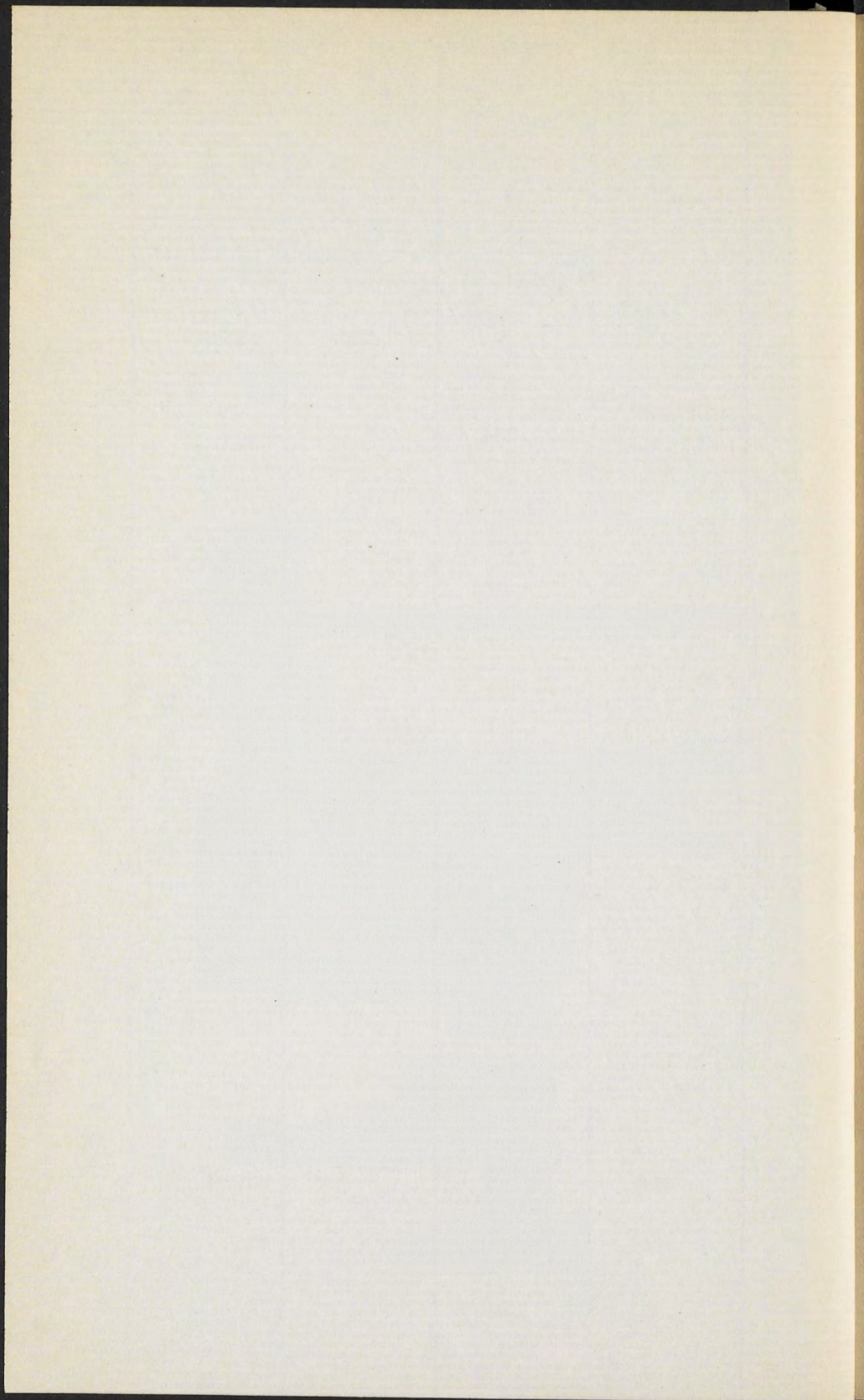
I believe this carefulness and the sanctity with which the trust estates of the University are treated, to be questions of simple duty, inseparable from our position as Trustees. While we owe this duty to the University and to ourselves, we owe it, as well, to our benefactors; and while they have already received the warmest thanks of the Corporation for the public help which they have given, they cannot but feel an added confidence from the system which has been adopted in the Treasurer's office, and the workings of which are yearly thrown open to public inspection.

In closing this report, I will not refer, as heretofore, to any of the needs of which the University is so greatly in want. I will only say that, while death annually claims so many of the friends of the University, the University remains—while they pass away—and the gaps in the ranks of its friends are not only filled, but their number is annually increased.

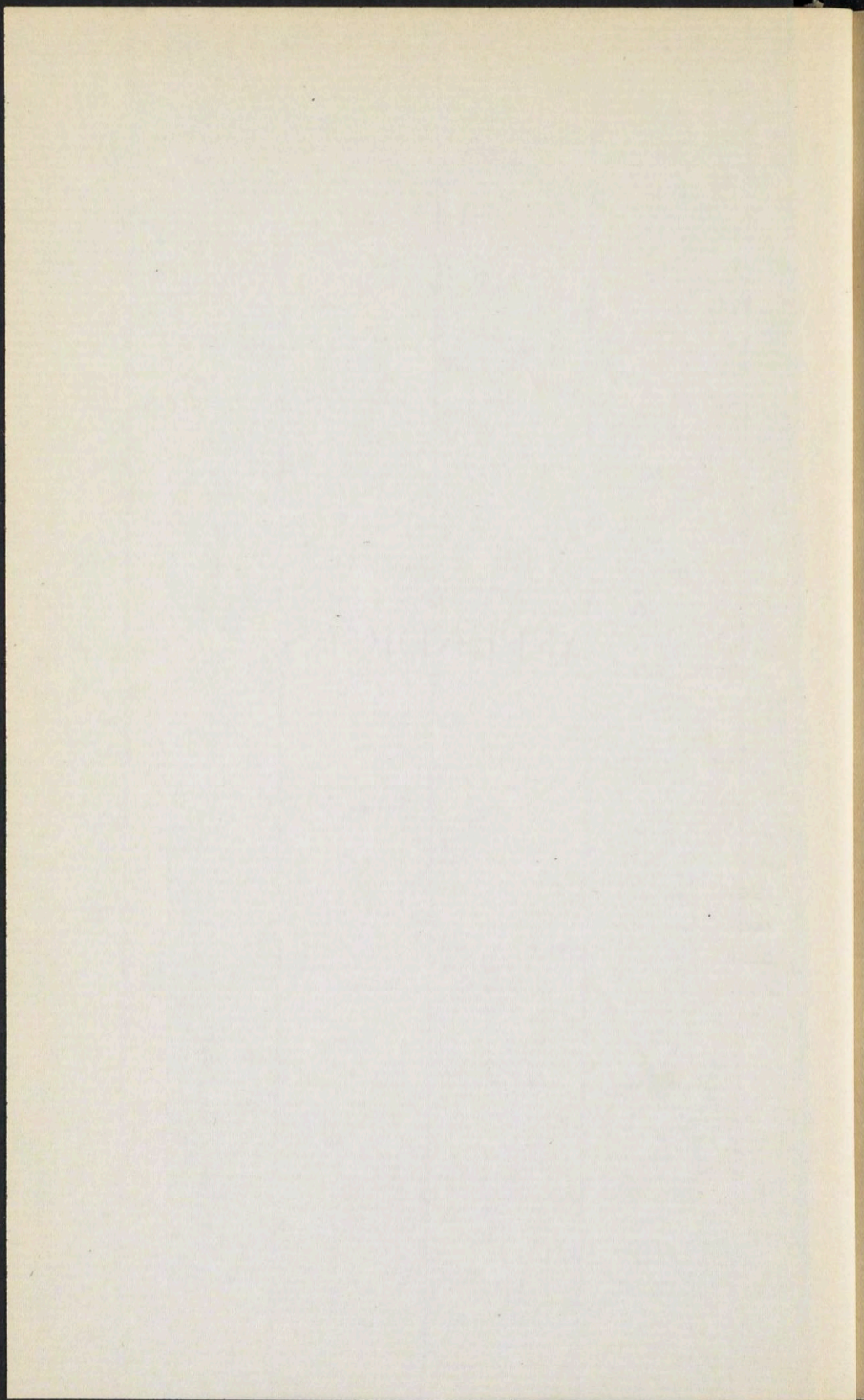
I am, very respectfully,

Your obedient servant,

CHARLES C. HARRISON,
Provost.



APPENDICES.



APPENDIX I.

PERSONAL CHANGES.

BY DEATH.

JOHN CLARK SIMS, A. M., Trustee.

FRANCIS ARISTIDE JACKSON, A. M., Professor of the Latin Language and Literature.

BY RESIGNATION OR EXPIRATION OF TERM.

RAYMOND MACDONALD ALDEN, A. M., PH. D., Instructor in English.

WILLIAM HARVEY ALLEN, PH. D., Instructor in Public Law.

REV. GEORGE DANA BOARDMAN, D. D., LL. D., Trustee.

PERCIVAL WALTER DARRAH, M. D., Assistant Demonstrator of Physiology.

WILLIAM LEON ELLERBECK, D. D. S., Demonstrator of Operative Dentistry.

EUGENE ELLICOTT, Assistant to the Provost.

HUGER ELLIOTT, B. S., Instructor in Architecture.

CHARLES JAMES ESSIG, M. D., D. D. S., Professor of Mechanical Dentistry and Metallurgy.

NORMAN STURGES ESSIG, D. D. S., Lecturer on Mechanical Dentistry.

ROLAND POST FALKNER, PH. D., Associate Professor of Statistics.

OTTO HOTTINGER FOERSTER, M. D., Assistant Demonstrator of Physiology.

CHARLES HERBERT GREENWOOD, S. B., Instructor in Mechanical Engineering.

(MISS) FANNY R. M. HITCHCOCK, PH. D., Director of Women Studying at the University.

EDMUND WALES HOLMES, A. B., M. D., Demonstrator of Anatomy.

FREDERICK H. HOWARD, M. D., Assistant Demonstrator of Pathology.

JOSEPH FRENCH JOHNSON, A. B., Professor of Journalism.

AUGUSTUS O. KOENIG, B. S., M. D., Assistant Demonstrator of Normal Histology (in Department of Medicine).

(MISS) ESTHER KUHN, Instructor in Gymnasium for Women.

GEORGE CHRISTOPHER KÜSEL, M. D., D. D. S., Assistant in Bacteriology.

CHARLES LESTER LEONARD, A. M., M. D., Assistant Instructor in Clinical Surgery.

- HENRY WILLIAM FREDERIC LORENZ, A. M., PH. D., Instructor in Organic Chemistry.
- CASPAR WISTAR MILLER, PH. D., M. D., Director of Physical Education.
- JOSEPH HADERMAN NOBLE, D. D. S., Instructor in Physical Education.
- JOHN GEORGE O'MEARA, M. D., Assistant Demonstrator of Anatomy.
- FRANCIS RANDOLPH PACKARD, M. D., Instructor in Laryngology.
- FRANK SAVARY PEARCE, M. D., Instructor in Physical Diagnosis.
- WILLIAM HENRY PRICE, M. D., Instructor in Diseases of Children.
- GEORGE NELSON RICHMOND, M. D., Assistant Demonstrator of Anatomy.
- (MISS) ELISABETH A. RYDER, M. D., Assistant Director of Physical Education.
- DANIEL BUSSIER SHUMWAY, B. S., PH. D., Instructor in the Germanic Languages and Literatures.
- JOHN DUTTON STEELE, M. D., Students' Physician.
- T. TURNER THOMAS, M. D., Assistant Demonstrator of Anatomy.
- JACOB PAUL JONES WILLIAMS, M. S., Instructor in Civil Engineering.
- GEORGE B. WOOD, M. D., Instructor in Laryngology.
- RICHARD F. WOODS, M. D., Instructor in Clinical Gynæcology.
- NATHAN SHURTS YAWGER, M. D., Assistant Demonstrator of Physiology.
- MASON W. ZIMMERMAN, M. D., Ophthalmologist to the Department of Physical Education.

APPOINTMENTS.

GENERAL.

- JOSEPH LEVERING JONES, LL. B., Trustee.
- FREDERICK ADOLPHUS PACKARD, A. B., M. D., Trustee.

IN THE COLLEGE.

- MARTIN GROVE BRUMBAUGH, A. M., PH. D., Professor of Pedagogy.
- FRANZ FREDERICK EXNER, A. B., Instructor in Chemistry.
- NATHANIEL GILDERSLEEVE, M. D., Assistant in Bacteriology.
- JOHN PAUL GOODE, PH. D., Instructor in Geography.
- CLARENCE GILBERT HOAG, A. M., Instructor in English.
- ARCHIBALD BLAIR HUBARD, B. S., Instructor in Civil Engineering.
- JOSEPH B. LONG, Instructor in Woodworking.
- WALTON BROOKS MCDANIEL, A. M., PH. D., Instructor in Latin.
- HENRY KERR MCGOODWIN, B. S., Instructor in Architecture.
- GEORGE WINFIELD SCOTT, A. B., Assistant in Public Law.

DANIEL BUSSIER SHUMWAY, B. S., PH. D., Assistant Professor of the Germanic Languages and Literatures.

HENRY ERNEST VAN DERHOEF, M. E., Instructor in Mechanical Engineering.

IN THE DEPARTMENT OF PHILOSOPHY.

STEWART CULIN, Lecturer in Ethnology and American Archæology.

WALTON BROOKS MCDANIEL, A. M., PH. D., Lecturer in Latin.

JOHN PAUL GOODE, PH. D., Lecturer in Economics.

IN THE LABORATORY OF HYGIENE.

NATHANIEL GILDERSLEEVE, M. D., Assistant in Bacteriology.

J. EDWIN SWEET, M. D., THOMAS A. SCOTT Fellow in Hygiene.

IN THE DEPARTMENT OF DENTISTRY.

GEORGE O. JARVIS, PH. B., M. D., Assistant Demonstrator of Applied Anatomy.

T. VICTOR SMITH, D. D. S., Demonstrator of Operative Dentistry.

S. MERRILL WEEKS, D. D. S., Demonstrator of Operative Dentistry.

IN THE DEPARTMENT OF LAW.

VICTOR B. WOOLLEY, B. S., Lecturer on Delaware Practice.

IN THE DEPARTMENT OF MEDICINE.

MONTGOMERY H. BIGGS, M. D., Assistant Demonstrator of Surgery.

J. BERTON CARNETT, M. D., Assistant Instructor in Surgery.

JAMES REA CRAWFORD, M. D., Assistant Demonstrator of Physiology.

NORTON DOWNS, M. D., Assistant Demonstrator of Obstetrics.

ALBERT P. FRANCINE, M. D., Assistant Instructor in Clinical Medicine.

FREDERICK P. GAY, M. D., Assistant Demonstrator of Pathology.

ELISHA H. GREGORY, JR., M. D., Demonstrator of Anatomy.

NORMAN B. GWYN, M. B., Instructor in Clinical Medicine.

THOMAS BEAVER HOLLOWAY, M. D., Assistant Demonstrator of Surgery.

GUTHERIE McCONNELL, M. D., Assistant Demonstrator of Histology.

CHARLES C. NORRIS, M. D., Instructor in Clinical Gynæcology.

MAURICE OSTHEIMER, M. D., Instructor in Children's Diseases.

WILLIAM E. QUICKSALL, M. D., Assistant Demonstrator of Anatomy.

HOWARD A. SUTTON, M. D., Assistant Demonstrator of Anatomy.

APPENDIX II.

REPORT OF THE DEAN OF THE COLLEGE.

To the Provost of the University;

SIR:—I have the honor to present to you my report of the College for the year 1900-01.

CHANGES IN THE FACULTY.

The following extract from the minutes of the College Faculty for April 11, 1901, records the feeling of the Faculty on the loss of its oldest member, Professor Francis Aristide Jackson, Professor of the Latin Language and Literature, who died on April 4, 1901, after several months of serious illness:

“In the seventy-second year of his age, after forty-six years of continuous and faithful service as a teacher in the College, and as a member of its Faculty, Professor Francis Aristide Jackson has been taken from us by the hand of death.

“We, therefore, members of the Faculty and Instructors in the College of the University of Pennsylvania, the colleagues of his later, and many of us the pupils of his earlier years, herewith record our appreciation of his work, our esteem for his character, and our respect for his memory.

“Professor Jackson became a teacher in the College in 1855, being then elected Adjunct Professor of the Greek and Latin Languages, as assistant to Professor Allen, of revered memory, the traditions of whose teachings and character he ever cherished and frequently referred to; in 1864 he was made Professor of the Latin Language and Literature, the chair which he continued to hold till the day of his death.

“He was before all things a teacher, a college teacher,

a teacher of young men who were equipping themselves for the tasks, the burdens and the struggles of independent and responsible life; to this every other function or consideration was subordinate, for teaching was to him neither a business nor a profession, it was a vocation, to which he was called not by personal choice, nor 'by the will of man,' but by a voice from on high, from his God. To shirk this duty or to perform it carelessly would have been sinful disobedience; to withdraw, while strength was present for performance, would have been (the words are his own) nothing less than desertion.

"As a teacher of Latin it was his chief aim to develop in his students the power and engender the habit of scrutinizing closely the written word, until it gave up the secret of its author's intent both in the thought and in 'the shape of the thought.' Accurate analysis of grammatical relations and precision of definition were the instrumentalities. He believed there was profit alike in the process and in the end to be attained, both for the present purposes of the students and for the life that was to follow graduation. It was his desire, too, and his earnest effort to bring his pupils, were it for the brief space of their college course, into touch with those authors and works, which by nobility of thought and adequacy of expression have won a recognized place in the literature of mankind.

"The first twelve years of his teaching belong to that remote time, when in the old buildings in Ninth street, a faculty of six filled the whole circle of collegiate instruction. What changes and developments have occurred since that day of small things, as we too lightly often call it, the youngest among us may easily see; but the labor and the thoughts that were spent in the process, imagination can hardly realize. In the midst of this agitation, with the earnestness of effort and disinterestedness of purpose, Professor Jackson bore his part. He was conservative by nature and sincerely devoted to the old order, which many, both in our colleges and out of them, seemed blindly eager to demolish. He belonged to that band, to his honor be it said, whose

firmness of conviction and stoutness of heart forced head-long enthusiasm to take patient thought, and stayed the rush of innovation to the advantage of rational progress.

"Profoundly religious, he lived 'ever as in his great Taskmaster's eye,' no deflection to right or to left was to be discerned as he trod the path of duty in childlike, but confident obedience. Constancy and courage, unostentatious yet steadfast, lifted him above all personal considerations. Were this all, he might be thought stern, rigid, austere; but there was besides, a tenderness of heart and a large charity which, though to him it may have borne the aspect of duty, was to such as were privileged to see it, the very expression of his inner self, spontaneous, perennial. No service was too exacting of time or strength; no person too poor or insignificant: the kindly word, the sympathetic gesture, the tender of a flower endeared him to many whom the graciousness of the act cheered in depression or heartened in suffering.

"He might have said of himself, in the words of Terence:

" 'Humani nil a me alienum puto' ;

and we may apply to him the words of his favorite Latin poet:

" 'Vir justus et tenax propositi—impavidus.' "

Professor Joseph French Johnson, Professor of Journalism, resigned his chair at the end of the year to accept the Professorship of Finance at New York University. It was with regret that the College parted with Professor Johnson, whose connection with us is most pleasantly remembered by his colleagues and former students.

Dr. Henry R. Seager, Assistant Professor of Political Economy, and Dr. Alfred Gudeman, Associate Professor of Classical Philology, were granted leave of absence for the year 1901-02.

Professor Martin G. Brumbaugh was absent on public business during the year, having accepted the appointment

as Commissioner of Education for Porto Rico, where his administrative ability and wide and intimate knowledge of schools and educational problems have been exercised greatly to the benefit of the people of our new possession.

Assistant Professor Leo S. Rowe and Assistant Professor Emory R. Johnson were likewise absent on public business during the year, the former being a member of the Commission appointed to revise and compile the laws of Porto Rico, and the latter being a member of the Isthmian Canal Commission.

Dr. Raymond M. Alden's ability and success as a teacher of English, especially of Debating, led to his being elected Assistant Professor of English at Leland Stanford, Jr., University, a position which he accepted. Some readjustments of the courses in English were rendered necessary by this change, and a portion of Dr. Alden's work will be done during the coming year by Mr. Clarence G. Hoag, who was appointed Instructor in English.

The death of Professor Jackson and the absence of Professor Gudeman have caused some changes in the work in Latin which is in charge of Professor Gibbons, who will be assisted by Dr. Walton Brooks McDaniel, who has been appointed Instructor in Latin.

Mr. J. P. J. Williams, who resigned his position as Instructor in Civil Engineering to accept a position in the Engineering Department at Swarthmore College, has been succeeded by Mr. Archibald Blair Hubard.

Dr. H. W. F. Lorenz, Instructor in Organic Chemistry, Mr. C. H. Greenwood, Instructor in Mechanical Engineering, and Mr. Huger Elliott, Instructor in Architecture, having resigned, will be succeeded by Mr. Franz Frederick Exner, Mr. Henry Ernest Van Derhoef and Mr. Henry Kerr McGoodwin, respectively.

Dr. William H. Allen, Instructor in Public Law, accepted the position of Secretary of the Organized Charities of New Jersey. His courses will be given in part during the coming year by Mr. George Winfield Scott, who has been appointed Assistant in Public Law for the coming year.

Additional courses in Physical and Economic Geography will be given in 1901-02 by Dr. John Paul Goode, who has been appointed Instructor in Geography.

PROMOTIONS.

At the close of the year the Board of Trustees, on recommendation of the Academic Council, promoted to the grade of Assistant Professor the following men, whose earnest and efficient work for some years as Instructors merited such recognition:

William Easby, Jr., Assistant Professor of Civil Engineering.

A. William Schramm, Assistant Professor of Electrical Engineering.

Clarence G. Child, Assistant Professor of English.

William N. Bates, Assistant Professor of Greek and Classical Archæology.

Daniel B. Shumway, Assistant Professor of the Germanic Languages and Literatures.

THE RANDAL MORGAN LABORATORY OF PHYSICS.

Through the munificence of Randal Morgan, Esq., of the Class of '73, the University now possesses a finely equipped Laboratory of Physics, the need of which has been felt for many years. The Morgan Laboratory is situated on Thirty-fourth street, north of the Laboratory of Hygiene. The new building affords at least double the facilities possessed formerly for work in Physics. The equipment in apparatus has been increased, and it is now possible to utilize, to the fullest extent, the large and valuable collection of physical apparatus already possessed.

An important addition is a useful and valuable dividing engine, formerly the property of a wealthy investigator of Philadelphia, who had it made, with no sparing of expense, by the Geneva Society. It has a corrected millimeter screw with a pair of micrometer microscopes reaching to the thou-

sandth of a millimeter. At the present time, the basement on the north side of the Laboratory is being fitted up as a machine-tool and work shop, which, when entirely equipped, will constitute a very valuable and long-needed feature of the Department of Physics. The larger tools include: (1) A fourteen-inch six-foot Hendey-Norton Engine Lathe of the latest design, fitted with a taper attachment, a drawing-in attachment with seven wire chucks, one six-inch, three-jaw skinner combination chuck and one nine-inch four-jaw chuck of the same make. This lathe is run by an electric motor permanently attached to it, the whole making a single machine unit. (2) A No. 2 Hendey Universal Milling Machine, complete with all attachments and necessary tools for operating it. (3) A fifteen-inch Hendey Shaper with improved vise. The shop has also been supplied with smaller tools, including a high speed bench lathe for wood turning. The electrical equipment has been increased by a 20 K. W. direct connected unit, Westinghouse type, which when not needed for lighting is available for furnishing current and power for various electrical experiments and tests.

INCREASED FACILITIES AND ADDITIONS TO EQUIPMENT.

The removal of the Department of Physics to the Randal Morgan Laboratory, threw open for redistribution the rooms in College Hall formerly occupied by that department. The need of additional space has been felt by many departments of the College, but the rooms vacated by Physics enabled us to meet some of the most pressing wants in this regard.

Philosophy and Psychology have suffered from the fact that the Psychological laboratories were in Biological Hall, where most of the books of reference were kept, making them difficult of access to students in Philosophy. By assigning to the work in Psychology the rooms in the basement of College Hall, formerly used as Physical laboratories, and to Philosophy the rooms on the first floor immediately over them, and connected by private stairway, it has been

possible to provide better facilities than ever before for the work in these subjects, while the removal of Psychology from Biological Hall has given to Botany and Zoölogy additional and much needed space. Work in the courses in Philosophy has been facilitated by a large accession of books to the Library, purchased with the money provided by the gift of the Class of '89. These books are for the most part rare and difficult to procure, but were gotten together abroad, after several months' search.

The Department of English, which has heretofore been uncomfortably limited in space, has been assigned the rooms on the second floor formerly occupied by Philosophy, so that English is now provided with suitable rooms.

The large room in the basement, at one time used as an assembly room, and later as a gymnasium, has now been assigned to the Department of Geology and Mineralogy, which already occupied the room on the first floor immediately above it. The putting in of a private stairway and lift connecting the two rooms, enables the department to have a large and well-lighted room for museum purposes and an adequately equipped mineralogical laboratory with attachments for gas and compressed air on all the tables. An air compressor has been installed and specially devised blowpipe lamps have been made for this laboratory, thus supplying each student with an individual power blowpipe, which is under his complete control. This addition to the equipment should increase greatly the efficiency of the laboratory.

Nine hardwood mineral cabinets or cases were presented by Mr. Clarence S. Bement, who gave also a valuable collection of minerals. Other additions are the collection of minerals presented to the University by the heirs of Joseph Ashmead Clay and John Randolph Clay, and the Cardeza Collection, one of the largest and best that has ever been gotten together. This collection was purchased by the University, through the generosity of Mr. E. Burgess Warren.

The reassignment of space resulting from the removal of the Department of Physics has made it possible to provide an additional draughting room on the third floor for

the Department of Architecture, a small room on the second floor for the Department of History, and a large room on the first floor for the work in English and Comparative Philology, besides providing a lecture room capable of seating a hundred students, for use by instructors with large sections.

The erection in the near future of the new Engineering building will relieve yet more the crowded condition of College Hall, by rendering available for redistribution the rooms now occupied by the Department of Civil Engineering.

The Department of Botany has received during the year numerous books for the library, two microtomes for the laboratory and a large and valuable Herbarium collected by the late Dr. J. Bernard Brinton, and secured by the Pro-voost through the liberality of Mr. William F. Dreer.

The constant additions that are being made to the Botanical Gardens render it increasingly valuable for undergraduate work, and permit our students to obtain a practical knowledge of plant life. During the year four students in the Junior and Senior classes carried on research work, the results of which proved of great value and are ready for publication.

One of the most important additions to the equipment of the Zoölogical Department during the past year has been the completion of certain large series of zoölogical publications, which have heretofore been incomplete. We now have complete series of some of the largest and best zoölogical series that are published.

Another very important addition to the equipment is the recent gift of a complete photographic outfit for use in connection with the University Vivarium. This is a need which has been felt since the beginning of the work of the Vivarium, and one which had become well-nigh imperative during the past few months. Through the kindness of Mr. Walter E. Hering, a first-class photographic outfit will also be provided.

Another matter of general interest in the way of equipment is the connection of Biological Hall with the Central

Light and Heat Station. This renders the lighting and heating of the building very much more effective than under the old system, and reduces the labor of attendance and the danger of fire.

THE COMPOSITE YEAR IN MEDICINE.

The arrangement between the College and the Department of Medicine, by which students in the Senior year of the course in Arts and Science and in the second year of the special course in Biology are permitted to take the work of the first year of the course in Medicine, was described at length in the report of the College for 1899-1900. That this was a move in the right direction is shown by the fact that nineteen students availed themselves of the privilege the first year it was granted.

SERIES OF TRANSLATIONS AND REPRINTS OF THE DEPARTMENT OF HISTORY.

During the past year the Department of History has changed the form of the *Series of Translations and Reprints from the Original Sources of European History*. In place of the detached pamphlets, which have been published in the past, a single volume is issued each year. The first of the new series is *Selections from Zwingli*—a volume of 258 pages.

It is gratifying to learn that the *Translations and Reprints* are used in the class-rooms of forty-two universities and colleges and four divinity schools. The series now embraces thirty-two publications, and over 50,000 copies have been sold.

MEETING OF THE ASSOCIATION OF COLLEGES.

During the Thanksgiving recess the University had as its guests the members of the Association of Colleges and Preparatory Schools of the Middle States and Mary-

land assembled in the Fourteenth Annual Convention. The first meeting of the Association, as at present constituted, was held at the University in 1889.

NEW PRIZES ESTABLISHED IN THE COLLEGE.

The following new prizes were established during the year and are open to competition by students of the College:

THE J. S. H. PRIZES.

(a) *In the Department of Biology.*

1. Beginning with the year 1901, and thereafter annually until further notice, a prize of twenty-five dollars is offered to the student in the first-year class in the four-year course, or the two-year course, who, having taken the entrance examinations without condition, shall have the highest standing in the class; the term standing and conduct to be determining factors, as well as the standing for examinations.

2. Beginning with the year 1902-03, and thereafter annually until further notice, a prize of fifty dollars to the student in the second year of the above-named courses, who shall stand first in the class, under similar conditions.

3. Beginning with the year 1903-04, and thereafter annually until further notice, a prize of seventy-five dollars to the third-year student in the four-year course, who shall stand first in the class, under similar conditions.

4. Beginning with the year 1904-05, and thereafter annually until further notice, a prize of two hundred and fifty dollars to the fourth-year student in the four-year course, who shall stand first in the class, under similar conditions.

(b) *In the Department of Architecture.*

To the students in Interior Decoration, prizes are open similar in all respects to those offered to the first, second and

third-year students in Biology, provided such students have taken the full entrance examinations for the Department of Architecture.

THE ARTHUR SPAYD BROOKE MEMORIAL PRIZE in the School of Architecture, of a cash value of fifty dollars, is awarded annually to that student in Architecture whose entire work for the year shows the highest general excellence. This prize has been established by Maria Wharton Brooke, as a memorial to her son, Arthur Spayd Brooke, a graduate of the Class of 1897.

THE CHILTON PRIZE.—A prize of one hundred and fifty dollars is offered by Harris J. Chilton, Esq., for the best essay on Compulsory Voting. To be awarded on or before May 15, 1902. Competition is restricted to Seniors in the College and regular students in the Department of Philosophy (Graduate School).

THE PENNSYLVANIA SOCIETY OF NEW YORK offers annually a prize of seventy-five dollars for the best, and a second prize of twenty-five dollars for the second best historical essay on some subject relating to the State of Pennsylvania. Competition is open to members of the Senior Class of the University of Pennsylvania, the Western University of Pennsylvania, Pennsylvania State College, and Lehigh University.

PUBLIC LECTURES IN THE COLLEGE CHAPEL.

A series of public lectures by members of the Faculty, given as follows, attracted large audiences and seemed to bring the University into yet closer touch with the community.

ARCHÆOLOGY:

November 13, 1900, "The Indians of Hupa Valley, California." Stewart Culin.

November 20, 1900, "Recent Excavations at Troy." William N. Bates.

November 27, 1900, "Hebrew and Babylonian Accounts of the Deluge." Morris Jastrow, Jr.

FINE ARTS:

December 4, 1900, "Precedent in American Architecture." Edgar V. Seeler.

December 11, 1900, "Instruments of Music." Hugh A. Clarke.

HISTORY:

January 8, 1901, "A Century of Struggle for the Rights of Man." John Bach McMaster.

January 15, 1901, "Three Days at St. Albans," June 14-16, 1381. Edward P. Cheyney.

SOCIAL SCIENCE:

January 22, 1901, "Current Fallacies About Good Times." Joseph French Johnson.

January 29, 1901, "Self-Help Among the Industrial Classes." Samuel McCune Lindsay.

LITERATURE:

February 5, 1901, "The Elizabethan Theatre." Felix E. Schelling.

February 12, 1901, "The Niebelungenlied." Daniel B. Shumway.

February 26, 1901, "Nature in Eighteenth Century Literature." Josiah H. Penniman.

March 5, 1901, "The Younger Victorians." Cornelius Weygandt.

PHILOSOPHY:

March 12, 1901, "St. Augustine and His World." George S. Fullerton.

PSYCHOLOGY:

March 19, 1901, "Mind and Body." Lightner Witmer.

PHYSICAL SCIENCE:

March 26, 1901, "The Adaption of Plants to Their Surroundings." John M. Macfarlane.

April 2, 1901, "Color." Arthur W. Goodspeed.

April 9, 1901, "Some Recent Advances in Our Knowledge of Life." Edwin G. Conklin.

April 16, 1901, "The Management of Polluted Water Supplies and Their Influence Upon Public Health." Alexander C. Abbott.

THE CERCLE FRANÇAIS.

Under the auspices of the Cercle Français, Molière's *Le Bourgeois Gentilhomme* was creditably presented by students of the College, on March 29, at the New Century Drawing Room.

Two courses of lectures in French were given in the College Chapel and in the Auditorium of Houston Hall, by Professor A. M. Grillon and Mr. Gaston Deschamps.

Professor Grillon's subjects were:

Saturday, January 12, "Origines et histoire générale de la Langue Française."

Saturday, January 26, "La Phonetique. Histoire des Voyelles et des Consonnes."

Saturday, February 9, "Le Lexique—Mobilité du Lexique—Derivation."

Saturday, February 23, "Grammaire historique—Formes et Syntaxe."

M. Deschamps subjects were:

Friday, March 22, "La Presse française au dix neuvième siècle."

Monday, March 25, "Un Homme d'Etat Français; Jules Ferry."

Wednesday, March 27, "Victor Hugo et son siècle."

Thursday, March 28, "La Vie de Provence et les romanciers contemporains: Theuriet, Rene, Bazin, Emile Pouillon."

REORGANIZATION OF THE COURSES IN ARTS AND SCIENCE,
FINANCE AND ECONOMY, AND BIOLOGY.

