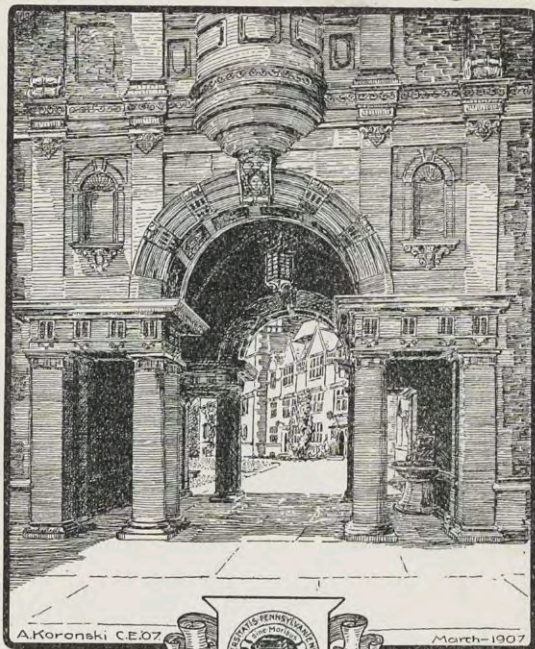


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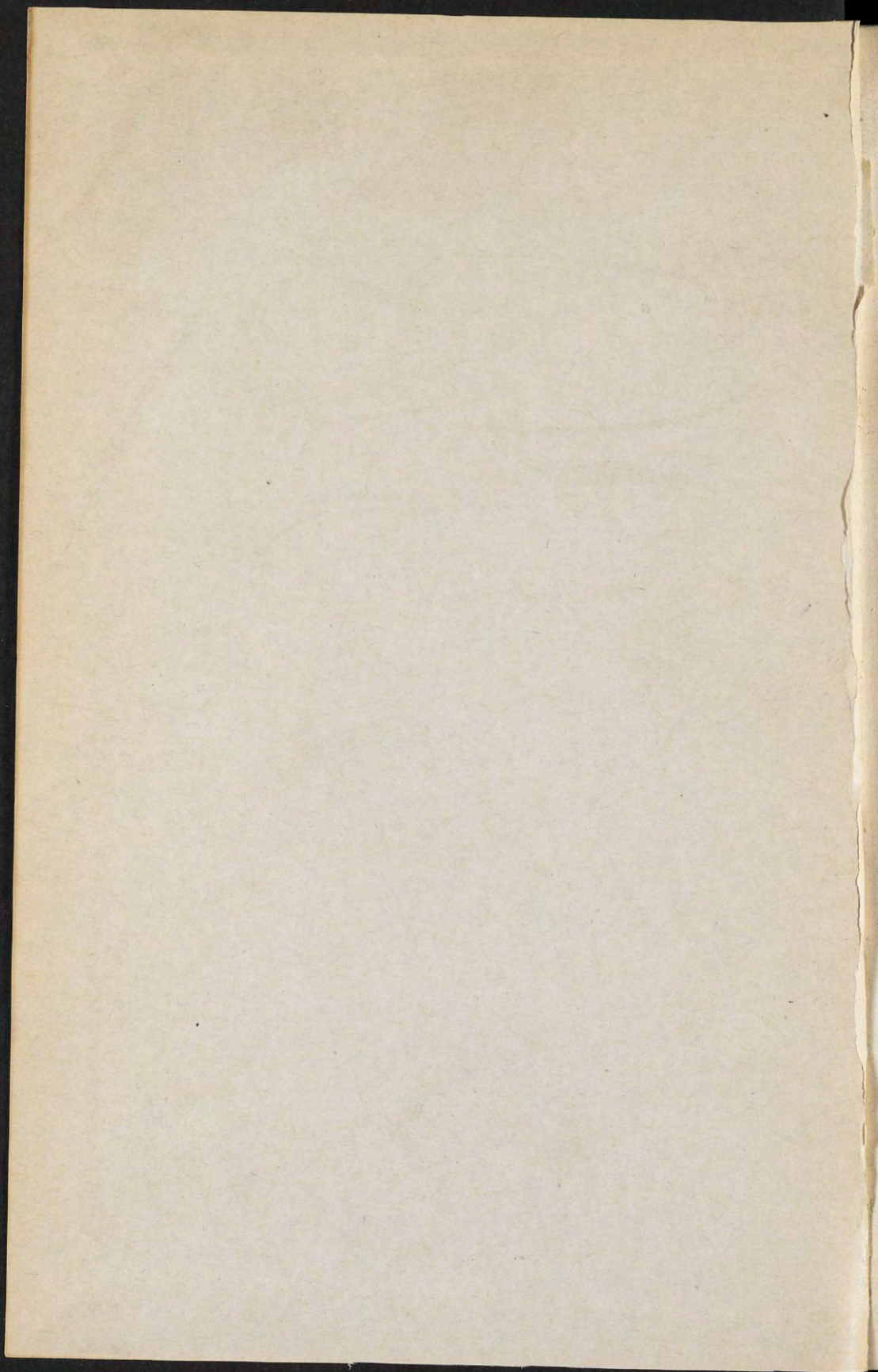
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UNIVERSITY OF PENNSYLVANIA

ANNUAL REPORT

OF

THE PROVOST

TO THE

BOARD OF TRUSTEES

FROM

SEPTEMBER 1, 1904, TO SEPTEMBER 1, 1905

PHILADELPHIA
PRINTED FOR THE UNIVERSITY
1906

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REPORT OF THE PROVOST

To the Trustees of the University of Pennsylvania :

GENTLEMEN : Another academic year has ended, and it is my duty, as Provost of the University, to make to you the annual report of its history and work.

The Appendices are so arranged that there will always be found in Appendix I a record of the personal changes, from any cause whatsoever, in our University Body ; not only the changes which have resulted from death, or resignation, or otherwise, but also of new names which within the year have been added to the roll.

The reports of the Deans of all the Departments are included in this volume, as, also, are the statements of the work of the Hospital, of the Department of Archæology, and of the newly created Department of Physical Education.

It is my desire, in the first place, to ask your attention to the increase in the student registration in the year under review, September 1st, 1904,—August 31st, 1905, as compared with the preceding year, which ended with the 31st of August, 1904. In this latter year, our total registration was 2692. In that of which I am now writing, it rose to 2975. To this total registration, seventy-six different States and Countries contributed.

The public service which the University of Pennsylvania is prepared to render, and which, year by year, it is fitted to

render in a more earnest, sincere and self-sacrificing way, is certainly becoming known and understood and respected, far and near. The letters of inquiry which come to the University from almost every part of the world are reported to be more than double those which we received at the beginning of this new century. The interest and activity of our alumni, and the same qualities, animating our undergraduate students, keep in the minds of men and women everywhere the mission of Pennsylvania, and her name.

With the continued growth of the College—a growth which has been a constant one since we erected the Dormitories and Houston Hall—there is no reason why every Department of the University should not show an annual increase in numbers. So far, then, as that vital part of the University's work is concerned, which deals with the instruction and care of young men, we are likely to have each year larger numbers to teach, and larger numbers whose characters and life purposes we are to direct. And from the University centre of influence here in Philadelphia,—where, according to our Charter, we must always be located,—there will annually radiate in every direction, clear-headed, well-trained, pure-hearted, and truth-loving Sons of Pennsylvania.

The practical interest in our work and purposes continues, as evidenced by the gifts and bequests which were received during the year. The total sum received in cash from all sources, for all University purposes, amounts to \$834,098.-17 and, while this total has once been exceeded, it has only been exceeded in that year in which we received an unusually large bequest by Will,—so that, as a matter of fair comparison, in the number of givers and in the gross amount, this

year may justly be considered as that in which the University received the greatest help and encouragement from its friends, of any year in its history. This is truly a matter for great thankfulness; for deep as our needs still are,—needs which can only be reasonably satisfied to enable us to do our work in the immediate future by the gift of many millions of dollars,—we do owe to this community, and to our alumni everywhere, the record that for the past ten years we have gone out of each year without any indebtedness, either upon Current Expense Account or upon Construction Account.

Very many urgent questions of the first importance remain yet to be considered and solved, and can only receive their solution by great gifts of money. But the good will manifested year by year may be relied upon, I feel sure, in the years that are to come; and the further growth and development of the University, the making strong the weak places and the strengthening of the strong places, will surely be made possible,—and perhaps sooner than we now see,—through that charity towards the University which has never ailed.

In the report of the Treasurer there will be found an itemized statement of each and every benefaction, so arranged that the purpose of the gift is also made evident; and while it would have given me pleasure to have referred specifically to a number of these benefactions and to the reasons which have prompted them,—I will ask your Board, instead thereof, to study the encouraging and interesting statement presented by the Treasurer.

I have already said that there will be found in Appendix I a statement of all changes and additions, both as to officers

of instruction and in the governing body. Three losses by death have taken place in the year, each one of which calls for particular mention.

On the 18th day of October, 1904, the Rev. Jesse Y. Burk, Secretary of the Corporation, died, after a long illness. As he had been a school-mate of mine at the Episcopal Academy, and a member of the same College Class—the Class of '62—for, indeed we went up to our examinations together; and as, upon the resignation of Mr. Cadwalader Biddle from his position as Secretary, Mr. Burk was elected, upon my suggestion, to fill the vacancy; his loss, though a very personal one to every member of the Board and to all who knew him, was, naturally, a peculiar loss to me. I talked with him, while still conscious, a few hours before his death. So long was his term of office, and so important his service to the University, that the Minute of the Board upon the occasion of his death is herewith transcribed, as a renewed token of our remembrance of him; and as an inspiration, likewise, to all University men, for, as the Minute records, he loved the University above all else, except his own household.

“Jesse Young Burk entered the Arts Department of the University in 1858, and was graduated in 1862. He chose as his calling the sacred ministry, and, in due time, became rector of St. Peter's Church, Clarksboro, New Jersey.

“His duties to his parish made it possible for him to accept the invitation to be the Secretary of this Corporation. He was accordingly nominated at a stated meeting held upon April 4th, 1882, and he was duly elected at the stated meeting held upon June 6th, 1882.

"With the exception of the few weeks' absence during which he underwent a severe surgical operation, he was invariably constant and faithful in his services from the day of his election until Commencement time of 1904. Every member of the Board of Trustees, during these twenty-two years, would undoubtedly bear witness to his extraordinary fitness for the post which he filled. Not only have all the Minutes of the stated meetings of the Board been kept, and the Minutes of its several Committees, with care and attention and perfection of method, but all the correspondence of the University which issued from his office, reflected credit upon and brought respect to the University and to its administration.

"He was an ideal College man,—always retaining his educated interests, and always showing the results of his culture. Although a sufferer for many years, and almost always in discomfort, his good-nature and kindness were constant, and he received with respect and attention all who came to the Offices of the University, seeking information upon the many questions connected with the several Departments.

"Next to his family and to his Church, he loved the University ; and, indeed, the hope of the last days of his life was that he might continue to live, to work for the University ; but this was not to be his lot any longer,—and he died, as he had lived, in the confidence of a good faith, and beloved of all. "

Upon January 24th, 1905, our then Senior Trustee, Mr. William Sellers, died, in the University Hospital, having undergone a surgical operation, in the hopeless effort to prolong his life. I saw Mr. Sellers in his room in the Hospital, a few hours before the operation. He was under entire self-control, quiet, confident and affable, quite hopeful of recovery, and his

last words to me were a kindly expression of his regret that he would not be able to be at the Dinner which your Board courteously gave to me at about that time. Although Mr. Sellers was eighty-one years of age, neither had his mental nor physical force abated. It is true that his hair was white; but the colour of youth was upon his face, and he was erect and active as a young man. He rendered continuous service to the University during the thirty-seven years of his Trusteeship. His attendance upon Committee meetings, as well as upon Board meetings, was regular and conscientious. He was interested not only in the scientific work of the College—for he was a trained engineer of the very highest order, both in theory and practice—but all that was of interest to the University was of interest to him.

On May 19th, 1905, Mr. Francis P. Sibley, Treasurer of the University, resigned on account of ill health, and this resignation was followed soon afterwards by his death. During the term of his Treasurership, Mr. Sibley served with a fidelity which, indeed, might well be called devotion. Long after he was unable to leave his room, or, indeed, his bed, he transacted such business as he could possibly attend to,—such as the signing of cheques, from his sick-room; sending a messenger daily from his house to our office on Chestnut Street. It is not too much to say that, both with Mr. Burk, our Secretary, and with Mr. Sibley, our Treasurer, the University had become part of their life, and they were anxious to live, so that they could work for the University.

To fill vacancies in the Board of Trustees caused by death and resignation, there were elected, in the year, Dr. Wharton Sinkler and Mr. Arthur L. Church.

It would be, however, unbecoming to pass from the mention of the three University men who held office with us, without referring to the death of Mr. Oliver Hopkinson, which took place in this City on the 10th of March, 1905,—Mr. Hopkinson being in the ninety-third year of his age, and the oldest graduate of the College. His Class was, College 1832. To his family belongs the distinguished record of having taken part in the development of the University from its very beginning. In the "Alumni Register" of April, 1905, a notice of Mr. Hopkinson's life and of his University history is permanently recorded, but it may be added that Francis Hopkinson, Signer of the Declaration of Independence, and a member of the first Class to be graduated from the "College of Philadelphia" was the grandfather of Mr. Oliver Hopkinson, the record of whose death in 1905 is here made.