The Academic Council has been considering for more than a year the reorganization of the courses in Arts and Science, Finance and Economy, and Biology. The committee appointed to study the problem and report a plan proposed the following scheme, which was adopted by the Council, and recommended to the Board of Trustees. It was felt that any scheme that might be adopted should make it possible for students to earn their degrees in three, four or five years, according as circumstances may direct or make it advisable. We should provide, that is, both for the student whose rate of work can be rapid and for those who, though sure to profit by the total course, require for various reasons more time. It is hoped and believed that the following schemes as proposed will enable us to secure these important ends.

COURSES IN ARTS AND SCIENCE.

Required work :

- 6 hours. Foreign Languages—3 to each of 2.
- 6 hours. English and English Literature.
- 2 hours. History.
- 2 hours. Logic and Ethics.
- 2 hours. Mathematics—Solid Geometry and Trigonometry.
- 4 hours. Chemistry and Physics.

Elective work :

Each student shall elect a group of either two or three subjects from the following list: in groups of three, each subject shall cover six hours of work, and in groups of two, each shall cover nine hours of work.

Free Electives :

In addition to the above required and elective work, each student shall be required to take at least twenty hours

work: in this his elective shall be absolutely free except so far as necessary sequence in related courses may condition it.

Subjects from which groups may be chosen:

Greek.	Politics.
Latin.	Chemistry.
German.	Mathematics.
French.	Physics.
English.	Botany.
Philosophy.	Zoölogy.
History.	Geology.
Economics.	Astronomy.

Each student shall take sixty hours before graduation, and not less than twelve hours in any one year.

Of the required work the Logic and Ethics may not be taken before the Sophomore year.

The following recommendations are regarded as essential to the proper working of these proposed schemes of study:

1. That all courses shall consist of two or three hours; no one-hour course to be permitted except by special authorization of the Academic Council; but a two-hour course for a single term shall be allowable.

2. That, so far as possible, in all subjects one-third of the hours be put in the afternoon.

3. That some of the work be placed on Saturday morning, and be distributed as evenly as may be by classes and subjects.

The general provisions 1, 2 and 3, herein recommended, are to apply alike to the courses in Arts and Science, Finance and Economy, and the four-year course in Biology.

The proposed reorganization of the courses in Finance and Economy, and Biology, to bring them under the same general rules, is indicated in the following scheme:

COURSES IN FINANCE AND ECONOMY.

Freshman and Sophomore years.

Group I.

Courses that must be taken the first year.

	Hours.
Economics	2
Race Development	2
Government	2
Physiography	2
English	3

Group II.

Courses that must be taken after Group I.

Advanced Economics	2
Legislative Problems	2
Literature	3

Group III.

Courses that must be taken either with Group I or II.

Accounting	3
History	2
Language	6

Group IV.

Courses that may be taken with Group II.

Economic Geography	2
Commerce	2
Money and Exchange	2
Investment and Speculation	2
Chemistry	4
Mathematics	2
History	3
Language	6

The Junior and Senior years of the course in Finance and Economy to remain as at present. In each of these years, students may take four hours a week outside of the course in Finance and Economy. Each student must take sixty hours of work before graduation, and not less than twelve hours in any one year.

It is recommended that students who desire to complete

the work of the course in three years enter with credits for six hours in Foreign Language, Mathematics or History.

PROPOSALS RELATIVE TO THE COURSE IN BIOLOGY.

1. The subjects required for graduation are as follows :

First Group.

	Hours.
Mathematics (3 and 5)	2
English (1 and 1)	3
German (1)	3
Chemistry (1)	4
Botany (1)	6
Zoölogy (1 and 2)	6
Zoölogy (3 and 5)	6
	<hr style="width: 100px; margin-left: auto; margin-right: 0;"/> 30

Second Group.

Physics (1)	2
English (2 and 1 and 2)	3
German (3) or French (5)	3
Chemistry (2)	6
Botany (2)	6
Zoölogy (4)	3
Zoölogy (6 and 7)	6
Zoölogy (8)	3
Psychology (1 and 2)	2
Geology (3)	2
	<hr style="width: 100px; margin-left: auto; margin-right: 0;"/> 36

Third Group.

Chemistry (3 and 5)	6
Psychology (3 and 4)	2
Botany (3 and 4)	12
Zoölogy (9)	9
	<hr style="width: 100px; margin-left: auto; margin-right: 0;"/> 29

2. The work of the second and third groups cannot be undertaken until the work in the same subject in the preceding group has been completed.

3. Not less than twelve hours shall be taken in any year.

4. It is recommended that students who undertake to complete this course in less than four years enter with credits

for the Mathematics, and for at least one year of the language required, and also that they do work in Botany or Zoölogy during at least one summer at Wood's Holl, or at some other place to be approved by the professors in charge of those subjects.

GRADUATE YEAR IN ARCHITECTURE.

Another important change in the courses in the College was the addition of a fifth year to the four already offered in the course in Architecture. The work of this graduate year will lead to the degree of Master of Science in Architecture, for students who have completed the course leading to the degree Bachelor of Science in Architecture at this University or at another institution the course of which, in Architecture, may be accepted as equivalent to our own. This new course is arranged as follows:

	Hours per week.
Thesis in advanced design—equivalent in unit hours to...	12
History of Architecture and Fine Arts (research course) ..	2
Fine Arts	3
Drawing	2
Water Color	2
	—
	21

The time is indicated in "unit hours," two laboratory or draughting room hours being regarded as equivalent to one "unit" hour.

Certain free electives in the History of Painting, History of Architecture, and Principles of Design have been offered to students in the course in Arts and Science. A number of other changes have been made in the details of the various courses in the College.

The appended tables exhibit statistically the state of the College and its students.

Respectfully submitted,

JOSIAH H. PENNIMAN,
Dean.

COLLEGE STATISTICS FOR 1900-1901.

TABLE I.
STUDENTS IN COLLEGE, 1900-1901.

	A., Arts and Science.	Wh., Finance and Economy.	B., Biology.	M. Music.	Sc., Science and Technology.				Four-Year Technical Courses.						Totals.		
					Sc. Specific Courses not Decided.	Sc. 1. Chemistry	Sc. 2. Civil Engineering.	Sc. 3. Mech. and Elec. Eng.	Ch., Chemistry.	Ch. E. Chemical Engineering.	C. E., Civil Engineering.	M. E. and E. E., Mechanical and Electrical Engineering.	Arch. Architecture.	I. Dec., Interior Decoration.			
Post-Seniors	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Post-Seniors.
Seniors	52	169	84	.	.	.	1	3	7	3	7	28	7	.	.	132	Seniors.
Juniors	43	186	.	.	.	3	1	1	10	3	12	10	7	.	.	116	Juniors.
Sophomores	39	25	5	.	4	.	.	.	9	4	13	23	17	.	.	139	Sophomores.
Freshmen	53	24	3	.	7	.	.	.	10	2	19	52	11	.	.	181	Freshmen.
Students in Special Courses.																	Students in Special Courses.
	Third Year	7	.	9	.	1	.	.	.	.	.	.	8	1	18	Third Year.	
	Second Year	9	3	9	.	.	.	.	.	.	.	.	.	3	32	Second Year.	
First Year	19	9	12	.	.	.	.	.	.	.	.	.	9	3	52	First Year.	
Partial Students	11	18	23	.	3	1	.	.	16	.	8	4	1	1	86	Partial Students.	
Totals	198	139	55	30	14	5	2	9	52	12	59	117	60	8	760	Totals in the College.	

Students taking Courses for Teachers . . . 247

Total 1007

TABLE II.

SHOWING ADMISSIONS TO COLLEGE, 1900.

Average age of students entering Freshman Class in 1899, 18 years, 6 months, 11 days.	
Average age of students entering Freshman Class in 1900, 18 years, 9 months, 11 days.	
Total number of applicants	410
Applicants admitted on examination	91
Applicants admitted on public high school diploma	101
Applicants admitted on credits from other colleges	8
Applicants admitted to advanced standing	31
Applicants admitted to special and partial courses	104
	<hr/>
Applicants rejected on examination	335
Applicants taking preliminaries and receiving credits	8
Applicants taking preliminaries and receiving no credits	56
	11
	<hr/>
	67
	<hr/>
Total	410
APPLICATIONS CONSIDERED BY THE COMMITTEE ON ADMISSION TO SPECIAL AND PARTIAL COURSES.	
Applications on which Committee took action	116
Total applications approved	104
Total applications rejected	12
	<hr/>
	116
APPLICATIONS CONSIDERED BY COMMITTEE ON ADMISSION TO ADVANCED STANDING.	
Applicants who entered College	31
Applicants who did not enter College	4
	<hr/>
	35
APPLICATIONS CONSIDERED BY COMMITTEE ON SCHOOLS AND ENTRANCE REQUIREMENTS.	
Total number of cases acted upon	109
Applicants admitted without examination upon diploma	79
Applicants admitted on diploma with supplementary examination	22
	<hr/>
	101
Applicants admitted from other Colleges	8
Of these, admitted without conditions	1
admitted with conditions	7
	<hr/>
Total	109

CONDITIONS IMPOSED BY COMMITTEE ON SCHOOLS AND ENTRANCE
REQUIREMENTS ON CANDIDATES PRESENTING DIPLOMA OF A PUBLIC
HIGH SCHOOL.

English B	3	Latin D	2
History B	2	Latin E	1
History C	1	Latin F	2
Mathematics F	3	Latin G	2
Greek A	1	French B	5
Greek B	2	German A	3
Greek C	1	German B	9
Greek D	1		
Greek E	1	Total	40
Latin C	1		

TABLE III.

SHOWING ELECTIONS OF GROUPS MADE BY JUNIORS AND
SENIORS IN ARTS AND SCIENCE.

	1900-1901.	
	Juniors.	Seniors.
Greek-Latin	5	8
Latin-German	—	2
French-German	—	2
English-German	—	3
English-French	—	2
History-English	6	6
Philosophy-History	4	4
History, Politics, Economics	—	15
Physics-Mathematics	2	—
Chemistry-Physics	—	1
Biology-Chemistry	7	—
Botany-Zoölogy-Medicine	2	2
Geology-Chemistry	2	1
Economics, Social Science, Law	12	5
Latin-French	1	—
Mathematics-Astronomy	2	1
Total	43	52

TABLE IV.

NUMBER OF STUDENTS CONDITIONED AND NUMBER OF CONDITIONS IMPOSED.

	Number of Students Conditioned.	Number of Conditions.	Conditions per Student Conditioned.
FIRST TERM.			
Post-Seniors	—	—	—
Seniors	55	110	2.0
Juniors	48	114	2.3
Sophomores	60	163	2.7
Freshmen	93	231	2.4
Total Regulars	256	618	2.4
Specials, third year	1	1	1.0
Specials, second year	5	10	2.0
Specials, first year	11	33	3.0
Total Specials	17	44	2.6
Partials	37	80	—
Grand Totals	310	742	2.4
SECOND TERM.			
Post-Seniors	—	—	—
Seniors	25	44	1.7
Juniors	39	72	1.8
Sophomores	52	113	2.2
Freshmen	60	126	2.1
Total Regulars	176	355	2.0
Specials, third year	1	1	1.0
Specials, second year	—	—	—
Specials, first year	7	18	2.5
Total Specials	8	19	2.3
Partials	28	65	2.3
Grand Totals	212	439	2.0

TABLE V.
NUMBER OF STUDENTS ADVANCED WITH CONDITIONS
AND NUMBER OF CONDITIONS CARRIED.

	Number of Students Allowed to Continue with Con- ditions.	Number of Con- ditions.	Number of Conditions per Stu- dent Con- ditioned.
FIRST TERM.			
Post-Seniors	1	1	1.0
Seniors	41	58	1.4
Juniors	26	47	1.8
Sophomores	42	79	1.8
Freshmen	71	132	1.8
Total Regulars	181	317	1.7
Specials, third year	4	9	2.0
Specials, second year	5	8	1.6
Specials, first year	13	32	2.4
Total Specials	22	49	2.1
Partials	33	58	1.7
Grand Totals	236	424	1.7
SECOND TERM.			
Post-Seniors	1	1	1.0
Seniors	17	22	1.3
Juniors	29	45	1.5
Sophomores	36	61	1.7
Freshmen	48	78	1.6
Total Regulars	131	207	1.5
Specials, third year	1	1	1.0
Specials, second year	1	1	1.0
Specials, first year	7	13	1.8
Total Specials	9	15	1.6
Partials	13	26	2.0
Grand Totals	153	248	1.6

TABLE VI.
COLLEGE STUDENTS BELONGING TO UNIVERSITY
ATHLETIC TEAMS.

(Football, Baseball, Crew, Track, Gymnasium and Cricket.)

NUMBER OF STUDENTS ON THESE TEAMS:

Regulars	44
Specials	4
Partials	2
Total	50

	Dropped.	Dismissed.	Withdrawn.	
			1st Term.	2d Term.
Regulars	1	—	—	—
Specials	—	—	—	—
Partials	—	—	—	—

	Number of Students Con- ditioned.	Number of Con- ditions.	Number of Conditions per Student Conditioned.
FIRST TERM.			
Regulars	13	20	1.5
Specials	0	0	—
Partials	3	5	1.6
Totals	16	25	1.6
SECOND TERM.			
Regulars	11	20	1.8
Specials	2	4	2.0
Partials	2	4	2.0
Totals	15	28	1.9

TABLE VII.

COLLEGE STUDENTS BELONGING TO ORGANIZATIONS
OTHER THAN ATHLETIC.

(Mask and Wig, University Band, The Red and Blue, and
The Pennsylvanian.)

NUMBER OF STUDENTS IN THESE ORGANIZATIONS :

Regulars	116
Specials	8
Partials	7
Total	131

	Dropped.		Withdrawn.	
	1st Term.	2d Term.	1st Term.	2d Term.
Regulars	—	2	1	3
Specials	—	—	1	—
Partials	—	1	—	1
Totals	—	3	2	4

	Number of Students Conditioned.	Number of Conditions.	Number of Conditions per Student Conditioned.
FIRST TERM.			
Regulars	36	54	1.5
Specials	1	1	1.0
Partials	5	10	2.0
Totals	42	65	1.5
SECOND TERM.			
Regulars	29	53	1.7
Specials	2	2	1.0
Partials	4	8	2.0
Totals	35	63	1.8

TABLE VIII.
STUDENTS WITHDRAWN OR DROPPED.

	With- drawn.	Dropped.		Dismissed.	Deceased.
		1st Term.	2d Term.		
Post-Seniors	—	—	—	—	—
Seniors	2	—	1	—	2
Juniors	2	2	4	—	—
Sophomores	5	2	6	—	—
Freshmen	13	4	11	—	—
Total Regulars	22	8	22	—	2
Special, third year	—	—	—	—	—
Special, second year	4	—	—	—	—
Special, first year	6	—	2	—	1
Total Specials	10	0	2	—	—
Partials	29	4	5	—	—
Grand Total	61	12	29	—	3

TABLE IX.
SCHOLARSHIPS.

	Arts.	Wharton.	Science.	Mechanical Engineering.	Civil Engineering.	Chemistry.	Biology.	Architecture.	Chemical Engineering.	Grand Total.
<i>Full Faculty Scholarships.</i>										
Post-Senior	—	—	I	—	—	—	—	—	—	I
Seniors	9	3	I	3	I	2	—	I	—	20
Juniors	2	I	I	I	2	3	—	2	—	12
Sophomores	7	2	I	—	—	I	—	I	I	13
Freshmen	4	I	—	6	I	—	—	I	—	13
Partials	—	2	—	—	—	I	I	—	—	4
First-Year Special	—	I	—	—	—	—	—	—	—	I
Total . . . . .	.	.	.	.	.	.	.	.	.	64
<i>Partial Faculty Scholarships.</i>										
Seniors	I	I	—	2	I	—	—	—	I	6
Sophomore	—	—	—	I	—	—	—	—	—	I
Freshmen	—	—	—	I	—	I	—	—	—	2
Partial	—	—	—	—	—	—	I	—	—	I
Total . . . . .	.	.	.	.	.	.	.	.	.	10
<i>Muhr Scholarships.</i>										
Senior	—	—	—	—	I	—	—	—	—	I
Junior	I	—	—	—	—	—	—	—	—	I
Partial	—	—	—	—	—	—	I	—	—	I
Total . . . . .	.	.	.	.	.	.	.	.	.	3
<i>Penn Scholarships.</i>										
Senior	—	—	—	—	—	I	—	—	—	I
Sophomore	I	—	—	—	—	—	—	—	—	I
Total . . . . .	.	.	.	.	.	.	.	.	.	2
<i>Matthew Baird Scholarship.</i>										
Partial	—	—	—	I	—	—	—	—	—	I
Total . . . . .	.	.	.	.	.	.	.	.	.	I
<i>Free City Scholarships.</i>										
Seniors	4	—	—	2	I	—	I	—	—	8
Juniors	2	I	—	—	—	—	—	—	I	4
Sophomores	3	—	—	3	3	2	I	I	—	13
Freshmen	—	I	—	2	—	I	I	I	—	6
Total . . . . .	.	.	.	.	.	.	.	.	.	31
<i>Pay City Scholarships.</i>										
Juniors	I	3	—	I	4	I	2	—	I	13
Sophomores	2	—	—	3	3	2	2	—	—	12
Freshmen	2	2	—	5	3	I	—	I	—	14
Partials	—	—	—	—	—	—	4	—	—	4
Second-Year Specials	—	—	—	—	—	—	2	—	—	2
Total . . . . .	.	.	.	.	.	.	.	.	.	45
Totals	39	18	4	31	20	16	16	8	4	156

APPENDIX III.

REPORT OF THE DEAN OF THE DEPARTMENT OF PHILOSOPHY.

To the Provost of the University;

SIR:—I have the honor of presenting to you my report upon the progress of our work during the year ending August 31, 1901, as follows:

THE FACULTY AND ITS COMMITTEES.

The members of the Executive Committee for the year 1900-01 were:

Edgar F. Smith, Vice-Provost, *ex-officio*,
William Romaine Newbold, Dean, *ex-officio*,
William A. Lamberton,
Simon N. Patten,
George Stuart Fullerton,
John M. Macfarlane,
Marion D. Learned.

Professor A. W. Goodspeed has represented this Faculty upon the University Athletic Committee and Professor E. P. Cheyney upon the University Committee on Non-Athletic Organizations.

The Committee on Discipline has consisted of the Dean, Professors Crawley and Conklin. It has had no duties to discharge.

Professor Hilprecht resumed his graduate instruction the first week of November, but was compelled again to lay it down in the first week of March, when the interests of the

University required his presence in the Orient. During his absence, as heretofore, the more important part of his work was carried by Dr. Clay.

Assistant Professor E. R. Johnson was again absent on public business, his duties as a member of the Isthmian Canal Commission making it impossible for him to continue his graduate work.

Assistant Professor Rowe was also absent on public business, having been appointed by President McKinley a member of the Commission for the Codification of the Laws of Porto Rico. Professor Rowe will return to his duties in February, 1902.

Professor Brumbaugh also was absent on public business, having been appointed Commissioner of Education for the Island of Porto Rico. The graduate work in Pedagogy was given during the year by the Hon. Nathan C. Schaeffer, Superintendent of Public Instruction for the State of Pennsylvania. Professor Schaeffer has consented to continue this work during Professor Brumbaugh's absence in the year 1901-02.

Professor Barker's resignation has thrown all the graduate work in Physics upon the shoulders of Assistant Professor Goodspeed and Dr. Richards. Notwithstanding this increase in their responsibilities, the work in Physics has not been diminished. The work as planned by Professor Barker comprised six standard lecture courses offered by Professor Barker, three offered by Assistant Professor Goodspeed, and one offered by Dr. Richards. In the work as reorganized, Professor Goodspeed offers four standard courses, Dr. Richards offers three, and a seminary in Physics equivalent to one standard course has been added under the joint direction of the two instructors. In place of the eleven laboratory hours formerly offered, twelve are now offered. The total amount of work, therefore, is increased by one laboratory hour.

At the close of the year we lost by resignation: Joseph French Johnson, Lecturer on Monetary Problems; Henry W. F. Lorenz, Ph. D., Lecturer in Chemistry, and Raymond

M. Alden, Ph. D., Lecturer in English. Associate Professor Gudeman has been granted leave of absence for the year 1901-02. During that year the graduate work in Latin will be given by Professor Edgar S. Shumway and Dr. W. B. McDaniel.

Daniel B. Shumway, Ph. D., and Clarence G. Child, Ph. D., have been advanced from Lectureships in German and English respectively to Assistant Professorships in the same subjects.

During the current year Miss F. R. M. Hitchcock, Ph. D., who for four years past has held the position of Director of Women of this University, was compelled to resign her post by the pressure of other duties. In deference to what I know to be her wishes, I must refrain from any specific allusion to the many acts of kindness and of generosity of which those of us who have been closely associated with her have become, always very indirectly, aware; but I cannot allow the occasion offered by the necessity of mentioning her resignation to pass without expressing my appreciation of her earnest and unselfish devotion to the interests of the women graduate students during her connection with the Department.

The organization of the new Group Committee in Jurisprudence and Political Science, which was authorized towards the close of the year 1899-1900 (*cf.* page 80 of my last report), has not yet been carried into effect owing to the death of Mr. White and the continued absence of Professor Rowe.

ADMINISTRATION.

A number of changes in the organization of the Department and in the administrative rules have been made during the year just closed. The new regulations for the advancing of candidates to the higher degrees, the details of which I gave in my last report to you, pages 81 to 85, were made obligatory upon all candidates at the close of the year. Some difficulty has been found in enforcing the provision requiring

the printing of the thesis. In some cases the candidate desires to print the thesis in a technical journal, or in the proceedings of some learned society. It is desirable that this should be done whenever possible, as the thesis is thereby insured wider circulation than can be secured when it is privately printed; but in such cases its actual publication frequently must be deferred for some months, and it does not seem just or necessary that the candidate should not be allowed to receive the Doctor's degree until the thesis has actually appeared in print. In these cases we have for the past two years regarded a letter from the editor of the journal in which it is to appear, accepting it for publication, as a sufficient guarantee that the rule would be complied with, and have allowed the candidate to proceed to his degree.

Some students, again, desire to delay the printing of the thesis for a few weeks or months in order to make certain additions to it which, while their absence would not materially affect its value as a contribution, are nevertheless desirable. In these cases we have allowed the student to proceed to his degree after he has deposited with the Dean a copy of the thesis in a form suitable for publication, and a sum of money sufficient to print the manuscript. If the thesis is not printed by the student within the period fixed by the Executive Committee, it will then be printed by the Department.

The interpretation of Article III, Section 2, Paragraph (a) of the rules, providing that admission to the Graduate School may be granted by the Dean to persons holding certain specified degrees provided those degrees are "recognized" by this University, has given rise to much perplexity. Under the provisions of our Constitution as approved by the Board of Trustees, the right to interpret this and other rules is vested in the Executive Committee. For some years past the Committee has interpreted this rule as follows: When the degree held by the applicant represents three-fourths of the work required by this University for the corresponding baccalaureate degree, the student is allowed the option of entering the Graduate Department or of entering the College. If the degree represents less than this amount, it is

not accepted for admission to the Graduate Department, and the applicant is not allowed to proceed to a higher degree until he has taken a baccalaureate degree which is accepted by us.

Exceptions to this interpretation have sometimes been made in cases in which applicants who had originally graduated from colleges whose degrees could not be recognized under this interpretation, had since graduation devoted themselves to graduate work, or to teaching, or to private research, and had attained in their several branches of work a recognized standing at least equivalent and in many cases superior to that of the graduates of the greater colleges. Whenever it is found that the work done for the degree held by the applicant falls short of the amount required by us for the corresponding degree by a year or by not much less than a year, we advise the student to enter the College rather than the Graduate School, and to take a second baccalaureate degree. This step would not materially increase the actual time required to attain to the higher degree. A candidate for the Master's degree is in all cases required to take as many standard courses in addition to the twelve required of our own graduates as will represent the difference in value between the baccalaureate degree held by the candidate and our own corresponding degree. The time required for the degree of Doctor of Philosophy will also be proportionately lengthened. Nevertheless, most students in this position are unwilling to enter the College, partly because of the greater freedom allowed graduate students in the election of courses and in attendance, partly because of the higher fees charged students in the College, and partly again because there are practically no scholarships available for a student entering the Senior Class of the College.

It will be seen that the interpretation adopted by the Committee might be construed as a discrimination against our own College degree. We do not, however, believe that it is such in fact, and we are convinced that the interests of scholarship do not require us to demand of all graduate students a degree equivalent to that granted by our own

College. To take the last point first—it is not required in the interest of the individual student's scholarship: good advanced work in any subject presupposes (1) training in the methods and acquaintance with the results of several distinct sciences, (2) a knowledge of the foreign languages which must be used in the prosecution of the graduate work elected. These qualifications a student in one of our larger colleges should possess at the close of his Junior year. The Senior year is usually not only devoted to work of a relatively advanced character, but that work is pursued under conditions which allow of a very considerable degree of specialization. It is therefore both in its actual character and in the conditions under which it is given much more closely akin to graduate than to what is usually understood as undergraduate work.

There is no good reason for requiring that every graduate student in a given subject should begin graduate as distinguished from undergraduate work at the same point. One student may well begin with more elementary and another with more advanced work in the subject, provided both be required to attain approximately the same degree of proficiency before receiving the Doctor's degree. This is the justification for the recognition that a portion of the more elementary work in many subjects may properly be regarded as suitable both for graduates and for undergraduates, a policy which is now adopted by nearly all American universities. Its adoption by us has been impeded by the presence of women in the graduate work, since the laws of our College forbid the presence of women in most classes attended by undergraduates.

Furthermore, the general interests of scholarship do not demand of us that we refuse to recognize the degrees in question. Although the most influential institutions have agreed in fixing the standard for the baccalaureate degree at least a year higher than that formerly recognized and since maintained by the majority of American colleges, I cannot believe that this radical difference in the amount of work required for the baccalaureate degree and in the conditions

under which it is granted will continue to be permanent features of our system of higher education. The ultimate adjustment must come either in the greater institutions accommodating their requirements to those of the majority of colleges, or in the latter raising their standard to conform to that of the former. Strong arguments can be alleged on both sides of the controversy, but the standard for the higher degree is not involved in it. I do not at the present time see any reason to believe that we would not maintain the standard now set for those degrees at its present point, even if by concerted action the authorities of the other universities of the country should resolve upon a lower standard for the baccalaureate degree.

If we require as a condition of admission to graduate work a degree equivalent to our own baccalaureate degree, we shall be casting our influence definitely in favor of the permanent maintenance of the higher standard. This we do not feel required to do. On the other hand, our recognition of the degrees of the smaller colleges is not intended as an encouragement of their claim that the standard for the baccalaureate degree should not be set as high as it now is by the colleges of the greater universities. It merely implies that, although the graduate of a smaller college will usually require four years to win his Doctor's degree, and the graduate of the college of the great university three, we do not regard it as a matter of vital importance whether that year be spent as a member of the senior class of a college or as a first-year student in a graduate school.

It will be seen then that our present policy is not in fact a discrimination against our College, save in so far as the circumstances already mentioned may influence a student to enter the Graduate School rather than the College. That we cannot prevent.

EQUIPMENT.

In my last report I stated on page 86 that the Class of '89 of the College had contributed about two thousand dollars

for the purchase of books on Philosophy and kindred subjects. During the summer of 1901 Professor Fullerton went to Europe, and devoted a large part of his time to the purchase of a carefully selected library of books covering the last three centuries in the history of philosophic thought. The total purchases amounted to about nine hundred volumes. Many of these books are rare and we have been singularly fortunate in securing them. Although purchases are being made almost daily, a portion of the sum still remains unexpended, not because there are not many books which we still need, but because a large number of the landmarks of the History of Philosophy come into the market but seldom. The delay in the expenditure of the total amount is merely an assurance of the care with which it is to be used—care which will exclude the purchase of useless material.

The fellowship funds provided by the George Leib Harrison Foundation have, as heretofore, been chiefly expended in the increase of the Library.

The gift of \$250,000 by Mr. Randal Morgan for a new Laboratory of Physics has made it possible for us to offer to our students admirable laboratory facilities in that subject.

Some of the rooms in College Hall formerly used for laboratory work in Physics, have been converted into a Psychological Laboratory, giving ample space for the present needs in Psychology. The removal of the Psychological Laboratory from the rooms formerly occupied in Biological Hall has provided more floor space for the laboratories of Botany and Zoölogy.

These changes, in addition to the equipment of the Seminary rooms in the Library, have in large measure satisfied the needs for additional room to which I have referred in former reports as justifying the erection of a building for graduate work. I do not regard such a building as at the present time needed. For the details of other additions to our equipment I would refer to the reports of the Dean of the College and of the Librarian.

FELLOWSHIPS.

The temporary University Fellowship in English, founded by Mr. J. F. Sinnott for the years 1899-1901, was held by Joseph Vincent Crowne, Ph. D., until his resignation on February 1, 1901, to accept the position of Professor of English in the Temple College, Philadelphia. Mr. Sinnott then generously authorized the transfer of that portion of the fund which remained unexpended, to the Department of Philosophy for expenditure in enlarging our library of Mediæval Philosophy, for which a fund was raised in the year 1898-99.

A new Fellowship upon the Harrison Foundation has been created by the Corporation. It will be known as "The Research Fellowship in Assyriology on the George Leib Harrison Foundation of the University of Pennsylvania." The holder of this Fellowship must have received the degree of Doctor of Philosophy, but not necessarily from the University of Pennsylvania. The duties connected with the Fellowship are:

1. Such work in the Assyriological Collections of the University of Pennsylvania, or elsewhere, as will tend to make the contents, the value, and the significance to science of the collections of the University of Pennsylvania known to scholars and to the public.
2. Work with the Babylonian Expedition of the University of Pennsylvania.
3. Such instruction in the College or Graduate School of the University as will tend indirectly towards either of the above ends by enabling other members of the Assyriological Department to devote themselves more exclusively thereto.
4. The details of the appointee's duties to be determined by Professor H. V. Hilprecht, in consultation with and subject to the approval of the Provost.

The compensation attached to the Fellowship is at the rate of \$800 per annum.

Of the five Senior Fellowships on the George Leib Harrison Foundation, four have been filled.

Claude Halstead Van Tyne, Senior Fellow in American History on the Harrison Foundation, continued his work upon the Loyalists in the American Revolution, part of which he presented as his thesis for the Doctor's degree. This inquiry covers the military organization and operations of the Loyalists; British treatment of the Loyalists during and after the Revolution, and the assistance other than actual military service rendered by the Loyalists to the British; treatment of the Loyalists by mobs and the attempts of the American authorities to protect them. He also made some further studies of the Loyalist centres, their social status and nationality, and their number as compared with that of the patriots. In the actual composition of the "History of the Loyalists," Dr. Van Tyne has completed in manuscript the equivalent of about ninety printed pages.

He has also nearly completed the editing of the unpublished letters of Daniel Webster, above one thousand in number, and consisting of correspondence between Webster and members of his family, his farmers, his constituents, and a great number of the political men of his time, among them being letters to and from John Quincy Adams, Lord Ashburton, Thomas H. Benton, Stratford Canning, Lewis Cass, Henry Clay, DeWitt Clinton, Edward Everett, Millard Fillmore, Samuel Houston, Lafayette, John Marshall, William H. Seward, Sydney Smith, Joseph Story, John Tyler, Thurlow Weed, William Wirt, and many other eminent men. Several of the famous political controversies in American History received new and searching light, and Webster's criticism of public men of his time and his most intimately expressed opinions upon great events are given for the first time. The work will be published by McClure, Phillips & Co., New York.

Dr. Van Tyne has also written a brief history of the United States, published in both Spanish and English, under the direction of Major-General MacArthur, for use in the Philippine Islands. The questions discussed in this history are: (1) Growth of Territory, in which the physical features of the United States, the birth of the nation and its growth

after independence are described; (2) the industrial development of the United States; (3) The government of the United States, under which head are described the events leading to the formation of the Constitution, the important phases of the Constitution, and finally the state and local governments.

Dr. Van Tyne has also written a number of encyclopædia articles and book reviews. He has been reappointed to his Senior Fellowship for the year 1901-02.

Victor William Dippell, Ph. D., Senior Fellow in Assyriology on the Harrison Foundation, continued his thesis work upon Assyrian Proper Names. He has collated about three thousand published tablets, and has record of between fifteen and twenty thousand separate names occurring from eighty to one hundred thousand times. Dr. Dippell was unable to bring this material into form for publication by reason of the many errors in the published material upon which he was working. To complete it, it would have been necessary for him to visit the British Museum and consult the original tablets, which, unfortunately, the conditions of tenure of the Senior Fellowships did not permit him to do. For the year 1901-02 Dr. Dippell is pastor of a church at Lebanon, Pa.

James Edward Hagerty, Ph. D., Senior Fellow in Sociology upon the Harrison Foundation, devoted himself to the study of commercial credit, a part of a more extended study upon the distribution of industrial products. He has completed and has ready for publication chapters on "Commercial Credit," "The Credit Man," "The Mercantile Agency System," "Commercial Credits and Depressions," "The History of the Credit Men's Association," and "Bankruptcy Legislation." He also during the year collected considerable data for another branch of the subject. During the year 1901-02 Dr. Hagerty will be Assistant Professor of Economics and Sociology in the Ohio State University, Columbus, Ohio. He expects to complete his work and to have it ready for publication by the end of the summer of 1902.

Martin Schütze, Ph. D., Senior Fellow in Germanics on the Harrison Foundation, continued the work of previous years upon "The Contemporary German Drama from Hauptmann to the Present Day," and "The German Drama from Schiller's Death to the Middle of the Nineteenth Century." The results of the above-mentioned work were in part presented in Dr. Schütze's lectures to graduate students during the first half of the year, and will serve as the basis for an important publication which is now in course of preparation. Dr. Schütze resigned his Senior Fellowship on the first of January to accept an instructorship in German as a *locum tenens* in the Northwestern University, Evanston, Ill. In September, 1901, he accepted a position as Associate in German at the University of Chicago.