"University Day,"—February 22d, 1905, was observed with imposing and patriotic ceremony. In 1898, the Oration upon this day was delivered by our then President, William McKinley. In 1905, the Orator of the Day was Theodore Roosevelt; and in the roll of Honorary Degrees conferred upon that occasion, appear the names of His Majesty, Friedrich Wilhelm II, German Emperor and King of Prussia, and of Theodore Roosevelt, President of the United States. At no other Seat of Learning is Washington's Birthday so remembered as at "Pennsylvania;" and the message which is spoken upon these occasions has come to be world-wide in its influence. One hundred and twenty-two years earlier in our history, the Trustees of the same University conferred the Degree of Doctor of Laws upon the First President of the United States of America.

For your information, there is here presented the classified statement of Professors, Lecturers and Instructors; and of the Student-Body, sub-divided as to their several Departments, and, also, a table giving the geographical distribution of the latter for the year 1904-05.

PROFESSORS, LECTURERS, AND INSTRUCTORS.

	1903-04.	1904-05.
The College	128	131
Department of Philosophy	52	60
Department of Law	18	18
Department of Medicine	122	129
Department of Dentistry	46	46
Department of Veterinary Medicine	22	24
Emeritus Professors	3	3
	<hr/>	<hr/>
Duplications	391	411
	75	86
	<hr/>	<hr/>
Totals	316	325

STUDENTS.

	1903-04.	1904-05.
The College	1,258	1,490
Department of Philosophy	201	213
Department of Law	322	303
Department of Medicine	472	546
Department of Dentistry	362	359
Department of Veterinary Medicine	82	79
	<hr/>	<hr/>
Duplications	2,697	2,990
	5	15
	<hr/>	<hr/>
Totals	2,692	2,975

GEOGRAPHICAL SUMMARY OF STUDENTS.

Alabama.....	11	Italy.....	1	Peru.....	1
Arkansas.....	2	Japan.....	7	Philippine Islands....	1
Australia.....	23	Kansas.....	5	Porto Rico.....	2
Austria.....	2	Kentucky.....	20	P. E. Island.....	1
Belgium.....	1	Louisiana.....	1	Rhode Island.....	6
Brazil.....	4	Maine.....	11	Russia.....	5
Brit. West Indies. ...	6	Maryland.....	39	Scotland.....	1
California.....	5	Massachusetts.....	45	South Africa.....	1
Canada.....	20	Mexico.....	3	South Carolina.....	4
Chile.....	5	Michigan.....	9	South Dakota.....	3
Colorado.....	4	Minnesota.....	4	Spain.....	1
Connecticut.....	38	Mississippi.....	1	Sweden.....	1
Costa Rica.....	2	Missouri.....	7	Switzerland.....	4
Cuba.....	5	Nebraska.....	2	Syria.....	1
Delaware.....	34	New Hampshire.....	12	Tennessee.....	1
Dist. of Columbia....	25	New Jersey.....	200	Texas.....	8
England.....	3	New York.....	124	Utah.....	3
Florida.....	8	New Zealand.....	13	Vermont.....	6
France.....	4	Nicaragua.....	2	Virginia.....	16
Georgia.....	6	North Carolina.....	8	Washington.....	9
Germany.....	7	North Dakota.....	1	West Virginia.....	11
Holland.....	1	Ohio.....	53	Wisconsin.....	6
Honduras.....	1	Oklahoma Ter.....	1		—
Illinois.....	24	Oregon.....	2		2990
India.....	1	Panama.....	1	Duplications.....	15
Indiana.....	18	Paraguay.....	1		—
Iowa.....	9	Pennsylvania.....	2056	Total.....	2975

I have again the pleasure of calling the attention of your Board to the flourishing condition of the College. The increase in the number of students has continued and the earnestness with which they are working shows no diminution. The statistics which will be found in the report of the Librarian touching their use of the Library are instructive and gratifying. The combined influences of the improved methods of presentation, and the enlarged freedom of choice and in so far of initiation which the present arrangement of the College

**The
College**

courses puts in the power of the individual student, have resulted in a genuine college-student interest in their work.

It is now three full years since the introduction in 1902 of the new scheme of college courses. Those who were freshmen at the time of the inauguration of the present system, are now seniors, and some few have even taken their degrees already. We may fairly say that the test has been a complete one, and the experimental stage has been passed. It is for this reason, doubtless, that the Dean of the College has, in his report, again called attention to the particular features which are embodied in the scheme, and at some length has explained its nature and its workings. Radical as may seem the departure we have thus made from traditional College methods and ideas, it is really, as a little consideration will soon show, but the logical outcome of tendencies that have been at work for at least forty years. As a matter of fact, there has been no break at all; the process has been continuous, and this last stage reached is the natural and normal development of all that has gone before. Towards the close of the sixties of the last century, the large development of the so-called natural sciences took place. This development not only caused, but also evidently justified the claim which their advocates were making that an adequate place should be assigned them, side by side, and on a par with the traditional College course, and as integral parts of a rational scheme of education. Simultaneously, too, with this movement, another sprang up amongst those who insisted that modern sciences and modern literatures must be added to the recognized College courses. We soon discovered that two important principles had been potent influ-

ences in bringing about these additions to the curriculum. The first was that we learned to acknowledge that all human effort for the enlargement of man's knowledge, whether of himself and his history, or of the world in which he lives, is eminently fitted to be educative of and stimulating to the individual mind; and secondly, and not less important, that just as in the world of actual life, various individuals are variously endowed, and each must contribute his share to the general advancement and find the work he is fitted to do, so in the miniature world of the College, which is but a preparation for the larger and more exacting world that is to follow, there must be recognition of individual capacities and adaptabilities, and opportunities must be offered for their discovery and initial development. This much the forces which led to the adoption of the elective system very soon made clear. Recognizing this fact of individualism, and under the impulse of a movement which was declaring itself in several of the leading Universities, in Harvard to begin with, the Faculty determined to make graduation follow, not, as heretofore, on the work of a certain number of years, but on the covering of an adequate amount of ground. This work was to be made up of a certain number of courses, to be required of all, a certain number to be chosen as a group—which might be made up of either two or three lines of work to be chosen from a carefully selected, but broadly representative list—and finally of a number of free electives—that is, of subjects that might be chosen without any restriction, other than the practical limitations imposed by the roster. The details of this will be found in the Dean's report. An exceptionally bright and rapidly working student may do this work in

three years ; the average student in four ; the student, whose rate of working (but not, necessarily, his real mental power), or whose material circumstances demand a longer time, may complete the work required for graduation in five years.

This is the scheme which was put in force in 1902, and has now gone completely through what may be called the experimental stage. The experiment has proved in every way a success. All the results that may perhaps be looked for from it have not as yet developed ; but those that have so far come into evidence have been good. One point, noted by the Dean, may perhaps also be alluded to here. The emphasis thrown by the elective system upon the personal interest in, and responsibility for, his own adequate training, that belongs to and should be felt by the student himself, would alone make it obligatory upon the College authorities to provide him with some advice and guidance in the selection that it is for him to make. To leave him to himself would be not to provoke in him rational selection, but to tempt him to drift along any current that might set his way. Now that he is at liberty to hasten his pace, as well as choose his path, there arises of necessity the temptation to hurry beyond his strength. It is, therefore, doubly necessary, and peculiarly so at the outset of his College course, that some one of experience should be there to advise and caution. Further, it will be necessary that, after he has started, there should be some experienced person to whom he may go when unforeseen difficulties begin to arise. These responsibilities of careful selection at starting, and persevering effort in the face of obstacles afterward, he must be taught and he must be helped to acquire. As the fundamental principle is now the per-

sonal rights and duties of the student, there is laid upon the College the obligation of close personal contact with him. What careful provision, and of how practical and feasible a character, is now making in the College to meet this difficult and inevitable problem, the Dean's report shows.

May we hope for one thing more? This it is out of the College's power to furnish, but it is an essential, which of late years has been conspicuously absent. I refer to a more active and enlightened interest on the part of parents in the education of their sons. School and College can do much; but they cannot do all; especially are they powerless to undo bad habits and false ideals, which through lack of adequate home supervision and advice so often have taken hard root.

It is interesting to note that Columbia University has this year adopted a very similar scheme of study in its College, and has followed it up by similar provision for the appointment of Faculty advisors. Unquestionably, the idea was in the air and it was only a question of local conditions and opportunities, when in a given Institution it should be realized. Its great merit may be said to be this, in a word; it recognizes fully that the work of a College is the education of its students,—not their graduation.

May I close by again expressing the extreme pleasure that I feel in the thought that the flourishing conditions, both as to number of students and as to earnestness of work by them performed, now visible in the College, are clear evidence that all its members, students and teachers alike, are alive to the duty which the University owes to the Commonwealth and to the Nation.

Two recent adjuncts to the College come naturally to be mentioned here: The evening classes given in Logan Hall, under the auspices of the Wharton School, under the personal direction of Dr. Meade, and the Summer School, under the Directorship of Dr. Quinn.

The Summer School was begun in the summer of 1904, and reached in that first year, in spite of the fact that but a brief time was available for spreading the news of this new venture, a total enrollment of 137. Last year (1905) the enrollment had risen to 212; of these 96 were students who had not attended the University in any other Department. In entering upon this work, the College has but fallen into line with the other leading Universities of the country. The large total enrollment that annually is found in these Schools is testimony to the fact that they meet a want that is felt by many. Teachers, whose daily work fully occupies their time during the usual months of the College session, are anxious to come again under the guidance of experts in the subjects that interest them. It is much for them, too, for a few brief weeks in the year to be brought within the range and to breathe the atmosphere of a University well equipped with laboratories, library and the necessary scientific apparatus of all kinds. If it were to do nothing else, it at least, we may be assured, will give them a higher and truer idea of the noble profession to which they belong, and a deeper sense of the value of the work to which they have devoted themselves.

The Evening School of Accounts and Finance had a total registration, in the first term of the College year, of 159, and in the second term, of 139. In the first term, 95 students took the full work of four evenings in the week; the

remainder taking special courses only. Of the students who took the full work, 83 successfully passed the final examination.

The students who attended these courses were men of mature age, many of them holding responsible positions. Coming to the work with earnestness, due to a practical conviction of its great value to themselves, and furnished, thanks to their business experience, with a good preliminary knowledge of the work, they were able to take advantage of the essential matter of the courses without delay. The handicap of exacting daily employment was largely overcome by their interest and energy. It is not surprising, therefore, to learn that a considerable amount of outside work was done in the preparing and writing out of reports and papers. It is noticeable, that, as the Director reports, the final examination was more severe than that given the undergraduate in the Wharton School in the same subjects, and yet the percentage of failure was very small.

Altogether, the first year's work has been a very gratifying success, and promises well for the popularity and the usefulness of these courses.

That our Graduate Department is established upon a firm and lasting basis is proved conclusively by the smoothness and continuity with which its work continued for the past year, under the new Dean, along the lines that had been determined by its past history. None the less is this same smoothness and continuity a sign—and a very grateful sign—of the wisdom of your Board in selecting the present Dean, Dr. C. G. Child, to take up the arduous and re-

**The Department of
Philosophy**

sponsible duties of that office upon the resignation, accepted with sincere regret, of his efficient predecessor, Prof. W. R. Newbold. How the department has grown in numbers, and how its influence is gradually extending over the whole of our broad country, the statistics embodied in the Dean's report give most gratifying evidence. How alive the Department is to its duties in the way of original work the address of the Dean at the opening of the academic year shows in detail. As the facts therein embodied are not repeated in the present report, I earnestly recommend all the members of the Board to read carefully that address, which was printed in the Alumni Register.

The radical changes that were made in the previous year in the conditions and the manner of awarding, as well as in the nomenclature of, the various "Harrison Fellowships," have been in operation during the present year, and some data, at least, are furnished for estimating the wisdom of the modifications made. It is gratifying to be able to state on the basis of this experience, that the advantages then anticipated have been realized, and that the elimination of restrictions of appointments to our own graduates has made it possible to insist on a higher grade of qualification in the successful candidates, as well as in securing their appointment at an earlier date; and this is a matter of importance. The record of work done, and of work in hand, on the part of the incumbents of Fellowships for Research, as they are now called (Senior Fellowships, as they were formerly called,) I recommend to your attentive perusal.

The Department of Philosophy, as no other part of the University, has a peculiar relation to the College. The studies

pursued in it are the same as in the College and as in the College, they are followed as branches of pure, rather than of applied science. It is true that in the College they are more regarded as instruments of education, and, in the Department of Philosophy, as ends in themselves; yet, while there is here a very real difference in object which entails a certain difference of method, yet it is very easy to exaggerate the magnitude and the importance of this distinction. As a matter of fact, the two shade into one another and no hard and fast line of division can be drawn between them. Scientific work and the educative influence of such work go together and cannot practically be severed. Yet curiously enough, the proper articulation, one with the other, of the College and the Department of Philosophy, has been a problem which has encountered what have hitherto proved insuperable difficulties. These were caused not by the nature of the problem in itself, but chiefly by one fact, viz. : that by legislation of your Board the Department of Philosophy was necessarily open to students of both sexes under precisely identical conditions, whereas, with the exception of the courses in Biology, the college was open only to male students. At other Institutions this difficulty has been met by the organizations of courses of an intermediate character. These are sometimes graduate courses to which exceptionally qualified undergraduates are admitted, and sometimes undergraduate courses to which graduate students proper, who may need or want just that work, may be admitted. In view of the very unequal preparation in many subjects which is found in the graduates of different Colleges in good standing, determined by local conditions at times restricting the character and amount of progress that is possible, courses of this intermediate character become a necessity, if our graduate work

is to be of a uniformly high grade. Such courses also become necessary because duplication of work, and consequently of expense, to an unwarrantable extent, must be avoided. In the past it had been found possible to provide such courses in particular cases, but, owing to the limitations above referred to, only in a few carefully selected subjects. After discussion of the subject by a committee representative both of the College and of the Department of Philosophy, it was, on its favorable report, resolved by the Faculty of Philosophy to petition your Board to remove this restriction as to sex, in so far as bona fide students of the Department of Philosophy were concerned. In other words, to permit the admission of matriculates of that Department without distinction of sex to such courses whether primarily classified as graduate or undergraduate to which courses students of the College were admitted. This permission being given, by concurrent action of the Academic Council and of the Faculty of Philosophy, several such courses have been authorized and are now in progress. Thus, finally and happily, perfect articulation has, after many vain efforts, been secured between these closely related Departments of the University. The result, it is confidently expected, will be no less beneficial to the College than to the Department of Philosophy. It is further to be hoped that this action by bringing about organic relation between the two Departments, will do much to change the condition alluded to by the Dean in his report, that comparatively so small a number of College graduates proceed to the higher work. Many of them will thus find themselves in the midst of this advanced work almost before they are aware of it, will become interested in it and will be encouraged to persevere in it.