Joseph Vincent Crowne, Ph. D., University Fellow in English, continued his work upon the Early English Devotional Lyric, being engaged more particularly in a study of the poems of the mystic, Richard Rolle, and of the "Complaints of Mary." The latter were investigated with especial reference to the possibility of their offering one of the sources of the religious drama. The work included an investigation of French and Latin sources and parallels, the legends and symbolism involved. Among the more interesting preliminary results are a clearer recognition than has heretofore been attained of the fact that these poems constitute a large and definite group; the discovery that the lament contained in the "Cursor Mundi" is a free translation of a sermon by Saint Bernard; that the poems as a class show no evidence of dramatic intent, and that there is but slight evidence of contact between these lyrics and the corresponding scenes in the Mystery Play. Dr. Crowne's work was interrupted by his resignation in February. He is still continuing it as opportunity offers, and hopes to publish a portion in the near future. Some of his conclusions were comprised in a paper read at the meeting of the Modern Language Association in 1900. During the year 1901-02 Dr. Crowne will be a Tutor in the College of the City of New York.

Miss Lily Gavit Kollock, Ph. D., Honorary Fellow

in Chemistry, devoted herself to a review of special methods for the quantitative determination of fluorine in minerals, and the application of the method of Offerman, with slight modifications, to the estimation of fluorine in insoluble silicates. Among other topics upon which her investigations touched were the following: The electrolytic deposition and determination of uranium from solutions of the acetate, nitrate and sulphate; separations of uranium from barium, calcium, magnesium and zinc in acetate solutions; the electrolytic deposition and determination of molybdenum; the electrolytic separation of sulphur and molybdenum in molybdenite and the quantitative determination of these constituents. The results of her work have been incorporated in two published papers, "The Electrolytic Method Applied to Uranium," *Journal of the American Chemical Society*, August, 1901; and "The Electrolytic Determination of Molybdenum," in the same journal, September, 1901. Miss Kollock has accepted the position of Professor of Chemistry in the Girls' High School, Louisville Ky., for the year 1901-02.

Albert Edward McKinley, Ph. D., Honorary Fellow in American History, published during the tenure of his fellowship the following articles: "The English and Dutch Towns of New Netherlands," *American Historical Review*, Vol. vi, pp. 1-18; "The Transition from Dutch to English Rule in New York," in the same journal, Vol. vi, pp. 693-724. He also continued his studies in the history of the suffrage and political representation in the English colonies.

S. C. Schmucker, Ph. D., Honorary Fellow in Botany, has under preparation a book of nature studies for the Educational Series published by the firm of J. B. Lippincott Company, under the general editorship of Professor M. G. Brumbaugh.

Charles Hugh Shaw, Ph. D., Honorary Fellow in Botany, undertook the study in a number of native flowering plants of the periods at which the phases in the process of spore-formation occur, and the periods at which fertilization occurs, with a view also to glean possible facts with regard to

the phenomena of fertilization. He collected a large amount of material and prepared a large number of microscopic slides, but was prevented by the pressure of other duties from preparing his results for publication.

The Alumnae Fellowship for Women, established in June, 1898, by women who had formerly been students of the University, and guaranteed for three years, expired last June. It had been held since its establishment by Miss Roxana Hayward Vivian, A. B. (Wellesley, 1894), who received her Doctor's degree in Mathematics in June, 1901, and in September went to Wellesley College as Instructor in Mathematics. While we naturally regret that this Fellowship could not have been made permanent, I desire here to express the gratitude and appreciation of the Department to the women who have maintained it during these three years.

Of the nineteen Harrison Fellowships, seventeen have been filled.

Mr. U. S. Hanna, Fellow in Mathematics and Astronomy, resigned January 1, 1901, to accept the Assistant Professorship in Mathematics in the University of Indiana.

Mr. H. C. Longwell, Fellow in Philosophy, resigned February 1 for personal reasons approved by the University. He has been reappointed Fellow for the year 1901-02.

The five Harrison Fellowships at large were awarded for the past year to Classical Languages, English, Mathematics, Chemistry and Zoölogy.

Mr. Charles Tyndall Evans, Tyndale Fellow in Physics, has been absent on leave at Harvard University during the year.

Of the eight Harrison Scholarships seven were awarded.

Of the thirty University Scholarships twenty-five were awarded.

REGISTRATION.

The registration for the year was practically the same as that of the preceding year. The total number of students registered was 179. Of these, three withdrew without

doing any work, leaving 176 as the net registration. Nine were Senior, University and Honorary Fellows, that is to say, persons who had already taken their Doctor's degree and returned to the University under various provisions, for the purpose of carrying on research work. Twenty-five were classed as "auditors," that is to say, as persons who, holding no baccalaureate degree, cannot become candidates for a higher degree; leaving 142 students who were fitted to present themselves for candidacy for a higher degree. Of these 142 students, 87 had been in the Department during the preceding year, while 55 were new students. The subjoined table will give the registration figures for 1900-01, the corresponding figures for the two preceding years being annexed in brackets.

	New Students.			Old Students.			Total.		
	1900-1901.	'99-00	'98-9	'00-01	'99-00	'98-9	'00-01	'99-00	'98-9
Senior, University and Hon. Fellows	1	[1,	3]	8	[5,	5]	9	[6,	8]
Regular Students	55	[72,	68]	87	[66,	62]	142	[138,	130]
Auditors	8	[19,	13]	17	[12,	11]	25	[31,	24]
	64	[92,	84]	112	[83,	78]	176	[175,	162]

The following figures will show the number of women in the Department during the last six academic years:

	'95-6	'96-7	'97-8	'98-9	'99-1900	1900-01
Fellows and other						
Regular Students.	13	13	18	21	32	27
Auditors	17	14	18	11	12	9
	30	27	36	32	44	36

The percentage of women in the Department is shown in the following table:

	'95-6	'96-7	'97-8	'98-9	'99-1900	1900-01
Of the Fellows and other Regular Students	12	12	14	16	23	18
Of the Special Students	28	17½	30	46	33	36
Of the Total Number of Students	18	15	22½	20	25	20

INSTITUTIONS REPRESENTED.

	A. B.	B. S.	Other Non-Technical Degrees.	Technical Baccalaureate Degrees.	M. A. and M. S.	Ph.D.	Degrees in Theology.
Alfred	I	—	—	—	—	—	—
Allegheny	I	—	—	—	—	—	—
Alma	I	—	—	—	—	—	—
Amherst	I	—	—	—	—	—	—
Boston	—	—	—	—	—	—	—
Bowdoin	I	—	—	—	—	—	S. T. B. 1
Bryn Mawr	I	—	—	—	I	—	—
Bucknell	I	—	Ph. B. 1	—	I	—	—
Univ. of California	I	—	Ph. B. 1	—	—	—	—
Calvin	I	—	—	—	—	—	—
Carleton	I	—	—	—	—	—	—
Univ. of Chicago	2	—	—	—	—	—	—
Colby	I	—	—	—	2	—	—
Colorado College	I	—	—	—	—	—	—
Columbia	I	—	—	—	—	—	—
Cornell	I	—	Ph. B. 3	B. S. in Math. 1	I 2	—	—
Delaware	I	—	—	—	—	—	—
Denison	I	—	—	—	—	—	—
Dickinson	2	—	Ph. B. 2	—	I	—	—
Univ. of Georgia	—	I	—	—	—	—	—
Harvard	—	—	—	—	I	—	—
Haverford	6	2	Ph. B. 1	—	2	—	—
Hiram	I	—	—	—	—	—	—
Univ. of Illinois	I	—	—	—	—	—	—
Univ. of Indiana	5	—	—	—	I	—	—
Univ. of Iowa	I	—	Ph. B. 1	—	—	—	—
Johns Hopkins	I	—	—	—	—	—	—
Juniata	I	—	—	—	—	—	—
Kenyon	—	—	Ph. B. 1	—	—	—	—
Lafayette	2	—	Ph. B. 1	—	—	—	—
Lebanon Valley	I	—	—	—	—	—	—
Lehigh	—	I	—	—	I	—	—
Univ. of Maine	—	—	—	B. S. in Chem. 1	—	—	—
Univ. of Michigan	I	—	—	—	—	—	—
Univ. of Minnesota	—	I	—	—	—	—	—
Muhlenberg	I	I	—	—	2	—	—
Nashville	I	—	—	—	—	—	—
Northwestern	I	—	—	—	—	—	—
Oberlin	4	I	—	—	I	—	—
Ohio Wesleyan	I	2	—	—	I	—	—
Pennsylvania College	I	—	—	—	—	—	—
Univ. of Pennsylvania	16	15	—	B. S. in Biol. 3 B. S. in Chem. 4 B. S. in Econ. 2 LL. B. 2	10	9	—

	A. B.	B. S.	Other Non- Technical Degrees.	Technical Bacca- laureate Degrees.	M. A. and M. S.	Ph.D.	Degrees in Theology.
Princeton	2	—	—	—	I	—	—
P. E. Theol. Seminary	—	—	—	—	—	—	B. D. I
Rochester	—	—	Ph. B. I	—	—	—	—
Simpson	—	—	Ph. B. I	—	—	—	—
Smith	2	—	—	—	—	—	—
Stevens Institute	—	—	—	—	I	—	—
St. Joseph's	I	—	—	—	—	—	—
St. Lawrence	—	I	—	—	—	—	—
St. Andrew's	—	—	L. L. A. I	—	—	—	—
Swarthmore	—	—	B. L. I	—	2	—	—
Syracuse	—	I	—	—	—	—	—
Toronto	3	—	—	—	—	—	—
Trinity	2	—	—	—	—	—	—
Tufts	I	—	—	—	I	—	—
Ursinus	3	—	—	—	2	—	B. D. I
Washington	—	—	—	B. S. in Chem. I	—	—	—
Wells	2	—	—	—	—	—	—
Wellesley	I	I	—	—	—	—	—
Williams	I	—	—	—	—	—	—
Wisconsin	—	—	B. L. I	—	—	—	—
Woman's College of Baltimore	I	—	—	—	—	—	—
Yale	3	—	Ph. B. 2	—	—	—	—

Total number of degrees.....	190
Admitted to baccalaureate standing by special action:	
Graduate of Gymnasium of Güstrow.....	I
Graduate of Gymnasium of Haarlem.....	I
Holders of University of Pennsylvania Certificates.....	3
Former matriculates of other American institutions.....	2
	197
Repeated	46
	151

DISTRIBUTION OF COURSES.

The following table gives the studies elected by regular students working with the degree of Doctor of Philosophy in view.

I have not included in this table the studies elected for the Master's degree, which I have given for a number of years past. In theory the Master's degree is supposed to

represent one year of work distributed among a number of different subjects, but in fact very few students now plan their course upon that principle. Nearly all elect courses so related that they could in time be credited towards the Doctor's degree. Those who apply for the Master's degree usually do so because they desire some definite recognition on the part of the University for the work which they have actually accomplished, a desire which becomes intensified when they foresee that financial or other difficulties are likely to prevent their completing the work for the Doctor's degree. While we do not encourage this practice, we do not refuse the degree if the student is applying for it under these circumstances. The consequence is that the elections for the Master's degree have no particular significance, and for that reason I have omitted them from this report and do not intend again to include them.

For a similar reason I have omitted the studies elected by special students. Prior to the year 1898-99 a very large number of our students were classed as special students. In that year the principle of classification was changed. Partly in consequence of the change, and partly in consequence of new rules which were at that time adopted, the number of special students rapidly diminished. In 1896-97 we had eighty students classed as specials. Last year we had in the corresponding class, auditors, twenty-six students. No especial interest attaches to the studies elected by the few irregular students.

STUDIES ELECTED BY REGULAR STUDENTS.

Min., abbreviation for Minor. Maj., abbreviation for Major.

	FOR THE DOCTOR'S DEGREE.													
	'94-95	'95-96	'96-97	'97-98	'98-99	'99-00	'00-01	'94-95	'95-96	'96-97	'97-98	'98-99	'99-00	'00-01
	Min.	Min.	Min.	Min.	Min.	Min.	Min.	Maj.	Maj.	Maj.	Maj.	Maj.	Maj.	Maj.
Comparative Philology and Sanskrit . . .	2	3	3	4	5	5	4	I	..	..	I	I	I	2
Greek	6	7	7	6	6	5	10	2	I	2	4	5	5	4
Latin	2	2	2	4	4	6	8	I	2	3	3	7	5	5
Romanic	2	3	2	6	8	6	6	..	2	2	..	3	2	4
Germanic	I	2	I	I	4	5	7	..	I	I	..	5	8	II
English Philology	6	7	6	7	II	10	15	I	I	..	..	I	I	..
English Literature	6	7	10	11	5	3	6	3	5	4	7	13	14	17
Assyrian	2	3	I	I	I	2	2	3	4	4	8	I	..	..
Hebrew	7	7	6	6	2	..	7	3	2	3	2	2	4	5
Syriac	2	..	..	..	..	I	..	..	..	..	..	..	..	..
Arabic	3	2	..	I	2	..	2	..	..	..	..	I	..	..
Philosophy	31	20	26	15	14	8	13	16	14	9	8	4	5	7
Psychology	7	8	10	8	2	4	8	6	7	2	3	6	4	3
Ethics	9	8	9	5	4	4	4	I	3	4	I	..	..	..
Pedagogy	12	15	7	8	9	2	5	13	II	II	4	8	8	7
American History	3	6	II	6	9	8	13	7	8	4	6	9	7	5
American Constitutional History . . . . .	..	2	3	3	I	I	..	..	I	2	I	I	I	5
European History	9	12	8	11	12	7	3	5	6	I	5	4	6	4
Political Science	7	9	7	4	6	5	5	4	6	4	2	I	2	4
Economics	27	24	14	9	6	7	11	3	4	6	5	7	5	9
Statistics . . . . .	..	4	2	3	2	I	I	..	..	..	..	..	..	..
Mathematics	2	2	2	8	7	8	10	5	4	..	..	6	6	9
Astronomy	4	I	4	..	I	4	4	..	4	4	3	4	6	6
Physics	6	6	3	6	2	I	7	I	..	I	2	2	4	4
Chemistry	2	2	5	5	5	3	2	11	12	13	10	4	5	4
Geology	II	10	II	10	5	3	3	..	..	..	..	..	..	..
Mineralogy	8	17	7	7	5	3	4	..	I	I	I	I	I	I
Botany	3	2	I	4	5	3	8	3	I	2	I	3	3	3
Zoölogy	7	4	3	4	6	8	8	4	3	3	6	9	8	8
Italian and Spanish	I	..	2	..	I	2	3	..	..	..	..	..	..	..
Old Norse . . . . .	..	..	I	..	2	I	I	..	..	..	..	..	..	..
Mediæval History . . . . .	..	..	..	I	..	I	I	..	..	2	I	..	..	..
English History . . . . .	..	..	..	I	2	I	6	..	..	I	..	..	..	..
Organic Chemistry . . . . .	..	..	..	7	7	12	12	..	..	..	2	2	..	..
Inorganic Chemistry . . . . .	..	..	..	4	2	I	..	..	..	..	5	6	10	II
Analytical Chemistry . . . . .	..	..	..	3	3	I	5	..	..	..	..	..	..	..
Comparative Anatomy of the Vertebrates . . . . .	..	..	..	I	I	..	I	..	..	..	..	..	..	..
Electro Chemistry . . . . .	..	..	..	..	..	I	..	..	..	..	I	..	..	..
Sociology . . . . .	..	..	..	..	4	5	8	..	..	..	I	3	7	5
Classical Archæology . . . . .	..	..	..	..	..	..	I	..	..	..	..	..	..	..
Physiography . . . . .	..	..	..	..	..	..	I	..	..	..	..	..	..	..
Minors not yet elected . . . . .	..	..	10	9	70	92	68	..	..	..	..	..	..	..
	185	194	182	188	240	242	284	97	98	91	94	120	122	142

DEGREES.

At the commencement held on June 12, 1901, degrees were granted as follows: (In connection with each student's name will be found his subjects, and his address for the year 1900-01. In case of candidates for the Ph. D. degree, the major comes first, and the title of the thesis is also given.)

MASTER OF ARTS.

Charlotte Kimball: Sociology, Economics, English Literature.

Head Worker of Neighborhood House, 324 East Jefferson Street, Louisville, Ky.

Charlotte Frelinghuysen McLean: English Literature.
277 South Fourth street, Philadelphia.

Clara Leonora Nicolay: Romanics, Latin, Greek.
59 High street, Germantown, Philadelphia.

DOCTOR OF PHILOSOPHY.

Gilbert Hillhouse Boggs, B. S. (University of Georgia, 1896): Inorganic, Organic and Analytical Chemistry.

Thesis: I. *The Separation of Vanadic Acid from Metals by means of Hydrochloric Acid Gas.* II. *The Occurrence of Molybdenum in the Mineral Endlichite.*

Instructor in Chemistry, University of Maine, Orono, Maine.

Lee Byrne, B. A. (University of Illinois, 1898): Latin, Greek, Indo-European Philology.

Thesis: *Seneca's Philosophy of Life: His Tragedies Compared with His Prose.*

Teacher of Languages, Lake Forest Academy, Lake Forest, Ill.

Caroline Colvin, B. A. (University of Indiana, 1893): European History, American History, Political Science.

Thesis: *The Invasion of Bruce, and its Place in Irish History.*

Williamsburg, Indiana.

Henry Shoemaker Conard, B. S., M. A. (Haverford, 1894, 1895) : Botany, Botany, Zoölogy.

Thesis: *Water Lilies: a Monograph on the Genus Nymphaea.*

Senior Fellow in Botany, University of Pennsylvania.

Morris William Croll, A. B., A. M. (Pennsylvania College, 1889, 1892; Harvard, 1894, 1895) : English Literature, English Philology, Germanic Philology.

Thesis: *The Works of Sir Fulke Greville.*

Member of the Editorial Staff of the "New Webster's Dictionary" and Honorary Fellow in English, University of Pennsylvania.

Burton Scott Easton, B. S. (Pennsylvania, 1898) : Mathematics, Mathematics, Astronomy.

Thesis: *Substitutions and Substitution Groups.*

Senior Fellow in Mathematics, University of Pennsylvania.

William Clarence Ebaugh, B. S. in Chemistry (Pennsylvania, 1898) : Inorganic, Organic and Electro-Chemistry.

Thesis: *On the Atomic Weight of Arsenic.*

Professor of Chemistry and Physics, Kenyon College, Gambier, Ohio.

Henry Brown Evans, M. E. (Lehigh, 1893) : Astronomy, Mathematics, Philosophy.

Thesis: *The Right Ascensions of One Hundred and Eighty Latitude Stars.*

Instructor in Astronomy, University of Pennsylvania.

John Paul Goode, B. S. (Minnesota, 1889) : Economics, Geology, Sociology.

Thesis: *The Influence of Physiographic Factors Upon the Occupations and the Economic Development of the United States.*

Instructor in Economic Geography, University of Pennsylvania.

John Louis Haney, B. S. (Pennsylvania, 1898): English Literature, European History, English Philology.

Thesis: *The Influence of German Literature on Samuel Taylor Coleridge.*

Instructor in English, Central High School, Philadelphia, and Honorary Fellow in English, University of Pennsylvania.

Henry John Harris, A. B. (Haverford, 1895): Economics, Statistics, European History.

Thesis: *The Problem of the Small Industrial Producer in Germany.*

Statistician in the Bureau of Statistics, Treasury Department, Washington, D. C.

Lolabel House, A. B., A. M. (Nashville, 1893; Chicago, 1898): American History, American Constitutional History, European History.

Thesis: *The Twelfth Amendment.*

Assistant Teacher of History in the Erasmus Hall High School, Brooklyn, New York.

Alice MacMichael Jefferson, Certificate in Chemistry, 1897: Inorganic Chemistry, Organic Chemistry, Geology.

Thesis: *Aromatic Bases as Precipitants for Rare Earth Metals.*

4062 Irving street, Philadelphia.

William Ezra Lingelbach, A. B. (Toronto, 1894): European History, American History, Political Science.

Thesis: *The Organization and Government of the Merchants Adventurers.*

Instructor in European History, University of Pennsylvania.

Roswell Cheyney McCrea, A. B., A. M. (Haverford, 1897; Cornell, 1900): Economics, Sociology, American History.

Thesis: *The Taxation of Transportation Corporations.*

Instructor in Economics and History, Eastern Illinois State Normal School, Charleston, Ill.

John Raymond Murlin, B. S. (Ohio Wesleyan, 1897):
Zoölogy, Zoölogy, Botany.

Thesis: *The Digestive System of the Land Isopods, with special reference to the Morphology of Absorption and Secretion.*

Professor of Biology, Ursinus College, Collegeville, Pa.

Marie Louise Nichols, Certificate in Biology (Pennsylvania, 1893): Zoölogy, Philosophy, Psychology.

Thesis: *The Spermatogenesis of Oniscus asellus, with especial reference to the History of the Chromatin.*

Instructor in Biology, Philadelphia Normal School.

Jonathan Taylor Rorer, Jr., A. B. (Colorado College, 1895): Astronomy, Mathematics, Mathematics.

Thesis: *A Definitive Determination of the Orbit of Comet, 1898, X-Brooks.*

Assistant Professor of Mathematics, Central High School, Philadelphia.

Abraham S Wolf Rosenbach, B. S. (Pennsylvania, 1898): English Literature, English Philology, History.

Thesis: *Spanish Influence in the English Drama Before the Restoration.*

Honorary Fellow in English, University of Pennsylvania.

Glen Levin Swiggett, A. B. (Indiana, 1888): Germanics, English, Romanics.

Thesis: *Heinrich von Kleist and the Spanish Movement, with especial reference to Penthesilea.*

Senior Fellow in Germanics, University of Pennsylvania.

Thomas Maynard Taylor, B. S. (Oberlin, 1897) : Chemistry, Chemistry, Mineralogy.

Thesis: I. *The Atomic Weight of Tungsten*. II. *On the Ammonium Tungstates*.

Instructor in Chemistry, Oberlin College, Oberlin, Ohio.

Caroline Burling Thompson, B. S. in Biology (Pennsylvania, 1898) : Zoölogy, Zoölogy, Botany.

Thesis: *Zygeupolia Litoralis: A New Heterone-meritean*.

Instructor in Zoölogy, Wellesley College, Mass.

Roxana Hayward Vivian, A. B. (Wellesley, 1894) : Mathematics, Mathematics, Astronomy.

Thesis: *The Poles of a Right Line with respect to a Curve of Order n*.

Instructor in Mathematics, Wellesley College, Mass.

Nicholas Panagis Vlachos, Graduate, Gymnasium of Haarlem, Holland : Greek, Latin, Sanskrit.

Thesis: *The Subject of Sophocles' Antigone*.

Senior Fellow in Classics, University of Pennsylvania.

Cornelius Weygandt, A. B. (Pennsylvania, 1891) : English Literature, English Philology, Romanics.

Thesis: *Tendencies in English Poetry*.

Instructor in English, University of Pennsylvania.

NEEDS.

Our chief need is, as I stated in my last report, instruction in subjects which are either not adequately represented, or not represented at all in our graduate work. In this direction nothing has been done since my last report.

Respectfully submitted,

WM. ROMAINE NEWBOLD,
Dean.

APPENDIX IV.

REPORT OF THE DEAN OF THE DEPARTMENT OF LAW.

To the Provost of the University;

SIR:—I beg to submit herewith my annual report for the year ending August 31, 1901:

STUDENT STATISTICS.

The total number of students in attendance during the last year was 365; 81 in the third-year class, 97 in the second-year class, 153 in the first-year class, 21 special and 13 partial students. This is 52 more than during the previous year and is the highest number ever registered in the Department. The increase in the entering class over the total registration in the first-year class during the previous scholastic year was 41.

Geographically the students were more widely distributed than in any previous year. There was an increase of almost 80 per cent in the number of students who came from States other than Pennsylvania. The number of States represented was twenty-two as compared with twelve during the previous year. We had five students from Porto Rico and one from Canada. There were 182 students coming from Philadelphia, 118 from Pennsylvania outside of Philadelphia, and 65 from places outside of Pennsylvania. For the first time in the history of the Law School more than 50 per cent of the students came from outside of Philadelphia.

The average age of the students of the first-year class was twenty years and seven months. This is the same as the

average age on entrance of our present second-year class. Indeed for a number of years there has been no decided change in the age of our students.

One hundred and fifty-six of our students, or 43 per cent of the whole, were college graduates. This is an increase of three in the per centum of college graduates, and a numerical increase of 21. There were 24 more college graduates in our first-year class than in the first-year class during the previous year. Sixty-six men, or 18 per cent of the whole number of students, had been in college from one to three years, an increase of 6 in this class of students over the numbers for the previous year. One hundred and three students, or 28 per cent of the whole, were high school graduates, an increase of 33. Forty students, or 10 per cent of the whole, did not fall under any one of the previous classes, a decrease of 13 in this miscellaneous and on the whole undesirable class.

During the previous scholastic year the college graduates represented 41 institutions. This year 58 universities and colleges were represented.

RESULTS OF THE EXAMINATIONS IN COURSE.

The general average received by the students in the 2,035 examinations taken was 75 5-10 on the basis of 100. Last year the general average was 74 9-10. The general average received by those representing the four large Eastern universities, namely, Pennsylvania, Harvard, Yale and Princeton, was 80 3-10, being somewhat higher than that for college graduates as a whole, which was 77 4-100. The average for college men not college graduates was 75 66-100; for high school graduates, 74; and for all others, 70 6-100.

The comparison of the prior education of those men who received honors shows the superiority of the college education as a preparation for work in the Department. Nineteen per cent of the college graduates received honors as compared to 12 per cent of the partial college men and

16 per cent of the high school men. On the other hand, 9 per cent of the college men and 19 per cent of the high school men were dropped on account of three or more conditions at the end of the year. The prizes in all three classes were awarded to college graduates, with honorable mention of only one man who had not had a college training. All but one of the nine men who graduated with honors in the class at the last Commencement were college graduates.

Of the 153 men registered in the first-year class, 58, or 38 per cent, passed without conditions at the end of the year; 31, or 20 per cent, received three or more conditions and were dropped from their class; 33, or 21 per cent, resigned or failed to appear for their examinations, the remainder passing with one or more conditions. Thus there will be this fall 64 men who entered with the first-year class last year who are unable to go on with the second-year class. An explanation of the large percentage of failures lies in the belief of the Faculty that their object is to prepare for the bar only those men who show themselves not only hard-working but peculiarly adapted to the practice of the law. We do not pretend that the average hard-working student can successfully pass our examinations, but only those who, besides being willing to work hard, possess what is sometimes described as a peculiar capacity to grasp legal problems.

The percentage of total failures in the upper classes was comparatively small, being 7 per cent in the second-year class and 2 per cent in the graduating class. It is hoped that the increased severity with which we examined the papers of the first-year last June will still further reduce the percentage of failures in the second-year.

SCHOLARSHIPS.

Twenty men registered in the Department held scholarships. The total assistance given amounted to \$7,200. Six were free city scholarships, 7 city scholarships paying \$100 each, and 7 Faculty scholarships.

FACULTY CHANGES.

There were no changes in the personnel of the Faculty throughout the year, though Professor Hampton L. Carson was obliged to request a leave of absence on account of the pressure of his private practice. The course in Contracts heretofore given by Mr. Carson was conducted by Mr. Roberts. The course in New Jersey Practice proved so successful, that several students intending to practice in the State of Delaware petitioned for a course in the practice of that State. As a consequence of affirmative action on this petition, Mr. Victor B. Woolley was appointed Lecturer on Delaware Practice and gave a course on that subject. It is proposed to continue the course during the coming scholastic year. Mr. Charles L. McKeehan, of the Class of 1900, who was appointed Junior Fellow in the Department, conducted, to the satisfaction of the Faculty, a course to the second-year class on Bills and Notes, one and one-half hours a week. Mr. Henry Wolfe Biklé has been recommended by the Faculty and appointed by the Trustees as Fellow for one year, the term of service to begin on the first of September.

THE BIDDLE LAW LIBRARY.

The first year in the new building, as was anticipated, shows a great increase in the use of the Library. During the crowded periods of each day the number of persons working in the three rooms connected with the Library exceeded two hundred. No record has been kept of the number of books used per day in McMurtrie Hall, as the men working in this room have access to the shelves; but the average number of books per day given out in the undergraduate reading-rooms, is over twenty-seven hundred, or thirteen times as many books as are taken from the Library shelves in the General Library of the University. The Library is kept open until eleven o'clock at night and the attendance during the evening

varies from seventy-five to thirty from the first to the last part of the week.

The new catalogues made by the assistants during the summer of 1900 and placed in the students' reading-rooms are in no small degree responsible for the increased use of the Library. During this summer these catalogues have been completed so that we now have an author and subject catalogue in each of the undergraduate reading-rooms. The accession number on August 31 is 25,768; the increase during the year being 2,868; 141 from gifts. Our income enabled us to purchase all reports, text-books, etc., on the Common Law—that is, the law of the English-speaking peoples—published during the year, except a few English text-books excluded because of their purely local interest. It also enabled us to increase considerably the number of text-books previously published. The Librarian divides the accessions during the year as follows: Text-books, 1,064; Reports, 870; Statutes, 189; Digests, 65; Encyclopedias, 10; Periodicals, 234; Ordinances, 4; Bar Association Reports, 23; General Literature, 2; and Dictionaries, 7.

The Library is not yet complete in reports of cases of the Common Law, as we lack several of the British Colonial Reports as well as most of the British India Reports. These reports are very expensive. The text-books on different subjects, especially the earlier text-books, are difficult to procure, but they are not expensive when found, and therefore it is to be hoped that in a few years the Library will be strong in this important particular. Our immediate need is in respect to Statute Law. The University is peculiarly complete in the State Law of the United States, but nine-tenths of the collection is in the General Library. The General Library also possesses a number of works on Roman Law and General Jurisprudence. It is hoped that some satisfactory arrangement may be arrived at during the coming year whereby the Statute Law so necessary for the work of our professors and students, as well as other works on legal subjects possessed by the General Library, may be transferred to the Biddle Library.

RECEIPTS AND EXPENSES.

Tuition fees		\$49,865 00
Income		1,407 76
Receipts from miscellaneous sources.....		335 00
		<hr/>
		\$51,607 76
Educational Salaries	\$26,689 66	
Administrative Salaries	6,340 06	
Current expenses	7,589 31	
Biddle Library	6,024 00	
Charge for University Expenses	7,622 72	
	<hr/>	\$54,265 75
		51,607 76
		<hr/>
Deficit		\$2,657 99

As compared with the previous fiscal year there was an increase in revenue from tuition fees of \$4,194.23, a decrease in educational salaries of \$1,209.70, an increase in the total administrative expenses of \$1,776.03, and in the charge for University expenses of \$2,614.42. The increase in administrative expenses, kept on our books under the heads of administrative salaries and current expenses, is due to the fact that throughout the entire year we were in our new building, while during the previous year we only occupied our new building after the twenty-second of February. Experience would seem to show that the new building increased the administrative cost of the Department about 25 per cent. In view of the fact that the cubic contents of our present building is more than five times that of the building occupied by us at Sixth and Chestnut streets, the resulting increase is much less than we anticipated. The increase of 50 per cent in the charge for general University expenses is due to the relative increase in the number of students in the Department as compared with the total number of students in the University, as the charge is apportioned among the various Departments in accordance with the number of students registered in each.

Respectfully submitted,

WILLIAM DRAPER LEWIS,
Dean.

APPENDIX V.

REPORT OF THE DEAN OF THE DEPARTMENT OF MEDICINE.

To the Provost of the University;

SIR:—I have the honor of submitting to you the following report of the Department of Medicine for the academic year 1900-1901:

The students in attendance during the session, arranged in classes, numbered as follows:

Fourth-year Class	161
Third-year Class	163
Second-year Class	126
First-year Class	114
Special	1
	<hr/>
	565

The total number of students, therefore, in attendance this session was 565, as compared with 679, the total number in attendance during the preceding session (1899-1900). The decrease in number was 114. This decrease may be attributed to the causes stated in the report of the Department for the session 1899-1900, principal of which is the increase in the requirements for admission to the first-year class.

The following tabular statement exhibits the effect upon the size of the first-year classes of the entrance requirements, which were annually increased in severity, beginning with the session 1896-97, and including the sessions 1899-1900 and 1900-01, during which two sessions the maximum requirements for admission to the first-year class of the Department of Medicine, viz, the identical requirements

demanding for admission to the Freshman Class of the College of the University, were demanded.

		Members first-year class.
<i>Old requirements:</i>	{ 1894-95 . .	242
	{ 1895-96 . .	333
First increase of entrance requirements:	1896-97 . .	283
Second increase of entrance requirements:	1897-98 . .	205
Third increase of entrance requirements:	1898-99 . .	227
<i>Maximum requirements:</i>	{ 1899-00 . .	141
	{ 1900-01 . .	114

Under these conditions of maximum increased entrance requirements, the first-year class in 1899-1900 numbered 141 members, and in 1900-01 numbered 114 members; although 119 had matriculated, 5 withdrew in the early part of the session, thus reducing the number to 114. While 119 candidates satisfied the requirements and matriculated, this represents only about half of the individuals who applied for admission, and whose qualifications were insufficient.

Of the 141 members of the first-year class of the session 1899-1900, there were 34 individuals (24.1 per cent) who had been members of the first-year class of the preceding session, and who, because of failure to pass the examinations for promotion, were repeating the studies of the year; while of the 114 members of the first-year class of the session 1900-01 there were only 12 individuals (10.5 per cent) repeating the studies of the year.

While as a class those who entered the Department of Medicine under these maximum requirements in general education are picked individuals, well prepared to pursue the studies included in the medical curriculum, the classes under these conditions have diminished in membership. Under the rearranged curriculum of the Department of Medicine it is an advantage to the student that the class under instruction should be small; but in this reduction in the number of students there has been a very considerable reduction in the pecuniary income of the Department. On taking the membership of the first-year classes for the five years preceding the session 1899-1900 and com-

puting the size of an average class, it is found that the average class would number 258; whereas, taking the two classes which entered under the maximum entrance requirements, viz, during the sessions 1899-1900 and 1900-01, the average class would number 130. Assuming that, if it were not for the increased entrance requirements demanded during the last two sessions, the first-year class would be of the average size of the preceding first-year classes which entered under the lower entrance requirements, viz, 258, there would be a difference of 128 in each of the two classes, making a total of 256 additional students who might be in attendance during this session (1900-01) were it not for the increased entrance requirements. That this assumption is not based upon an improbability may be shown by the experience of the Department at the beginning of the session 1900-01, when 119 candidates possessed the required qualifications and were admitted to the first-year class, and 120 candidates who possessed qualifications which would have admitted them under the former low requirements, were rejected. If both of these groups of candidates had been admitted, the first-year class would have numbered 239. In the calculation which is given, no account is taken of those individuals who may have possessed the lower qualifications demanded before the session 1896-97, and possibly were deterred from making application for admission when they ascertained from the annual catalogue the higher requirements. While, as said before, this decrease in the number of students has caused a considerable decrease in the pecuniary income of the Department—and a considerable decrease in the amount of income is a serious matter to an unendowed medical school in which modern methods are employed in teaching—the action of the University in demanding higher entrance requirements, and thus admitting only those candidates who seemed, by possessing higher educational qualifications, better fitted to take up the study of medicine, is fully justified by the pedagogic results obtained.