In my report of last year, I laid particular stress upon the importance of the Library as a working department of the University. I might repeat, with the same truth, now, what I said then. I wish even to add to it, for the actual record of use shows a steady increase this year over the last in the extent to which our students, particularly those of the College and of the Department of Philosophy, have availed themselves of the facilities it offers. It is quite safe to say that without the Library it would be utterly impossible to carry on the work of the College, not to speak of the Department of Philosophy, as it is now conducted, and as a self-respecting College of to-day must conduct its work.

**The
University
Library**

There were days,—some of you may remember them,—when it was thought possible to conduct a College efficiently without a library available for consultation by the students, as there were days when it was conceived possible to give a satisfactory course in Chemistry to students who never set foot inside a laboratory and never personally made a single experiment. But that day has gone by, for the one case as well as for the other. This fact cannot be too deeply impressed upon our minds, nor too constantly present in our thoughts.

But a library to be and to continue serviceable, needs money. It needs it badly and needs it incessantly. There are new books by leading scholars, in their various lines that must be purchased, and there are extensive and expensive publications of original documents which must be secured. There are, also, the regular and manifold issues of scientific journals which must be subscribed for, and there is the wear and tear incident to continuous use which must be made good.

All of this calls for money. Hitherto, we have been fortunate in the fact that generous friends, some of them well known members of your Board, have stepped into the breach and have personally given very considerable sums to supply some crying need of the Library, some need that unsupplied, would have seriously crippled the work of the University. We shall probably never see the day when such calls upon willing friends will cease to be necessary. But apart from such large needs, there is the steady, normal demand, which cannot be neglected or overlooked, for the purchase of the current works, constantly issuing in the various branches of science. A well-equipped teacher must get at them somehow. He cannot afford to buy them for himself, for his salary will not allow that. And there is the student who must be referred to them and must consult them. Yet even for this so necessary provision, this necessity of daily recurrence, we have been hitherto largely and almost entirely, dependent upon individual generosity. Of the periodicals in the Library, no less than 501 are gifts. Surely there should be some permanent fund from which at least the necessary current books, and the even more necessary current issues of the periodicals could be obtained, leaving us to depend upon extraordinary gifts of generously minded individuals for extraordinary needs.

Let me once more emphatically express my conviction that the question is a vital one, for it touches the life and existence of the University, especially in the College and the Department of Philosophy. Starve the Library, and we of necessity starve the College and the graduate work of the University. Will not some one arise who will face this problem for us, or help us to face it for ourselves?

The report of the Dean states the agreeable fact that the First Year Class outnumbers its predecessor, and predicts from data already gathered that the same will be true of the class to enter next year. After further noting that in this regard our own Medical School occupies a quite unique position, the Dean proceeds to give some reasons which in all likelihood account for this. The causes he finds in the greatly enlarged equipment and the facilities offered by the new Medical Building; but even more than to this it is, he thinks, due to the particular pains that are here taken to make the student's life a wholesome and happy one. And this is a statement which goes to the heart of the present student-life at "Pennsylvania." There is a reverse, however, to this picture. This is discovered when we turn our eyes upon the community at large, and, for the moment, away from our school itself. Then we become aware of two facts; first, that the profession of Medicine is becoming overcrowded, and second, that the progress of science has enormously increased the volume of knowledge that must be demanded of medical men. To meet these two conditions, i. e., to reduce the number of intending physicians and to increase the power of the average medical graduate, the thought suggested by the Dean is an advance in the entrance requirements along the lines of the sciences cognate to medicine and the addition of a fifth year to the course as it now stands. The suggestion is modified by the proposition that graduates of Colleges, who have had in College a good training in chemical, physical and biological science be admitted to the second year of the medical course. The question is a vital and a difficult one. It is vital because of the interest

**The
Department
of Medicine**

the public has, in the adequate preparation of professional men. It is difficult, however, on the other hand, since the men themselves must at some age, and an early age—not an advanced one,—escape from the work of preparation and get actively at the work of application. If we keep the young physician too long in training, we may deprive him of all power of initiation; and this means to deprive him of all that makes him really valuable as a professional man. There are two sides to be looked at in all questions, and the true solution will only be found by mutual concessions. We cannot afford simply to add years to the course; because every year added is just so much subtracted from the years of a man's professional life, and that, too, from those years when the man is most vigorous, energetic, and most likely when thrown upon his own resources to gather and develop the initiative and independence that are indispensable to his success and his usefulness.

We cannot expect to turn out at graduation perfect physicians, any more than we can turn out from an Engineering School perfect engineers. In all cases, much in the way of necessary knowledge must be left for them to gain in the busy days of active practice. But as to one thing, we must take great care. We must not hold the student beyond the years when he should begin to work at his profession for himself, nor should we directly or indirectly cultivate in him the thought that he is always to be dependent upon superior guidance. A learner one must always be, but we should early be trained to find our learning for ourselves. Is not the ideal professional man he who has come by training into full possession of the powers that are in him, and has acquired in addition the necessary foundations of technical professional

knowledge? If a man has thus been trained to the full possession of his powers, he cannot but grasp more speedily and more intelligently the principles of professional knowledge, and this the more surely if there shall have been included in the elements of his training such subjects as are strictly introductory to the profession he proposes to enter. Now, the one Institution that we have whose express object is this putting a man in possession of his powers is the College, and, notwithstanding individual exceptions, in the main it must be admitted that it succeeds in accomplishing its object. This is the ground, I think, on which those who advocate a bachelor's degree as an advisable, if not a necessary antecedent of a medical course, base their opinion. It is not because of that indescribable thing called culture, but because the College graduate is likely to have a firmer grip upon himself than has his fellow. If it be remembered too, that in College courses, at least in the larger Institutions, as now constituted, there is ample provision made for very high grade instruction in chemical, physical and biological science, it becomes clear that probably a considerable percentage of their graduates are in every way, both general and special, better prepared for starting on a course of Medical studies than their fellows who are non-graduates. Every step should be taken in the direction of encouraging the entrance of men into the Medical School previously and fully prepared by general and specific College training. The proper method of approaching the solution of this difficult problem appears to me to determine when the preparatory work ends and the medical course proper begins. The line is to be drawn and the entrance requirements fixed accordingly. The Colleges will be glad and eager to take up their share in the work, for upon that score there need be no fear.

There is but little in the report of the Dean that calls for special comment. The total registration has slightly fallen off, owing to causes that were noted and discussed in the report of last year. This is, however, in a measure offset by a gratifying increase in the numbers of the First Year Class. We may hope, therefore, that the causes which produced the falling off, temporary in their nature, may have by this time had their maximum of effect, and that, consequently, more normal conditions have already set in.

**The
Department
of Law**

The work of the School has gone on as usual. It has not, however, become mere routine work. Many advances have been made. New courses have been instituted and old ones modified. New regulations have been made as to the amount of weekly work to be required of the student with a view to assuring him, as far as may be done by regulations, the maximum of profit from his course, in view of his subsequent professional duties.

Much importance is assigned by the Dean, and no doubt rightly, to the lectures that have been delivered in the course of the year by lawyers of standing and of eminence, on various aspects of the lawyer's professional life, and on the lives and works of eminent jurists of our country. Such lectures, dealing with legal topics from an extra academical point of view, or handling subjects of legal history and achievement for which room cannot properly be found in the curriculum, cannot fail to be profitable to the student at law and will be, if continued, as there seems to be a prospect that they will be, a valuable addition to the School programme.

The Biddle Memorial Library continues its useful work. The additions to it made this year are noteworthy and will

furnish in the future valuable original material not only for the lawyer but for the student of history. The actual circulation of the books is an indication at once of the service the library is rendering and of the diligent use the students of the School are making of the advantages thus placed at their disposal.

The Dean's brief note of the publications of the Department is interesting and deserves special attention.

This Department shows an increase, small but encouraging in the numbers of its entering class. Evidently, as the Dean notes, the exceptional conditions which in the previous year caused a diminution in the number of matriculating students have worked themselves out and normal conditions have again set in. Particularly noticeable is the large percentage of students who have come from foreign parts, some very remote, to avail themselves of the facilities offered. The mere fact of the price they are willing to pay, and not merely in money, but in time and absence from friends and family connections, would have stamped these students, if we had had no other test, as a very desirable addition to our student-body; not to speak of the "gratifying index thus afforded to the reputation which our institution has achieved and is maintaining abroad."

**The
Department
of Dentistry**

Besides the regular academic work of the course prescribed, the Dean notes as worthy of particular interest, the activity of the three student Societies, which hold regular meetings throughout the academic year, in all of which papers of professional interest are read. Such evidence of

independent interest in the work of their profession cannot but be of incalculable value in developing in the future practitioner a scientific view of his work. And, besides, this development in our Dental students of habits of accurate observation and careful logical statement, these Societies will tend to the uplifting of the profession itself, and will lay the foundation for future investigation of scientific facts and improvements in processes and methods. Akin to these in object and results is the Penn-Dental Journal, edited and managed entirely by the students themselves, and largely subscribed for by both students and alumni. No better means could be devised than these for early impressing the Dental student with the duty imposed upon him; a duty towards his profession and through it to the community at large, of doing all that may come in his way to do for the advancement of his specialty and of recording in accessible place any observation or experiment he may have been led to make. It is thus that investigators take their first steps, and it is in these ways that the seeds are sown of future discoveries.

The report of the Dean of this Department is like that of last year. It is a record of hard and earnest work, done under conditions that are most unfavourable and must be very depressing. The more honour, therefore, is due to those who have never abated one jot of heart or hope, but have continued labouring faithfully, in season and out of season.

The
Veterinary
Department

There is, however, now more than a ray of light to cheer the heart and refresh the strength of the Department. An anonymous friend of the University and of the Department has given \$100,000 as an

endowment for the support of the work; while the State of Pennsylvania has given \$100,000 for the erection of the building that has been so long and so sadly needed. The State requires, as a condition of its gift, that in the new building to be erected, laboratories shall be provided for the use of the State Live Stock Sanitary Board in its work of investigation of the diseases of domestic animals. This condition, as the Dean points out, so far from being a limitation, will really be an added advantage to the School itself,—while it will be of undoubted benefit to the State, as well. Each of the parties, State and School, will be distinctly the better off for the conditions thus attached to the appropriation.

The importance of such a School as ours to the community is sufficiently attested by the fact, noted by the Dean, that the value of livestock owned in the United States has increased since the census of 1900 was taken, by \$249,000,000. With such values at stake, it is inevitable that the public at large should come to a proper estimate of the value to them of a profession which is prepared by expert methods to safeguard their large investments, and it is also inevitable that they will come to appreciate at its proper worth, the service the University is doing in maintaining and improving, in the face of manifold difficulties, this School of Veterinary Medicine.

A question intrinsically difficult of solution has arisen as to the interrelations of the Medical and the Veterinary Departments in regard to subjects wherein the work of the two Schools "interlock," as the Dean phrases it. Indeed, a similar question is touched on by the Dean of the Medical Department, as arising from similar conditions between his

Department and that of Dentistry. Such questions are bound to arise in a large University, which is growing and progressive. Such questions can probably never receive a solution which is good for all time. The inevitable progress of science is bound to render inefficient any arrangement which may at a given moment be arrived at. If an adjustment which promises to work well for a reasonable time in the future can be secured, it is as much as we have a right to expect, holding ourselves always in readiness to go over the question, or a similar one, again, whenever necessity may arise. Mutual goodwill and an earnest desire to serve the best interests of the whole University, on the part of the several faculties, may always be counted upon.

During the past year, the Institute lost, through resignation, the valuable services of its Director, for the past nine years, Dr. Horace Jayne. Over and above the thanks due to him for his official services as Director in supervising the equipment of the Museum, which at the time he entered it had as yet hardly advanced beyond its initial stage, and in the framing of plans for its future usefulness and growth, it is but proper to mention his large gifts of collections, purchased from his own funds, and of many valuable scientific books, now in the Museum Library.

On January 11th, 1905, Dr. Milton J. Greenman was elected to succeed Dr. Jayne, as Director of the Institute.

The new Director, having in view a more definite plan for carrying on the work of the Institute, and to define its re-

lations to similar Institutions, as well as to bring it into touch with them and with investigators in Anatomy generally, called a conference of ten leading American anatomists for advice and consultation. This conference met at the Institute on April 11th and 12th, and framed recommendations touching all the points raised. These recommendations may be read at length in the Director's report, and I need not repeat them here.

In accordance with the recommendations of this conference, the Institute created an Advisory Board of Anatomists. The names of those who have been chosen members of this Board will be found in the Director's report. The Director expresses the hope that with the assistance of the Board thus created, the Institute will become an important central Institute for investigators in Anatomy.

On the recommendation of the Advisory Board, Dr. Henry H. Donaldson has been appointed Professor of Neurology, and is to assume charge of his department of the Institute's work in October, 1905.

Large accessions have been made to the collections of specimens, and considerable additions to, and improvement of, the laboratory equipment.