The history of the Department shows that, on every

occasion when the Department has made an advance in its requirements for graduation, as in the lengthening of the academic year, or especially in adding years to the course or when higher educational qualifications have been demanded of candidates for admission, there has been a decrease in the size of the entering classes. This reduction in the size of the classes has been in every case only temporary in character, and after the expiration of a period of three or four years the reduction in membership of the class is overcome. There is no reason to doubt but that history will repeat itself at this time.

The number of College graduates in the first-year class of the session 1899-1900 was 28 in a total of 141 members, or 19.9 per cent; whereas, in the first-year class this session (1900-01), which numbered 114, there were 36 College graduates, or 31.5 per cent. The number of graduates in Arts or Science who were admitted to the second-year class on biologic and scientific qualifications was 15. After this session, graduates in Arts or Science will not be admitted to advanced standing in time, but may be admitted to advanced standing in subjects included in the first year of the course.

The status of general education of the members of the first-year class who entered the Department this session, compared with those who entered last session, may be shown by the following table:

	Session 1900-01.	Session 1899-1900.
Candidates who passed entrance examinations.	8	4
Candidates who took part of the examinations (remainder covered by diplomas from High or Normal Schools)	3	4
College graduates	36	28
Graduates of approved High Schools and Academies	25	40
Graduates of approved Normal Schools	1	3
Candidates who had been members of the Senior Class in a College of standing.....	4	1
Candidates who had been members of the Junior Class in a College of standing.....	4	3
Candidates who had been members of the Sophomore Class in a College of standing.	6	11

Candidates who had been members of the Freshman Class in a College of standing..	15	13
Dropped from the preceding First-year Class and repeating the studies of that year.....	12	34
	<hr/>	<hr/>
	114	141

The average age of the members of the first-year class was 20.8 years, a decrease of 0.3 of a year as compared with the first-year class of the preceding session. The following tabulated statement shows the average age of the members of the class who entered under varying conditions of preparatory education:

	Session 1900-01.	Session 1899-1900.
The average age of the members of the First- year Class was	20.8	21.1
Average age of College graduates	22.0	23.0
Average age of members who entered from the Senior Class of a College of standing.....	21.7	22.0
Average age of members who entered from the Junior Class of a College of standing....	20.7	22.0
Average age of members who entered from the Sophomore Class of a College of standing.	19.6	20.4
Average age of members who entered from the Freshman Class of a College of standing.	21.4	20.8
Average age of graduates of High Schools, Academies, etc.	19.0	20.4
Average age of graduates of Normal Schools..	19.0	24.3
Average age of those entering by examination	19.8	19.4

The following tabulated statement shows the status of the membership of the class at the end of the session, after the examination periods:

Number entering session 1900-01		114
Number in Second-year Class 1901-02 (suc- ceeding session)	104	
Less number admitted to advanced standing	5	
Less number repeating second year from a former session	2	
	<hr/>	7
Number advanced from first to second year...	97	
Number repeating first year	6	
Number withdrawn	11	
	<hr/>	114

The figures in the following table show the number of members of the fourth-year class who selected the respective electives:

Nervous Diseases and Electro-Therapeutics	5
Skin Diseases	29
Advanced Hygiene (including Bacteriology)	0
Laryngology and Rhinology	38
Pharmacodynamics	1
Advanced Pathology	1
Orthopedic Surgery	11
Ophthalmology	14
Otology	4
Genito-Urinary Diseases	72
Advanced Anatomy	0
Advanced Physiology	0
Advanced Medical Chemistry (including Toxicology)	0
Pediatrics	68
Experimental Psychology	0

This system of obliging a member of the fourth-year class to select from certain specified subjects, at the beginning of the fourth year, in addition to the required subjects of the year, one subject, called a major subject, and pursue its study as an elective for two hours a week during a period of not less than half the session; or of two subjects, called minor subjects, and pursue the study of them for one hour each a week during a period of not less than half the session, was abolished by the Faculty, and a new system adopted, to go into effect with the session 1901-02, by which the members of the fourth-year class may, at the beginning of the fourth year, with the approval of the professor in charge, inscribe their names for special instruction in any of the clinical branches taught in the school, provided they give at least one hour a week for a period of not more than half the academic year, to the work; they may inscribe their names likewise for special work in the fundamental branches, provided, in the opinion of the professor in charge of the Department, they are qualified to undertake the work and have at their disposal the time necessary to its successful performance. In this new system provision has also been

made for the members of the third-year class, by which they will be privileged to take special work in the fundamental branches, under the same conditions offered to the members of the fourth-year class in those branches. Students contemplating the election of special work in addition to the regular scheduled work of the fourth and third years are expected to observe the following conditions:

(a) The number of electives selected may depend upon the number of hours at the disposal of the student, and the absence of all conflict with the work scheduled on the general roster.

(b) The qualifications on the part of the student for the pursuit of any given subject shall be decided by the professor in charge of the Department.

(c) The decision as to the time necessary or desirable to give to the special subject shall rest with the professor in charge.

(d) The practicability of affording special opportunities in any subject or subjects to any or all students electing them will be decided by the professor in charge of the Department.

(e) Consent to enter upon special work must be obtained from the professor in charge in the form of a permit on special blanks prepared for the purpose, which are to be presented at the office of the Dean before entering upon the work specified.

(f) The right is reserved to the professor of the Department to terminate at any time the special privileges of a student for lack of qualifications to pursue profitably the work undertaken, or for irregularity of attendance.

(g) No examination will be held or mark given for elective work done under these conditions.

The composite year referred to in the last report of the Department transmitted to you, in which members of the Senior Class of the College of the University may matriculate in the Department of Medicine at the beginning of their Senior year in the College and take the studies of the first year of the Department of Medicine in that Depart-

ment, in conjunction with certain studies of the Senior year of the College, went into effect this session. Two students of the Senior Class of the College availed themselves of this arrangement. It is believed, however, that the number of students who will take the combined College and Medical courses will increase in succeeding years.

During this session the newly arranged curriculum of the studies of the first and second years of the course, in which the studies are arranged in their pedagogic relation to each other, and concentrated in periods, was put into effect. While thus far the results of this rearranged curriculum have been satisfactory, it may require a trial of several years to determine the value of the arrangement.

Respectfully submitted,

JOHN MARSHALL,
Dean.

APPENDIX VI.

REPORT OF THE UNIVERSITY HOSPITAL.

To the Provost of the University;

SIR:—At the opening of a new century, and at the close of the twenty-sixth year of the existence of the Hospital of the University of Pennsylvania, the Managers can report with satisfaction that the year shows a marked increase in the charitable usefulness of the Hospital, as evidenced in the larger number of sick and suffering cared for within its Wards and in its Out-Patient Service.

It is also gratifying to note the extension of its sphere of influence through the increase in its bedside and clinical teaching facilities, which enable the Medical Students of the University to obtain more practical instruction, thus better fitting them to fulfil the responsible duties which they assume in entering on the practice of their profession. The steady growth of the Hospital and its increased usefulness are sources of gratification to its Managers, but this very growth and improvement cause them to face new and augmented responsibilities, while owing to the general lowering of rates of interest, their income from invested securities is diminished.

The settling of the front wall of the old part of the Hospital, owing to insufficient foundations, and the necessary repairs to them and to the walls, will cause great and unexpected expense. The increase in the number of patients, of nurses, and of Resident Physicians is so great that our laundry is insufficient for the work expected from it, and at times washing has to be given out, a procedure which is manifestly incompatible with thorough asepsis and the best hygiene.

In the early part of the winter an epidemic of scarlet fever broke out in the Children's Wards, and we were obliged to send the children thus affected to the Municipal Hospital, there being no proper means of isolating them in the Hospital, a circumstance demonstrating the necessity of an Isolating Ward in our own grounds. During the year many betterments have been accomplished. All the roofs of the Hospital buildings have been thoroughly repaired and painted, the walls of the main corridors and stairways have been painted, the courtyard between the laundry and kitchen has been paved, and asphalt walks constructed between the various buildings. Eight large new private rooms, with three bath-rooms for them, have been constructed and furnished through the generosity of Mrs. Harrison, Mrs. Paxson and Mr. McFadden. A Medical Ward for Children has been opened, and by the efforts of Dr. Griffith and Mrs. Langstroth's Branch of the League of University Hospital Helpers, five annually endowed beds have been secured for it. The Maternity building has been much improved, one wing having been replastered and repainted, the Nursery refurnished, and a new steam sterilizer placed in the building, all of which has been accomplished by the liberality of the Auxiliary Committee on the Maternity, under the guidance of Mrs. George Wharton Pepper.

There have been considerable changes in the officers of the Hospital. Miss Jessie W. Brown having resigned her position as Superintendent, Miss Jean W. Macpherson, the former Assistant Superintendent, was appointed in her place, while Miss Elsie F. M. Chambers was made Assistant Superintendent. Dr. Montgomery H. Biggs resigned his post as Chief Resident Physician, and Dr. William B. Stanton was appointed to the vacant position. The increase in the size and work of the Hospital has necessitated the appointment of an additional Resident Physician, and of an extra clerk.

During the past year 2,099 patients have been admitted to the Hospital, an increase of 16 per cent over the previous year; 3,076 have been treated in the Receiving Ward and 9,580 in the Dispensaries. There were 472 ambulance calls.

Five thousand dollars have been given to the Hospital by Mrs. Elizabeth Wilt Baker to endow a bed in memory of her brother and sister, Abraham and Mary Baker, and a similar sum from Mr. Joseph R. Wainwright to endow the Mary B. K. Wainwright bed.

The Managers desire to express their appreciation of the work of the Board of Women Visitors, and to acknowledge their devoted efforts in behalf of the Hospital. The Board hereby tenders to the Medical Staff of the Hospital and Dispensaries, and also to the officers of the House, their sincere thanks for the skill, care and conscientiousness with which they have performed their duties.

Respectfully submitted,

FRANCIS P. SIBLEY,
Secretary.

APPENDIX VII.

REPORT OF THE DIRECTOR OF THE WISTAR INSTITUTE OF ANATOMY AND BIOLOGY.

To the Provost of the University;

SIR:—The work of the Wistar Institute during the past year has been along the lines indicated in my last report. The rebuilding of the properties in Chicago owned by the Institute has been completed, and as they are practically all rented the income thus derived shows a satisfactory return for the money invested. The Museum building has been kept in good repair and the usual small annual improvements effected. Our attention has been largely directed towards building cases for the proper display of the wealth of specimens now stored away and ready for exhibition. The additions to our collections in the past few years have been so numerous and so important that it is no exaggeration to state that, could we exhibit all the material, the present Museum building would be taxed to its utmost.

The decision we reached last year, that in the future we would build all exhibition cases in our own shops, has proved a wise one. Not only is the work carried on better under our direct supervision, but the cost is reduced at least one third.

Five large steel and glass cases have been completed and eight more are in process of construction. These cases are held to be the very best ever made; they are strong, light, and handsome, absolutely dust-proof and fitted with a new and improved system of supports for shelving. A permanent and exceeding rich finish is obtained by heavily plating the steel frames with copper and then oxidizing it a warm brown color and finally applying a durable lacquer.

In my last report I noted that new machinery had been ordered to enable us to carry on the work; this has been installed and has proved satisfactory. In addition we have added to the shop a complete electro-plating plant with a new dynamo run by a powerful gas engine, which is also used in the summer time to run the machinery in the shop and the main dynamo for electric lighting.

The work in the Museum has been largely of the usual routine character; the identification, labelling, cataloguing and preparation of specimens. Satisfactory progress has been made in all these departments and the methods employed greatly improved. The additions to the Museum have not been so numerous as last year; we have not felt justified in expending much money even for desirable material. Gifts have been received from the Philadelphia Zoölogical Gardens, and from a number of individuals, and we have purchased some rare species from dealers in living animals.

During the year original work has been carried on as heretofore. The Director has been also engaged in the preparation of a bibliography of Comparative Osteology. Three students working in the laboratories have either published their results or the papers are in preparation.

The collection of reptiles from Borneo has been identified and studied by Mr. Arthur E. Brown, who has prepared for publication a list with notes and descriptions of three new species. Mr. Witmer Stone has studied and described some of the birds and mammals from Borneo and the Liu-Kiu Islands.

Respectfully submitted,

HORACE JAYNE,
Director.

APPENDIX VIII.

REPORT OF THE LABORATORY OF HYGIENE.

To the Provost of the University;

SIR:—I have the honor to report that for the year ending August 31, 1901, the work of the Laboratory consisted in the instruction of undergraduates; the giving of special courses to students of this and other institutions; the pursuit of original research, and the customary amount of expert work, in the way of chemical, bacteriological and sanitary examinations for citizens of this and other cities.

The routine instruction was, as hitherto, both practical and didactic.

Instruction in practical Bacteriology was given to 412 undergraduates and to 12 special students, as follows:

Second-year Medical Class.....	126
First-year Medical Class.....	118
Third-year Dental Class.....	168
Special	12

Total424

A change in the roster of the Medical Department by which practical and didactic Bacteriology were transferred from the second to the first year of the course necessitated our accommodating, for the year in which the change became operative, both the first and second-year classes. This, for the time being, threw upon the staff of the Laboratory such an unusual amount of routine teaching as to materially reduce the opportunity for original research, on which the success of laboratories in general is so directly dependent.

It is proper to mention the fact that during the time of our greatest teaching needs valuable assistance was ren-

dered the Laboratory by two of the upper class medical students, namely, Messrs. Frank T. Maxson and John A. Shoemaker, and it is a pleasure to state that these gentlemen showed themselves fully qualified for the performance of such duties as were assigned to them.

Of the special workers in the Laboratory, eight were University matriculates regularly registered in one or another of the Departments; one was a University graduate, and three were from other institutions. All of these pursued courses of instruction in Bacteriology.

The didactic work of the Laboratory staff included: Two courses of lectures on general Bacteriology; one to the first and second-year medical students, the other to the third-year dental students. These lectures were given twice weekly from the opening of the session to the Christmas recess.

A course of lectures on general Hygiene, two weekly, to the fourth-year medical students. These lectures extended from February 1 to the end of the session.

Two courses of lectures on Ventilation and Heating and on Water Supplies and Sewage Disposal, ten lectures in each course, to the students of Architecture in the College.

Examinations were held on all of the above courses.

In addition to the routine teaching, expert services in the way of miscellaneous investigations, analyses, examinations, etc., for citizens of this and other cities were rendered as follows:

Water analyses, chemical and bacteriological, 52; milk analyses, 4; examinations of pathological exudates, 7; making a total of 63.

The Thomas A. Scott Fellowship in Hygiene was creditably filled during the year by Dr. Nathaniel Gildersleeve, a graduate of the Medical Department of this University in the Class of 1900.

In March Dr. George C. Küsel resigned the position of Assistant in Bacteriology. He severed his connection with the Laboratory in order to pursue the practice of his profession.

In the report preceding this one a plan was advocated by which students who have creditably pursued a prescribed course in Hygiene and its allied branches might be officially rewarded by the University in some such manner as with a degree or diploma. While the details necessary to the organization of such a course of study have not been finally arranged, we can nevertheless report progress and express the hope that in the near future a degree or diploma in Public Health may be numbered among the rewards offered by the University to properly qualified candidates. The signs of the times leave no doubt that such systematic instruction is desirable, and we trust that this school may be among the first, if not the very first, of American schools to offer it. Courses of the nature of that which we have in mind have been in successful operation in the schools of Great Britain for a number of years.

Respectfully submitted,

ALEXANDER C. ABBOTT,
Director.

APPENDIX IX.

REPORT OF THE DEAN OF THE DEPARTMENT OF DENTISTRY.

To the Provost of the University;

SIR:—I have the honor to submit to you the following report of the condition of the Department of Dentistry for the academic year 1900-1901:

The total number of students matriculated 1900-1901..	417
Of these, there were students of the third year.....	168
Of these, there were students of the second year.....	116
Of these, there were students of the first year.....	116
Special students	17
	417
Number of new matriculates, including those admitted to advanced standing	159
Of these, there were admitted upon presentation of diplomas and certificates	105
Admitted upon examination	7
Admitted on advanced standing.....	39
Special students	8
	159

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

Chicago College of Dental Surgery.....	1
College of Physicians and Surgeons, San Francisco, Cal..	1
Guy's Dental Hospital, London, Eng.....	2
London Dental Hospital, London, Eng.....	3
New York College of Dentistry	2
New York Dental School	1
Northwestern University Dental School	1
Pennsylvania College of Dental Surgery.....	1
Philadelphia Dental College	8

Pittsburg Dental College	3
Royal College of Physicians and Surgeons, Edinburgh....	1
University of Berlin, Germany.....	2
University of Buffalo, Dental School	4
University of Geneva, Switzerland.....	2
University of Michigan, Dental School.....	1
University of Minnesota, Dental School.....	1
University of Pennsylvania, Medical Department.....	3
University of Vienna, Austria.....	1
University of Zurich, Switzerland.....	1

The countries represented in the Department are as follows:

Middle States	262
New England States	54
Western States	21
Southern States	11
Pacific States	6
Africa	1
Australia	7
Austria	1
Canada	14
China	2
Ecuador	1
England	6
France	2
Germany	5
Holland	1
Ireland	1
Jamaica	2
Japan	1
Mexico	2
New Zealand	9
Nicaragua	1
Russia	1
Scotland	1
Spain	2
Switzerland	3

SUMMARY.

United States	354
Foreign Countries.....	63
	<hr/>
	417

A change in the arrangement of several studies of the Curriculum in this Department was made necessary because of similar changes in the Curriculum of the Medical Department affecting those branches of instruction pursued by both Dental and Medical students intercurrently. The changes referred to were inaugurated with the object of so grading the course of instruction that the several branches taught would be placed in the order of logical sequence. The elementary branches of Chemistry and Anatomy were placed wholly within the curriculum of the first year and the teaching of the entire subject of Physiology was placed in the second year of the course, and while the total amount of instruction given was the same as under the previous arrangement, it was believed that the concentration of the teaching of the branches named so that the student for the time being could devote his entire attention to a limited number of studies would be productive of better educational results than by the previous arrangement, whereby a larger number of studies were taken simultaneously.

Practical experience in the working of this system in the Department of Dentistry for the past session indicates that while logical in arrangement it has the practical disadvantage of compelling students to complete their work in a given branch within a minimum specified period, a result which is easily accomplished by the higher grade of students, those who by natural qualification or preliminary training are capable of rapidly absorbing and retaining the instruction given under the so-called concentration system; but to the less brilliant or average student the limitations of time accorded him in which to complete his work and which are a necessary part of the concentration system appear to work to a disadvantage. As a consequence a larger percentage of students have failed to attain advanced standing during the present session than heretofore.

In order to provide for the more adequate instruction, especially of the large bulk of students of average capacity, additional instruction has been provided, especially in Anatomy, Physiology and *Materia Medica*, in the nature of

demonstration and drill work through the medium of specially qualified demonstrators with very encouraging results. Similar additional instruction in Chemistry should be also provided, particularly in the application of that science to the needs of the dental practitioner.

The standard of entrance requirement in the Department, of graduation from a high school having a three years' course, has now reached the maximum contemplated by the action of the Faculty, which raised the standard of entrance from a completed grammar-school preparation, by successive yearly increases to the present maximum; and while this increase of standard has had the effect of somewhat limiting the number of matriculates, the decrease in number of those entering has been relatively slight, and has been largely compensated for by the improved preliminary preparation of those admitted as compared with the qualifications of matriculates admitted under the old standard of entrance.

The growth in importance of the laboratory system of teaching together with the constantly increasing demands for instruction in the newer developments of dental technique has made necessary a further elaboration of the methods of laboratory instruction pursued in this Department. An important change bearing upon this feature of the work, and which has produced highly beneficial results during the present session, has been the assignment of the laboratory instruction in prosthetic dentistry to a chief demonstrator, whose entire time is devoted to the work in connection with a well-qualified corps of assistants. The same plan should, as soon as it may be found possible to do so, be put into operation with respect to the Clinical Infirmary Service of the Department.

In my previous report reference was made to the crowded condition of the curriculum and the desirability for the addition of another year to the course of instruction. I am gratified to be able to report that by official action of the National Association of Dental Faculties it has been decided to increase the length of the course of dental instruction to

four years, beginning with the session of 1903, in which action the Faculty of this Department fully concurs.

I am pleased to note the continued high favor in which this Department is regarded in foreign countries as evidenced by the large percentage of students from foreign lands, who are undergoing instruction either as students in course or who are doing post-graduate work.

The tabular exhibit submitted with this report will further portray the wide geographical distribution of the influence which this Department exerts in drawing its student material.

A number of minor changes have taken place in the personnel of the corps of demonstrators, several having resigned, but their places have been adequately filled and the total number of instructors has been increased.

The Chair of Prosthetic Dentistry so long and so ably filled by Professor Charles J. Essig has been made vacant by his resignation at the close of the present session.

Respectfully submitted,

EDWARD C. KIRK,
Dean.

APPENDIX X.

REPORT OF THE DEAN OF THE DEPARTMENT OF VETERINARY MEDICINE.

To the Provost of the University;

SIR:—I have the honor to submit the following report on the condition of the Department of Veterinary Medicine for the year ending August 31, 1901.

During the year there have been sixty-one students in attendance, divided among the classes as follows:

Post-graduate Class.....	1
Third-year Class.....	14
Second-year Class.....	19
First-year Class.....	26
Special	1
<hr/>	
Total	61

This is an increase of fifteen over last year, when the attendance was forty-six.

There is at present more demand for well-trained veterinarians than the schools can supply. The value of veterinary science to the live-stock industry and the public health is being more fully realized. The field of the veterinarian is broadening and the positions wherein veterinarians can perform useful service for the public or for individuals are multiplying. All of this increases the task and responsibility of the Department of Veterinary Medicine and makes it more urgent that it shall grow in harmony with the demands upon it.

There has been some rearrangement of the curriculum in respect to the order and grouping of the separate courses.

These changes have resulted chiefly from the changes that have been made in the Department of Medicine in the courses in Chemistry and Physiology. Under the present arrangement, all instruction in Chemistry comes in the first year and all instruction in Physiology comes in the second year instead of, as heretofore, extending the courses in both subjects through the first two years. It is believed that by thus concentrating the attention and energy of the student, better results can be obtained without increasing the total amount of time devoted to the separate studies.

In respect to subjects taught, no change has been made during the year. There is, however, need of a few additional courses in subjects pertaining to general animal hygiene and to animal husbandry. To properly develop and expound these subjects, increased resources are needed. Indeed, to maintain the present standard of instruction, the Veterinary School is in urgent need of funds—especially for the payment of professors' and instructors' salaries. For several years the highest salary paid for teaching in the Veterinary School has been \$800. It is necessary, therefore, for all the members of the teaching staff to devote the larger part of their time and energy to work outside of the Veterinary School. It is unfortunate that this is true and that the School can not have the best efforts of a few men.

It affords me much pleasure to gratefully acknowledge, on the part of the Faculty of Veterinary Medicine, the generous gifts from the children of the late J. B. Lippincott and from Mr. Harrison K. Caner, without which the maintenance of the School at the established standard would have been impossible.

Through funds furnished by the State, a large volume of research work has been conducted in the Veterinary School under the direction of the State Live Stock Sanitary Board during the past four years. Some investigations on tuberculosis, with especial reference to the comparative virulence of bovine and human tubercle bacilli, which have been carried on for three years by Dr. M. P. Ravenel and others were reported upon by Dr. Ravenel at the British Congress

for the study of Tuberculosis at its meeting in London in July, 1901. Several other important contributions to the study of the diseases of animals have been made from the School during the past year.

The live-stock industry represents an investment of \$3,500,000,000; it is the greatest single industry in the country and supports more families than any other. It is capable of vast development and improvement and is deserving of the most scrupulous protection. The study of animals and their diseases, of their breeding, cultivation and betterment, is, therefore, one of great economic importance to the nation and justifies the most careful research and teaching. Great university schools have been created for the training of men who will devote their lives to designing, building and caring for structures and machinery. Why should not adequate and appropriate provision be made for the teaching and training of animal engineers?

The prospective change in the location of the Veterinary School and Hospital will afford an opportunity to supply new equipment compatible with their needs, and make it possible for them to more perfectly perform the important work for which they are designed.

Respectfully submitted,

LEONARD PEARSON,
Dean.

APPENDIX XI.

REPORT OF THE VETERINARY HOSPITAL.

To the Provost of the University;

SIR:—I have the honor to submit to you the following report of the Veterinary Hospital for the year ending August 31, 1901:

There were treated in the wards of the Hospital, 1,394 animals, and in free clinics, 3,361, an increase over the previous year of 103 hospital cases and 448 "out" cases. The total number of animals given professional attention thus reached 4,755, an increase of 551 above the preceding year.

The proportion of larger animals treated has shown a gratifying increase, and has resulted in an increase of receipts in the hospital for large animals, from \$3,636 for the year ending August 31, 1900, to \$4,423 during the past year.

The hospital for small animals continues to do an increasing business. Indeed, several times during the past year this building held all that it could accommodate and a few dogs had to be placed in a section of the stable. Kennel receipts were \$3,322 during the previous year; during the past year, \$3,516.

The farriery receipts were \$1,866, a decrease of \$70.00. The cause of this decrease cannot be explained; but it is undoubtedly a fact that our shoeing shop will not do a remunerative outside business so long as our competitors continue to personally solicit custom, and to employ a system of rebate to attract and hold purchaseable trade. As a part of the hospital equipment, and a factor in the education of our students, it is, nevertheless, indispensable.

The ambulance service has brought increased returns,

and contributed materially toward making the past year the most pecuniarily successful of the Hospital's history.

The buildings have been kept in repair, but no avoidable expense has been incurred since it was decided to abandon the present hospital site. The hospital service has been efficient, the accommodations for animals ample, and the clientèle of the Hospital has shown a most encouraging growth.

I desire especially to emphasize the great value of the dispensary service to the poorer people. Three thousand three hundred and sixty-one animals were treated, not only without cost to their owners, but at quite an expense to the Veterinary Hospital for antiseptic dressings and numerous things of little value in each individual case, but aggregating a very considerable amount.

About one thousand six hundred of these dispensary cases were the bread-winners of poor families—horses and mules incapacitated for work by injury or disease. It is impossible to measure the worth of such service to these people, or to overestimate the humane value of this contribution to the relief of suffering animals.

Societies for *prevention* of pain to animals do much worthy work and receive generous financial support from those who are interested in the humane treatment of animals; while, strange as it may seem, veterinary hospitals, which are societies for the *relief* of pain in animals, are usually overlooked and never receive assistance at all commensurate with their worthiness. There should be several endowed stalls in which work-horses of the worthy poor could be restored to service. An investment of \$3,000 will provide one permanently free stall and would be a monument of mercy to the benefactor.

Yours respectfully,

JOSEPH E. GILLINGHAM,
President Board of Managers.

APPENDIX XII.

REPORT OF THE LIBRARIAN.

To the Provost of the University;

SIR:—I have the honor to present the report of the Library for the year ending August 31, 1901.

The new books accessioned and catalogued comprise 7,630 volumes, which brings the number of catalogued books in the main library up to 171,842. Adding to this about 5,000 volumes not yet catalogued and 26,014 in the Law Library, the total number of books now in our possession is somewhat over 200,000, besides upwards of 50,000 pamphlets. Of the uncatalogued portion of the main library, about 4,200 were received during the past year, making a net increase for the main library about 11,800 volumes, while the Law Library has added during this period 2,916 volumes to its collection.

The sources whence the additions were received were as usual three: (a) by purchase from invested funds or special gifts; (b) gifts sent directly to the Library; (c) through the Exchange Bureau.

Of regular funds, the Library had at its disposal during the past year the annual income from the Wagner, Lippincott, Norris, Krauth, Pepper and Agriculture funds amounting to about \$1,500, of which \$1,390.63 were spent; the George L. Harrison Foundation a maximum proportion of \$100 for each Fellow appointed, the total amount spent being \$761.07.

The special funds for purchases were as follows: an appropriation of \$2,000 divided among twenty departments of the College, of which all but about \$50.00 was spent; an appropriation by the Board of Trustees of \$1,200 for defraying the cost of subscriptions to periodicals; a special appropriation of \$1,000 for the same purpose; a fund of \$1,730.25 donated by the Class of 1889 for the pur-

chase of books on Philosophy, of which \$285.15 has been spent; a fund of \$615 donated by Robert Buist for works on Botany; a gift of \$1,000 from Mr. John W. Brock for the purchase of a complete set of the Transactions of the Royal Society; a fund of \$409.20 obtained from friends of the University for the purchase of books from the sale of the library of the late John W. Hunter in April, 1901; a fund of \$1,500 likewise contributed by friends of the University for the purchase of 1,900 volumes from the library of the late Dr. J. Stockton Hough; balances to the amount of \$1,179.92 of various funds contributed in former years; and lastly, the Gibson and Potter funds to defray the cost of additions to the English Government Publications and of Hansard's Parliamentary Debates, respectively. The total amount thus spent for books was \$10,966.87, which includes \$1,297.57 for binding.

The following table shows the distribution of the additions made to the various classes of books, though it should be added that it includes only bound volumes and such as have gone through the complete process of cataloguing:

General works	485
Philosophy	320
Religion	212
Sociology and Economics	2,045
Philology	298
Natural Sciences	1,260
Useful Arts	777
Medicine	204
Fine Arts	98
Literature	433
History	32

Special mention may be made of the better equipment of the philosophical section of the Library now rendered possible through the fund of the Class of 1889. When the purchases out of this fund shall have been completed, we will have a collection in ancient and modern philosophy that in some divisions will be very well equipped and in all sufficiently so, as to make advanced work in this field of investigation possible. A word might also be said about our efforts to complete files of periodicals. In a University

Library, it is especially important to have complete files of all the leading scientific and literary periodicals, as well as proceedings of learned associations. A few years ago by means of a special gift we were able to make considerable progress toward attaining this goal, and during the past year through the donations referred to, some of the more serious gaps in the botanical and general scientific periodicals were filled. There are, however, a number of sections of the Library which in this respect are very deficient. This applies more particularly to Zoölogy, Physics, Medicine and History, besides gaps in a number of the literary periodicals, so that from three to four thousand dollars could be spent to great advantage in this part of the Library. In view of the fact that the cost of sets of periodicals is steadily advancing from year to year, it is obviously of importance to complete this portion of the Library as soon as possible.

EXCHANGE BUREAU.

Through the Exchange Bureau we received 4,715 publications from United States and foreign universities, from domestic and foreign learned societies, and from schools. The value of what comes to us through the Exchange Bureau is not to be measured alone by the number of publications (including sixty-nine periodicals) that reach us, but through the close connection that is established in this way between our own University and the numerous other institutions in this country and abroad that are engaged in scientific work; and it is gratifying to note that under the efficient superintendence of the Assistant Secretary of the University, the scope of the Exchange Bureau is being steadily extended from year to year.

Besides the publications obtained through the Exchange Bureau, there were sent directly to the Library a large number of official publications from the United States and foreign governments, from state and municipal organizations, from railroad corporations, from libraries and from miscellaneous institutions.

The following tabulated list represents in detail the accessions received from the sources named:

	Sept.		Oct.		Nov.		Dec.		Jan.		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Total.		
	b.	ub.	b.	ub.	b.	ub.	b.	ub.	b.	ub.	b.	ub.	b.	ub.	b.	ub.	b.	ub.	b.	ub.	b.	ub.	b.	ub.	b.	ub.	
United States Government	16	20	53	50	26	3	40	26	22	26	37	100	33	13	39	11	29	22	18	11	30	5	43	32	386	319	
Foreign Governments . . .		9	1	8		2	1	1		1	1	2		7		2		3	1	2	1	3		9	5	49	
State	86	51	31	14	10	17	4	4	4	7	2	2	28	8	65	7	20	5	2	1	10	7	12	7	274	130	
Municipal	4	3			1		1	21	1	12		3	1		2	4	2	3	2		2	1	3	5	19	52	
United States Universities	2	22	4	151		34	3	179	2	11		19	3	26	1	11	4	37	8	52	2	119	2	47	31	708	
Foreign Universities . . .	3	104	2	499		203	5	19		859	1	8	2	154	1	21		140		15	2	10		1612	16	3644	
Schools, etc.	9	16	15	50										4		4		6				1	1	6	25	87	
United States Learned Societies	3	25	5	6	1	27				2		2		28	1	3	6		1	2		2				17	97
Foreign Learned Societies								2	1	5	2		2	3	2	3		21		8		37	1	3	8	82	
Libraries		10		6		1						2			13	2	5		8	1	5		5		8	5	61
Hospitals and Charitable Institutions										2				12				3									17
Religious Organizations						18				3						2		4		1		9	1		1	37	
Social Clubs																1	2	1						1		3	2
Miscellaneous										3		12		9	1	1		5	2	1		7		22	3	60	
Railroads																3	306		92		1					3	399
Total per month	123	260	111	784	38	305	54	252	30	931	45	148	60	277	117	381	63	350	35	99	47	206	64	1751	796	5744	

Special efforts were made during the past year to obtain as complete files as possible of the reports of the leading railroad operations, and thanks to the ready response which a circular letter met, we now have a very good collection of material of this kind which we hope to make more complete by continued efforts.

CATALOGUING DEPARTMENT.