Twelve specimens were loaned during the year for lecture purposes, and twenty-four to other laboratories, at Smith College, the University of Michigan and the University of Leipzig, for purposes of research.

Two papers have been published on the fishes in the collections in the Museum, resulting in the description of fourteen new species and two new genera, and another paper on "The Mechanics of Dislocation of the Hip Joint," is rapidly nearing completion.

It is with regret that I report to your Board the resignation, in the course of the past year, of Mrs. Sara Y. Stevenson, the President of the Board of Managers, and long the

Curator of the Egyptian Section. Mrs. Stevenson's head and hand were busy in the work of the Department from its beginning, and her personality impressed itself deeply upon the organization and the conduct of the Museum.

Her efficiency as Secretary, and afterwards as President, and the generosity with which she gave her time and her labor to the service of the Department are here recorded with the thanks of the University. I also acknowledge the valuable gift which Mrs. Stevenson has since made to the Museum of her collection of scarabs, amulets and textiles. Other retirements from this special University service are individually noted, and were the occasions of peculiar regret.

Since the resignation of Mrs. Stevenson, Mr. S. F. Houston has filled the place as Acting-President. Mr. John Wanamaker has been chosen one of the Vice-Presidents to fill the vacancy caused by the lamented death of Prof. Maxwell Sommerville; Mr. Eckley B. Coxe, Jr., has been chosen a Vice-President; and vacancies on the Board have been filled by the election of Dr. Norton Downs, Mr. E. B. Smith and Mr. B. F. Pepper, the latter of whom has also been elected Secretary.

Dr. Gordon has been chosen Curator of the Section of General Ethnology, and Dr. Bates, of the Mediterranean Section.

Thanks are due to Mr. Wanamaker for important and valuable gifts to the Egyptian Section and for the replicas of Pompeiian bronzes to the Mediterranean Section. Mr. Eckley B. Coxe, Jr., has continued his generosity in subscribing, on the part of the Museum, to the Egyptian Exploration Fund and thus procuring many valuable and interesting objects resulting from the Explorations carried on under that Fund.

Much material has been gathered to enrich the American collections of the Museum, from the excursion made to Alaska by Dr. Gordon in the past summer, and as the natives of that region are fast succumbing to the influx of the new settlers, this collection promises to prove of exceedingly great value, for there is little probability that a few years hence it could be duplicated.

In the Babylonian Section the work of arranging and cataloguing the collections is going on vigorously. In the matter of publications, the Curator reports the publication of Dr. H. Ranke's monograph on "Early Babylonian Proper Names," and that four other volumes, one by Dr. Ranke, two by Prof. Hilprecht, and one by Assistant-Professor Clay, are now ready for the press, while four others are rapidly nearing completion.

In the "Transactions," papers have been published by Prof. Bates on the Etruscan Inscriptions in the Museum, by Miss H. A. Boyd and Miss E. H. Hall, on their work at Gour-nia, by Mr. R. B. Seager, on his excavations at Vasiliki, and by Dr. Alfred Emerson on a torso of Hermes, in the Drexel Collection of Greek and Roman statuary.

The Hospital continues its beneficent duty of caring for the sick, and has added materially during the year to its facilities for doing this, its proper work, and at the same time, has provided most thoughtfully for the comfort of its suffering inmates. **The University Hospital.** Three Sun Parlors have been added to the Wards in the Gibson Wing, so that now each Ward has one of its own. The accommodations for private patients have been increased by the addition of two new suites.

An isolation building is now completed and ready for use, should any infectious case occur in the main hospital. This will both protect the other patients and obviate the necessity, hitherto existing, of sending the infected patient to the Municipal Hospital.

Many gifts have been made, which are fully set forth in the Treasurer's report.

This is the first year in which appears the report of the Professor of Physical Education and the Director of the Department. The formal opening of the new Gymnasium took place on December 14th, 1904. The Gymnasium, and the improvement of the physical condition of Franklin Field, are the splendid gifts to the University by our Alumni. No other University interest of equal significance and importance has ever been undertaken solely by our Pennsylvania men and carried to so complete and brilliant a conclusion.

Following the dedication of the Gymnasium your Board made certain rules, providing in the first place that the course in Physical Education be made an integral part of the University curriculum; and, later, directing as to the amount of gymnastic or athletic work which would be required in the different Departments, both in the several sub-divisions of the College and in our Professional Schools.

Dr. McKenzie's report makes so plain the distinction between athletics and physical education, and he defines the difference so clearly, that I am sure that every one who may read this reference will prefer to study the entire statement of the Director of the Department, rather than to have his views and purposes condensed in a few words. I particularly, then, ask that every one to whom this volume may come will read in full this first report from the Department of Physical Education.

That in the analysis of the first one thousand men examined, more than one-half presented marked defects of one kind or another, would not have been beforehand expected. Such a percentage would have been considered by all of us as antecedently improbable. That almost all of those showing these defects were capable of restoration to a normal condition is the highest evidence of the importance of this new work undertaken by our University. The magnitude of it will increase yearly, and its usefulness likewise, but, under good administrative methods, and the adoption, in time, of what may be called an ideal roster, this new Department will work in smoothly with the Departments of Instruction.

In addition to the reference made by the Director to the personal examination of the first one thousand students,

added interest must be taken in the Department of Physical Education, when that section of the report is studied which refers to the eye examinations conducted by Dr. William Campbell Posey, the Ophthalmologist of the Department, assisted by ten qualified physicians from the various Hospitals.

All of us know that the man who can accomplish a definite and important work in life is not only he who has the mental vigour, but the health as well ; and the University has undertaken in these recent years no greater public service than the determination, in the words of the Director, "to develop an all-round citizen,—a man not only able to will and to plan, but with the vital and the physical qualities to carry out to complete execution, the plans and purposes which his mind formulates."

Much public criticism has been directed to the inter-University athletic contests occurring in the autumn of each year ; but even more public interest and encouragement have been manifested in them. If moderation be the rule of life, we have certainly broken the rule in athletics, and their consideration has become a very serious matter to Universities, Colleges and Schools, as well. With the growing and healthy interest in out-door sport and recreation, and with the American love for open-air games, the question to be settled seems not to be the abolition of the game of foot-ball, and other sports,—but their restoration to a clean and manly and wholesome addition to our University student life. If victory at any cost rather than defeat with honour, is to be the stronger influence, there will be no decency in athletic teams,—as teams,—straightforward and upright as the majority of the

members of athletic teams undoubtedly are. It may be the minority which saves in politics and government, but it is the minority which has brought athletics to their present regrettable condition.

Many suggestions will undoubtedly be made to remedy an ill, which is a clearly existing evil during the autumn months of every new academic year. Those which I desire to offer may not meet with approval, but they are the result of a quiet and long contemplation of the question.

It seems to me, in the first place, that the committee which governs our inter-University athletic relations—the University Committee on Athletics—should be a very small committee,—not exceeding five in number; and, preferably, a committee of three,—with absolute power, and to be appointed by the Provost of the University. The absolute power conferred upon this committee should cover every question, including the eligibility of the student, the number of games to be played, and even a veto upon the appointment of a coach or coaches. There is no one who does not know that where a large committee has charge of such a matter as this it is difficult, if not impossible, to bring about the desired result. This is not the case with a small committee.

It seems to me, also, that no one should be allowed to represent the University in an inter-University game, except after a full year's residence, with steady maintenance of good scholastic standing.

And, if, as stated in the report of the Director of Physical Education, games should be the spontaneous expression of

the play instinct of young men, I would set an age limit,—having passed which, no student can be a candidate.

If these suggestions—or any of them—meet with favour, I shall be glad to take such action, under your direction, as may bring about a practical result.

In closing this report, all of us wish to express to the Civil Authorities of the City of Philadelphia, and to those of the State of Pennsylvania, as well, and to all our helpful friends, women and men, a thankful recognition in return for their constant sympathy with, and fostering care of, the University of Pennsylvania. It is difficult, indeed, to know just what to say, when every day brings to us some act of helpfulness to the University from within the limits of our own State. Their best return, as is our best reward, are the knowledge and hope that in every succeeding year, as in the past year, we may be the better prepared in all respects to enter upon and fulfil the present trust and the heritage so long committed to us.

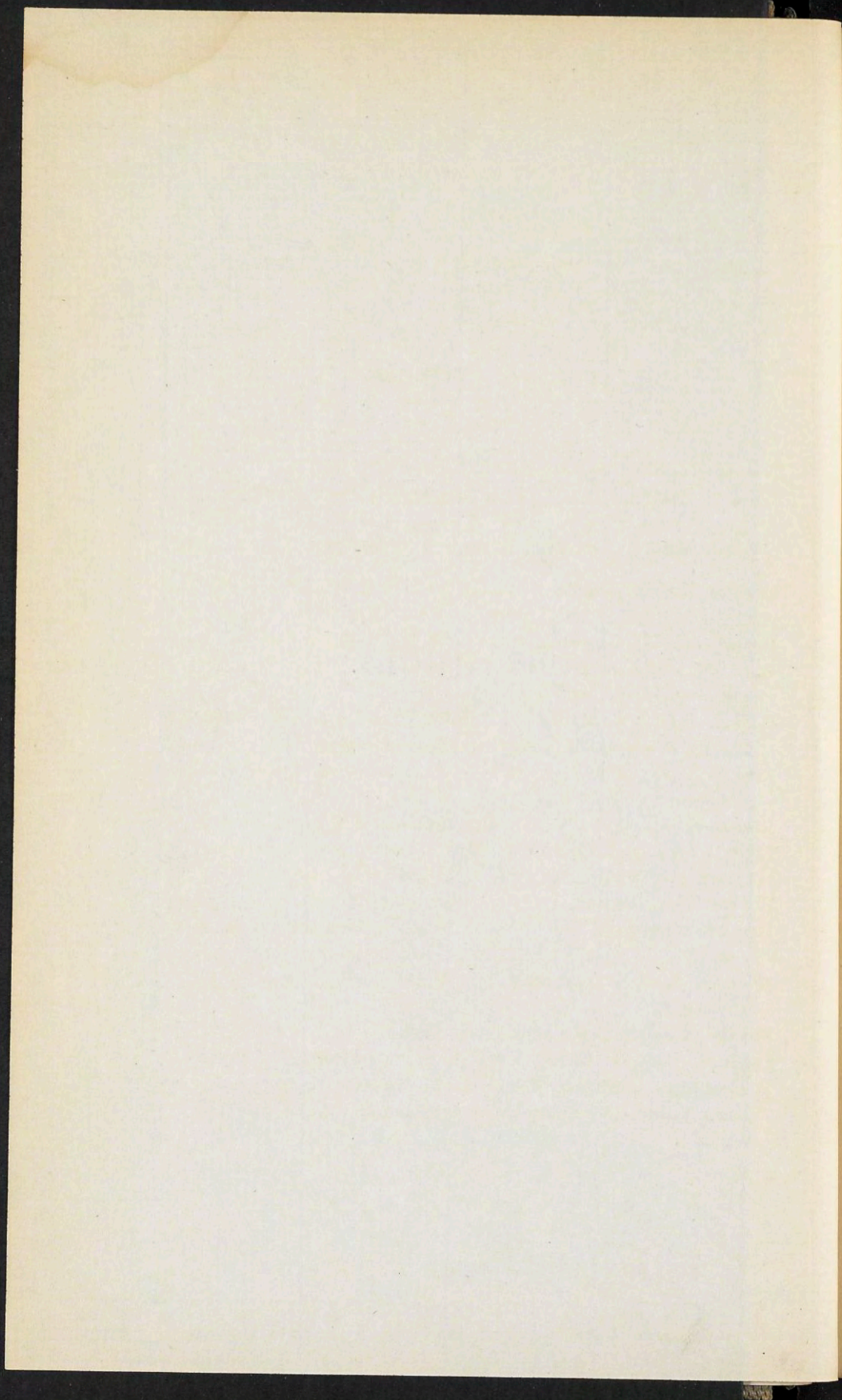
I am, very respectfully,

Your obedient servant,

CHARLES C. HARRISON,

Provost.

APPENDICES.



APPENDIX I.

PERSONAL CHANGES

BY DEATH

WILLIAM SELLERS, Trustee.

JESSE YOUNG BURK, A.M., S.T.D., Secretary of the University.

BY RESIGNATION OR EXPIRATION OF TERM

FRANCIS POTTER SIBLEY, Treasurer of the University.

WILLIAM WEST FRAZIER, Trustee.

HARRY WALN HARRISON, A.B., Assistant to the Provost.

JOHN MUMFORD SWAN, M.D., Demonstrator of Osteology, and Students' Physician.

HORACE JAYNE, M.D., Ph.D., Professor of Zoölogy, and Director of the Wistar Institute of Anatomy and Biology.

ADOLPH WILLIAM MILLER, M.D., Ph.D., Assistant Professor of Materia Medica.

ROBERT FORMAD, M.D., V.M.D., Demonstrator of Normal Histology.

ARTHUR FERNANDEZ COCA, A.M., M.D., Demonstrator of Pathology.

WILLIAM MCCLELLAN, B.S., Ph.D., Instructor in Physics.

BURTON SCOTT EASTON, Ph.D., Instructor in Mathematics.

BURNETT SMITH, B.S. in Chem., Assistant in Geology and Mineralogy.

WILLIAM THOMAS LEGGO, B.S. in C.E., Instructor in Civil Engineering.

JONATHAN JONES, A.B., Assistant in English.

CHARLES FREDERIC BRÉDÉ, A.M., Assistant Instructor in French.

WALTER EDISON KRUESI, B.S. in Econ., Assistant in Economics.

WILBUR FRANCIS SMITH, Assistant Instructor in Mechanical Drawing.