During the past year there were catalogued by the regular force of the Library 11,776 volumes, of which 694 volumes represented old books that were revised, the work being distributed through the months of the year as follows:

	Works.	Volumes.	Cards.
Aug. 27 to Sept. 22, 1900.....	900	1,170	1,634
Sept. 24 to Oct. 27, 1900.....	1,122	1,488	3,181
Oct. 29 to Nov. 24, 1900.....	916	1,116	3,249
Nov. 26 to Dec. 22, 1900.....	1,038	1,287	2,785
Dec. 24 to Jan. 26, 1901.....	803	1,203	2,601
Jan. 28 to Feb. 23, 1901.....	352	534	1,276
Feb. 25 to Mar. 23, 1901.....	706	979	2,587
Mar. 25 to Apr. 27, 1901.....	774	1,209	2,233
Apr. 29 to May 25, 1901.....	310	849	2,516
May 27 to June 22, 1901.....	117	591	2,525
June 24 to July 27, 1901.....	77	446	2,141
July 29 to Aug. 24, 1901.....	87	210	814
	<hr/>	<hr/>	<hr/>
	7,202	11,082	27,542

In addition cards were made for 2,174 pamphlets.

An important work during the past year was the cataloguing of the large collection of dissertations from German Universities. The beginning was made on the latest ones received and 1,736 were prepared for use in this way, the cards being placed in a separate compartment of the catalogue drawers. It is hoped that this year the dissertations for former years can be attacked and the work, when completed, will add very materially to the usefulness of the Library. These dissertations represent in many cases the results of important investigation on special points, but owing to the large number that appear every year, it is

quite impossible to keep track of them without a catalogue which notes more particularly the subject with which they deal.

Through an extra cataloguing force of four cataloguers and one supervisor, the balance of the Leutsch collection, the library of the West Philadelphia Medical Club, a large collection of miscellaneous music, the very valuable Macaulay library on Dante, Petrarch and Tasso, besides some miscellaneous accumulation were disposed of. In all 6,526 volumes were catalogued, the work being distributed from September, 1900, to the middle of May, 1901, as follows:

	Works.	Volumes.	Cards.
Sept. 12 to Sept. 22, 1900.....	220	315	691
Sept. 24 to Oct. 20, 1900.....	855	721	3,423
Oct. 22 to Nov. 17, 1900.....	744	678	2,712
Jan. 2 to Jan. 26, 1901.....	804	1,065	3,108
Jan. 28 to Feb. 23, 1901....	678	772	3,935
Feb. 25 to Mar. 23, 1901.....	735	836	4,015
Mar. 25 to Apr. 20, 1901.....	963	1,215	3,765
Apr. 22 to May 18, 1901.....	897	924	2,548
	<hr/>	<hr/>	<hr/>
	5,896	6,526	24,197

Owing to the illness during the greater part of the year of the cataloguer especially engaged for the Brinton Library, very little work was done on this collection, and probably two years will elapse before this part of the catalogue will be completed.

BINDING DEPARTMENT.

In the Binding Department 3,647 books were forwarded to the binder, of which 1,418 were bound in boards, 1,396 in cloth, 146 in half morocco and roan, 85 in canvas, and 602 volumes were repaired.

During the past year the experiment was tried of having imported books bound abroad, and it may be said that on the whole this method has proved satisfactory. The expense of binding abroad is about the same, and besides the fact that there is less delay in the circulation of the books after they are once received, the Binding Department is relieved of some of its work.

CIRCULATION DEPARTMENT.

Both in the number of persons using the Library, and in the number of books circulated within and outside of the building, there has been a considerable increase during the past year. We now have 1,432 readers registered as against 1,031 last year. The registration is divided as follows:

Professors, Instructors and Officers	159
The College	496
Medical Department	204
Law Department	108
Dental Department	50
Veterinary Department	7
Department of Philosophy	160
Teachers' Courses	158
Fellows	25
	1,367
Readers paying \$3.00 per year.....	6
Special readers	38
Employees of the University.....	21
	1,432

The number of books circulated during the year amounted to a total of 68,003 as against 49,267 last year, 32,004 two years ago and 27,984 three years ago. The detailed statistics are as follows:

	Home use.	Library use.	Total.
Aug. 27 to Sept. 22, 1900.....	530	246	776
Sept. 24 to Oct. 27, 1900.....	1,925	4,465	6,390
Oct. 29 to Nov. 24, 1900.....	2,058	5,931	7,989
Nov. 26 to Dec. 22, 1900.....	1,993	5,876	7,869
Dec. 24 to Jan. 26, 1901.....	2,348	6,622	8,970
Jan. 28 to Feb. 23, 1901.....	1,987	6,042	8,029
Feb. 25 to Mar. 23, 1901.....	2,002	7,561	9,563
Mar. 25 to Apr. 27, 1901.....	2,433	6,949	9,382
Apr. 29 to May 25, 1901.....	1,495	4,719	6,214
May 27 to June 22, 1901.....	689	594	1,283
June 24 to July 27, 1901.....	539	290	829
July 29 to Aug. 24, 1901.....	293	416	709
	18,292	49,711	68,003

Circulation of books by classes :

	Home use.	Library use.
General Works.....	355	6,787
Philosophy	454	120
Religion	969	370
Sociology and Economics	3,249	12,028
Philology	973	477
Natural Sciences	1,071	2,782
Useful Arts	274	827
Medicine	740	3,383
Fine Arts	178	128
Literature	6,842	10,612
History	3,187	12,197
	18,292	49,711
Home Use		18,292
Library Use		49,711
		68,003

Number of books borrowed from other libraries :

Columbia University	9
Cornell University	1
Drexel Institute	2
Free Library of Philadelphia	10
Johns Hopkins University	4
Harvard University	15
Mercantile Library	11
Philadelphia Library Company	71
University of Chicago	1
	124

Institutions that have borrowed books :

Columbia University,	Library of Congress,
Bryn Mawr College,	Law Library,
Haverford College,	Princeton University,
Johns Hopkins University,	University of Texas,
Swarthmore College,	Brown University,
Drexel Institute,	Lehigh University,
Ursinus College,	Free Library of Philadelphia.

Considerable improvements were made during the year in the distribution of books in the stack. Through addi-

tional shelving certain classes that had become crowded could be extended and by some shifting more space was afforded for future growth. As a consequence, we are now able to keep the books in very much better order and in better condition than was possible before, and it is reasonable to hope that misplacements and actual losses will also be fewer. In this connection it may be proper to refer to the revision of the books in the stack which was undertaken during the summer months by the members of the library force, together with two assistants especially engaged for the purpose. The result showed a great many misplacements, but very few actual losses. The number of books reported missing was at first considerable, but by search and by comparison with our records the number has been greatly reduced, though there still remain quite a number to be accounted for. The work of hunting for the missing volumes is being continued at present. The experience of this revision has shown the desirability of undertaking it at frequent intervals. In spite of the restrictions placed upon admission to the stack, it being practically limited to officers of instruction, there are all kinds of accidents to which books are subject, and which can only be controlled in a measure by examination of the shelves at tolerably frequent intervals. In some of the larger libraries special assistants are engaged who spend their time in going over the shelves constantly, and there is little doubt that in this way the actual loss of books is reduced to a minimum.

READING ROOM.

The present arrangement of dividing the reading room into two sections, the outer room for the catalogue and the periodicals, and the inner room for the reference libraries, provided with facilities for study and research has proved satisfactory. The inner reading room has been the means of largely increasing the use of the books within the building, while accessibility to well supplied reference libraries has without question stimulated the work of students. In the medical alcove, for instance, besides sets of important periodicals and general reference works, the new publica-

tions in medicine, many of which are presented to us through the medical publishers, are placed directly at the disposal of the students who are not slow to respond to the better facilities offered. Confining myself to this alcove as an example, it will be found filled daily by medical students, while the registration at the desk likewise shows that last year 204 medical students used the Library as against 129 the year before.

There is every reason to believe that if similar advantages were provided for the dental and veterinary students, the results would be equally gratifying.

A feature added to the inner reading room during the past year was a Text-Book Library, being made up of new publications of school, college and university text-books as well as reference works, which were sent to us as gifts from the leading publishers of this country. In response to a letter explaining the purpose of the undertaking, 434 volumes have already been received from fourteen different publishing houses. By placing the books in an alcove accessible to all, professors and students, and more particularly those attending the teachers' courses, are enabled to see the character of new publications of particular interest to them. The experimental stage of the undertaking has been passed, and our efforts are now directed toward maintaining the useful character of such a library by keeping it up to date.

The statistics of the inner reading room are as follows:

Oct., 1900	3,378
Nov., 1900	3,580
Dec., 1900	3,064
Jan., 1901	3,921
Feb., 1901	3,170
Mar., 1901	3,940
Apr., 1901	3,430
May, 1901	3,072
June, 1901	235
July, 1901	153
Aug., 1901	191

28,134

(Total for 1899-1900 = 24,061.)

It is to be noted that the room is used chiefly by the undergraduates pursuing non-technical courses; by the students in the Medical Department and by a proportion of the students in the Graduate School. For college students taking technical courses, Departmental Libraries with reading rooms in separate buildings have been fitted up; in the upper floors of the Library building there are a number of special working and Seminar Libraries for the students in the Graduate School. The Law Department has its own library, although many of its students also make use of the main library, while the material in the Library of any value to dental or veterinary students is restricted to books in the stack and to the periodicals.

For the use of students who desire to work together, a room has been fitted up in the hall. This arrangement has been found useful, and also enables us to preserve that degree of silence in the inner reading room which is essential to those engaged in work. The one unfavorable feature connected with this reading room is the continued disappearance of books from the alcoves. During the past year we lost no less than twelve books in this way. As soon as it is discovered that a book has disappeared, a strenuous effort is made to have both professors and students informed and often in this way the missing book is returned. The record, however, of the actual losses is larger than it should be, and in some cases at least appears to be due to deliberate theft. The alcoves are examined daily.

The number of periodicals now received and placed on file in the outer reading room amounts to 1,011, of which number 334 come to us as gifts and 69 through the Exchange Bureau.

DEPARTMENTAL LIBRARIES.

The number of Departmental Libraries outside of the Library building is now twelve, the distribution of the books being as follows:

	Volumes.
Architecture	625
Astronomy	469
Botany	1,100
Chemistry	1,144
Civil Engineering	1,105
English	400
Hygiene	718
Mechanical Engineering	783
Assyrian	27
Physics	1,523
Psychology	748
Zoölogy	3,027
	11,669

In addition 256 volumes are kept for reference in the American History Department of the College.

In the Seminar rooms in the upper floors of the Library building there are eleven reference and working libraries, the number of volumes being distributed as follows:

American History	125
Ecclesiastical History	467
Economics	534
English Constitutional History	541
Latin	101
German	3,580
Mathematics	572
Music	613
Pedagogy	283
Philosophy	318
Romance Languages	1,450
Semitic Languages	11
	8,595

In all 8,595 volumes are kept in these rooms, and adding to these the number of volumes outside the Library building, namely, 11,925 in the Departments, and the Brinton Collection of 4,098 volumes deposited in the Museum of Archæology, it will be found that 24,618 volumes are now placed at the disposal of students beyond the direct control of the Circulation Department.

The proper equipment of these Departmental and Seminar Libraries naturally reduces the number of those using the books in the stack and in the inner reading room, but there can be no doubt that the distribution of books in the manner indicated adds largely to their actual use. The books in the Seminar Libraries in the upper floors of the Library building are in charge of one of our assistants, who makes a regular examination of them every week. It has not been found practical, however, to have special attendants in each room so that we have to rely for their safe keeping on the honor of those who have the privilege of using the libraries in question. It is gratifying to note that during the entire year only two books have disappeared, one from the Department of Pedagogy and one from the seminar library in American History. The record of the Departmental Libraries is not quite as satisfactory. The taking of stock just before the close of the spring session showed that while no books had disappeared in the following Departments: Botany, Chemistry, Hygiene, Mechanical Engineering and Psychology, in the Department of Architecture eleven were reported missing and in Physics three, in Civil Engineering one volume and a pamphlet, and in Zoölogy three.

The Departments having libraries of their own have appointed assistants to take charge of them. In some Departments the students have access to the shelves, in others they can obtain books only through the assistant. It would seem fair that where the students have direct access to the shelves, a proportion of the responsibility for the proper keeping of the books should rest upon them. In two Departments this plan has been adopted, and so far as can be ascertained, works satisfactorily. The use of the books in Departmental Libraries naturally varies considerably according to the character of the collections and the special kind of work done by the students. From statistics kept in the Departments it appears that those showing the largest circulation are the following: Architecture, Botany, Psychology, Zoölogy and English. Of the Seminar Libraries in the upper floors of the Library, those most largely used are the fol-

lowing: Economics, History, Germanics, Pedagogy and Philosophy. These Seminar Libraries are kept open until 11 p. m., and while the number of students who attend in the evenings is not large, the important character of the work done by those who do come is such as to warrant the continuance of this arrangement.

LAW LIBRARY.

The report from the Law Library shows a total of 26,014 volumes in the collection, of which number 2,916 were added during the past year. Three hundred and seventy-eight desks have now been assigned to students in the three reading rooms, Sharswood Hall, McKean Hall and McMurtrie Hall. No detailed statistics were kept in this Library, but the average number of students using it is about 200 daily, while the average number of books consulted daily is estimated at 2,200.

GIFTS.

Besides the donors referred to at the beginning of this report, we are under special obligations to the medical publishers, Messrs. P. Blakiston's Son & Co., Lea Brothers, the J. B. Lippincott Company and W. B. Saunders & Co., who have during the year sent us many of their medical publications. The publishers now co-operating in the Text-Book Library are as follows: American Book Company, Appleton & Co., Atkinson & Mentzer, Cassell & Co., Ginn & Co., D. C. Heath & Co., Hinds & Noble, Henry Holt & Co., Houghton, Mifflin & Co., Lemcke & Buechner, Longmans, Green & Co., Open Court Publishing Company, G. P. Putnam's Sons and Scott, Foresman & Co.

The Editor of the *University Medical Magazine* has during the past year sent us regularly the files of thirty-eight medical periodicals.

To enumerate all those who have remembered the Library during the past year would make too long a list, but our special obligations are due to Messrs. Eckley Brinton Coxe, Jr., Provost Harrison, Charles H. Hutchinson,

Dr. S. Weir Mitchell, Dr. Charles A. Oliver, J. G. Rosengarten, who have at frequent and in some cases at regular intervals made donations of books.

Of gifts other than books, mention may be made of the clock for the inner reading room, presented through *The Pennsylvanian* by the College Classes and the handsome memorial tablet—the gift of the College Alumni Society—on which are inscribed the names of the classes that have made donations to the University Library. Both gifts were formally transferred on Commencement Day and accepted on behalf of the administration by the Chairman of the Library Committee. The names of six classes (1865, 1887, 1889, 1891, 1892, 1893), are now inscribed on the tablet and one may venture to express the hope that the recent generous action of the Class of 1889 will stimulate others to directly aid the task devolving upon the University Library by providing further material for study and research needed in an institution that has grown to be so extensive as the University.

The University Library may properly be designated as a factor in the intellectual life of this city, whose utility is not limited to those directly connected with the University. The periodicals as well as the books in the reference libraries and in the stack are, under certain conditions, at the disposal of scholars in general, but as the usefulness of the institution is thus extended, its needs also become more urgent. Thanks to the generous aid received from friends of the University, we have been enabled to add largely to our collections during the past years, but the time has come when far more could be accomplished if we had an adequate endowment fund, the interest of which could be used for filling gaps that exist in our collections and for making regular additions of new publications appearing in the various departments of scientific activity.

Respectfully submitted,

MORRIS JASTROW, JR.,
Librarian.

APPENDIX XIII.

REPORT OF THE DEPARTMENT OF ARCHÆOLOGY.

To the Provost of the University;

SIR:—On behalf of the Department of Archæology I beg to submit that, since its last report, by action of the Board and with the approval of the Board of Trustees, its name has been altered by the omission of the word "Paleontology." This was done at the recommendation of the Chairman and Curator of the Section of Paleontology, Colonel Willcox, who urged that, as no suitable room could be assigned by the Department to the display of specimens, and as the field of the section was already covered by the Departments of Geology and Biology, he deemed it wise to divide the collections already acquired between the above mentioned Departments. Accordingly the transfer of the invertebrate series to the Department of Geology and of the vertebrate series to the Wistar Institute of Anatomy and Biology was authorized.

In the year that has just gone by the Department of Archæology has shown increased vigor. Its contributing membership, through the efforts of the committee in charge, has been increased by 302 members, making the total list of subscribing members 840. 36,921 persons have visited the Museum during the scholastic year, and the average number of Sunday visitors has increased from 272 to 335. On a fine Sunday afternoon the number of visitors has been known to reach 687.

At the suggestion of the Provost cards of admission were sent to the members of the State Government. Schools,

classes, and other educational or religious bodies have taken advantage of the scientific facilities offered by the Museum, and some of the Wednesday Lectures have been fairly well attended.

The building was used last winter for the "Faculty Teas" and for receptions, given by the Provost and Mrs. Harrison, to the Association of Colleges and Preparatory Schools of the Middle States and Maryland (November 30) and to the first-year classes of the University (December 7). On December 27 a reception was given by the Philological Society to the learned societies assembled in a joint meeting during Christmas week. The use of the building was granted to the Graduate Club for a reception to General Wilson, and to the Convention of Architectural Societies for a reception held in May. From the above facts it appears that the Museum is growing in general usefulness.

The portion of the ground assigned by the University to the Department and at present unoccupied has, with the approval of the Trustees, been loaned for three years to the Philadelphia Museums, with the understanding that it shall be cared for and kept in order by the latter institution, and that it shall be at once returned to the Department should it be needed for its own purposes. The arrangement is one of mutual advantage, and the Department is thereby saved considerable expense.

A most creditable, though partial exhibit, consisting of games of the American Indians and of photographs and pictures of the "Pepper-Hearst Collection," made by the late Frank Hamilton Cushing in Florida, was sent by the Department to the Pan-American Exposition at Buffalo and received a silver medal.

The Endowment Fund has been increased by a legacy under the will of the late Carl Edelman to the American Section, to be used towards excavations to be conducted in the United States or Mexico or both.

The excavations at Nippur have been temporarily suspended. During the past months Professor Hilprecht has been in Constantinople, classifying and studying the material

obtained with a view to its final disposition. At no distant date it is expected that the share granted by the Sultan to the University will arrive in Philadelphia.

Progress has been made during the past year toward the publication of the Nippur discoveries. No less than four volumes of inscriptions are in course of preparation, besides others which deal with the history of the excavations and with other aspects of the discoveries made by the expedition. The Research Fellowship recently founded by the University will provide for an additional worker in the editorial department which, under the able direction of Professor Hilprecht, may be expected soon to place before the learned world the full results of the expedition.

Mr. Robert C. H. Brock, Chairman of the Sections of General Ethnology and American Prehistoric Archæology, having resigned the chairmanship of the latter Section, Mr. Samuel T. Bodine was duly appointed chairman of the same. Several collections and numerous objects, of which some are of serious scientific importance, have been added to these Sections. The gift of the "Donaldson" Collection by Hon. John Wanamaker has added to the Section of General Ethnology a large amount of interesting material from many American tribes, notably from the Mandan Indians. Last summer, Mr. Wanamaker defrayed the expenses of Mr. Stewart Culin, Curator of the Section, during a collecting expedition through the Southwest, in the course of which considerable ethnographical material was secured by purchase, at Mr. Wanamaker's expense, bearing upon the manners and customs of the Choctaws of Louisiana, the Hopi of Arizona and others.

Archæological material from the Hopi Mesas, Cañon Diabolo and Flagstaff, Arizona, was obtained, as well as ethnographical series. In all some 6,000 objects were thus added to the Sections and will be installed in the Museum as soon as possible. Much courtesy was received from the Pennsylvania and the Atchison, Topeka and Sante Fé Railroads, who gave every facility in their power to the representative of the Sections during his trip.

Mr. Culin also visited Cuba, at Mr. Brock's expense, with a view to investigating the truth of a report to the effect that a tribe of savage Indians were to be found in the interior of that island. A trip to the province of Santiago brought out the fact that the report had arisen from the presence of a small settlement of people of mixed blood, locally known as "Indios." Numerous photographs, a small collection of native musical instruments and domestic utensils were secured. From the neighborhood of the Pueblo Viejo, near Cape Maisi, some prehistoric skulls were also obtained.

A fine collection from the Naga Hills of Assam, made by Mr. Alfred C. Harrison, Jr., and Dr. H. M. Hiller, has been displayed in the Far East Room. These gentlemen are now traveling in Asia. At last reports they were collecting among little known tribes living in the interior of the Island of Sumatra, and important material from the Ainu of Jesso, in Northern Japan, had already been shipped by them to the Museum.

The collection of coins deposited by Mr. Robert C. H. Brock has been greatly increased. Two hundred shelves have been added to the cases to receive the new material, among which may be mentioned a remarkable series of papal medals.

Mrs. Frishmuth has also made important additions to her collection of Musical Instruments which, for lack of proper accommodations, it is at present difficult to display. It is, however, hoped that such facilities for their exhibition may soon be provided.

The "Pepper-Hearst Collection," made by Mr. Cushing in Florida and temporarily loaned to the Bureau of American Ethnology, Smithsonian Institution, has been returned by the latter institution and is also awaiting installation.

Last winter, Mrs. Hearst having requested that the share of the collection from the Colorado Cliff Dwellers' presented by her to the Museum, which she had reserved for her own use, be sent to California, her request was com-

plied with. At the same time, the Russian Collection made by Mrs. Nuttall in 1896, at Mrs. Hearst's expense, was placed on exhibition. Besides many specimens illustrative of the ethnology of the people, the collection includes a series of admirable models of early graves opened in Russia, which have yielded many important scientific treasures. The series is not only unique in this country but is to be found in no Museum out of Russia. It was made for the University under the supervision of Professor Anutchin, of the Moscow Museum—the cost being defrayed by Mrs. Hearst.

The Egyptian and Mediterranean Section has been enriched with an important share of the results of Mr. Flinders-Petrie's excavations conducted in 1901 at Abydos for the Egypt Exploration Fund. The tombs of several kings of the first and second dynasties and of some pre-Menite Kings were opened and inscriptions in archaic Egyptian hieroglyphs, as well as many sepulchral deposits, illustrative of the arts and industries of the people at the beginning of the fifth millennium, B. C., were found. Among these are vases of stone and pottery, some of which are inscribed; objects of gold, ebony, bone, rock crystal and a series of the un-Egyptian pottery marks which have recently aroused so much interest in the learned world. The above material was received, as usual, from the Egypt Exploration Fund, through the American Exploration Society, working in close connection with the Egyptian and Mediterranean Committee of the Department. These, added to the collections previously received through the same channel, form the fullest and most important series of early Egyptian antiquities in this country.

In addition to the above, twenty-nine Græco-Roman papyri have been received, most of which belong to the great "find" of Messrs. Grenfell and Hunt at Oxyrhynchus—a few are from former excavations in the Fayum. All were obtained from the Græco-Roman branch of the Egypt Exploration Fund, also through the liberality of the American Exploration Society. Among the more important pieces

are a fragment of the First Chapter of St. Matthew, and one of the Book of Thucydides, both of which have attracted considerable attention. A suitable case is being made in which these precious documents may be exhibited without danger of fading.

From the Egyptian Research Account, through the same agency and owing to the liberality of Mrs. John Harrison, a part of the important material discovered by Mr. Garstang, has also been secured. The most notable piece of this invoice is a fine and complete limestone doorway of the twelfth dynasty, *i. e.*, C^a. B. C. 2500, with blue hieroglyphic inscriptions.

It is with sincere appreciation of the good feeling shown towards us by our English co-workers that we record the gift by Mr. H. W. Seton-Karr, of a collection of paleolithic implements found by him in Egypt, and which has formed the subject of an interesting article in the *Bulletin* of the Liverpool Museums of January, 1900.

The Mediterranean Section has also received notable accessions. For the Dillywn Parrish Collection three fragments of beautiful Roman mosaic pavements have been secured, and a collection of twelve unopened rolls of Græco-Roman papyri is shortly expected. A superb gold necklace has been presented to the Section by Mr. George Earle, Jr.

A part of the Etruscan collection formerly purchased by Mrs. Hearst for the Department, known as the "Coleman Collection," which she had reserved for her own use, has been shipped to California.

The thanks of the Department are due to the American Exploration Society, and especially to Hon. Calvin Wells and Mr. Charles H. Cramp, for a full series of large original and, as yet, unpublished photographs of the excavations conducted by Miss Boyd and Miss Wheeler for the Society during the summer, on the site of Gournia (Eastern Crete), where an ancient Mycenaean City was found with streets, houses, a palace and shrine. Also for the gift of casts of Mycenaean seal impressions and of a bull's head, discovered among the ruins.

Mrs. Hearst, having withdrawn her large picture by Verestchagin, "Blown from the Guns," which occupied the north wall of Pepper Hall, Mr. C. Hartman Kuhn, through Mrs. Charles Platt, Jr.'s kind interest, presented the Section with a cast of the western frieze of the Parthenon, which must prove a great addition to the Hall.

Three numbers of the *Bulletin* have been issued. Many accessions have been made to the Library, the more important being from Mr. C. H. Clark, the Duc de Loubat, Señor Manuel de Peralta, The Royal Academy of Belles Lettres, Mr. Robert C. H. Brock and the Commissioner of Indian Affairs.

Valuable gifts have been made to the Sections of American Prehistoric Archæology and General Ethnology by Drs. Octavio and Ramirio E. Gamez, Heber R. Bishop, Rev. Robert Hape, Louis R. Meeker, Thomas J. Collins, Dr. Roland Steiner, Mrs. Wm. H. Miller, Dr. Henry C. Eckstein, Armand de Potter, Professor Maxwell Sommerville, Verner Nisbet, Mauro R. Fernandez, O. P. Phillips, Charles McCall, Dr. Thomas G. Morton, Hon. Robert Adams, Jr., Mrs. H. L. Carson, E. W. Hodge, Dr. A. H. Thompson, Andre Salles and the Field Columbian Museum.

In conclusion it may be stated that the scientific value and material progress of the Department fully justify the labor and effort of those in charge. The growth of the collections is already beyond the capacity of the present building, and the increase in the cost of maintenance is necessarily great. It is earnestly hoped that public interest in the work may grow in proportion to its success, and that the Institution will receive from the community the liberal support which it deserves.

Respectfully submitted,

SARA Y. STEVENSON,
Secretary.

DEPARTMENT OF ARCHÆOLOGY OF THE UNIVERSITY OF PENNSYLVANIA.

REPORT OF JOHN SPARHAWK, JR., TREASURER.

January 1, 1901, to August 31, 1901.

(The fiscal year of the Department being now made to close on August 31, instead of December 31, in order to conform with the usage of the other Departments of the University.)

RECEIPTS.

Balance on hand December 31, 1900:		
Building Fund	\$2,487	99
Endowment Fund	3,383	62
Babylonian Fund, Niffer Expedition	1,494	73
Babylonian Fund, Dr. Hilprecht's expenses	257	07
Maintenance Fund	4,654	50
Drexel Medal Fund	2,160	66
Chinese playing cards	20	00
Dr. Hilprecht's Fund	14	16
Mrs. H. S. Ellis, Treasurer	235	96
Jos. Willcox, Chairman	20	30
American and Prehistoric Archæology...	988	96
Egypt and Mediterranean	472	46
Dillwyn Parrish Collection	507	60
		<hr/>
Annual dues		\$16,698 01
General Fund:		3,860 00
Donations:		
Robert C. H. Brock	\$2,773	82
Samuel T. Bodine	1,500	00
Eckley B. Coxe, Jr.	1,070	00
Samuel F. Houston	1,000	00
E. W. Clark	1,000	00
Calvin Wells	1,000	00
Mrs. Lucy W. Drexel	1,000	00
C. H. Clark	500	00
S. de C. Parrish	60	10
Evans R. Dick	50	00
		<hr/>
		9,953 92

Building Fund, interest		\$58 14
Babylonian Fund, Niffer Expedition, interest..		54 03
Endowment Fund, interest		2,153 08
Hilprecht Constantinople Fund:		
Donations:		
S. A. Crozer	\$500 00	
C. H. Clark	350 00	
E. W. Clark	250 00	
Robert C. H. Brock	250 00	
C. C. Harrison	250 00	
Evans R. Dick	250 00	
Eckley B. Coxe, Jr.....	250 00	
Samuel T. Bodine	250 00	
Silas W. Pettit	250 00	
Stuart Wood	250 00	
Henry C. Lea	125 00	
George C. Thomas	125 00	
Samuel F. Houston	125 00	
J. G. Rosengarten	100 00	
	<hr/>	
	\$3,325 00	
Transfer from Babylonian Fund, Dr. Hilprecht's expenses, by order of E. W. Clark, Chairman	7 07	
Transfer from Dr. Hilprecht's Fund by order of E. W. Clark, Chairman.	14 16	
Interest on deposits	9 74	
	<hr/>	3,355 97
Asia and General Ethnology Fund:		
Donations, Mrs. Phoebe A. Hearst	\$496 15	
Transfer of balance standing to the credit of Chinese playing cards by resolution of Board of Managers, April 19, 1901	20 00	
	<hr/>	516 15
Egypt and Mediterranean Fund, interest		13 64
American and Prehistoric Archæology Fund:		
Donations:		
Mrs. Lucy W. Drexel	\$153 00	
John Wanamaker	2,600 00	
	<hr/>	
	\$2,753 00	
Advance, Robert C. H. Brock	300 00	
	<hr/>	3,053 00

Jane E. Welton Estate Fund:			
Donation	\$500 00		
Interest	6 41		
			<u>\$506 41</u>
Mrs. Charles Platt, Jr., Special Fund:			
Donation, Hartman Kuhn	\$500 00		
Interest	5 33		
			<u>505 33</u>
Carl Edelheim Excavation Fund:			
Donation	\$1,000 00		
Interest	7 00		
			<u>1,007 00</u>
Drexel Medal Fund, interest			80 00
Dillwyn Parrish Collection, interest			20 00
Robert C. H. Brock:			
Advances to Maintenance Fund	\$12,000 00		
Advance for duplicating and mounting games for Buffalo exhibit	88 94		
			<u>12,088 94</u>
John Sparhawk, Jr.:			
Advance to Maintenance Fund.....	\$521 75		
Advance to American and Prehistoric Archæology	89 04		
			<u>610 79</u>
General Fund:			
Graduate Club, expenses of reception, July 19, 1901.....	\$9 37		
Pennsylvania Railroad Company, rebate..	3 40		
Subscription and sales of Bulletin.....	11 25		
University of Pennsylvania, for duplicat- ing and mounting games for Buffalo exhibit	167 15		
Interest on deposits	185 65		
			<u>376 82</u>
			<u><u>\$54,911 23</u></u>

DISBURSEMENTS.

General Fund or Expense Account:		
Salary account	\$10,948 52	
Stationery and printing account	191 65	
Postage account	275 00	
Freight and hauling account	677 91	
Repairs account	5 70	

Supplies account	\$1,805 88	
Sundries account	1,401 98	
Return of money orders for subscription to Bulletin		1 50
	<hr/>	\$15,308 14
Building Fund		1,467 12
American and Prehistoric Archæology		4,131 00
Asia and General Ethnology.....		500 00
Egypt and Mediterranean.....		175 00
Bills payable		12,850 00
Babylonian Fund, Niffer Expedition.....		851 87
Babylonian Fund, Dr. Hilprecht's expenses..		257 07
Dr. Hilprecht's Fund		14 16
Hilprecht Constantinople Fund		2,347 61
Robert C. H. Brock, account of advances..		3,238 94
Paleontology		20 30
Publication Fund		75 00
Egypt and Mediterranean.....		235 96
Chinese playing cards.....		20 00
Balance on hand:		
Building Fund	\$1,079 01	
Endowment Fund	5,536 70	
Babylonian Fund, Niffer Expedition....	696 89	
Drexel Medal Fund.....	2,240 66	
Egypt and Mediterranean.....	311 10	
Hilprecht Constantinople Fund.....	1,008 36	
Jane E. Welton Estate Fund.....	506 41	
Mrs. Chas. Platt, Jr., Special Fund....	505 33	
Carl Edenheim Excavation Fund.....	1,007 00	
Dillwyn Parrish Collection.....	527 60	
	<hr/>	13,419 06
		<hr/>
		\$54,911 23
		<hr/> <hr/>

JOHN SPARHAWK, JR.,
Treasurer.

APPENDIX XIV.

REPORT OF THE DIRECTOR OF THE ASTRONOMICAL OBSERVATORY.

To the Provost of the University;

SIR:—I have the honor to submit my report of the condition and work of the Flower Astronomical Observatory for the past year.

The buildings, grounds and instruments have been maintained in good condition. The past winter proved to be unfavorable for the evergreens, several of which were killed. These were replaced and a number of additional trees, chiefly maples, were planted. Otherwise no changes have been made since the last report.

The scientific activity has continued very much as in previous years, as it is believed to be the case that much more effective service to science can be rendered by consistently following a well chosen program from year to year than by frequent changes. Therefore, as heretofore, the large Equatorial has been employed by Mr. Eric Doolittle in observation of double stars, especial attention being given to close and difficult pairs and to those which have been neglected in recent years. Two hundred and seventy-eight separate pairs have been observed on from one to eighteen nights each.

The performance of the instrument has been highly satisfactory. On two exceptionally favorable nights in the month of June, a pair was distinctly separated and measured, the distance of whose component stars was only $0''.17$ —a very unusual thing with an instrument of this size.

A list of about nine hundred pairs is now being observed,

consisting of the more difficult Burnham stars and those discovered by Professor Hough, with the 18½ inch glass of the Dearborn Observatory.

During the year ending August 31, 1895, observations were made with the Zenith Telescope for investigating the Variation of Latitude and the value of the Constant of Aberration. 9,243 observations have been made with this instrument since its installation, October 1, 1896. There have also been observed during the year, twenty-four series of transits of circumpolar stars near elongation for investigation of the micrometer. Two series of readings for determining the values of the levels and several determinations of the Azimuth and Collimation have also been made. The four-inch Meridian Circle has been used throughout the year by Mr. Henry B. Evans, as heretofore, for time observation.

Besides this, during the months of October and November, 1900, Messrs. A. B. Turner and Harry I. Woods, students in the Department of Philosophy, made a series of observations for determining the positions of about one hundred stars.

The 3½ inch instrument has been employed by students, graduate and undergraduate, in observation for Time Azimuth and Latitude, the latter, both by the methods of Prime Vertical Transits and the Zenith Telescope.