- ROBERT MCARDLE KEOWN, B.S., Instructor in Mechanical Drawing.
HENRY SHOEMAKER CONARD, B.S., A.M., Ph.D., Instructor in Botany.
JESSE PAWLING, JR., B.S., Assistant in Physics.
JACOB ELON CONNER, A.B., Ph.D., Instructor in Economics.
THOMAS WARNER MITCHELL, A.B., Instructor in Accounting.
CHARLES WHARTON STORK, A.M., Assistant in English.
ARCHIBALD GRAHAM THOMSON, Ph.B., M.D., Instructor in Ophthalmology.
FRANK ARDARY CRAIG, M.D., Assistant Instructor in Medicine.
CHARLES LOUIS MCKEEHAN, A.B., LL.B., Lecturer on Law.
JOEL HENRY HILDEBRAND, B.S., Assistant in Chemistry.
PAUL GERHARDT CRESSMAN, A.B., M.S., Assistant Instructor in Chemistry.
WILLARD EUGENE HOTCHKISS, Ph.B., A.M., Instructor in Political Science.
LEONARD ADOLPH PECK, B.A., Assistant in English.
ROBERT JOHN HARDING, C.E., Instructor in Civil Engineering.
THOMAS HOVENDEN, M.S., Instructor in Civil Engineering.
JULIUS G. KIRBY, B.S. in M.E., Instructor in Mechanical Engineering.
WALTER HAMLIN KNISKERN, M.E., Instructor in Mechanical Engineering.
VERNER NISBET, M.D., Assistant Demonstrator of Pharmacodynamics.
CHARLES MORTON HOSMER, M.D., Voluntary Assistant Demonstrator of Pathology.
SAMUEL MCCLARY, 3d., M.D., Assistant Demonstrator of Normal Histology.

BY PROMOTION

- JAMES HARTLEY MERRICK, A.B., Secretary of the University.
FRANCIS HERMANN BOHLEN, LL.B., Professor of Law.
CRAWFORD DAWES HENING, A.B., Professor of Law.
LEO LOEB, M.D., Assistant Professor of Experimental Pathology.
OWEN LOUIS SHINN, Ph.D., Assistant Professor of Chemistry.
DAVID LINN EDSALL, A.B., M.D., Assistant Professor of Medicine.
WALTER THOMAS TAGGART, Ph.D., Assistant Professor of Chemistry.

BY ELECTION OR APPOINTMENT

- WHARTON SINKLER, M.D., Trustee.
ARTHUR LATHAM CHURCH, B.S., Trustee.
CLAYTON FOTTERALL McMICHAEL, Assistant to the Provost.
CLARENCE GRIFFIN CHILD, Ph.D., Dean of the Faculty of Philosophy.
ROBERT TAIT MCKENZIE, B.A., M.D., Professor of Physical Education, and Director of the Department of Physical Education.
MILTON JAY GREENMAN, Ph.B., M.D., Director of the Wistar Institute of Anatomy and Biology.
OWEN JOSEPHUS ROBERTS, A.B., LL.B., Assistant Professor of Law.
DANIEL JOSEF MCCARTHY, M.D., Professor of Medical Jurisprudence.
HAROLD WARNER BROWN, B.S., Assistant Professor of Electrical Engineering.
JAMES PEMBERTON HUTCHINSON, M.D., Adjunct Professor of Surgery.
THOMAS GEORGE ASHTON, M.D., Adjunct Professor of Medicine.
REUBEN ARNOLD BOGIA, M.D., Assistant in Physiology.
JOHN BUSCH, M.D., Assistant Instructor in Surgery.
JEAN JACQUES ABRAM VAN KAATHOVEN, M.D., Assistant Instructor in Surgery.
I. VALENTINE LEVI, M.D., Assistant Instructor in Pediatrics.
JACK CLAXTON GITTINGS, M.D., Assistant Instructor in Pediatrics.
THOMAS STOTESBURY GITHENS, M.D., Voluntary Assistant Demonstrator of Pathology.
ALEXANDER AUGUSTUS UHLE, M.D., Assistant Instructor in Genito-Urinary Diseases.
EWING TAYLOR, A.B., M.D., Assistant in Anatomy.
WILLIAM HENRY FITZGERALD ADDISON, B.A., M.B., Demonstrator of Normal Histology.
RUFUS BELL SCARLETT, M.D., Voluntary Assistant Demonstrator of Pathology.
WILKIE NELSON COLLINS, A.B., Assistant in English.
HERMAN CLAUDE BERRY, A.B., B.S. in C.E., Instructor in Civil Engineering.
HAROLD EZRA HILTS, B.S. in C.E., Instructor in Civil Engineering.

- ALBERT WILLIAM KIEFER, B.S. in C.E., Instructor in Civil Engineering.
- ALBERT JOSEPH HOULE, E.M., B.S., Instructor in Civil Engineering.
- RAYMOND C. SEMPLE, Assistant in Civil Engineering.
- ROGER CLARK WELLS, Ph.D., Instructor in Physical Chemistry.
- DUNLAP JAMISON MCADAM, A.M., Assistant in Chemistry.
- WILLIAM MILTON BARR, B.S., M.A., Assistant in General Chemistry.
- GEORGE EMERSON CROFOOT, B.S. in M.E., Instructor in Mechanical Engineering.
- CHARLES ARTHUR FULLER, B.S. in M.E., Instructor in Mechanical Engineering.
- WILLIAM JOHNSON PAYNE, A.M., B.M.E., Instructor in Mechanical Engineering.
- MARTIN AUGUSTUS DOYLE, B.M.E., Instructor in Mechanical Engineering.
- EARL DEAN HOWARD, Ph.M., Instructor in Banking.
- JOSEPH ALBERT BECK, B.S. in Econ., Assistant in Political Science.
- ENOCH MARVIN BANKS, Ph.D., Instructor in Economics.
- LOUIS WILLIAM FLACCUS, Ph.D., Instructor in Philosophy.
- HENRY LAMAR CROSBY, Ph.D., Instructor in Greek.
- MAURICE JEFFERIS BABB, B.S., Instructor in Mathematics.
- WALTER KELLER HARDT, B.S. in Econ., Assistant in Accounting.
- GEORGE BENJAMIN MANGOLD, A.M., Instructor in Sociology.
- JOSEPH HENRY STANNARD, Jr., Instructor in Drawing.
- THOMAS CONWAY, Jr., B.S. in Econ., Assistant in Finance.
- GEORGE WILLIAM KELLER, Assistant in Drawing.
- LIVINGSTON CORSON, B.S., Assistant in English.
- PERCY VAN DYKE SHELLY, B.S., Assistant in English.
- JACOB LYNFORD BEAVER, E.E., Instructor in Electrical Engineering.
- PHILIPPE DE LA ROCHELLE, B-ès-L., Assistant in French.
- JOHN JAMES SULLIVAN, A.M., LL.B., Instructor in Commercial Law.
- LOUIS HENRY LOSSE, B.S. in C.E., Instructor in Civil Engineering.
- FRANCIS MARKOE RIVINUS, A.B., Assistant in English.
- LEWIS BURTRON HESSLER, A.B., Assistant in English.
- HUGER ELLIOTT, B.S., Instructor in Architecture.

ELON KANAGA, D.D.S., Demonstrator of Crown-and-Bridge Work.

NORMAN L. ROBERTS, D.D.S., Demonstrator of Operative Dentistry.

HOWARD CHILDS CARPENTER, M.D., Instructor in Pediatrics.

PENN-GASKELL SKILLERN, JR., M.D., Assistant Demonstrator of Normal Histology.

HAROLD BACON WOOD, M.D., Assistant Demonstrator of Normal Histology.

CLIFFORD BAILEY FARR, A.B., M.D., Instructor in Physical Diagnosis.

DAVID KAPP, Assistant Demonstrator of Pathology.

WILLIAM WARDER CADBURY, M.D., Assistant Demonstrator of Pathology, and of Pharmacodynamics.

RALPH S. LAVENSON, M.D., Assistant Demonstrator of Gross Morbid Anatomy.

JOHN SPEESE, M.D., Voluntary Assistant Demonstrator of Surgical Pathology.

THOMAS BEAVER HOLLOWAY, M.D., Instructor in Ophthalmology.

CHARLES ANDREW FIFE, A.B., M.D., Instructor in Pediatrics.

SAMUEL H. GILLILAND, V.M.D., M.D., Demonstrator of Veterinary Medical Diagnosis.

JOSEPH WOLSTON HUFF, A.B., Reader in History.

WINFRED TREXLER ROOT, A.B., Reader in History.

ARTHUR GUY TERRY, Ph.D., Assistant in History.

APPENDIX II.

REPORT OF THE DEAN OF THE COLLEGE FACULTY.

To the Provost of the University :

SIR : I have the honor to submit my report upon the work of the College for the year 1904-05.

CHANGES IN THE FACULTY.

The resignation of Professor Dana was received with regret. He had held the position of Professor of Art for sixteen years and his services which he very generously gave to the University were of great value to students in the courses in Architecture. The position and title vacated by the resignation of Professor Dana have been filled by the promotion of Assistant Professor Everett, who was granted leave of absence for the year 1905-06 to pursue studies in the art centres of Europe. On his return to the University the courses in Art and the History of Art will be increased in number and scope.

In recognition of valuable service rendered and ability shown in their respective subjects, Dr. Owen L. Shinn and Dr. Walter T. Taggart were promoted to be Assistant Professors of Chemistry and Dr. William McClellan to be Assistant Professor of Physics. Dr. McClellan resigned during the summer vacation to accept a position as Electrical Engineer in charge of important work.

Leave of absence for the year 1905-06 was granted

Professor McMaster, who needed freedom from University duties to enable him to complete portions of the important historical work on which he has been engaged for a number of years. Some of his courses will be given during his absence by Dr. Arthur Guy Terry, Harrison Fellow in History 1902-03, 1904-05, who has been appointed for the year Assistant in History.

Assistant Professor Bates was honored by the appointment as Annual Professor of Greek in the American School of Classical Studies at Athens for the year 1905-06, and was granted leave of absence by the University in order to enable him to accept the appointment. Dr. H. L. Crosby has been appointed Instructor in Greek during the absence of Dr. Bates.

Every large university has, each year, the problem of filling a considerable number of instructorships, owing to the fact that such instructorships are the stepping stones to advancement, both of title and salary, which frequently comes most quickly in the form of offers from other institutions. Another cause for a considerable number of changes in the teaching staff is the desire of men who have received technical or professional training to enter upon the practice of their professions after having equipped themselves more thoroughly for their work by a year or two of teaching. Superior financial inducements are often the deciding factor.

The following instructors resigned at the close of the year: J. A. Beck, Reader in History; A. C. Boggles, Reader in History; C. F. Brede, Assistant Instructor in French; J. E. Conner, Instructor in Economics; P. G. Cressman, Assistant Instructor in Chemistry; B. S. Easton, Instructor in Mathematics; R. J. Harding, Instructor in Civil Engineering; J. H. Hildebrand, Assistant in Chemistry; W. E. Hotchkiss, Instructor in Political Science; T. Hovenden, Instructor in Civil Engineering; J. Jones, Assistant in English; R. McA. Keown, Instructor in Mechanical Drawing; J. G. Kirby, Instructor in Mechanical Engineering; W. H. Kniskern, Instructor in Mechanical Engineering; W. E. Kruesi, Assistant in

Economics ; W. T. Leggo, Instructor in Civil Engineering ; William McClellan, Instructor in Physics ; T. W. Mitchell, Instructor in Accounting ; J. Pawling, Jr., Assistant in Physics ; L. Peck, Assistant in English ; B. Smith, Assistant Instructor in Geology and Mineralogy ; W. F. Smith, Assistant Instructor in Mechanical Drawing ; C. W. Stork, Assistant in English ; T. R. White, Lecturer on Business Law.

The following appointments to fill vacancies and additional positions created to meet the demands of instruction were made for the year 1905-06 : M. J. Babb, Instructor in Mathematics ; E. M. Banks, Instructor in Economics ; W. M. Barr, Assistant in Chemistry ; J. L. Beaver, Instructor in Mechanical Engineering ; Jos. A. Beck, Assistant in Political Science ; C. Berry, Instructor in Civil Engineering ; W. N. Collins, Assistant in English ; Thomas Conway, Jr., Assistant in Finance ; L. Corson, Assistant in English ; G. E. Crofoot, Instructor in Mechanical Engineering ; H. L. Crosby, Instructor in Greek (vice Dr. Bates) ; P. de La Rochelle, Assistant in French ; M. A. Doyle, Instructor in Mechanical Engineering ; Huger Elliott, Instructor in Architecture ; L. W. Flaccus, Instructor in Philosophy ; C. A. Fuller, Instructor in Mechanical Engineering ; W. K. Hardt, Assistant in Accounting ; L. B. Hessler, Assistant in English ; H. E. Hiltz, Instructor in Civil Engineering ; A. J. Houle, Instructor in Civil Engineering ; Earl D. Howard, Instructor in Banking ; J. W. Huff, Reader in History ; George Keller, Assistant in Drawing ; A. W. Kiefer, Instructor in Civil Engineering ; L. H. Losse, Instructor in Civil Engineering ; D. J. McAdam, Jr., Assistant in Chemistry ; G. B. Mangold, Instructor in Sociology ; W. J. Payne, Instructor in Mechanical Engineering ; M. Rivinus, Assistant in English ; W. T. Root, Reader in History ; R. C. Semple, Assistant in Civil Engineering ; P. V. Shelly, Assistant in English ; J. H. Stannard, Instructor in Drawing ; J. J. Sullivan, Lecturer on Business Law ; N. E. Sutphen, Instructor in Wood-working ; A. G. Terry, Assistant in History ; R. C. Wells, Instructor in Physical Chemistry.

CHAPEL ADDRESSES.

The Chapel exercises were made of especial interest by addresses during the year by the following speakers: Rev. Kerr Boyce Tupper, Rev. Trumbull Lee, John C. Bell, Esq., Judge Robert N. Willson, Dr. Wilfred T. Grenfell, Rev. Dr. W. H. Oxtoby, Rev. Howard Agnew Johnston, Rev. C. A. R. Janvier, Rev. Richard Montgomery, Rev. Charles Wadsworth, Jr.

THE ADMINISTRATION OF THE ELECTIVE SYSTEM.

The transition from the strict and personal supervision under which a student is placed in a preparatory school, especially during his last year, to the larger measure of freedom in college is the source of many problems to parents, to students, and to college administrative officers. The Freshman year, and particularly the first half of it, is a critical time in a young man's life, and it not infrequently happens that he does not realize the dangers and the responsibilities, resulting from a measure of personal liberty to which he is unaccustomed, until he has formed habits and associations which do him no good. The elective system, which, however much it may have to recommend it, requires care in its proper administration, may work harm to a student by encouraging him to avoid subjects which he regards as difficult or imagines to be distasteful. He may contract the habit of doing the thing that is easy or pleasant rather than the thing that will be of the greatest benefit to him. There has been a sacrifice of the disciplinary value of a required college course for the sake of the superior advantages to be derived from allowing a student to select from the whole list of subjects those which he wishes for any reason to take. In order that the elective system may accomplish its purpose and the freedom of college life may not prove to be too great for the good of the student, it is necessary that some wise and effective supervision be exercised over him from the time he enters college.

Every large university has been struggling with the solution of the problem how to make the college course of the greatest permanent value to the student, for, despite the undoubted benefits to be derived from participation in athletics and in the many musical, literary and social organizations to be found in every college, it is necessary to insist that these shall not infringe upon the time which must be given to study, if a degree is to represent something more than the mere fact that certain examinations have been passed. To insure the educational value of the college course and a definite and considerable amount of uniformity in the value of its degree, the College in 1902, in adopting a modification of its former elective system, required the completion by each candidate for a degree in the course in Arts and Science, Finance and Commerce and Biology* of sixty units of work of which twenty-two are definitely prescribed and consist of fundamental subjects, History, English, Mathematics, Languages, Logic and Ethics, Chemistry and Physics, and eighteen must be taken in groups consisting of six units of each of three or nine units of each of two subjects. The remaining twenty units may be elected freely by the student, who in most cases takes additional units in his group subjects. With the adoption of these regulations came also a system of advisers, each student being assigned to a member of the faculty designated for this purpose. No course of study can be entered upon without the consent of the adviser given by signing the course card filed at the Dean's office. This system has worked admirably and has been modified in some particulars as experience and the needs of students showed to be desirable. The latest modification will take effect in 1905-06, when an adviser will be assigned to every ten Freshmen in the elective courses, the need of personal supervision diminishing as the

*A unit is one hour of lecture or recitation, or two hours of laboratory work per week for one year.

The work in the technical courses in Engineering, Chemistry, and Architecture is all prescribed.

student passes successively into the Sophomore, Junior, and Senior classes. With the sympathy and interest shown by every member of the faculty in whatever concerns the happiness and welfare of the students, it is safe to say that no college students have more done for them to minimize the dangers arising from the freedom of college life and the human tendency to sacrifice future usefulness for present ease. The modifications of courses made in 1902 enabled the student of unusual ability or industry to take more work in a year, if he desired to do so, than his less able or less industrious fellow, so that sixty units credit could be earned in three years, instead of the usual four. The successive steps in the transition from the admirable old-fashioned college course to the present have been made in recognition of the truth that the system must exist for the student and not the student for the system, that the developing of the best that is in each individual by allowing, within reasonable limits, for differences of tastes, temperaments or abilities, is essential to the accomplishment of the purposes of college education.

CHANGES IN COURSES.

Important legislation which will be found in detail in the report of the Dean of Philosophy was enacted by joint action of the Department of Philosophy and the College, ratified by the Board of Trustees. The result of this is the enrichment of the work of both departments by the inclusion of a number of courses which have heretofore been given only to students in the one or the other. The College courses which under this new arrangement have been made available for graduate students are, in every case, of an advanced nature.

With the year 1905-06, the old four-year courses known as courses in Science and Technology, will disappear from the catalogue announcements, as arranged for two years ago, no new students having been admitted to them for three years. The four-year technical courses have thus entirely superseded

the five-year courses in which a larger amount of non-technical work was included. The problem of which some years ago the five-year courses were thought to be a solution is still recognized, and is the need of general studies of great cultural value to students who are looking forward to technical pursuits. Under the elective system now in force in the Arts course, it is possible for a student to complete that course and one of the four-year technical courses and earn two degrees in six years. The integrity of each degree will be in no wise impaired by compromises or concessions to the requirements for the other. The student who desires to do so can still devote five years to his course and include in it a number of subjects not required as a part of the four-year technical course.

GYMNASIUM REGULATIONS.

A great need of the University has been met by the completion of the Gymnasium, and students in the College are required to comply with the following regulation of the Board of Trustees :

“Two periods will be required lasting one hour each, of all full students, and of partial and special students as provided by a special form ; the work to be graded and made progressive throughout the four years. Exceptional cases to be excused from this requirement when approved jointly by the Director of the Department of Physical Education and the Dean of the Department.”

CHANGES IN THE ARRANGEMENT OF THE COLLEGE YEAR.

It has been the custom to devote every year two periods of two weeks each, to examinations. As the academic year, including recesses at Thanksgiving, Christmas, and Easter is barely nine months in length, this amount of time given to term examinations has seemed disproportionately large. There has been need also of a longer recess at Easter, which

it was not possible to grant without still further decreasing the number of days actually devoted to teaching. To meet the first of these problems and incidentally to make a solution of the second possible, without loss of working days in the College, the Academic Council in June last made the following changes in the arrangement of the College year :

- 1st. In subjects extending through the year, no examinations will be held and no marks given at the middle of the year (except in Wharton School).
- 2nd. For subjects completed at the end of the first term, one week will be set apart for examinations for such subjects as require it (except in Wharton School).
- 3rd. The Easter vacation will be lengthened so as to include the whole of the week beginning Easter Monday.

PUBLIC RECOGNITION OF STUDENTS WHO HAVE WON
ACADEMIC DISTINCTIONS.

It was formerly the custom to make public announcement at the Commencement exercises of the names of students who had attained distinction in their class standings or had won prizes. The necessity of shortening the time devoted to Commencement led to the omission of all matters not directly connected with the conferring of degrees, hence for several years there has been no occasion on which the University formally and publicly recognized its students who had during the year won academic distinctions. It was felt that some plan should be devised for meeting this very just claim to recognition and for this purpose the Academic Council appointed a committee to consider the question and report. As the $\Phi B K$ and ΣE Societies award memberships to students who have made notably good records in their studies, the Committee recommended, and the Academic Council approved the recommendation, that public announcement of honors and prizes be made at the annual joint meeting of these

societies in Commencement Week. This was done in June 1905 and will be annually hereafter.

THE EVENING SCHOOL OF ACCOUNTS AND FINANCE.

During the past year there have been given a number of courses of instruction in Accounting and Finance to a very serious and mature group of men, who, by reason of their daily occupations, are not able to attend the regular College classes at the usual roster hours. It was to meet what was recognized as a genuine need that the University authorized some of its instructors to arrange courses to be given in the evenings and I append, as a matter of very general interest, a report of Dr. E. S. Meade, who was appointed Director of the Evening School of Accounts and Finance.

The report of Dr. A. H. Quinn, Director of the Summer School, is also appended, as are also statistical tables, giving information concerning total registration in the College, Admission to College, Group Elections in the course in Arts and Science, Geographical Distribution of Students in the College, Comparative Standings of Students Admitted by Examination and by Certificate from Public High Schools, Students Withdrawn, Schools and Colleges from which students came, and Scholarships.

Respectfully submitted,

JOSIAH H. PENNIMAN,

Dean.

REPORT OF THE DIRECTOR OF THE EVENING SCHOOL.

To the Dean of the College:

SIR: I submit the following report of the Evening School of Accounts and Finance for the year 1904-05.

The total enrollment in the Evening School of Accounts and Finance was:

For the first term159

For the second term139

Of the students registered for the first term 95 pursued the regular course of four evenings per week, and the remainder pursued special courses.

Of the students enrolled for the regular course 83 successfully passed the final examination.

The students of the Evening School were, for the most part, men of mature age, many of them holding responsible positions. Nearly every industrial interest in the city was represented among the students. The work done in every course was of a high order of excellence, a fact to be explained by the maturity of the students, their habits of concentration, acquired in business life, the zeal with which they approached the work and their business experience, which has made a large amount of preliminary instruction, indispensable in the Wharton School, entirely superfluous.

In spite of the fact that the students of the Evening School are all occupied during the daytime, a considerable amount of outside work was assigned and performed, in the form of writing and the preparation of reports and papers, and the solution of problems.

The method of work pursued was that of lectures and class room discussion. Stenographic notes were taken of all the lectures. These were mimeographed and distributed to the students. It was found that the efficiency of the work was in this manner greatly increased, since the students were able to give their undivided attention to the work of the class-room and receive the results of this work in complete form in their notes. Two examinations and numerous quizzes were given during the year, the final examination being more severe than that imposed upon the students in the same subjects in the Wharton School. The percentage of failures as has been already remarked, was small. The results of the work of the first year and the fact that the enrollment during the second year has almost doubled, convince me that work of this character can be made both profitable and attractive.

The entrance requirements to the Evening School are

now equivalent to those imposed upon students for admission to the course in Business Practice and Banking in the Wharton School.

The Evening School already has enrolled a large number of high school graduates, and it is expected that this number will materially increase. Those students who are not able to present high school certificates or college diplomas are, with few exceptions, men of mature years and long business experience. The average age of students in the Evening School is 28 years.

Respectfully submitted,

E. S. MEADE,
Director.

REPORT OF THE DIRECTOR OF THE SUMMER SCHOOL.

To the Dean of the College:

SIR: I am sending to you a report of the work of the Summer School for the session of 1905. It gives me great pleasure to inform you that the total registration amounted to 212 students compared with 137 last year. Of this year's students, 149 were men and 63 were women.

The geographical distribution of students this year compared with last year is as follows:

	1905	1904
Canada	1	..
Delaware.....	5	1
Florida .....	..	1
France .....	..	1
Germany .....	..	2
Illinois.....	..	1
Kentucky	1	..
Maryland	3	..
Massachusetts	1	..
Minnesota	1	..
Missouri	1	..
Nebraska.....	1	..
New Jersey	13	7
New York.....	4	2
North Carolina.....	..	1

Ohio	3	2
Pennsylvania (outside of Philadelphia).....	72	35
Philadelphia	98	80
South Carolina.....	1	..
South Dakota	1	..
Texas.....	1	1
Virginia.....	1	..
Washington, D. C.	3	2
Wisconsin	1	..
Utah .....	..	1
	<hr/>	<hr/>
	212	137

Of this year's students, 82 had previously registered in the College, 25 had been members of the teacher's courses, one student had registered in the Department of Law and 8 in the Department of Philosophy, consequently there were 96 students in the Summer School who have not attended the University in another department.

The total number of courses subscribed for was 382. Below is a comparative statement of the courses subscribed for this year and last year.

	No. of Instructors		Courses	
	1905	1904	1905	1904
Architecture	1	2	14	20
Botany	1	2	6	6
Chemistry	4	4	41	16
English	2	3	63	48
French.....	1	1	29	7
German.....	1	1	55	24
Greek	1	1	5	10
History	2	1	21	4
Latin	1	1	29	29
Mathematics	4	4	85	49
Music.....	1	0	5	
Physics	1	1	19	10
Psychology	1	1	10	4
	<hr/>	<hr/>	<hr/>	<hr/>
	21	22	382	227

During the school session an elaborate program of lectures, excursions and other entertainments was arranged.

These entertainments were greatly appreciated by the students. In this connection I wish to emphasize the services of Professor Hugh A. Clarke, who not only delivered a most interesting course of lectures himself, but also arranged for the organ recitals and secured the services of prominent musicians in Philadelphia to give these recitals. I wish also to lay stress upon Dr. McKinley's services in taking charge of the excursions.

I would mention here the importance of offering courses in Pedagogy and Physical Training for next year.

The success of the Summer School cannot be measured simply by the number of students in it. Its influence will increase materially the total enrollment of the University.

Respectfully submitted,

ARTHUR HOBSON QUINN,
Director.

TABLE I.
STUDENTS IN COLLEGE, 1904-1905.

		A., Arts and Science.	Wh., Finance and Commerce.	B., Biology.	M., Music.	Sc., Science and Technology.			Ch., Chemistry.	Ch. E., Chemical Engineering.	C. E., Civil Engineering.	M. E. and E. E., Mechanical and Electrical Engineering.	Arch., Architecture.	Totals.		
						Sc. 1, Chemistry.	Sc. 2, Civil Engineering.	Sc. 3, Mech. and Elec. Eng.								
Post-Seniors		60	23	10	....	....	1	....	6	4	19	25	8	2	Post-Seniors.	
Seniors		54	28	4	....	2	5	2	16	7	29	39	17	202	Seniors.	
Juniors		54	37	8	....	....	....	1	17	4	49	58	15	242	Juniors.	
Sophomores		76	52	8	....	....	....	....	7	11	47	79	22	302	Sophomores.	
Freshmen															Freshmen.	
Students in Special Courses.	Fourth Year.	....	....	....	4	....	....	....	....	....	....	....	....	4	Fourth Year.	
	Third Year..	1	....	9	....	....	....	....	....	....	1	....	....	11	Third Year.	
	Second Year.	....	7	11	....	....	....	....	1	....	....	....	14	33	Second Year.	
	First Year...	....	22	8	10	....	....	....	....	....	....	....	15	55	First Year.	
Partial Students		21	57	8	....	....	....	....	21	....	23	19	12	161	Partial Students.	
Totals		266	226	46	34	2	9	3	68	26	168	220	104	1172	Totals.	