The watch for the November meteors was resumed this year, but on a less extended scale than last year. One observer at a time was on duty during the nights of November 13, 14 and 15, with instructions to call out the entire force in case of any unusual display. However, the number of Leonids seemed to be even fewer than usual at this season.

Part III, Vol. I, Astronomical Series—Measures of 900 Double and Multiple Stars—has been printed and is ready for distribution.

The results of observation with the Zenith telescope, from August 16, 1898, to September 1, 1900, is practically

completed and can be placed in the printer's hands on very short notice.

Part I, Vol. I, Series in Astronomy, still awaits electric connection of the Observatory with the world outside, as without this the longitude cannot be determined.

The accessions to the Library, by exchange, gift and purchase, consist of 104 volumes and 119 pamphlets.

Respectfully submitted,

C. L. DOOLITTLE,
Director.

APPENDIX XV.

REPORT OF THE DIRECTOR OF THE BOTANIC GARDEN.

To the Provost of the University;

SIR:—I beg to submit the following report on the condition and progress of the Botanic Garden during the past year.

The increasing attractiveness of the institution alike from the botanical and æsthetic standpoints has drawn numerous visitors, and in nearly all cases these have shown an appreciation of the privilege extended to them. Repeated visits have been made by groups of teachers and students from various of the educational institutions of the city.

Several important donations have been made. That deserving first mention is the entire collection of Orchids, Ferns and Palms brought together during the past fifteen years by the judgment and enthusiasm of Mr. Roberts Le Boutillier, of Washington Lane, Germantown, whose collections have been known to every plant-lover in and around Philadelphia. He has shown a warm interest in the Botanical Society of Pennsylvania since its inception four years ago. It is, therefore, peculiarly gratifying to record that when he resolved to spend several years in travel he gave his collection to the University. It includes about one hundred and fifty specimens, representing fifty odd species, and among these are Orchids and Ferns of great size and value. The fine example of Vanilla Orchid deserves particular mention in this respect. Mr. Theodore Rand, of Radnor, has again presented two cases of shrubs and small trees. The Director of the Missouri Botanic Garden contributed,

through our student, Mr. Wolfert, a collection of Cacti and other succulent plants. Mr. Aldrich Pennock, of Lansdowne, gave an extensive collection of Ferns. Mr. John T. Morris has presented numerous specimens of Begonia, Fern, etc., while from the Dreer Company came a valuable gift of bulbs. Specimens have also been given by Dr. Weir Mitchell and Dr. H. C. Wood, by Mrs. Craggin and Miss Phebe Reed, by Mr. Fleming, of Lansdowne, and Mr. Standen, of Haverford.

During the period of the Christmas recess the writer organized a small party for the observation and collection of plants in Southern Florida. The trip extended over sixteen days and many growing specimens of native plants were secured. The writer also arranged for exchanges with plant cultivators at Palm Beach and Miami. As a result thirteen cases of plants were forwarded to the Garden, containing Mangroves, Tillandsias, Zamias, native Ferns, Palms and other types of vegetation. Most of them have grown luxuriantly, and have proved a noteworthy addition to the greenhouse collections. The success of the party has caused a request to be made to the Director by several of our graduate workers and members of our Botanical Society for the organization of a similar party during the coming winter.

During the summer recess the writer visited many of the important botanical centres of Europe, and obtained collections, partly by purchase, partly by donation. Two cases have already arrived and others will soon follow. Several of the species are new introductions to the country, and are still rare in European collections.

Good work has been done by our students and the teaching staff on various plant groups. Specially noteworthy have been the exhaustive observations made by Dr. Conard, Harrison Fellow of the Department, on the structure, growth, classification and hybridization of Water-lilies. Largely through his persistent efforts in securing material from abroad, aided by donations from the Dreer Company,

through their manager, Mr. Tricker, the University collection of Water-lilies is now probably the richest in the world. During the past summer he raised from crossed seed several beautiful hybrids, one of which will soon be sent into the trade by Messrs. Dreer as "Nymphæa Pennsylvania." Dr. Conard has also monographed the group of Water-lilies for "The Cyclopedia of American Horticulture," and presented a thesis on the group, which will soon be ready for publication. Ten other workers have conducted investigations in the Garden, and their results have been recently published or are nearly ready for publication. In this connection I venture to express the hope that considerable means will soon be forthcoming for the periodic publication of these in the "Contributions from the Botanical Laboratory."

Special repairs have been executed on the old greenhouse erected about fifteen years ago, and it is now in a satisfactory condition.

As in former years many plant specimens have been supplied to educational institutions, including Temple College, the Girls' High and Normal Schools, Altoona High School, several private schools in the city, and to the Architectural Department of the University for use in the drawing classes. A set of duplicate growing plants was also presented to the Boys' High School for class use.

Advantageous exchanges of plants have been made with the curators of Horticultural Hall, and Royal Palm Garden, Miami.

I am pleased to be able again to report valuable pecuniary aid to the Garden from the Botanical Society of Pennsylvania. The Ladies' Auxiliary Committee of the Society has done good work under the able secretaryship of Miss Anna Yarnall, and several considerable donations have been secured. Under the auspices of the Society a scientific reception was given on Saturday evening, April 20, for the benefit of the Garden, and in spite of inclement weather the meeting proved successful.

Since the completion of the labelling of the greenhouse collections, attention has been turned to providing an equally

good system of labels for the collections of hardy plants, and at present the Garden staff is engaged on this work.

In view of the many lines of usefulness which the existence and location of the Garden have rendered possible, the Director believes that a still greater future is in store for it.

Respectfully submitted,

JOHN M. MACFARLANE,
Director.

APPENDIX XVI.

REPORT OF THE DIRECTOR OF THE UNIVERSITY VIVARIUM.

To the Provost of the University;

SIR:—I have the honor to submit the following report on the University Vivarium for the year ending August 31, 1901.

Our Vivarium becomes year after year more and more valuable as an adjunct to the teaching and research work in Zoölogy. There are now found within it many representatives of almost every class in the animal kingdom, some of which are rare or but little known, while others, much more common, can be studied here under very favorable conditions.

The marine aquaria continue to be most successful, as is shown by the fact that many animals breed in the aquaria almost as freely as if they were in the open sea. One of the surprises of these aquaria is the unexpected appearance of animals which have been accidentally introduced. Thus, during the past summer the walls of the largest tank became covered with numerous colonies of a beautiful star-shaped Ascidian, *Botryllus*, which was probably introduced on seaweed. Another beautiful Ascidian, *Perophora*, which has bright green blood-corpuscles, has appeared in abundance in one of the aquaria. A very rare and interesting worm, *Dinophilus*, has also appeared in large numbers in these tanks, and we have but recently found a large and as yet undetermined species of marine Folyclade, the presence of which in the aquaria we had not before suspected. Recently dozens of egg masses of a shell-less mollusk, *Aeolis*, were found in one of the aquaria and on searching a few adults

were found which had been accidentally introduced probably on seaweed. During the summer the Sea-Anemones bred and the rocks in some of the aquaria are now covered with young Anemones. In other aquaria several species of Hydroids and some sponges have appeared. In addition to these larger animals very many species of microscopic forms, some of which are rare and extremely valuable for research, have made their appearance. The bare recital of these facts will serve, I think, to show something of the varied interests which our marine aquaria present to zoölogical investigators, while the habits of the many animals which are represented in these aquaria—Hermit Crabs, Star Fishes, Sea Cucumbers, living Corals, etc., are of great interest not only to the students in the zoölogical courses but also to the general public.

We are again indebted to the firm of Peter Wright & Sons for their kindness in supplying us with about two thousand gallons of sea water, which was brought from the open ocean on one of their tug boats. This, taken in connection with the water which they kindly supplied us last year, completely fills our salt-water system and will be sufficient, I think, for our needs for several years to come.

The fresh-water aquaria, while not so full of surprises as the marine ones, are still interesting and successful. Pickerel, sunfish, catfish, newts, crayfish, and many small invertebrates have bred freely in these aquaria, and breeding in confinement is after all the best test of any vivarium system.

In addition to the aquaria there are interesting collections of ants and bees, amphibia, reptiles, birds and small mammals.

While the value of the Vivarium for teaching purposes is great its chief value is found in the opportunities which it offers for research. During the past year there have been issued from the Zoölogical Laboratory about twenty scientific papers, a considerable number of which were made possible by the facilities which were provided by the Vivarium, and in addition to this published work several important investigations have been recently completed or are in

process of completion which were conducted in the Vivarium. The importance to research work of having an abundance of material from a large number of groups of the animal kingdom cannot be overestimated, and our University is to be congratulated on the peculiar facilities which it enjoys at present in this line.

The value of our Vivarium has been recognized by several other leading universities, one of which is now providing similar facilities for its own Zoölogical Department. We have reason to be proud of the fact that our University in establishing the Vivarium, has taken a pioneer step, the value of which is now so generally recognized.

In addition to the value of the Vivarium for both teaching and research work in Zoölogy, it has proved a source of interest and attraction to the students of the University as a whole and to the general public. While its purpose is in no sense that of a zoölogical garden or public aquarium, and though many of the most interesting animals are of microscopic size and are not seen nor appreciated by the public, nevertheless there are many general visitors every day, and almost every week one or more schools in the vicinity of Philadelphia visits the Vivarium.

I am particularly glad to report that the two great needs of the Vivarium which I mentioned in my last report, namely, a trained attendant, and a good photographic outfit, have now been supplied. For the latter we are under obligation to Mr. Walter E. Hering, and our thanks are also due to the United States Fish Commission for a number of marine fishes, and to various persons for gifts of small animals.

Respectfully submitted,

E. G. CONKLIN,
Director.

APPENDIX XVII.

REPORT OF THE PUBLICATION COMMITTEE.

To the Provost of the University;

SIR:—Through the continued generosity of the contributors to the special Publication Fund, the Committee has been enabled to issue a number of monographs in the several University series during the past year, as noted below. In addition to the new material thus published, the Committee has issued a second edition (re-printed) of Patten's "Consumption of Wealth" (Series in Political Economy and Public Law), in order to meet trade demands; and has also published: (1) Proceedings of University Day, February 22, 1901, and (2) Proceedings of Commencement Day, June 12, 1901, in separate editions.

TITLES ISSUED:

SERIES IN PHILOSOPHY.

No. 4.

Hindu Logic as Preserved in China and Japan. By Sadajiro Sugiura. Edited by E. A. Singer, Jr. 114 pp.

SERIES IN POLITICAL ECONOMY AND PUBLIC LAW.

No. 16.

Railway Passenger Traffic. By Walter E. Weyl. 250 pp.

SERIES IN HISTORY.

No. 1.

The Revolutionary Movement in Pennsylvania. By Charles H. Lincoln. 300 pp.

CONTRIBUTIONS FROM THE BOTANICAL LABORATORY.

Vol. II, No. 2.

Seven Papers. Plates I-X. By J. M. Macfarlane and others.

CONTRIBUTIONS FROM THE ZOÖLOGICAL LABORATORY.

For the year 1900: Nineteen Separata. By E. G. Conklin and others.

SERIES IN ASTRONOMY.

Vol. I, Part 3.

Measures of 900 Double and Multiple Stars Made with 18-inch Refractor of the Flower Astronomical Observatory. By Eric Doolittle. 148 pp.

Several noteworthy additions have been made to our list of Exchange Correspondents, among which may be mentioned the Universities of Berlin, Tübingen, Liége and Rennes; Royal Society of Edinburgh, Marine Biological Association (Plymouth, England), and the American Museum of Natural History, New York. Exchange arrangements, either in whole or in part, now exist between the University and 133 institutions, of which 74 are foreign and 59 domestic.

The Publication Committee feels encouraged at having been able to issue an increased number of monographs during the past year, through the liberality of those friends of the University who recognize the value of this branch of University work. It is almost impossible to emphasize too strongly the importance of maintaining the publication of such monographs, as representing the results of original investigation and scientific research carried on under University auspices; and it is the earnest hope of the Committee that ample provision may be made for the prosecution of its labors during the current year. A schedule of titles already accepted, and now awaiting publication is appended.

SERIES IN PHILOLOGY AND LITERATURE.

Palatalization in the Old English Dialects. By Clarence G. Child.

A Study of the Poetry of John Donne. By Martin G. Brumbaugh.

The Sources of Plutarch's Life of Cicero. By Alfred Gudeman.

"The Fair Maid of Bristowe." By Arthur H. Quinn.

On the Articular Infinitive in Demosthenes. By William A. Lamberton.

SERIES IN HISTORY.

Suffrage in the American Colonies. By Albert E. McKinley.

SERIES IN ASTRONOMY.

Description, and Determination of the Latitude, of the Flower Astronomical Observatory. By Charles L. Doolittle. No. I, Part I.

FOREIGN EXCHANGES.

- Aachen, Technische Hochschule, Preussen, Deutschland.
 Academie des Inscriptions et Belles Lettres, Institut de France, Paris, France.
 Amsterdam, Koninklijke Akademie van Wetenschappen, Nederland.
 Amsterdam, Bibliothèque de l'Université (pour la Société Mathématique), Holland.
 Asiatic Society of Bengal, Calcutta, India.
 Basel, Universitäts-Bibliothek, Schweiz.
 Berlin, Königl. Museum für Naturkunde (Zoologische Sammlung), Berlin, Deutschland.
 Berlin, Universitäts-Bibliothek, Berlin, Deutschland.
 Bern, Universitäts-Bibliothek, Schweiz.
 Bernice Pauahi Bishop Museum, Honolulu, Hawaii.
 Bonn, Universitäts-Bibliothek, Preussen, Deutschland.
 Braunschweig, Technische Hochschule, Deutschland.
 Breslau, Königl. Universitäts-Bibliothek, Deutschland.
 Brünn, K. K. Technische Hochschule, Mähren, Oesterreich.
 Cambridge University Library, Cambridge, England.
 Canadian Institute, Toronto, Canada.
 Ceylon, India; Royal Botanic Gardens.
 Constantinople, Imperial Ottoman Museum, Turkey.

- Darmstadt, Technische Hochschule, Hessen, Deutschland.
Dorpat, Imper. Universitet, Dorpat, Russia.
Dresden Technische Hochschule, Sachsen, Deutschland.
École Pratique des Hautes Etudes, Paris, France.
Edinburgh, Royal Society of, Scotland.
Erlangen, Koönigliche Universitäts-Bibliothek, Bayern, Deutschland.
Freiburg, i. B., Universitäts-Bibliothek, Baden, Deutschland.
Genève, Université de Genève, Suisse.
Genua, Reg. Universita degli Studi, Genua, Italia.
Giessen, Universitäts-Bibliothek, Deutschland.
Göttingen, Universitäts-Bibliothek, Preussen, Deutschland.
Göttingen, Koenigliche Gessellschaft der Wissenschaften, Preussen, Deutschland.
Greifswald, Universitäts-Bibliothek, Preussen, Deutschland.
Halle, Universitäts-Bibliothek, Preussen, Deutschland.
Hanover, Technische Hochschule, Preussen, Deutschland.
Heidelberg, Universitäts-Bibliothek, Baden, Deutschland.
L'Institut Catholique de Paris, Paris, France.
Jamaica, Institute of, Kingston, Jamaica, W. I.
Japan, Department of Education, Tokyo, Japan.
Jena, Universitäts-Bibliothek, Sachsen-Weimar, Deutschland.
Kazan, l'Université Imperiel (de la Société Physics-Mathématique), Russie.
Karlsruhe, Technische Hochschule, Baden, Deutschland.
Kiel, Koenigl. Universitäts-Bibliothek, Preussen, Deutschland.
Koenigsberg, Koenigl. Universitäts-Bibliothek, Preussen, Deutschland.
Leiden, Rijks Universiteit, Nederland.
Leipzig, Universitäts-Bibliothek, Sachsen, Deutschland.
Liège, l'Université, Liège, Belgique.
Louvain, Université Catholique de, Belgique.
Lünd, Kong. Universitet, Sverige.
Marburg, Universitäts-Bibliothek, Preussen, Deutschland.
Marine Biological Association, Plymouth, England.
McGill University Library, Montreal, Canada.

Moskau, Imper. Maskovskij Universitet, Moskau, Russia.
 München, Technische Hochschule, Bayern, Deutschland.
 Münster, Koenigl. Akademie-Bibliothek, Preussen, Deutschland.

Musée Social, Paris, France.

Nancy, l'Université de, France.

New South Wales, Royal Society of, North Sydney, Australia.

Oxford University, Bodleian Library, England.

Padua, Reg. Università degli Studi, Padua, Italia.

Perugia, Reg. Università degli Studi, Perugia, Italia.

Pisa, Reg. Università degli Studi, Pisa, Italia.

Prag, Deutsche Universität, Boehmen, Oesterreich.

Prince Edward Island, Legislative Library, Charlottetown, P. E. I.

Rennes, l'Université de, France.

St. Petersburg, Imper. Universitet, Russia.

Sapporo, Imperial College of Agriculture, Sapporo, Japan.

Strassburg, Universitäts-Bibliothek, Strassburg, Elsass, Deutschland.

Stuttgart, Technische Hochschule, Württemberg, Deutschland.

Tübingen, Koenigl. Universitäts-Bibliothek, Württemberg, Deutschland.

Toronto, University Library, Toronto, Canada.

Upsala, Kong. Universitets-Bibliotek, Upsala, Sverige.

Utrecht, Rijks Universiteit, Utrecht, Nederland.

Wien, Technische Hochschule, Oesterreich-Ungarn.

Würzburg, K. K. Universität, Bayern, Deutschland.

DOMESTIC EXCHANGES.

Academy of Natural Sciences, Philadelphia.

American Academy of Arts and Sciences, 1154 Boylston street, Boston, Mass.

American Academy of Medicine, Easton, Pa.

American Catholic Historical Society, Philadelphia.

American Jewish Historical Society, Washington, D. C.

- American Museum of Natural History Seventy-seventh street and Central Park West, New York City.
American Philosophical Society, Philadelphia.
Andover Theological Seminary Library, Andover, Mass.
Brown University, Anatomical Museum, Providence, R. I.
Buffalo Historical Society, Buffalo, N. Y.
Buffalo Society of Natural Sciences, Buffalo, N. Y.
California Academy of Sciences, San Francisco, Cal.
California, University of, Berkeley, Cal.
Carnegie Library, Pittsburg, Pa.
Case Memorial Library, Hartford, Conn. (Hartford Theological Seminary.)
Catholic University, Washington, D. C.
Chicago Academy of Sciences, Lincoln Park, Chicago, Ill.
Chicago, University of, Chicago, Ill.
Chicago Theological Seminary, Chicago, Ill.
Cincinnati Society of Natural History, 312 Broadway, Cincinnati, O.
Colby University Library, Waterville, Me.
Columbia University Library, New York City.
Congress, Library of, Washington, D. C.
Cornell University Library, Ithaca, N. Y.
Denison University Library, Granville, Ohio.
Detroit Public Library, Detroit, Mich.
Free Library of Philadelphia.
Harvard University Library, Cambridge, Mass.
Illinois, University of (State Laboratory of Natural History), Urbana, Ill.
Indiana State Geologist, Indianapolis, Ind.
Industrialist, The, Kansas State Agricultural College, Manhattan, Kansas.
Iowa, University of, Iowa City, Iowa.
John Crerar Library, The, Chicago, Ill.
Johns Hopkins University Library, The, Baltimore, Md.
Kansas Historical Society, Topeka, Kansas.
Kansas University, Lawrence, Kansas.
Lebanon County Historical Society, Lebanon, Pa.
Leland Stanford University Library, Palo Alto, Cal.
Massachusetts Institute of Technology, Boston, Mass.

Michigan, University of, Ann Arbor, Mich.
 Missouri, University of, Columbia, Mo.
 Minneapolis Public Library, Minneapolis, Minn.
 New York State Library, Albany, N. Y.
 Northern Indiana Historical Society, South Bend, Ind.
 Ohio State Arch. and Historical Society, Columbus, Ohio.
 Peabody Museum, Harvard University, Cambridge, Mass.
 Philadelphia, Library Company of, 1300 Locust street,
 Philadelphia.
 Princeton University Library, Princeton, N. J.
 Rush Medical College Library (University of Chicago),
 Chicago, Ill.
 Smithsonian Institute, Washington, D. C.
 Stanford University, California.
 State Library, Harrisburg, Pa.
 Tennessee, University of, Knoxville, Tenn.
 Texas Academy of Science, Austin, Texas.
 Trinity College Historical Society, Durham, N. C.
 Vermont, University of (Agricultural Experiment Station),
 Burlington, Vt.
 Virginia Historical Society, Richmond, Virginia.
 Wisconsin, University of, Madison, Wisconsin.
 Yale University Library, New Haven, Conn.

Total receipts through Exchange Bureau:

3660 dissertations and official publications from foreign
 universities.
 739 dissertations and official publications from United
 States universities.
 316 publications from United States and foreign learned
 societies and from schools.

4715

69 periodicals.

Respectfully submitted,

M. D. LEARNED,
 Chairman.

APPENDIX XVIII.

REPORT OF THE AUDITORS.

LYBRAND, ROSS BROS. & MONTGOMERY,
CERTIFIED PUBLIC ACCOUNTANTS.

PHILADELPHIA, November 30, 1901.

C. C. HARRISON, ESQ., *Provost,*
University of Pennsylvania,
Philadelphia.

DEAR SIR:—We have the honor to report that we have audited the accounts of the Treasurer of the University, Mr. George L. Harrison, Jr., for the fiscal year ended thirty-first August, 1901, and found them to be correct and very carefully and creditably kept. The audit covered the verification of the income and expenditures, the balances on deposit thirty-first of August, 1901, the draft of the Treasurer's report, and the examination of the securities on hand twenty-ninth November, 1901, including those deposited with the Fidelity Trust Company.

We also examined the accounts of the Deans of the several departments, of the Registrar of the College, and of the Central Light and Heat Station, and found them to be correct, with the exception of a few clerical errors of small amount which were corrected during the examination. At our suggestion, the Bursar has decided to keep an account showing the total amounts of the charges and credits to the students, the balance of which should agree with the aggregate balances of the individual accounts of the students. This system will lead to the detection of any errors in postings or footings of the accounts.

At the University we verified the charges to and collections from the students, miscellaneous receipts, the remittances to the Treasurer, the bank accounts, and the cash expenditures.

Very truly yours,

[Signed.]

LYBRAND, ROSS BROS. & MONTGOMERY.

APPENDIX XIX.

UNIVERSITY BIBLIOGRAPHY,

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YOUNG, JAMES T.

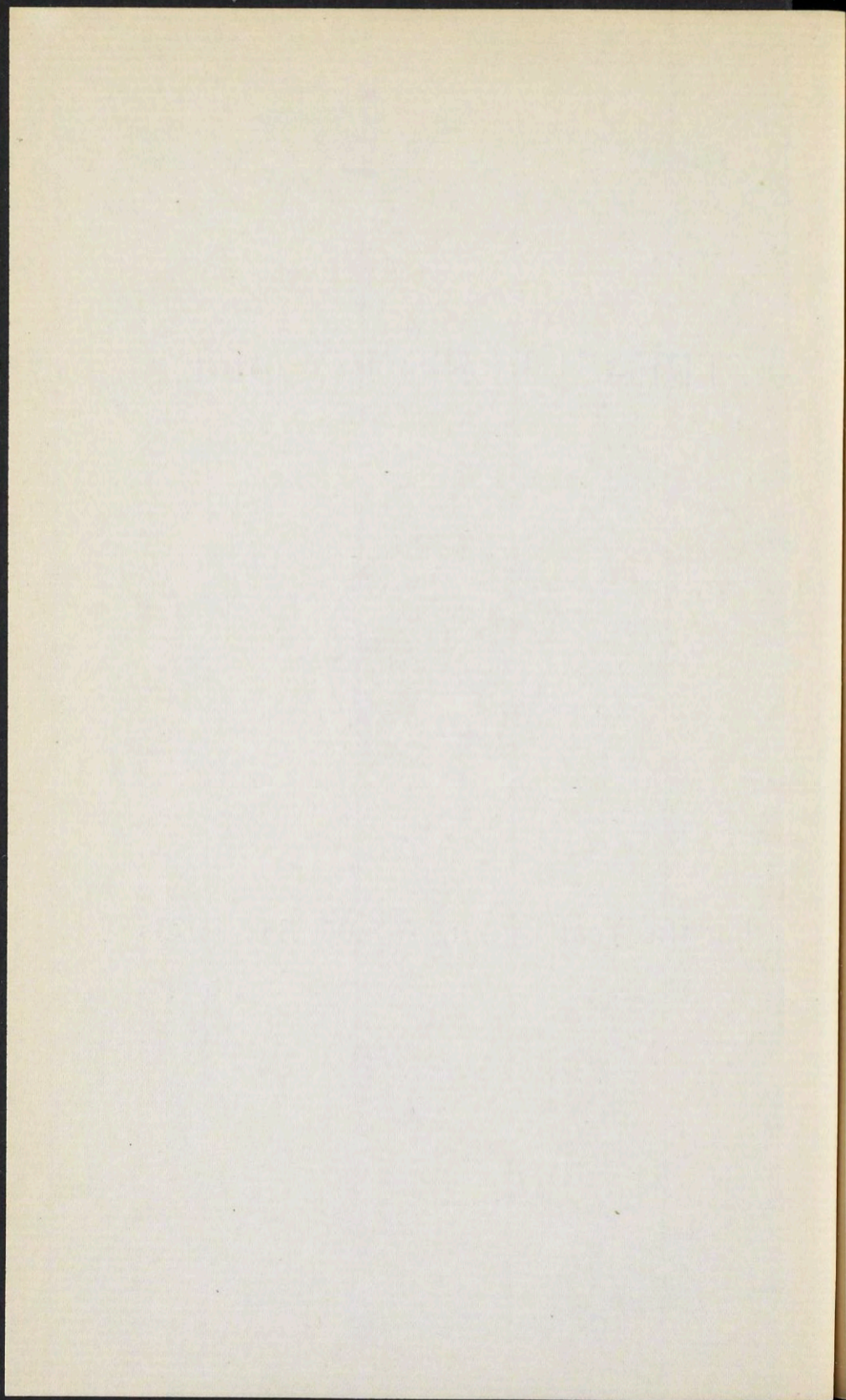
University Instruction in Municipal Government. (*National Municipal League*, Philadelphia, 1901.)

Articles on Porto Rico, Philippines and Cuba in *Notes on Colonies and Colonial Government*. (*Annals of American Academy of Political and Social Science*, January, March and May, 1901.)

TREASURER'S REPORT.



For the Year Ending August 31, 1901.



REPORT OF THE TREASURER OF THE UNIVERSITY OF PENNSYLVANIA.

THE PROPERTY OF THE UNIVERSITY

(part being held in trust and part in fee) is as follows, viz.:

GENERAL BALANCE SHEET.

Assets:

I. Real Estate		\$4,883,295	42	
II. Libraries, Museums, Apparatus, Furniture and Perpetual Insurance		1,630,352	99	
III. Securities:				
Railroad and Corporation Bonds	\$1,906,992	28		
Stocks	247,512	83		
			2,154,505	11
IV. Mortgages:				
On property in Philadelphia and vicinity..	\$264,970	00		
On property in Chicago and Western cities...	273,000	00		
			537,970	00
V. Ground Rents			60,620	62
VI. Loans on Collateral			101,073	40
			\$9,367,817	54
VII. Cash balances in Various Trust Companies:				
To Credit of Investment Funds:				
University Trusts	\$12,864	30		
Hospital Trusts		307	26	
To Credit of Funds not for Investment:				
University	42,380	69		
Hospital	18,730	84		
To Credit Income:				
University	4,607	98		
To Credit Administration	6,103	98		
			84,995	05
			\$9,452,812	59

Liabilities:

Bonds Central Light and Heat Station	\$70,000 00
Mortgage, 3451 Woodland Avenue ..	5,500 00
Mortgage, 3342 Walnut Street	5,000 00
Obligations of the General Fund	132,878 70
Advances to Trusts by Administration	42,025 45
Advances to Land purchases and Building Funds	102,693 37
Loan to Veterinary Hospital	10,400 00
	<hr/>
	\$368,497 52
	<hr/>
	\$9,084,315 07

REAL ESTATE.

IN PHILADELPHIA.

IN FIFTH WARD.

Premises No. 131 South Fifth Street	\$17,000 00
Premises No. 224 Stampers Street	1,800 00

IN SIXTH WARD.

Premises No. 58 North Fourth Street	20,000 00
" " 60 " " "	30,000 00
" " 62 " " "	18,800 00
" " 64 " " "	14,600 00
" " 66 " " "	20,000 00
" " 66 " " " rear.....	6,000 00
" " 29 and 31 North Seventh Street	20,980 00

IN TWENTY-SEVENTH WARD.

Plot of ground between Thirty-fourth and Thirty-sixth Streets, Spruce Street and Woodland Avenue, with College Buildings and Medical Hall	643,799 27
Medical Laboratory	69,414 15
Plot of ground between Thirty-sixth, Spruce, Woodland Avenue, Woodland Cemetery and Guardian Street ...	250,000 00
Library Building	209,142 08
Veterinary Building	40,358 56
Biological Building	36,844 98
Plot of ground between Connecting Railroad and Thirty- fourth Street	250,000 00
Plot of ground Thirty-third and Marston Streets	12,764 46
Plot of ground between Thirty-sixth and Spruce Streets, Woodland Avenue and Police Station	20,000 00

Treasurer's Report.

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John Harrison Laboratory of Chemistry	\$113,607 82
Henry Howard Houston Hall	134,544 57
Dormitory Building	344,268 67
New Dormitory Building and Memorial Tower, paid to August 31, 1901	241,448 01
Central Light and Heat Station	186,050 83
Department of Hygiene Building	50,000 00
Department of Hygiene Laboratory	15,001 75
Dog Hospital Building	11,771 30
Bennett Hall	17,500 00
Premises No. 3340, 3342, 3344, 3346 Walnut Street	30,000 00
Premises No. 3451 Woodland Avenue	5,500 00
Department of Dentistry Building	129,851 08
Dining Hall	14,799 58
Law School Building and Lot, paid to August 31, 1901...	420,721 06
Museum Science and Art, paid to August 31, 1901	391,331 08
Randal Morgan Laboratory of Physics	83,302 31
Premises Thirty-third and Locust Streets	35,625 00
New Medical Laboratory, paid to August 31, 1901	41,459 11
Plot of ground Thirty-fourth to Thirty-sixth and Spruce to Pine Streets	125,000 00
Hospital Buildings	243,743 92
Gibson Wing	65,000 00
Nurses' Home	20,000 00
Nurses' Home, New Building	28,598 37
Mortuary Building	11,000 00
Maternity Building	29,000 00
Agnew Memorial Pavilion	166,645 57
Pepper Clinical Laboratory	25,000 00
James Dundas Clinic	6,098 67

IN TWENTY-NINTH WARD.

Premises No. 3011 Girard Avenue	5,300 00
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IN THIRTY-NINTH WARD.

Twenty-three and one-half acres on Delaware River	100,000 00
Two and eighty-seven one hundredths acres on Moore Street	20,000 00

IN DELAWARE COUNTY, PENNSYLVANIA.

Reese Wall Flower Estate, Farm	30,000 00
“ “ “ “ Observatory Buildings	12,796 84
“ “ “ “ Professor's House	11,808 25

IN ELK AND MCKEAN COUNTIES, PENNSYLVANIA.

About seven hundred acres	\$5,054 71
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IN LIGONIER, WESTMORELAND COUNTY, PENNSYLVANIA.

Sundry lots of ground	7,000 00
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IN SEA ISLE CITY, N. J.

Marine Biological Laboratory	4,000 00
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IN MANCHESTER, MASS.

Sundry lots of ground	18,963 42
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\$4,883,295 42

LIBRARIES, MUSEUMS, APPARATUS, FURNITURE AND PERPETUAL INSURANCE.

College Apparatus and Furniture	\$112,000 00
Department of Medicine Apparatus and Furniture	94,072 00
Department of Law Apparatus and Furniture	145,998 65
Department of Dentistry Apparatus and Furniture	26,850 08
Department of Hygiene Apparatus and Furniture	19,874 28
Department of Veterinary Medicine and Hospital Apparatus and Furniture	11,422 00
University Library Books and Furniture	390,300 00
Museum of Science and Art Collections and Furniture...	690,000 00
Wistar and Horner Museum Collections and Furniture..	40,000 00
J. H. Towne Fossils Collections and Furniture	5,011 13
Flower Observatory Apparatus and Furniture	24,098 78
Hospital Furniture	15,511 43
Houston Hall Furniture	22,891 21
Dormitory Furniture	6,747 91
Dining Hall Furniture	522 42

\$1,605,299 89

Perpetual Insurance:

On College Buildings	\$10,680 00
" Veterinary Buildings	900 00
" Hospital Buildings	4,947 50
" Hospital Buildings, Gibson Wing	900 00
" Hospital Buildings, Nurses' Home	900 00
" Biological Building	300 00
" Central Light and Heat Station Building	1,000 00
" Department of Hygiene Building	875 00

On Chemical Laboratory Building	\$1,200 00
“ Department of Dentistry Building	2,565 00
“ Flower Observatory Building	200 00
“ Trust Properties in City	585 60
	<hr/>
	\$25,053 10

SECURITIES.

RAILROAD AND CORPORATION BONDS.