Students taking Courses for Teachers. 181
 Students in the Summer School—1905 212
 Evening School of Accounts..... 159
 Total 1724

TABLE II.

SHOWING ADMISSIONS TO COLLEGE, 1904.

Average age of students entering Freshman Class in 1902, 18 years, 10 months, 4 days.	
Average age of students entering Freshman Class in 1903, 19 years, 4 months, 7 days.	
Average age of students entering Freshman Class in 1904, 18 years, 11 months, 8 days.	
Total number of applicants.....	684
Applicants admitted on examination.....	126
Applicants admitted on public high school diploma.....	217
Applicants admitted to advanced standing.....	45
Applicants admitted to special and partial courses.....	140
Applicants rejected on examination.....	9
Applications postponed and incomplete.....	25
Applications rejected and withdrawn.....	18
	— 52
Applicants taking preliminaries and receiving credits.....	88
Applicants taking preliminaries and receiving no credits.....	16
	— 104
Total.....	684

APPLICATIONS CONSIDERED BY COMMITTEE ON ADMISSION TO SPECIAL AND PARTIAL COURSES.

Applications on which the Committee took action.....	158
Total applications approved.....	140
Total applications rejected.....	15
Total applications withdrawn.....	3
	— 18
	— 158

APPLICATIONS CONSIDERED BY COMMITTEE ON ADMISSION TO ADVANCED STANDING.

Applicants who entered College.....	45
Applicants who did not enter College.....	0
	— 45

APPLICATIONS CONSIDERED BY COMMITTEE ON SCHOOLS AND ENTRANCE REQUIREMENTS.

Total number of cases acted upon.....	217
Applicants admitted on diploma without examination.....	136
Applicants admitted on diploma with examination.....	81
	— 217
Admitted from Philadelphia schools.....	104
Admitted from Pennsylvania schools.....	42
Admitted from schools in other States.....	64
Admitted on certificates from other colleges and from College Entrance Examination Board.....	7
	— 217

ADMITTED WITH CONDITIONS IN

English A.....	4	Mathematics E.....	36
English B.....	4	History A.....	5
Latin A.....	3	History B.....	7
Latin B.....	4	History C.....	4
Latin C.....	8	History D.....	6
Latin D.....	6	Greek A.....	1
Latin E.....	7	Greek B.....	1
Latin F.....	8	Greek C.....	4
Latin G.....	12	Greek D.....	5
Physics.....	17	Greek E.....	8
Mathematics A.....	23	French A.....	9
Mathematics B.....	8	French B.....	18
Mathematics C.....	17	German A.....	8
Mathematics D.....	23	German B.....	15

TABLE III.

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

	1904-1905.	
	Juniors.	Seniors.
Botany-History-Zoölogy.....	1	....
Botany-Zoölogy.....	6	1
Botany-Zoölogy-Medicine.....	....	9
Chemistry-Botany-German.....	1	....
Chemistry-English.....	2	....
Chemistry-German-Mineralogy.....	....	1
Chemistry-German-Latin.....	1	....
Chemistry-Mathematics-Physics.....	....	1
Chemistry-Mineralogy.....	....	1
Chemistry-Mineralogy-Physics.....	....	1
Chemistry-Zoölogy.....	2	....

	1904-1905.	
	Juniors.	Seniors.
Economics-English-French .....	....	I
Economics-English-German .....	....	I
Economics-English-History	2	I
Economics-German .....	....	I
Economics-History .....	....	I
Economics-History-Philosophy .....	....	I
Economics-Latin-Physics .....	....	I
Economics-Political Science .....	....	I
English-French	I	....
English-French-History .....	....	2
English-French-Mathematics .....	....	I
English-German-Greek .....	....	I
English-German-History	2	2
English-German-Latin	3	I
English-Greek-History .....	....	I
English-Greek-Latin	4	I
English-History	8	8
English-History-Latin	7	2
English-History-Philosophy	2	2
English-History-Political Science .....	....	I
English-Latin	I	....
English-Latin-Philosophy	I	....
English-Philosophy	I	I
English-Philosophy-Mathematics .....	....	I
English-Physics	I	....
French-German .....	....	I
French-German-Geology	I	....
French-German-History .....	....	I
French-German-Latin .....	....	I
French-Greek-Latin	I	....
German-History	I	2
German-History-Latin .....	....	I
German-Latin	I	I
German-Mineralogy	I	....
Greek-Latin	2	2
History-Mathematics .....	....	I
History-Philosophy	I	....
History-Zoölogy .....	....	I
Latin-Mathematics .....	....	I
Mathematics-Physics .....	....	I
Physics-Zoölogy .....	....	I
Total	54	60

TABLE IV.
GEOGRAPHICAL DISTRIBUTION OF STUDENTS IN THE COLLEGE SESSION 1904-1905,
EXCLUDING STUDENTS IN COURSES FOR TEACHERS.

Middle.	South.	West.	New England.	Foreign.
Philadelphia.....623	Alabama.....7	Arkansas.....1	Connecticut.....11	Canada.....3
Pennsylvania.....296	Florida.....3	California.....2	Maine.....3	Germany.....1
Delaware.....6	Georgia.....4	Colorado.....1	Massachusetts.....6	Japan.....3
District of Columbia 11	Kentucky.....12	Illinois.....12		Mexico.....1
Maryland.....17	North Carolina.....1	Indiana.....9		Russia.....1
New Jersey.....56	Virginia.....10	Iowa.....2		South America.....2
New York.....34	West Virginia.....1	Kansas.....1		
		Michigan.....4		
		Missouri.....2		
		Ohio.....20		
		Oregon.....1		
		North Dakota.....1		
		South Dakota.....1		
		Washington.....3		
1043	38	60	20	11
Middle States.....	Middle States.....	Middle States.....	Middle States.....	Middle States.....
Southern States.....	Southern States.....	Southern States.....	Southern States.....	Southern States.....
Western States.....	Western States.....	Western States.....	Western States.....	Western States.....
New England States.....	New England States.....	New England States.....	New England States.....	New England States.....
Foreign.....	Foreign.....	Foreign.....	Foreign.....	Foreign.....
Total.....	Total.....	Total.....	Total.....	Total.....
				1172

TABLE V.

SHOWING RELATIVE COLLEGE STANDING OF STUDENTS
IN THE COLLEGE YEAR 1904-1905, WHO WERE ADMITTED
UPON EXAMINATION *ALONE*, AND STUDENTS AD-
MITTED *WHOLLY* OR *PARTLY* UPON CERTIFICATES
FROM PUBLIC HIGH SCHOOLS.

Students Conditioned.

	Total of such Stu- dents in College.	Total who were Con- ditioned.	Number of Conditions.	Conditions per Student Con- ditioned.
Session 1904-1905.				
Regular Students by Certificates (wholly or in part)	537	321	1114	....
Regular Students by Examina- tion	340	224	1014	....
Regular Students on Advanced Standing	44	6	21	....
Specials and Partials	217	123	809	....
Total of College	34			
Music Students				
Grand Total	1172	....	....	....

TABLE VI.

STUDENTS WITHDRAWN AND DECEASED.

	Session 1904-1905.		
	Withdrawn		Deceased.
	1st Term.	2d Term.	
Seniors	1	5	1
Juniors	9	12	....
Sophomores	8	13	....
Freshmen	12	21	....
Total Regulars	30	51	1
Specials, second year .....	....	5	....
Specials, first year .....	....	3	....
Total Specials		8	....
Partials	13	29	....
Grand Total	43	88	1

TABLE VII.

SHOWING THE SOURCES FROM WHICH CAME THE STUDENTS REGISTERED IN THE COLLEGE IN 1904-1905.

Prepared by	Located at	No.
Abington Friends' School	Jenkintown, Pa.	1
Adams Academy	Quincy, Mass.	1
Alabama Polytechnic School	Auburn, Ala.	1
Allegheny College	Meadville, Pa.	2
Allegheny High School	Allegheny, Pa.	2
Altoona High School	Altoona, Pa.	3
Anniston Training School	Anniston, Ala.	1
Arequipa College	Arequipa, Peru	1
Armour Institute of Technology	Chicago, Ill.	1
Atlanta Boys' High School	Atlanta, Ga.	2
Atlantic City High School	Atlantic City, N. J.	1
		— 16
Baltimore City College	Baltimore, Md.	2
Beaver College	Beaver, Pa.	1
Bethlehem Preparatory School	Bethlehem, Pa.	3
Birdsboro High School	Birdsboro, Pa.	1
Birmingham High School	Birmingham, Ala.	2
Blair Presbyterian Academy	Blairstown, N. J.	2
Blight School	Philadelphia, Pa.	9
Bliss Electrical School	Antrim, Pa.	1
Bloomfield High School	Bloomfield, N. J.	1
Bloomsburg State Normal School	Bloomsburg, Pa.	1
Booth Preparatory School	New Haven, Conn.	1
Bordentown High School	Bordentown, N. J.	1
Bordentown Military Institute	Bordentown, N. J.	2
Bradley Institute	Peoria, Ill.	3
Bridgeport High School	Bridgeport, Conn.	1
Brown Preparatory School	Philadelphia, Pa.	17
Bulkeley School	New London, Conn.	1
Burlington High School	Burlington, N. J.	1
		— 50
Camden High School	Camden, N. J.	5
Carbon Collegiate Institute	Mauch Chunk, Pa.	1
Cartersville High School	Cartersville, Ga.	1
Cascadilla School	Ithaca, N. Y.	3
Case and Child School	Philadelphia, Pa.	1
Catholic High School	Philadelphia, Pa.	5
Cecil County High School	Elkton, Md.	1
Central High School	Philadelphia, Pa.	140
Central Manual Training School	Louisville, Ky.	2

Prepared by	Located at	No.
Central Manual Training School.....	Philadelphia, Pa.....	101
Chambersburg Academy.....	Chambersburg, Pa....	1
Cheltenham Military Academy.....	Ogontz, Pa.....	5
Cheltenham Hills School.....	Wyncote, Pa.....	3
Chester High School.....	Chester, Pa.....	14
Chestnut Hill Academy.....	Chestnut Hill, Phila..	5
Chicago Manual Training School.....	Chicago, Ill.....	1
Cincinnati Technical School.....	Cincinnati, Ohio.....	2
Classical School.....	Pasadena, Cal.....	1
Clearfield High School.....	Clearfield, Pa.....	1
Coatesville High School.....	Coatesville, Pa.....	1
Colgate University.....	Hamilton, N. Y.....	2
College of City of New York.....	New York City, N. Y.	1
College of Liberal Arts.....	Lawrence, Kansas....	1
College of St. Anne.....	d'Auray, France.....	1
Columbia High School.....	Columbia, Pa.....	4
Columbian University.....	Washington, D. C....	2
Columbus High School.....	Columbus, Ohio.....	1
Concordia College.....	Milwaukee, Wis.....	1
Conshohocken High School.....	Conshohocken, Pa....	4
Cornell University.....	Ithaca, N. Y.....	6
Corry High School.....	Corry, Pa.....	1
Cross (Mrs.) School.....	Louisville, Ky.....	1
		— 319
Danbury High School.....	Danbury, Conn.....	1
Danville High School.....	Danville, Pa.....	1
Dartmouth College.....	Hanover, N. H.....	2
DeLancey School.....	Philadelphia, Pa....	33
Delaware College.....	Newark, Del.....	1
Detroit Art Academy.....	Detroit, Mich.....	1
Detroit Central High School.....	Detroit, Mich.....	1
Dickinson College.....	Carlisle, Pa.....	4
Drexel Institute.....	Philadelphia, Pa.....	14
DuPont Mutual Training High School...	Louisville, Ky.....	2
		— 60
Eastburn Academy.....	Philadelphia, Pa.....	3
Eastern High School.....	Washington, D. C....	3
Edward Little High School.....	Auburn, Me.....	1
Emerson Institute.....	Washington, D. C....	1
Episcopal Academy.....	Philadelphia, Pa.....	37
Erasmus Hall High School.....	Brooklyn, N. Y.....	3
Erie High School.....	Erie, Pa.....	13
		— 61

Report of the Dean of the College Faculty.