	Market value, Sept. 1, 1901.	Cost.
5,000 Chicago Gas Light & Coke Co. 1st Mtg. 5's, 1937.....	\$5,400 00	\$5,000 00
64,000 Reading Co. and P. & R. Coal and Iron Gen. Mtg. 4's, 1907	60,800 00	57,817 50
3,000 Phila. & Reading R. R. Cons. 7's, 1911	3,802 50	3,000 00
25,000 Phila. & Reading R. R. 4's, 1937....	26,625 00	25,000 00
12,000 Elmira & Williamsport R. R. Co. Income Bonds, 5's, 2862.....	13,080 00	12,000 00
2,000 Penna. R. R. Co. Cons. Mtg. 6's, 1905	2,150 00	1,924 00
1,000 Susquehanna Coal Co., Guar. by Penna. R. R. Co. 6's, 1911	1,150 00	1,000 00
25,000 Toledo, O., Electric Street Railway Co. 1st Mtg. 5's, 1912	25,750 00	25,000 00
5,000 Metropolitan St. Ry., Kansas City, Mo., Gen. Mtg. 5's, 1909	5,200 00	4,894 17
30,000 Evansville & Terre Haute R. R. Co. 1st Mtg. 5's, 1942	32,100 00	30,600 00
17,000 Bethlehem Iron Co. 1st Mtg. 5's, 1907	17,680 00	17,000 00
50,000 International Nav. Co. 1st Mtg. 5's, 1929	50,000 00	50,000 00
13,000 Norfolk & Western R. R. Co. 1st Mtg. 6's, 1932	17,095 00	13,000 00
58,000 Atlanta Gas Light Co. 1st Mtg. 5's, 1947	60,900 00	56,750 00
2,000 Catawissa R. R. Co. Extended 6's, 1902	2,000 00	2,000 00
101,000 San Antonio & Aransas Pass R. R. 1st Mtg. 4's, 1943	85,850 00	60,000 00
2,500 County of St. Louis, Minn., 6's, 1907	2,750 00	2,500 00
2,500 Wilmington, Columbia & Augusta R. R. 1st Mtg. 6's, 1910	2,900 00	2,500 00

	Market value, Sept. 1, 1901.	Cost.
1,350 Lehigh Coal & Nav. Co. Cons. Loan 4½'s	\$1,485 00	\$1,471 50
5,000 Columbus & Indianapolis Central R. R. 2d Mtg. 7's, 1904	5,400 00	5,000 00
13,000 Wabash R. R. Co. 2d Mtg. 5's, 1939	13,975 00	13,000 00
2,000 Saltzburg Coal Co. Gen. Mtg. 6's, 1914	1,400 00	2,000 00
3,000 Pittsburg, Shenango & Lake Erie R. R. 1st Mtg. 5's, 1940	3,555 00	3,000 00
5,000 Fairmount Coal & Coke Co. 1st Mtg. 4s', 1919	1,250 00	5,000 00
150,000 Phila. & Reading Coal & Iron Co. 5-10-year 6's, 1904	153,000 00	152,500 00
22,000 City of Galveston, Tex., 40-year Ltd. 5's, 1934	22,000 00	22,000 00
25,000 Lehigh Valley R. R. Mtg. and Collat. Trust 5's, 1907	26,875 00	25,000 00
53,000 Erie R. R. Co. prior lien 4's, 1906..	51,542 50	48,082 50
25,000 Scranton Traction Co. 1st Mtg. 6's, 1932	29,000 00	25,000 00
22,000 Ohio River R. R. Co. 1st Mtg. 5's, 1936	24,750 00	22,660 00
98,000 Equitable Ill. Gas. L. Co. 1st Mtg. 5's, 1928	104,125 00	99,440 00
12,000 Choctaw, Oklahoma & Gulf R. R. Gen. Mtg. 5's, 1919	12,990 00	12,050 00
10,000 Raleigh & Gaston R. R. 1st Mtg. 5's, 1947	11,400 00	10,332 50
10,000 Syracuse Rapid Transit Co. 1st Mtg. 5's, 1946	10,000 00	10,000 00
11,000 Western Gas. Co. 1st Mtg. 5's, 1933	11,770 00	10,987 50
5,000 Union Pacific R. R. 1st Mtg. land grant 4's, 1947	5,212 50	3,500 00
40,000 Pittsburg Consol. Gas. Co. 1st Mtg. 5's, 1948	44,400 00	41,000 00
3,300 Bloomsburg & Sullivan R. R. 1st Mtg. 5's, 1928	2,970 00	3,300 00
1,600 Bloomsburg & Sullivan R. R. 2d Mtg. 5's, 1928	960 00	1,600 00
200 Bloomsburg & Sullivan R. R. Scrip	66 66	66 66
23,000 Kansas City, Mo., Gas Co. 1st Mtg. 5's, 1922	23,460 00	21,882 50

Treasurer's Report.

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	Market value, Sept. 1, 1901.	Cost.
500 Phila. Country Club 1st Mtg. 5's, 1940	\$490 00	\$500 00
2,000 Buffalo & Susquehanna R. R. 1st Mtg. 5's, 1913	2,140 00	1,990 00
21,000 Second Ave. (Pittsburg) Traction Co. 1st Mtg. 5's, 1934	24,570 00	21,000 00
29,000 Chicago & Erie R. R. 1st Mtg. 5's, 1982	34,800 00	31,975 00
2,000 Brooklyn, N. Y., Union Gas Co. 1st Mtg. 5's, 1945	2,340 00	2,000 00
20,000 Lehigh Valley Car Trust 5's, 1900- 1904	20,300 00	20,000 00
30,000 Central Light and Heat Station 5 4-10's	30,000 00	30,000 00
132,878.70 Obligation of the University	132,878 70	132,878 70
34,000 Lehigh Valley Coal Co. 1st Mtg. 5's, 1933	36,720 00	33,850 00
25,000 St. Louis Merchants' Bridge Co. 1st Mtg. 6's, 1929	28,750 00	25,000 00
9,000 Sunbury, Hazleton & Wilkesbarre R. R. 1st Mtg. 5's, 1928	9,495 00	8,380 00
400 Sunbury, Hazleton & Wilkesbarre R. R. 2d Mtg. 6's, 1938	464 00	393 50
25,000 St. Louis Terminal Cupples Station and Property 1st Mtg. 4½'s, 1917	25,000 00	24,468 75
25,000 Consumers' Light, Heat and Power Co. 1st Mtg. 5's, 1938	25,000 00	25,000 00
1,000 City of Pittsburg Refunding 5's, 1910	1,130 00	1,130 00
1,000 Central R. R. of N. J. Gen. Mtg. 5's, 1987	1,300 00	1,120 00
6,000 Phila. & Erie R. R. Gen. Mtg. 5's, 1920	7,200 00	7,080 00
25,000 Citizens' Ry. Indianapolis 1st Con. Mtg. 5's, 1933	27,000 00	24,000 00
25,000 Phila. & West Chester Traction Co. 1st Mtg. 5's, 1918	26,000 00	25,000 00
10,400 Veterinary Hospital Bonds	10,400 00	10,400 00
35,000 Wilmington & Chester Traction Co. Collat. Trust. 5's, 1918	36,750 00	35,320 00
34,000 Williamsport Gas Co. 1st Mtg. 5's, 1939	35,360 00	34,420 00
25,000 North Hudson Heat, Light & Power Co. Mtg. 5's, 1938	25,000 00	25,000 00

	Market value, Sept. 1, 1901.	Cost.
45,000 Electric & People's Traction Trust Certf. 4's, 1945	\$43,650 00	\$45,028 75
20,000 Baltimore & Ohio R. R. 1st Mtg. 4's, 1948	20,400 00	19,925 00
10,000 Baltimore & Ohio R. R. prior lien 3½'s, 1925	9,400 00	9,412 50
30,000 Hudson County Gas Co. 1st Mtg. 5's, 1949	30,150 00	30,000 00
10,000 Northern Pacific R. R. prior lien 4's, 1997	10,425 00	10,000 00
60,000 Jersey City, Hoboken & Paterson St. Ry. 1st Mtg. 4's, 1949	48,150 00	50,000 00
25,000 United Railways Co. Gold Trust 4's, 1949	21,812 50	21,250 00
25,000 Norfolk & Western R. R. Co. 1st Cons. Mtg. 4's, 1996	25,625 00	24,437 50
50,000 Western N. Y. & Penna. R. R. Gen. Mtg. 3-4's, 1943	49,625 00	47,378 75
20,000 St. Louis, Iron Mountain & South- ern land grant 5's, 1931	23,100 00	20,000 00
5,000 Phila. Electric Gold Trust 5's, 1948	5,000 00	4,993 75
6,000 Lehigh Valley R. R. Car Trust 4½'s, 1910	6,111 00	6,120 00
25,000 Lehigh Valley Traction Co. 1st Mtg. 4's, 1929	22,750 00	23,000 00
1,000 Tuckerton R. R. Co. 1st Mtg. 6's, 1910	800 00	1,000 00
50,000 Chesapeake & Ohio R. R. Gen. Mtg. 4½'s, 1992	53,250 00	50,000 00
25,000 Schuylkill Traction Co. Gold Mtg. 5's, 1943	25,250 00	25,000 00
35,000 Michigan Lake Superior Power Co. 1st Mtg. 5's, 1949	33,250 00	35,000 00
25,000 Missouri, Kansas & Texas R. R. 1st Mtg. 4's, 1990	24,500 00	24,681 25
5,000 Southern Pacific R. R. Stock Collat. 4's, 1949	4,525 00	5,000 00
5,000 Lehigh Valley R. R. Reg. 7's, 1910..	6,325 00	5,000 00
10,000 Connecticut Ry. & Lighting Co. 1st Mtg. 4½'s, 1951	10,000 00	10,000 00
10,000 Louisville & Nashville R. R. Unified Gold 4's, 1940	10,100 00	10,000 00
	<hr/>	<hr/>
	\$2,004,105 36	\$1,906,992 28

STOCKS.

		Market value, Sept. 1, 1901.	Cost.
16 shares	Lehigh Valley R. R. pfd.....	\$640 00	\$800 00
120 "	Wm. Cramp & Sons Ship & En- gine Bldg. Co.....	8,880 00	6,000 00
61 "	Norfolk & Western R. R. Com..	3,355 00	5,550 00
507 "	Lehigh Valley R. R. Com.....	17,238 00	15,690 00
5 "	American Dredging Co.....	1,132 50	500 00
10 "	Lehigh Coal & Nav. Co.....	720 00	500 00
500 "	Delaware & Bound Brook R. R.	102,500 00	75,000 00
408 "	Pennsylvania R. R. Co.....	29,886 00	22,221 08
27 "	Brooklyn Union Gas Co. Com..	5,670 00	2,160 00
238 "	Phila. & Reading 2d pfd.....	6,188 00	2,856 00
578 "	Phila. & Reading Com.	11,849 00	5,780 00
134 "	Safe Deposit & Trust Co., Pitts- burg, Pa.	13,400 00	7,370 00
25 "	Union Pacific R. R. pfd.....	2,200 00	1,500 00
10 "	American Snuff Co. pfd.....	400 00	1,000 00
80 "	Fidelity Trust Co.....	44,480 00	35,600 00
22 "	Provident Life & Trust Co.....	15,400 00	9,482 00
58 "	Pennsylvania Salt Mfg. Co.....	6,380 00	6,290 00
500 "	United Traction Co., Pittsburg pfd.	25,000 00	25,000 00
250 "	Phila. Traction Co.....	24,000 00	24,183 75
3 "	Insurance Co. of North America	69 00	30 00
		<hr/>	<hr/>
		\$319,387 50	\$247 512 83

MORTGAGES

ON PROPERTY IN PHILADELPHIA AND VICINITY.

No. 707 Lydia Street	\$700 00
Nos. 752 and 754 South Eighth Street	4,000 00
Wallace and Nineteenth Streets	6,000 00
Lancaster Avenue and Rockland Street	2,750 00
Cheltenham Township, Montgomery County, Pa.....	10,000 00
Cheltenham Township, Montgomery County, Pa.....	3,000 00
Jenkintown, Pa.	4,320 00
Auburn and Tenth Streets	9,000 00
Washington Avenue and Twenty-first Street	35,000 00
No. 4044 Powelton Avenue	3,000 00
Nos. 2262, 2318 and 2320 North Front Street	8,000 00
Northeast corner Woodland Ave. and Thirty-fourth Street	2,500 00
No. 1343 Mount Vernon Street	2,700 00
No. 2977 Frankford Avenue	4,000 00

No. 2987 Frankford Avenue	\$4,000 00
Camden, N. J.....	10,000 00
Thirty-fifth Ward, Philadelphia	80,000 00
No. 1730 Pine Street	10,000 00
Glenloch, Chester County, Pa.....	38,000 00
City Line and Washington Lane	14,000 00
No. 549 North Second Street	3,000 00
No. 3342 Walnut Street	5,000 00
Manchester, Mass.	1,000 00
Ligonier, Pa.	3,000 00
Gray's Ferry Road and Thirtieth Street	2,000 00
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	\$264,970 00

COUPON MORTGAGES.

In Chicago, Illinois.....	\$8,500 00
" " "	30,000 00
" " "	8,000 00
" " "	25,000 00
" " "	25,000 00
" " "	10,000 00
" " "	20,000 00
" " "	6,000 00
" " "	10,000 00
" " "	2,500 00
" " "	35,000 00
" " "	15,000 00
" Kansas City, Mo.	16,000 00
" " " "	20,000 00
" Olympia, Wash.	6,000 00
" Lincoln, Neb.	30,000 00
" Atlanta, Ga.	6,000 00
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	\$273,000 00

GROUND RENTS IN PHILADELPHIA, ETC.

No. 29 North Sixth Street	\$2,500 00
No. 533 North Front Street	426 67
No. 535 North Front Street	426 67
No. 537 North Front Street	426 67
Green and New Market Streets	111 11
Moore and Otsego Streets	3,000 00
Oakford, Manton and Twenty-second Streets, eight at \$800 each	6,400 00
Stiles Street and Nineteenth	900 00

Treasurer's Report.

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Gray's Ferry Road	\$42,519 00
No. 110 Spruce Street	1,866 67
Nos. 13 and 15 Parkham Street	400 00
No. 618 South Seventh Street	444 50
No. 128 North Water Street	1,133 33
Lebanon, Pa.	66 00

\$60,620 62

Loans on Collateral	\$50,000 00
“ “ “	1,500 00
“ “ “	10,123 40
“ “ “	5,000 00
“ “ “	34,450 00

\$101,073 40

THE VARIOUS TRUST FUNDS HELD BY THE
UNIVERSITY ARE INVESTED IN REAL ESTATE AND OTHER
SECURITIES ENUMERATED IN THIS REPORT.

The following is a list of the various Trusts :

Endowment Funds—University.	Amount Invested.	Amount Uninvested
General Fund	\$2,948,180 49	\$38 81
J. Herman Raht Memorial Fund	250 00	
Phi Kappa Sigma Fund	400 00	
Keble Fund	12,868 41	
Elliott Cresson Fund	4,419 33	
Tobias Wagner Fund	5,300 00	
Bloomfield Moore Fund	15,000 00	
Thomas A. Scott Fund	50,000 00	
John H. Towne Fund	448,803 06	
John Welsh Fund	51,822 24	
A. Whitney Fund	48,870 75	1,073 25
Scholarship Fund	4,637 07	
Benjamin Franklin Scholarship Fund ...	10,026 12	
Samuel V. Merrick Scholarship Fund ...	3,508 10	
Matthew Baird Scholarship Fund	5,013 06	
E. Otis Kendall Scholarship Fund	5,000 00	
A. Seybert Fund	53,045 74	
Chair of Christian Ethics Fund	3,015 36	
Alumni Hall Fund	5,943 11	
Hector Tyndale Fellowship Fund	12,194 78	
S. W. Roberts Fund	1,114 83	
Wharton School Fund	157,754 00	
Assyrian Fellowship Fund	189 55	
Pepper Professorship of Hygiene Fund..	59,400 00	
J. Rhea Barton Fund	49,920 48	
J. Gillingham Fell Fund	1,100 00	
Auxiliary Faculty Medicine Fund	31,340 16	
Leidy Chair of Anatomy Fund	1,837 16	
Botanic Garden Fund	4,302 99	
Department of Biology Fund	63,155 22	
I. V. Williamson Fund	47,530 00	
George S. Pepper Residuary Legatee Fund	34,031 37	
Frances S. Pepper Fellowship Fund	7,150 00	
Chair of Pedagogy Fund	250 00	
Henry Reed Prize Fund	743 12	
Latin Prize Fund	1,025 80	

Endowment Funds—University.	Amount Invested.	Amount Uninvested.
Oratory Prize Fund	\$360 80	
English Composition Prize Fund	200 00	
Arthur Spayd Brooke Mem. Prize Fund	1,000 00	
J. Warner Yardley Prize Fund	500 00	
Class of 1880 Prize Fund	1,000 00	
Allen Memorial Prize Fund	1,000 00	
P. Pemberton Morris Prize Fund	1,000 00	
Rev. C. P. Krauth Library Fund	1,604 64	
Agricultural Library Fund	916 00	
Pepper Medical Library Fund	7,708 19	
Tobias Wagner Library Fund	10,087 08	
J. B. Lippincott Library Fund	7,000 00	
Isaac Norris Library Fund	5,233 69	
Reese Wall Flower Fund	109,213 87	
John Harrison Lab. of Chemistry Fund..	114,829 82	
Veterinary Fund	82,930 56	
J. M. Bennett Endowment for Women....	17,500 00	
Henry Howard Houston Hall Fund	157,435 78	
Henry Howard Houston Hall Endowment	500 00	
Dormitory Building Fund	355,016 58	
Dining Hall Fund	14,799 58	
Dental Hall Fund	159,266 16	
Wistar and Horner Museum Fund	40,110 11	
Department of Law Fund	7,735 08	
John F. Fraser Fund	6,332 64	
Department of Hygiene Fund	189,388 44	\$134 03
Laboratory of Hygiene Fund	15,001 75	
Thomas A. Scott Fellowship Fund	10,000 00	
J. M. Bennett End. Grad. Dept. for Women	45,737 50	
A. S. Biddle Fund	20,250 00	
Simon Muhr Scholarship Fund	9,525 60	
George L. Harrison Foundation	567,747 50	4,203 12
John Stewardson Memorial Fund	17,771 56	
Sinking Fund		2,728 52
Bond Interest Fund		3,036 10
John White Field and Francis Peters Scholarship Fund	10,000 00	
Pepper Hall Endowment Fund	50,012 50	
James Logan Scholarship Fund	5,000 00	
Robert Morris Scholarship Fund	5,000 00	
Garrett Scholarship Fund	10,000 00	
Louise Harrison Scholarship Fund	5,122 50	
University Fund for Women	100 00	
Professors' Retiring Fund	2,000 00	

Endowment Funds—University.	Amount Invested.	Amount Uninvested.
Thomas S. Stewart Scholarship Fund ...	\$5,000 00	
Hartman Kuhn Scholarship Fund	5,000 00	
Thomas H. Powers Scholarship Fund ...	5,000 00	
Charles Brinton Coxe Scholarship Fund..	5,000 00	
Annie Wolf Fund	808 40	\$1,650 47
Cadwalader Scholarship Fund	1,000 00	
Rev. James Latta Scholarship Fund	5,000 00	
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	\$6,241,888 63	\$12,864 30
Building Funds.	Amount Invested.	Amount Uninvested.
Museum Science and Art	\$391,331 08	
New Medical Laboratory	53,459 11	
New Dormitory and Memorial Tower ...	291,448 01	
Law School Building and Lot	589,719 71	
Randal Morgan Laboratory of Physics ..	83,302 31	
Premises Thirty-third and Locust Streets.	35,625 00	
New Engineering Building	34,450 00	
	<hr/>	
	\$1,479,335 22	
Endowment Funds—Hospital.	Amount Invested.	Amount Uninvested.
General Fund	\$842,876 79	\$13 51
Hahn Ward Fund	54,650 00	39 75
Alumni Ward Fund	10,025 25	
Mrs. G. W. Norris Fund	10,000 00	
Bement Fund	5,000 00	
Ward Chronic Diseases Fund	197,068 50	28 06
Dr. William Pepper Clin. Laboratory Fund	25,030 00	
I. V. Williamson Hospital Fund	47,266 81	33 19
Children's Ward Fund	32 07	
Henry Seybert Fund	60,317 31	45 45
George S. Pepper Fund	72,729 19	103 14
Recto-Genito-Urinary Fund	4,100 39	
Anna M. Powers Bed Fund	6,000 00	
Mary W. Eskens Bed Fund	5,000 00	
Dr. D. Hayes Agnew Hospital Fund	171,645 57	
Dr. D. Hayes Agnew Bequest for Care of Children	50,000 00	
Dr. D. Hayes Agnew Bequest for Mater- nity Hospital	1,000 00	
Andrew C. Butler Fund	5,432 67	

Treasurer's Report.

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Endowment Funds—Hospital.	Amount Invested.	Amount Uninvested.
Ligonier Free Bed Fund	\$38,080 81	\$31 00
Children's Orthopædic Ward Fund	14,140 00	
Ladies' Fund Maternity Hospital	3,44 31	13 13
A. Sydney Roberts Apparatus Fund	6,264 54	
John White Field Bed Fund	4,999 97	03
Abby Willing Peters Bed Fund	5,000 00	
Maternity Fund	10,084 00	
Edward Rhoads Memorial Fund	3,405 51	
Alfred Gustavus Baker Bed Fund	5,000 00	
Abraham and Mary Baker Bed Fund....	5,100 00	
Mary B. K. Wainwright Bed Fund	5,000 00	
Hamilton Disston Bed Fund	3,000 00	
Percival Roberts Bed Fund	3,000 00	
	\$1,671,593 69	\$307 26

Income Account.	Amount received, including Balance August 31, 1900.	Amount Expended.	Balance.
General Fund	\$2,154 42	\$1,709 76	\$444 66
J. Herman Raht Fund	10 00	10 00	
Phi Kappa Sigma Fund	16 00	16 00	
Keble Fund	399 96	399 96	
Elliott Cresson Fund	140 60	140 60	
Tobias Wagner Fund	212 00	212 00	
Bloomfield Moore Fund	617 10	617 10	
Thomas A. Scott Fund	2,471 36	2,471 36	
John H. Towne Fund	14,461 25	14,461 25	
John H. Towne Collec. Fossils Fund	64	64	
John Welsh Fund	2,438 70	2,438 70	
A. Whitney Fund	2,439 03	2,439 03	
Scholarship Fund	246 64	246 64	
Benjamin Franklin Scholar- ship Fund	451 30	451 30	
Samuel V. Merrick Scholar- ship Fund	175 40	175 40	
Matthew Baird Scholarship Fund	300 66	300 66	
A. Seybert Fund	2,714 78	2,714 78	
Chair of Christian Ethics Fund	150 76	150 76	
Alumni Hall Fund	294 41	294 41	
Hector Tyndale Fellowship Fund	612 06	612 06	

University of Pennsylvania.

Income Account.	Amount received, including Balance August 31, 1900.	Amount Expended.	Balance.
S. W. Roberts Fund	\$47 24	\$47 24	
Wharton School Fund	8,686 00	7,686 00	\$1,000 00
Assyrian Fellowship Fund ...	9 48	9 48	
Pepper Professorship Fund ..	2,917 75	2,917 75	
J. Rhea Barton Fund	2,394 52	2,394 52	
J. Gillingham Fell Fund	2 00	2 00	
Aux. Faculty Medicine Fund.	1,193 37	1,193 37	
Leidy Chair Fund	64 96	64 96	
Botanic Garden Fund	845 64	845 64	
Department Biology Fund ...	52	52	
I. V. Williamson Fund	3,262 20	3,262 20	
George S. Pepper Residuary Legatee Fund	1,421 79	1,421 79	
Frances S. Pepper Fellowship Fund	285 00	285 00	
Chair of Pedagogy Fund	11 89	11 89	
Henry Reed Prize Fund	58 29	25 00	33 29
Latin Prize Fund	63 97	18 00	45 97
Oratory Prize Fund	23 71	23 71	
English Composition Prize Fund	30 83	10 00	20 83
Arthur Spayd Brooke Memo- rial Prize Fund	60 00	30 00	30 00
J. Warner Yardley Prize Fund	54 98	25 00	29 98
Class of 1880 Prize Fund	100 17		100 17
Allen Memorial Prize Fund..	67 33	41 64	25 69
P. Pemberton Morris Prize Fund	40 14	40 00	14
Rev. C. P. Krauth Library Fund	192 02	106 00	86 02
Agricultural Library Fund ...	53 18	17 82	35 36
Pepper Medical Library Fund.	560 99	355 57	205 42
Tobias Wagner Library Fund.	466 89	368 13	98 76
Lippincott Library Fund	685 31	384 93	300 38
Isaac Norris Library Fund ...	351 50	267 69	83 81
Reese Wall Flower Fund	1,179 38	1,126 07	53 31
Veterinary Fund	843 15	843 15	
Houston Hall Endow. Fund..	23 77	23 77	
Dormitory Fund	200 00	200 00	
Wistar and Horner Mus. Fund	5 50	5 50	
Department of Law Fund ...	309 76	309 76	
John F. Fraser Fund	343 14	343 14	
Department of Hygiene Fund.	6,446 26	6,446 26	

Treasurer's Report.

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Income Account.	Amount received, including Balance August 31, 1900.	Amount Expended.	Balance.
Thomas A. Scott Fellowship Fund	\$450 00	\$225 00	\$225 00
J. M. Bennett Endow. Grad. Dept.	2,533 97	2,394 64	139 33
A. S. Biddle Fund	998 00	998 00	
Simon Muhr Schol. Fund....	441 28	441 28	
Geo. L. Harrison Foundation.	29,366 69	29,366 69	
John Stewardson Mem. Fund.	2,162 95	1,234 59	928 36
New Dormitory Build. Fund.	2,400 00	2,400 00	
John White Field and Frances Peters Schol. Fund	439 10	399 10	40 00
Pepper Hall Endow. Fund....	2,207 10	1,682 10	525 00
Logan Scholarship Fund	250 00	250 00	
Morris Scholarship Fund	250 00	250 00	
Garrett Scholarship Fund ...	462 50	462 50	
Louise Harrison Scholarship Fund	360 00	360 00	
University Fund for Women..	4 00		4 00
Professors' Retiring Fund ...	80 00		80 00
Thomas S. Stewart Schol. Fund	100 00	100 00	
Hartman Kuhn Schol. Fund..	125 00	125 00	
Thomas H. Powers Schol. Fund	117 50	45 00	72 50
Rev. James Latta Schol. Fund	100 00	100 00	
	<hr/>	<hr/>	
	\$106,457 79	\$101,849 81	\$4,607 98
Less Balances August 31, 1900	\$3,331 83		
Less Interest added to Income Account ...	43 85		
Less Advances to Income Account	24 73		
	<hr/>		
	\$3,400 41		
Net Income	<hr/>		
	\$103,057 38		

Funds not for Investment.	Amount received, including Balance August 31, 1900.	Amount Expended.	Balance
John C. Ropes Prize Fund ..	\$4 95		\$4 95
Botanic Garden Fund	2,369 70	\$2,369 70	
Latin Prize Fund	22 00	22 00	

Funds not for Investment	Amount received, including Balance August 31, 1900.	Amount Expended.	Balance.
Arthur Spayd Brooke Mem. Prize Fund	\$20 00	\$20 00	
Library Fund—Philosophy ...	1,761 45	341 37	\$1,420 08
Library Fund—Mediæv. Phil..	287 28	213 66	73 62
Library Fund—E. B. Warren..	483 65	287 83	195 82
Library Fund—Periodicals ...	1,585 88	1,486 11	99 77
Library Fund—Botany	615 00	454 02	160 98
Eckley B. Coxe, Jr., Fund ...	3,608 29		3,608 29
Library Fund—Comegys	2 98	2 98	
Library Fund—Spec. Ap. No. 3	141 32	135 12	6 20
Library Fund—Architecture ..	50 00		50 00
Mrs. E. W. Harrison's Fund for Collection of Casts ...	26 27		26 27
Civil Engineering Equipment Fund	850 00		850 00
Architecture Lecture Course Fund	193 17	100 00	93 17
Architecture Equipment Fund..	2,606 53	1,406 48	1,200 05
University Publication Fund..	2,331 33	1,813 20	518 13
Improvement Mechanical and Elec. Eng. Depart. Fund..	607 52	607 52	
1887's House Dormitory Fund	1,205 50	1,205 50	
Library Fund—Music	263 49		263 49
Library Fund—Astronomy ...	40 00		40 00
Library Fund—Insurance	10 00		10 00
Library Fund—Kendall	24 08	24 08	
Library Fund—Pathology	25 05		25 05
Suspense Account	94 39	94 39	
Architecture, General Fund for Casts	71 52		71 52
Architecture, Peabody Fund..	103 17		103 17
Lecture Course State of Penn- sylvania	281 05	281 05	
Alumnæ Fellowship for Women Fund	1,100 00	1,100 00	
Fellowship in English Fund ..	500 00	312 50	187 50
Law Library Fund	6,843 13	5,737 54	1,105 59
Library Fund, English Parlia- mentary Reports	529 15	243 53	285 62
Needy Students' Fund	4,950 00	3,950 00	1,000 00
Contributions to Current Ex- penses University	28,317 63	1,159 05	27,158 58

Treasurer's Report.

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Funds not for Investment.	Amount received, including Balance August 31, 1900.	Amount Expended.	Balance.
Teachers' Prize Fund	\$500 00		\$500 00
Delano Prize Fund	50 00	\$50 00	
"J. S. H." Prize Fund	50 00	50 00	
Locust Street Improvement Fund	44 38	30 00	14 38
Opening Ceremonies Law School Fund	445 20	445 20	
Contributions to Current Ex- penses Library	1,126 56	1,006 31	120 25
Semitic Department Fund ...	100 00	100 00	
Interest Account	5,000 00	5,000 00	
Mechanical Dept. Advertising Fund	35 15	26 95	8 20
Lippincott Fund Veterinary Dept.	4,500 00	4,500 00	
Law School Opening Publica- tion Fund	420 00		420 00
American School at Rome ...	500 00	500 00	
Y. M. C. A. Boys' Club	500 00	500 00	
N. Y. Alumni House Dormi- tories	7,750 00	7,750 00	
Electro-Chem. Apparatus Fund	3,200 00	1,520 00	1,680 00
New Engineering Department.	34,450 00	34,450 00	
Several Friends of the Univer- sity	40,000 00	39,651 99	348 01
History of the College Fund..	1,000 00	775 15	224 85
Lectures on Roman Law Fund	1,000 00	1,000 00	
Contributions to Salary Adm. Library	100 00	100 00	
Cuban Teachers' Entertain- ment Fund	400 00	400 00	
Alfred the Great Mem. Fund.	500 00	500 00	
Mrs. E. W. Harrison's Campus Fund	1,111 98	638 78	473 20
Dr. Thomas' Campus Fund ..	110 50	110 50	
University Campus Fund	110 00	110 00	
Library, Auction Fund	404 22	404 20	02
Architecture Lantern Fund ..	193 96	160 03	33 93
			<hr/>
			\$42,380 69

UNIVERSITY TRUSTS.

GENERAL BALANCE SHEET.

Dr.		
To balance, August 31, 1900.....		\$28,095 89
" Income from Invested Funds	\$103,057 38	
" Donations for Endowment ...	\$297,887 40	
" Donations not for Endowment	99,732 30	
	<hr/>	397,619 70
" Securities Sold and Redeemed	205,663 31	
" Advances by Administration	117,782 51	
" Amount Received from Departments Ac- count Sinking Fund		12,140 04
" Interest on Deposits in Bank	1,373 00	
" Amt. Transferred from Administration...	6,024 00	
" Premium Received	152 70	
" Sales of Material, etc.....	329 79	
" Miscellaneous—Rentals, etc.	130 00	
	<hr/>	844,272 43
		<hr/>
		\$872,368 32
Cr.		
By Investments made	\$304,572 53	
" Accrued Interest and Premium paid	5,946 11	
" Buildings and Ground Account as per Schedule	200,073 52	
" Taxes, Water Rent, Legal Expenses, etc...	3,734 36	
" Funds not for Investment Transferred to Administration	38,320 71	
" Income from Investments Transferred to Administration	70,781 05	
" Amt. paid on Account Sundry Trusts as per Schedule	17,767 19	
" Advances by Administration returned....	136,095 70	
" Interest paid	2,375 88	
" Loss on Investments	2,753 91	
" Loan paid off	20,000 00	
" Bonds paid off Account Sinking Fund ...	10,000 00	
" Suspense Account	94 39	
	<hr/>	812,515 35
		<hr/>
Balance, August 31, 1901		\$59,852 97
		<hr/> <hr/>

Treasurer's Report.

BUILDINGS AND GROUNDS.

New Medical Laboratory	\$41,359	11
New Dormitories	105,065	46
New Law School	47,232	54
New Randal Morgan Laboratory of Physics..	6,416	41
	<hr/>	
		\$200,073 52
		<hr/> <hr/>

PAYMENTS ON ACCOUNT SUNDRY TRUSTS.

Chair Christian Ethics Fund	\$153	70
Reese Wall Flower Fund	258	17
Architecture Lecture Fund	100	00
Museum Science and Art Fund	1,500	00
Architecture Equipment Fund	1,406	48
University Publication Fund	1,813	20
John Stewardson Memorial Fund	1,234	59
Improvement Mechanical and Electrical De- partment Fund	607	52
Lecture Course State of Pennsylvania	24	90
Parliamentary Reports	243	53
Needy Students	630	00
Cur. Exp. University Special Appropriations.	1,159	05
Locust Street Improvement	30	00
Opening Ceremonies Law School	20	73
Special Library Fund	1,006	31
Pepper Hall Endowment	1,667	10
Mechanical Engineering Advertising	26	95
American School at Rome	450	00
Young Men's Christian Asso. Boys' Club	500	00
Electro-Chemical Apparatus	1,520	00
Medical Magazine	1,040	43
History of the College	775	15
Cuban Teachers' Entertainment	400	00
Alfred the Great Memorial	500	00
Mrs. C. C. Harrison Campus Fund	539	35
Architecture Lantern Fund	160	03
	<hr/>	
		\$17,767 19
		<hr/> <hr/>

ADMINISTRATION ACCOUNT.

GENERAL BALANCE SHEET.

Dr.		
To	Balance, August 31, 1900	\$5,982 82
"	Tuition Fees	\$320,106 12
"	Graduation Fees and Certificates	3,380 00
"	Rents and Charges of Dormitories	38,220 92
"	Income from Invested Funds	70,781 05
"	Funds not for Investment	38,320 71
"	Amounts received from Departments, viz:	
	Veterinary Hospital	\$10,866 48
	Cen. Light and Heat Sta.	36,252 41
	Department of Repairs ..	5,996 58
		<hr/>
		53,115 47
"	Advances to Trusts repaid	136,095 70
"	Sinking Fund	10,000 00
"	Interest received	1,380 15
"	Bills Payable	45,000 00
"	Miscellaneous	101 50
		<hr/>
		716,501 62
		<hr/>
		\$722,484 44
Cr.		
By	Salaries, Educational	\$290,489 44
"	Salaries, Administration	74,510 63
"	Current Expense Accounts	177,258 73
"	Advances to Trusts	117,782 51
"	Bills Payable	45,000 00
"	Transfer to Trusts	6,024 00
"	Interest paid	5,315 15
		<hr/>
		716,380 46
		<hr/>
	Balance, August 31, 1901	\$6,103 98
		<hr/> <hr/>

ANALYSIS OF ADMINISTRATION ACCOUNT.

		Surplus. 2000 Deficit.
College:		
Tuition Fees	\$99,809 97	
Income	43,501 59	
	\$143,311 56	
Salaries, Education ..	\$149,367 61	
Salaries, Admin.	9,526 12	
Current Expenses ..	46,826 53	
	205,720 26	
		\$62,408 70
Department of Medicine:		
Tuition Fees	\$110,099 08	
Income	2,226 52	
	\$112,325 60	
Salaries, Education ..	\$68,774 02	
Salaries, Admin.	7,768 22	
Current Expenses ...	36,875 16	
	113,417 40	
		1,091 80
Department of Law:		
Tuition Fees	\$49,865 00	
Income	349 76	
	\$50,214 76	
Salaries, Education ..	\$26,689 66	
Salaries, Admin.	6,340 06	
Current Expenses ..	20,649 67	
	53,679 39	
		3,464 63
Department of Dentistry:		
Tuition Fees	\$55,308 88	
Salaries, Education ..	\$24,593 92	
Salaries, Admin. ...	2,774 24	
Current Expenses ..	24,129 58	
	51,407 74	
		\$3,901 14
Department of Hygiene:		
Tuition Fees	\$125 00	
Income	7,314 32	
	\$7,439 32	

		Surplus.	Deficit.
Salaries, Education ..	\$4,958 37		
Salaries, Admin.	480 00		
Current Expenses ..	2,274 15		
	<hr/>	\$7,712 52	
			\$273 20
Geo. L. Harrison Foundation:			
Income	\$12,270 90		
Salaries, Education ..	12,270 90		
	<hr/>		
Department Veterinary Medicine:			
Tuition Fees	\$4,898 19		
Income	250 00		
	<hr/>	\$5,148 19	
Salaries, Education ..	\$3,924 96		
Salaries, Admin.	1,573 15		
Current Expenses ..	2,569 32		
	<hr/>	8,067 43	
			2,919 24
Veterinary Hospital:			
Receipts	\$10,866 48		
Income	323 15		
	<hr/>	\$11,189 63	
Salaries, Admin.	\$5,002 13		
Current Expenses ..	6,019 03		
	<hr/>	11,021 16	
			\$168 47
Department of Repairs:			
Receipts	\$5,996 58		
Salaries, Admin.	\$2,324 16		
Current Expenses ..	8,954 48		
	<hr/>	11,278 64	
			5,282 06
Dormitories:			
Receipts	\$37,431 45		
Salaries, Admin.	\$6,433 16		
Current Expenses ..	16,790 99		
	<hr/>	23,224 15	
			14,207 30
Bennett Hall:			
Receipts	\$789 47		
Income	1,364 03		
	<hr/>	\$2,153 50	
Salaries, Admin.	\$922 00		
Current Expenses ..	2,811 10		
	<hr/>	3,733 10	
			1,579 60

Treasurer's Report.

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Central Light and Heat Station:

	Surplus.	Deficit.
Receipts	\$36,252 41	
Salaries, Admin.	\$8,624 98	
Current Expenses ..	29,312 85	
	<u>37,937 83</u>	<u>\$1,685 42</u>
	\$18,276 91	\$78,704 65

SUMMARY.

Deficits:

College	\$62,408 70	
Department of Medicine	1,091 80	
" " Law	3,464 63	
" " Hygiene	273 20	
" " Veterinary Medicine	2,919 24	
Bennett Hall	1,579 60	
Department of Repairs	5,282 06	
Central Light and Heat Station	1,685 42	
		<u>\$78,704 65</u>

Surplus:

Department of Dentistry	\$3,901 14	
Veterinary Hospital	168 47	
Dormitories	14,207 30	
		<u>18,276 91</u>
Net deficit		<u>\$60,427 74</u>

HOSPITAL.

GENERAL BALANCE SHEET.

RECEIPTS AND EXPENDITURES FROM AUGUST 31, 1900, TO AUGUST 31, 1901,
INCLUSIVE.

Dr.

Balance, August 31, 1900		\$4,133 87
To Income from Invested Funds	\$38,535 24	
“ Funds for Investment	11,000 00	
“ Special Funds not for Investment	69,216 46	
“ Loans returned	5,812 13	
“ Investments paid off	5,300 00	
“ Interest on Bank balances	115 32	
		<hr/> 129,979 15
		<hr/> \$134,113 02

Cr.

By Amount paid Superintendent of Hospital..	\$80,843 46	
“ Amount paid Investments made	19,934 65	
“ Amount paid Accrued Interest	52 54	
“ Amount paid Maintenance Pepper Clin. Laboratory	7,124 64	
“ Amount paid Mrs. W. Howard Pancoast, Treasurer of Ladies' Fund, Maternity Hospital	14 00	
“ Amount paid Taxes, Repairs, etc.	100 82	
“ Amount paid account Billings Fund	875 35	
“ Amount paid account Private Patients' Rooms	2,000 00	
“ Amount paid account Private Patients' Rooms, furnishing	764 95	
“ Amount paid account Anna D. Scott Me- morial	3,364 51	
		<hr/> 115,074 92
Balance, August 31, 1901		<hr/> \$19,038 10

Of which balance there are:

Special Funds not for Investment	\$18,730 84
Funds for Investment	307 26
	<hr/> \$19,038 10

Treasurer's Report.

STATEMENT OF SPECIAL FUNDS NOT FOR INVESTMENT.

	Amount re- ceived includ- ing balance Aug. 31, 1900.	Amount paid.	Balance.
Billings Fund	\$2,639 89	\$875 35	\$1,764 54
Mrs. E. W. Harrison's Fund for Private Patients' Rooms	2,000 00	2,000 00	
Mrs. E. W. Harrison's Fund for Private Patients' Rooms, fur- nishing	1,041 00	764 95	276 05
Mrs. E. W. Harrison Fund for Roof Garden	400 00		400 00
Stable Repair Fund	50 00		50 00
Maennerchor Fund	107 00		107 00
Maintenance Pepper Clin. Lab...	8,872 40	7,124 64	1,747 76
Charity Ball Fund	3,000 00	750 00	2,250 00
Diet Kitchen Fund	500 00		500 00
Anna D. Scott Memorial	15,000 00	3,364 51	11,635 49
			\$18,730 84

HOSPITAL TRUST ACCOUNT.

Income from Trusts from August 31, 1900, to August 31, 1901, inclusive:

General Fund (including Bed Funds)	\$14,561 90
Hahn Ward Fund	2,221 89
Alumni Ward Fund	480 00
Mrs. G. W. Norris Fund	214 32
Bement Fund	350 00
Ward Chronic Diseases Fund (including Bed Funds)	6,028 81
Pepper Clinical Laboratory Fund	3 60
I. V. Williamson Hospital Fund	2,436 50
Children's Ward Fund	1 00
Henry Seybert Fund	2,397 06
George S. Pepper Fund	2,206 32
Recto-Genito-Urinary Fund	199 00
Anna M. Powers Bed Fund	360 00
M. W. Eskens Bed Fund	300 00
Dr. D. Hayes Agnew Hospital Fund	35 16
Dr. D. Hayes Agnew Bequest for Care of Children	2,325 00
Dr. D. Hayes Agnew Bequest for Mater- nity Hospital	60 00
Andrew C. Butler Fund	240 00
Ligonier Free Bed Fund	1,415 00
Children's Orthopædic Ward Fund	760 00
Ladies' Fund Maternity Hospital	14 00
A. Sydney Roberts Apparatus Fund	310 00
John White Field Bed Fund	218 66
Abby Willing Peters Bed Fund	218 66
Maternity Fund	437 36
Edward Rhoads Memorial Fund	166 00
Alfred Gustavus Baker Bed Fund	250 00
Abraham and Mary Baker Bed Fund	225 00
Mary B. K. Wainwright Bed Fund	100 00
	\$38,535 24

DONATIONS TO THE UNIVERSITY.

ALFRED THE GREAT—MEMORIAL—
THROUGH MRS. C. C. HARRISON.

Harrison, Mrs. C. C.	\$100 00	
Harrison, Wm. W.	100 00	
Houston, Samuel F.	100 00	
Lucas, John	25 00	
Mitchell, Dr. S. Weir	50 00	
Paul, James W.	25 00	
Rawle, James	50 00	
Rosengarten, Jos. G.	50 00	
	<hr/>	\$500 00

ALUMNÆ FELLOWSHIP FOR WOMEN.

Alumnæ Association of Women	\$500 00	
	<hr/>	500 00

AMERICAN SCHOOL AT ROME.

"Cash"	\$250 00	
Harrison, C. C.	50 00	
Houston, Samuel F.	100 00	
Morgan, Randal	50 00	
Rosengarten, Jos. G.	50 00	
	<hr/>	500 00

ANNIE WOLF FUND.

Estate Annie Wolf	\$2,903 22	
	<hr/>	2,903 22

ARCHITECTURE—LANTERN FUND.

Stewart, Thomas S. and Ralph C.	\$193 96	
	<hr/>	193 96

BOTANIC GARDEN FUND.

Bartol, Mrs. E. J.	\$500 00	
Botanical Society of Pennsylvania	1,573 70	
Dreer, William P.	200 00	
Ladies' Auxiliary Committee	21 00	
Le Boutillier, Roberts	25 00	
Morwitz, Joseph	50 00	
	<hr/>	2,369 70

DONATIONS TO THE UNIVERSITY.
CAMPUS FUND—THROUGH MRS. C.
C. HARRISON.

Arnett, Elizabeth H.	\$10 00
Biddle, E. Craig	1 98
Biddle, Thomas	50 00
Bonnell, George B.	100 00
Brown, John A., Jr.	25 00
Cassatt, J. Gardner	50 00
Clark, Clarence H.	100 00
Drexel, George W. C.	25 00
Ellis, Rudolph	200 00
Freedley, A. T.	100 00
Hale, Mrs.	25 00
Hallowell, Sarah C. F.	10 00
Harris, Mrs. Mary Powers	25 00
Harrison, Mrs. C. C.	15 00
Harrison, George L., Jr.	25 00
Harrison, John	100 00
Hinchman, Lydia S.	10 00
Howe, Mrs. H. M.	50 00
Judson, Mrs.	5 00
Ladies' Committee Maternity Hospital	25 00
Markoe, J. B.	25 00
Paul, James W.	50 00
Roberts, Miss E. C.	25 00
Roberts, Miss F. A.	25 00
Rosengarten, Miss Fanny	25 00
Thomas, Dr. and Mrs. Chas. Hermon	110 50
Valentine, John R.	100 00
Van Renssalaer, Mrs. Alexander	10 00
Winpenny, Susan G.	10 00
<hr/>	
	\$1,332 48

CIVIL ENGINEERING EQUIPMENT FUND.

Ely, Theodore N.	\$100 00
Lloyd, Malcolm	500 00
Townsend, John W.	250 00
<hr/>	
	850 00

CUBAN TEACHERS' ENTERTAINMENT FUND.

Dickson, Samuel	\$25 00
Fraley, Frederick	20 00
Gest, John B.	25 00

Treasurer's Report.

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DONATIONS TO THE UNIVERSITY.

Harris, Joseph S.	\$75 00
Harrison, Alfred C.	25 00
Harrison, Mitchell	10 00
McCrea, James	50 00
Merrick, J. Vaughan	25 00
Pennypacker, Samuel W.	20 00
Sellers, William	100 00
Smith, Walter George	25 00

—————
\$400 00

DORMITORIES—1887 HOUSE FUND.

Ashbrook, W. S.	\$30 00
Benkert, W. C.	10 00
Clark, F. C.	20 00
Colladay, T. F.	20 00
Cowperthwaite, C. T.	50 00
Earle, E. T.	30 00
Frazier, George H.	100 00
Graham, F. W. W.	100 00
Griscom, C. A., Jr.	75 00
Hawkins, J. D.	18 00
Kenney, E. F.	7 50
Latta, T. C.	45 00
Magee, Jas. F., Jr.	15 00
Martin, G. L.	7 50
Pepper, George W.	50 00
Pryor, F. J.	5 00
Reath, Theodore W.	40 00
Redifer, A. P.	7 50
Smith, J. Somers	100 00
Townsend, C. C.	75 00
Wagner, Joseph C.	30 00
White, L. P.	15 00
Wilson, Richard	40 00

—————
890 50

DORMITORIES—NEW YORK ALUMNI
HOUSE.

Boulton, William B.	\$2,000 00
Guggenheim, William	2,500 00
Mallett-Prevost, S.	250 00
Patterson, William H.	1,000 00
Ward, H. G.	1,000 00

—————
6,750 00

DONATIONS TO THE UNIVERSITY.
NEW DORMITORIES FUND.

Baird, Thomas E.	\$1,000 00
Belfield, T. Broom	1,000 00
Blabon, George W.	500 00
Bloch, S. L.	250 00
Caldwell, J. Albert	500 00
Carruth, John G.	5,000 00
England, Thomas Y.	500 00
Graves, N. Z.	1,000 00
Hipple, Frank K.	500 00
Lippincott, J. Dundas	2,500 00
Massey, Walter S.	1,000 00
McIlhenney, John	500 00
Pettit, Silas W.	1,000 00
Pilling, Robert	500 00
Potts, Howard N.	500 00
Rawle, James	500 00
Rawle, William Brooke	500 00
Taylor, Nathan A.	500 00
Townsend, J. Barton	500 00
Townsend, J. B., Jr.	500 00
Walton, Charles S.	500 00
Winpenny, J. Bolton	1,000 00
	\$20,250 00

ELECTRO-CHEMICAL APPARATUS FUND.

Gerstley, Louis	\$100 00
Helme, William E.	500 00
Rosengarten, Joseph G.	250 00
Trotter, Charles W.	500 00
	1,350 00

GENERAL UNIVERSITY FUND.

Allen, Edmund	\$1,000 00
Anonymous	300 00
Anonymous	1,000 00
Blum Brothers	500 00
Bullitt, W. C.	250 00
Bushnell, Charles E.	100 00
Clark, E. W., & Co.	1,000 00
Coates, William M.	150 00
Converse, John H.	1,000 00
Dale, Richard C.	1,500 00
Flagg, Stanley G., & Co.	1,000 00

DONATIONS TO THE UNIVERSITY.

Gerstley, Louis	\$500 00	
Gest, John B.	250 00	
Gibson, Miss Mary K.	2,500 00	
Greene, Stephen	2,500 00	
Hamer, John W.	100 00	
Harrison, Mrs. Letitia H.	182 00	
Ivins, William	500 00	
Jeanes, Isaac W.	500 00	
Jonas, Herman	100 00	
Jones, J. Levering	200 00	
J. S. H.	50 00	
Kohn, Simon I. and Samuel	350 00	
Kremer & Strubing	500 00	
Lit Brothers	250 00	
Mann, William, Co.	250 00	
Merrick, J. Vaughan	1,000 00	
Pfaelzer, Morris	50 00	
Presser, Theodore	100 00	
Rosengarten, Joseph G.	100 00	
R. W.	745 63	
Several friends of the University (annual for five years)	40,000 00	
Shiple, Samuel R.	500 00	
Strawbridge & Clothier	1,000 00	
Strawbridge, Justus C.	1,000 00	
Taylor, Hollingshead W.	500 00	
Welsh, Samuel	500 00	
Wetherill, John Price	1,000 00	
Wetherill, S. P.	500 00	
Wilson, Thomas H.	250 00	
Wolf & Co.	500 00	
Wood, George	500 00	
Wood, R. Francis	500 00	
Wood, Stuart	140 00	
	<hr/>	\$65,417 63

HISTORY OF THE COLLEGE FUND.

Frazier, William West, Jr.	\$500 00	
Pierce, Harold	500 00	
	<hr/>	1,000 00

IMPROVEMENT MECHANICAL AND ELECTRICAL
ENGINEERING DEPARTMENTS.

Gribbel, John	\$500 00	
	<hr/>	500 00

DONATIONS TO THE UNIVERSITY.
INTEREST.

Athletic Association of the University	\$5,000 00	
	<hr/>	\$5,000 00

LAW SCHOOL BUILDING FUND.

Beck, James M.	\$250 00	
Beitler, Hon. A. M.	125 00	
Biddle, Mrs. George W.	1,000 00	
Burroughs, J. H.	100 00	
Caven, Joseph L.	250 00	
Clapp, B. Frank	100 00	
Colahan, J. B., Jr.	250 00	
Crawford & Loughlin	250 00	
Dale, Richard C.	1,000 00	
Downing, Robert W.	1,000 00	
Frazier, George H.	500 00	
Geyelin, H. Laussat	125 00	
Gowen, Francis I.	2,500 00	
Greenwald, Joseph L.	250 00	
Huey, Samuel B.	500 00	
Janney, Walter C.	98 50	
Jones, Carson & Beeber	3,000 00	
Kendrick, George W., Jr.	500 00	
Leedom, Joseph	500 00	
Lewis, Henry	250 00	
Magee, Horace	200 00	
McKean, Mrs. Thomas	10,000 00	
Paxson, Hon. E. M.	2,500 00	
Rawle, Francis	250 00	
Rhoads, Joseph R.	250 00	
Smith, A. Lewis	250 00	
Staake, William H.	250 00	
	<hr/>	26,248 50

LECTURES ON ROMAN LAW.

"A friend"	\$800 00	
Plimpton, George A.	100 00	
Pratt, Charles M.	100 00	
	<hr/>	1,000 00

LIBRARY—FOR ADDITIONS TO COLLECTION.

Beeber, Dimner	\$50 00
Bodine, Samuel T.	10 00
Brock, John W.	1,000 00

DONATIONS TO THE UNIVERSITY.

Carson, Hampton L.	\$50 00	
Castner, Samuel, Jr.	50 00	
Harrison, through Miss E. W.	35 00	
Houston, Samuel F.	25 00	
Hutchinson, Charles Hare	100 00	
Munro, D. C.	11 92	
Potter, William	31 56	
Rosengarten, Joseph G.	137 30	
Sinnott, Joseph F.	20 00	
Smith, Walter George	10 00	
	<hr/>	\$1,530 78

LIBRARY—AGRICULTURE.

Phila. Society for Promoting Agriculture...	\$406 74	
	<hr/>	406 74

LIBRARY—ARCHITECTURE.

Rosengarten, Joseph G.	\$50 00	
	<hr/>	50 00

LIBRARY—BOTANY.

Buist, Robert	\$615 00	
	<hr/>	615 00

LIBRARY—INSURANCE.

Cleveland, F. A.	\$10 00	
	<hr/>	10 00

LIBRARY—PHILOSOPHY.

Class of 1889, College	\$1,730 25	
	<hr/>	1,730 25

LIBRARY—PERIODICALS.

Anonymous	\$380 00	
	<hr/>	380 00

LIBRARY—SALARY ADMINISTRATION.

Rosengarten, Joseph G.	\$100 00	
	<hr/>	100 00

MEMORIAL TOWER FUND.

Bancroft, F. W.	\$5 00	
Class 1894 (entered in last Report)	1,126 57	
Christie, R. J., Jr.	2 00	

DONATIONS TO THE UNIVERSITY.

Elmer, Andrew	\$5 00	
Fahy, Thomas A.	5 00	
"Friends of the University"	48,101 07	
Halsey, J. B.	10 00	
Hoffman, J.	1 00	
Hokasson, O. M.	2 00	
Houston, S. F.	5,000 00	
Louisson, Dr. W. S.	5 00	
Massey, Walter S.	100 00	
Phillips, H. L.	1 00	
Rennert, H. A.	10 00	
Toulmin, Harry	10 00	
		<hr/> \$54,383 64

MUSEUM SCIENCE AND ART.

Estate of Carl Edelheim	\$1,000 00	
Jones, Carson & Beeber	250 00	
Wickersham, George W.	250 00	
		<hr/> 1,500 00

NEW ENGINEERING DEPARTMENT BUILDING
FUND.

"A lover of the University"	\$500 00	
Barnett, G. and H.	500 00	
Bradlee & Co.	250 00	
Bromley, Joseph H.	2,500 00	
Brooks, James C.	1,000 00	
Castner, S., Jr.	1,000 00	
Coxe, Alexander B., Jr.	10,000 00	
Disston's Sons, Henry	5,000 00	
Hughes, Robert J.	250 00	
Klemm, J. George	250 00	
McCahan, W. J.	5,000 00	
McMichael, Morton	1,000 00	
Moore, E. J.	500 00	
Steel, Edward T., & Co.	250 00	
The Sugar Apparatus Manufacturing Co....	250 00	
Turnbull, Frederick	1,000 00	
Voorhees, Theodore	250 00	
Wetherill, John Price	2,500 00	
Wilson, George B.	1,000 00	
Wilson, Joseph W.	250 00	
H. W.	1,000 00	
"X. Y. Z."	200 00	
		<hr/> 34,450 00

Treasurer's Report.

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DONATIONS TO THE UNIVERSITY.
NEEDY STUDENTS' FUND.

Carstairs, J. H. & D. H.	\$200 00
Collins, Henry H.	1,000 00
Grant, William S.	500 00
Harrison, Mrs. Letitia H.	100 00
"In Memoriam"	200 00
Kurtz, William W.	1,000 00
<i>Ladies' Home Journal</i>	1,000 00
Paul, Miss Mary and Dr. James	200 00
Shelmerdine, W. H.	250 00
Swain, Charles M.	500 00
	<hr/>
	\$4,950 00

NEW MEDICAL LABORATORY.

"Anonymous"	\$15,000 00
Aschenbach & Miller	100 00
Beates, Dr. Henry	750 00
Benson, Edwin N.	1,000 00
Cheston, Dr. D. Murray	500 00
Harrison, Mitchell	250 00
Harrison, William W.	2,500 00
Hirst, Dr. Barton Cooke	1,000 00
Isman, Felix	100 00
Kohn, Simon I. and Samuel	500 00
Lewis, Dr. Morris J.	1,000 00
Mitchell, Dr. John K.	5,000 00
Mitchell, Dr. S. Weir	10,000 00
Musser, Dr. John H.	250 00
Pepper, Dr. William	1,500 00
Posey, Dr. William C.	375 00
Risley, Dr. Samuel D.	375 00
Rosengarten, Joseph G.	1,000 00
Seiss, Dr. Ralph W.	100 00
Sinkler, Dr. Wharton	500 00
Small, Dr. J. Frank	150 00
Smith, Dr. Alexis Dupont	100 00
Starr, Dr. Louis	1,000 00
Strawbridge, Dr. George	1,000 00
Tyson, Dr. James	125 00
Willard, Dr. De Forest	500 00
Wharton, Dr. Henry R.	375 00
Wyeth, Frank H.	1,000 00
Yarrow, Dr. Thomas J.	500 00
Zimmerman, Dr. M. W.	125 00
	<hr/>
	46,675 00

DONATIONS TO THE UNIVERSITY.

PRIZE FUNDS.

Delano Prize—Delano, Eugene	\$50 00	
Latin Prize—Alumni Association	22 00	
Teachers' Prize—Anonymous	500 00	
"J. S. H." Prize—J. S. H.	50 00	
	<hr/>	\$622 00

PUBLICATION FUND OPENING CEREMONIES
LAW SCHOOL.

Bispham, George Tucker	\$50 00	
Bullitt, John C.	50 00	
Dale, Richard C.	50 00	
Dickson, Samuel	50 00	
Gest, John B.	50 00	
Pepper, George Wharton	20 00	
Rosengarten, Joseph G.	50 00	
Smith, Walter George	50 00	
Townsend, Charles C.	50 00	
	<hr/>	420 00

RANDAL MORGAN LABORATORY OF
PHYSICS FUND.

"A friend to Science"	\$60,000 00	
	<hr/>	60,000 00

SEMITIC DEPARTMENT—COLLEGE.

Sulzberger, Hon. Mayer	\$100 00	
	<hr/>	100 00

SCHOLARSHIP—GIBSON PEACOCK.

Anonymous	\$1,000 00	
	<hr/>	1,000 00

SCHOLARSHIP—ARTHUR SPAYD BROOKE
MEMORIAL.

Brooke, Mrs. John B.	\$1,020 00	
	<hr/>	1,020 00

SCHOLARSHIP—THOMAS S. STEWART.

Stewart, Mrs. Thomas S.	\$2,500 00	
Stewart, Thomas S., Jr.	1,250 00	
Stewart, Ralph C.	1,250 00	
	<hr/>	5,000 00

Treasurer's Report.

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DONATIONS TO THE UNIVERSITY.

SCHOLARSHIP—HARTMAN KUHN.

Kuhn, C. Hartman	\$5,000 00	
	<hr/>	\$5,000 00

SCHOLARSHIP—THOMAS H. POWERS.

Harris, Mrs. Mary Powers	\$2,500 00	
	<hr/>	2,500 00

SCHOLARSHIP—CHARLES BRINTON COXE.

Coxe, Eckley B., Jr.	\$5,000 00	
	<hr/>	5,000 00

SCHOLARSHIP—CADWALADER.

Cadwalader, John	\$1,000 00	
	<hr/>	1,000 00

SCHOLARSHIP—REV. JAMES LATTA, D. D.

Latta, William J.	\$5,000 00	
	<hr/>	5,000 00

J. H. TOWNE COLLECTION OF FOSSILS.

Wilcox, Joseph	\$20 30	
	<hr/>	20 30

J. H. TOWNE FUND.

Estate Laura M. Towne	\$19,800 00	
	<hr/>	19,800 00

UNIVERSITY PUBLICATIONS FUND.

Alumni Association of the University	\$100 00
Cohen, Charles J.	100 00
Craig, John F.	50 00
Cuyler, Thomas DeWitt	100 00
Dale, Richard C.	100 00
Dickson, Samuel	100 00
Dingee, John H.	200 00
Duane, James May	100 00
Erringer, J. L.	100 00
Gowen, Francis I.	100 00
Jones, Thomas F.	100 00
Joyce, William H.	100 00
McFadden, George	50 00
McFadden, J. Frank	100 00

University of Pennsylvania.

DONATIONS TO THE UNIVERSITY.

Riebenack, M.	\$100 00	
Rosengarten, Joseph G.	200 00	
Sparhawk, John, Jr.	100 00	
Vaux, J. Waln	100 00	
	<hr/>	\$1,900 00

VETERINARY HOSPITAL FUND.

Caner, Harrison K.	\$1,000 00	
Goodwin, Mrs. Josephine S.	1,000 00	
Lippincott, Craige	1,000 00	
Lippincott, J. Bertram	1,000 00	
Lippincott, Walter	500 00	
	<hr/>	4,500 00
Total		<hr/> \$397,619 70

DONATIONS TO THE HOSPITAL.

CHILDREN'S ORTHOPÆDIC WARD FUND.

Austin, Mr. and Mrs. James S.	\$200 00
Clark, Mrs. E. W.	100 00
Collins, Mrs. H. H.	200 00
Conrad, Mrs. T. K.	200 00
Dickson, Mrs. Samuel	200 00
Freedley, Mrs. W. G.	200 00
"Friends of the Gymnasium"	200 00
Harris, Mrs. J. Campbell	200 00
Moulton, Mrs. Byron P.	200 00
Porter, Mr. and Mrs. W. W.	200 00
Reed, Mrs. Anna L.	400 00
Saturday Club of New Jersey	200 00
Townsend, Mrs. John W.	200 00
	<hr/>
	\$2,700 00

DIET KITCHEN—THROUGH MRS.
EDWARD BROWNING.

Clyde, B. F.	\$100 00
Gibson, Miss Mary K.	100 00
Harrison, George L., Jr.	25 00
Magee, Miss Eliza J.	25 00
Roberts, Miss E. C.	50 00
Roberts, Miss F. A.	50 00
Shaw, Adelaide R.	50 00
Widener, Joseph E.	100 00
	<hr/>
	500 00

GENERAL FUND.

Brown, John A., Jr.	\$100 00
Burnham, Williams & Co.	250 00
Charity Ball Committee	2,800 00
City of Philadelphia	375 00
Dolan, Thomas	1,000 00
Drexel, Mrs. George W. C.	100 00
Griscom, C. A.	200 00
Harrison, Mrs. C. C.	200 00
Lewis, Miss	50 00
Lewis, Lawrence	100 00
Lewis, Mrs. Robert M.	50 00
Norris, Charles	200 00
Norris, Dr. William F.	300 00
Pardee, C.	500 00
State of Pennsylvania	27,655 31

DONATIONS TO THE HOSPITAL.

Stinson, S. B.	\$100 00	
Thomas, George C.	100 00	
Van Renssalaer, Mrs. Alexander	200 00	
Welsh, Mrs. J. Lowber	50 00	
Wentz, Dr. and Mrs. J. S.	1,000 00	
Widener, George D.	300 00	
Willard, Dr. De Forest	427 80	
	<hr/>	\$36,058 11

PRIVATE PATIENTS' ROOMS—THROUGH
MRS. C. C. HARRISON.

"Friends of the University"	\$191 00	
Harrison, George L.	250 00	
Harris, Mrs. Mary Powers	250 00	
Thomson, Mrs. Edgar	100 00	
Wheeler, Mrs. Charles	250 00	
	<hr/>	1,041 00

MAINTENANCE PEPPER CLINICAL LABORATORY.

Through Dr. Alfred Stengel	\$8,499 96	
	<hr/>	8,499 96
		<hr/>
		\$80,216 46
		<hr/> <hr/>

GEORGE L. HARRISON, JR.,
Treasurer.

LYBRAND, ROSS BROS. & MONTGOMERY,
Certified Public Accountants,
Philadelphia.

To the Trustees of the University of Pennsylvania.

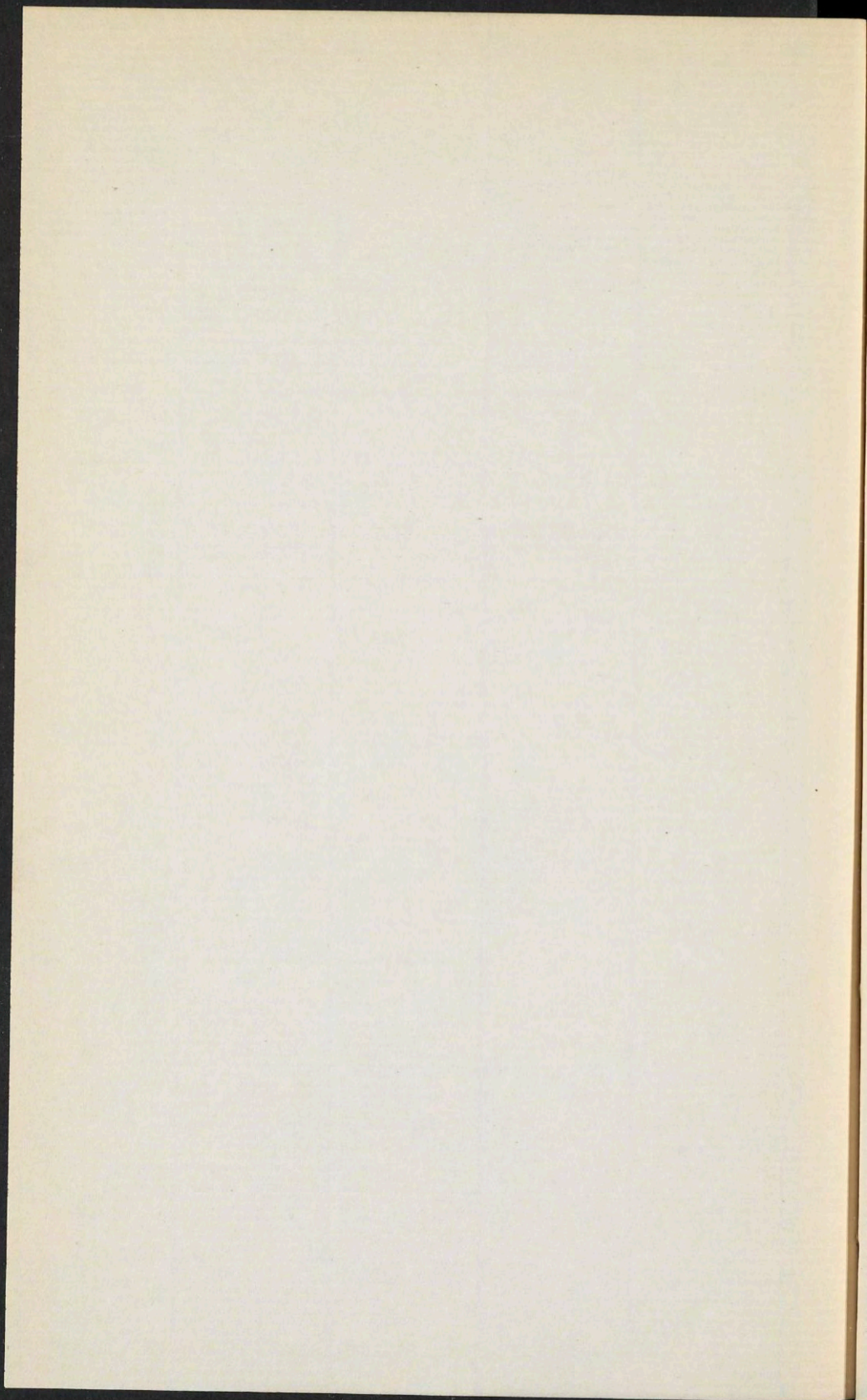
DEAR SIRs:—We hereby certify that we have audited the accounts of the University of Pennsylvania for the fiscal year ended thirty-first August, 1901, and found them to be correct and very carefully and creditably kept. We have also examined the foregoing report of the Treasurer and found it to be in accordance with the books, and the schedule of securities therein was found to agree with the securities on hand.

Respectfully yours,

[Signed]

LYBRAND, ROSS BROS. & MONTGOMERY,
Certified Public Accountants.

December, 1901.



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