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Prepared by	Located at	No.
Fargo High School.....	Fargo, N. D.....	1
Farnum Preparatory School.....	Beverly, N. J.....	2
Franklin High School.....	Franklin, Pa.....	2
Franklin and Marshall College.....	Lancaster, Pa.....	4
Friends' Academy.....	Moorestown, N. J.....	1
Friends' Central School.....	Philadelphia, Pa.....	21
Friends' Select School.....	Germantown, Pa.....	10
Friends' Select School.....	Washington, D. C.....	1
Fresno High School.....	Fresno, Cal.....	1
		— 43
George School.....	George School, Pa.....	1
Germantown Academy.....	Germantown, Phila..	38
Germany Gymnasium.....	Germany.....	1
Gettysburg College.....	Gettysburg, Pa.....	2
Gloversville High School.....	Gloversville, N. Y.....	1
Girard College.....	Philadelphia, Pa.....	2
Girls' High School.....	Philadelphia, Pa.....	17
Girls' Normal School.....	Philadelphia, Pa.....	4
Grand Rapids High School.....	Grand Rapids, Mich.	1
Gresham High School.....	Gresham, Ga.....	1
Gymnasium Plois.....	Germany.....	1
		— 69
Hackensack High School.....	Hackensack, N. J.....	1
Harrisburg High School.....	Harrisburg, Pa.....	4
Hartford High School.....	Hartford, Conn.....	1
Hartford Public Schools.....	Hartford, Conn.....	1
Hatboro High School.....	Hatboro, Pa.....	2
Haverford College.....	Haverford, Pa.....	16
Haverford College Grammar School.....	Haverford, Pa.....	18
Higher Normal School.....	Tokio, Japan.....	1
Hill School.....	Pottstown, Pa.....	1
Holbrook's (Dr.) School.....	Ossining, N. Y.....	1
Holderness School.....	Plymouth, N. H.....	1
		— 47
Illinois Western University.....	Bloomington, Ill.....	1
Indianapolis Shortridge High School.....	Indianapolis, Ind.....	2
International Correspondence Schools.....	Scranton, Pa.....	1
		— 4
Jacob Tome Institute.....	Port Deposit, Md.....	2
Japan Fourth High School.....	Tokio, Japan.....	1
Johnstown High School.....	Johnstown, Pa.....	2
Joliet Township High School.....	Joliet, Ill.....	1
Juniata College.....	Huntingdon, Pa.....	1
Juniata College Preparatory School.....	Huntingdon, Pa.....	1
		— 8

Prepared by	Located at	No.
Keystone Academy.....	Factoryville, Pa.....	I
Keystone State Normal School.....	Kutztown, Pa.....	I
Kittaning Academy.....	Kittaning, Pa.....	I
Konigliche Preussische Fachschule.....	Rensihreid, Germany	2
		— 5
Lafayette College.....	Easton, Pa.....	3
Lancaster High School.....	Lancaster, Pa.....	I
La Salle College.....	Philadelphia, Pa.....	4
Lawrenceville School.....	Lawrenceville, N. J...	2
Lebanon High School.....	Lebanon, Pa.....	I
Lehigh University.....	South Bethlehem, Pa.	14
Lewiston High School.....	Lewiston, Me.....	I
Lincoln University.....	Chester Co., Pa.....	I
Lockport High School.....	Lockport, N. Y.....	2
Locust Dale Academy.....	Locust Dale, Va.....	I
London Technical Institute.....	London, Eng.....	I
Louisville Girls' High School.....	Louisville, Ky.....	I
Louisville Normal School.....	Louisville, Ky.....	I
Louisville School for Boys.....	Louisville, Ky.....	I
Lower Merion High School.....	Ardmore, Pa.....	4
		— 38
McKinley Manual Training School.....	Washington, D. C...	2
Manheim High School.....	Manheim, Pa.....	I
Manor School.....	Stamford, Conn.....	I
Mansfield High School.....	Mansfield, Ohio.....	I
Manual Training School.....	Kansas City, Mo.....	I
Marston's University School.....	Baltimore, Md.....	I
Marion High School.....	Marion, Ind.....	I
Maryland Institute.....	Baltimore, Md.....	I
Massachusetts Institute of Technology...	Boston, Mass.....	3
Masten Park High School.....	Buffalo, N. Y.....	4
Mauch Chunk High School.....	Mauch Chunk, Pa...	I
Media High School.....	Media, Pa.....	5
Mercersburg Academy.....	Mercersburg, Pa.....	7
Millersville Normal School.....	Doylestown, Pa.....	I
Mishawaka High School.....	Mishawaka, Ind.....	2
Montague High School.....	Montague, Mass.....	I
Montclair High School.....	Montclair, N. J.....	I
Moravian College.....	Bethlehem, Pa.....	I
Mount Holly Academy.....	Mount Holly, N. J...	I
Mount Vernon High School.....	Mount Vernon, Ohio.	4
M Street High School.....	Washington, D. C...	I
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Report of the Dean of the College Faculty.

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Prepared by	Located at	No.
National Preparatory School	Mexico City, Mex....	1
Nazareth Hall	Nazareth, Pa.....	2
Newark High School.....	Newark, N. J.....	1
New Britain High School.....	New Britain, Conn...	2
Newcastle High School	Newcastle, Pa.....	2
New College	Eastbourne, England	1
New Jersey State Normal School	Trenton, N. J.....	1
New York High School.....	New York City, N. Y	1
New York State Normal College.....	New York City, N. Y.	1
New York University.....	New York City, N. Y.	1
Niagara University.....	Niagara, N. Y.....	3
Norristown High School.....	Norristown, Pa.....	12
Northampton High School	Florence, Mass.....	1
Northeast Manual Training School.....	Philadelphia, Pa.....	44
North High School.....	Columbus, Ohio.....	1
North Tonawanda High School.....	North Tonawanda, N. Y.....	1
Northwestern Military Academy.....	Highland Park, Ill ..	3
Norwich High School.....	Norwich, Conn.....	1
Ohio State University.....	Columbus, Ohio.....	79
Ontario High School.....	Ontario, Canada.....	1
Oregon Agricultural College.....	Portland, Oregon....	1
Palatine Bridge School.....	Palatine Bridge, N. J.	3
Patterson Davenport School	Louisville, Ky.....	2
Pennington Seminary.....	Pennington, N. J.....	1
Pennsylvania Academy of Fine Arts.....	Philadelphia, Pa.....	1
Pennsylvania College.....	Gettysburg, Pa.....	1
Philadelphia Institute for the Instruction of the Blind.....	Overbrook, Pa.....	2
Philadelphia College of Pharmacy.....	Philadelphia, Pa.....	3
Philadelphia School for Kindergartners..	Philadelphia, Pa.....	1
Phillips Exeter Academy.....	Exeter, N. H.....	7
Phoenixville High School.....	Phoenixville, Pa.....	3
Pine Grove High School.....	Pine Grove, Pa.....	1
Pittsburg Academy.....	Pittsburg, Pa.....	3
Pittsburg Central High School.....	Pittsburg, Pa.....	5
Portsmouth High School.....	Portsmouth, N. H....	1
Pottsville High School	Pottsville, Pa.....	2
Pratt Institute.....	Brooklyn, N. Y.....	1
Princeton University.....	Princeton, N. J.....	4
Purdue University.....	Lafayette, Ind.....	3
Paraguay Institute.....	Paraguay, S. America	2
Pekin High School.....	Pekin, Ill.....	1
		54

Prepared by	Located at	No.
Radnor High School.....	Radnor, Pa.....	4
Randolph Macon Academy.....	Danville, Va.....	I
Rayen High School.....	Youngstown, Ohio...	I
Reading Boys' High School.....	Reading, Pa.....	8
Real-Gymnasium	Russia.....	I
Ridge School.....	Washington, Conn...	I
Rochester East High School.....	Rochester, N. Y.....	I
Rugby Lower School.....	Rugby, England.....	I
St. Charles High School.....	St. Charles, Minn....	— 18
St. Cycil's College.....	Chicago, Ill.....	I
St. George's School.....	Newport, R. I.....	I
St. Joseph's College.....	Philadelphia, Pa.....	6
St. Luke's School.....	Wayne, Pa.....	I
St. Mark's School	Southboro, Mass....	I
St. Paul's School.....	Concord, N. H.....	3
Salisbury High School.....	Salisbury, Md.....	I
Scranton High School.....	Scranton, Pa.....	I
School of the Lackawanna.....	Scranton, Pa.....	I
Schools in Ireland.....	Ireland.....	I
Seattle High School.....	Seattle, Wash.....	I
Sewickley High School.....	Sewickley, Pa.....	I
Shady Side Academy.....	Pittsburg, Pa.....	3
Shamokin High School.....	Shamokin, Pa.....	3
Sheffield Scientific School.....	New Haven, Conn...	I
Sioux Falls High School.....	Sioux Falls, S. D....	I
South Manchester High School.....	South Manchester, Conn.....	I
Spokane High School.....	Spokane, Wash.....	I
Springfield High School.....	Springfield, Ohio...	I
State College.....	State College, Pa...	I
Stiles Preparatory School.....	Philadelphia, Pa.....	I
Swarthmore College.....	Swarthmore, Pa.....	I
Syracuse High School and University...	Syracuse, N. Y.....	I
Tacoma High School.....	Tacoma, Wash.....	— 35
Technical Institute.....	Friedberg, Germany.	I
Temple College	Philadelphia, Pa.....	4
Thiel College.....	Greenville, Pa.....	I
Tokio University.....	Tokio, Japan.....	I
Toledo High School.....	Toledo, Ohio.....	3
Trenton High School...	Trenton, N. J.....	3
Trinity School.....	Trinity, N. Y.....	I
Troy High School.....	Troy, N. Y.....	I
		— 16

Report of the Dean of the College Faculty.

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Prepared by	Located at	No.
University of Illinois.....	Chicago, Ill.....	1
University of Notre Dame.....	Notre Dame, Ind....	3
University of Pennsylvania.....	Philadelphia, Pa.....	6
University of Rochester.....	Rochester, N. Y.....	1
University Military School.....	Mobile, Ala.....	3
University Preparatory School.....	Ithaca, N. Y.....	2
University School for Boys.....	Baltimore, Md.....	1
Ursinus Academy.....	Collegeville, Pa.....	1
Ursinus College.....	Collegeville, Pa.....	2
Ursinus Preparatory School.....	Collegeville, Pa.....	1
		— 21
Villa Nova College.....	Villa Nova, Pa.....	2
Virginia Mechanical Institute.....	Blacksburg, Va.....	1
		— 3
Walden High School.....	Ellenville, N. Y.....	1
Walnut Hills High School.....	Cincinnati, Ohio.....	1
Warren High School.....	Warren, Pa.....	2
Washington and Jefferson College.....	Washington, Pa.....	1
Washington High School.....	Washington, D. C....	1
Wesley College.....	Winnepeg, Manitoba, Canada.....	1
Wesleyan University.....	Middletown, Conn...	2
West Chester High School.....	West Chester, Pa....	12
West Chester Normal School.....	West Chester, Pa....	4
West Des Moines High School.....	Des Moines, Iowa....	1
Western University of Penn'a.....	Pittsburg, Pa.....	1
West Jersey Academy.....	Bridgeton, N. J.....	2
Westtown Boarding School.....	Westtown, Pa.....	2
Wilkes-Barre High School.....	Wilkes-Barre, Pa....	3
William Penn Charter School.....	Philadelphia, Pa.....	104
Williamsport High School.....	Williamsport, Pa....	1
Wilkinsburg High School.....	Wilkinsburg, Pa.....	1
Williston Seminary.....	Easthampton, Mass..	1
Wilmington High School.....	Wilmington, Del....	2
Wilmington Military Academy.....	Wilmington, Del....	1
Wilson's Preparatory School.....	New York City, N. Y.	1
Winthrop School.....	Philadelphia.....	5
Wittenberg Academy.....	Springfield, Ohio....	1
Woman's College.....	Baltimore, Md.....	1
Woodberry Forest School.....	Orange, Va.....	2
Woodbridge School.....	Woodbridge, N. Y....	1
Woodward High School.....	Cincinnati, Ohio.....	1
Woolsey School.....	Pittsburg, Pa.....	1

University of Pennsylvania.

Prepared by	Located at	No.
Worcester Academy.....	Worcester, Mass.....	2
Worcester High School.....	Worcester, Mass.....	1
Wyoming Seminary.....	Kingston, Pa.....	1
		— 161
Yale University.....	New Haven, Conn...	1
Yeates School.....	Lancaster, Pa.....	2
York Collegiate Institute.....	York, Pa.....	4
York County Academy.....	York, Pa.....	1
York High School.....	York, Pa.....	5
		— 13
Privately prepared.....		32
		—
Total.....		1172

SUMMARY.

	Number of Institutions.	Number of Students.
Colleges and Universities.....	55	116
High and Other Public Schools :		
Pennsylvania	50	462
New York	9	15
New Jersey	11	17
Delaware	1	2
Maryland	2	2
Ohio	3	3
Western States.....	23	29
New England States.....	14	15
Southern States	12	19
	— 125	— 564
Private Preparatory Schools :		
Pennsylvania	36	345
New York	6	9
New Jersey	8	13
Delaware	1	1
Maryland	3	5
Ohio	1	1
Western States.....	2	4
New England States.....	11	20
Southern States	9	13
	— 77	— 411
Foreign Schools, Institutions, etc.....	13	14
American Technical Schools and Institutes.....	18	35
	288	1140
Privately Prepared.....		32
Total.....		1172

University of Pennsylvania.

TABLE VIII.
SCHOLARSHIPS.

	Arts.	Finance and Commerce.	Science.	Mechanical Engineering.	Civil Engineering.	Chemistry.	Biology.	Architecture.	Chemical Engineering.	Music.	Grand Total.
<i>Full Faculty Scholarships.</i>											
Post Senior.....								1			1
Seniors.....	9		1	2	1	1	1	1			17
Juniors.....	10			5	5	4	2		2		28
Sophomores.....	4			4	6	1		2	3		20
Freshmen.....	11			10	9			2	1		33
Partials.....								1			1
Total.....											100
<i>Partial Faculty Scholarships</i>											
Senior.....				1				1			2
Junior.....	1										1
Sophomore.....					1						1
Freshman.....					1						1
Total.....											5
<i>Muhr Scholarship.</i>											
Senior.....	1										1
Freshman.....					1		1				2
Total.....											3
<i>Penn Scholarship.</i>											
Partial.....					1						1
Total.....											1
<i>Free City Scholarships.</i>											
Seniors.....	2	1		1			2				6
Juniors.....	1	1		3	1						6
Sophomores.....	2			3	4		1	1	2		13
Freshmen.....				2	2			1	1	1	7
Second-year special.....								2	3		5
Partials.....					1						1
Total.....											38
<i>Pay City Scholarships.</i>											
Seniors.....	1			3	2	1	7				14
Juniors.....	3			2	1						6
Sophomores.....				2	5	1	1			1	10
Freshmen.....	2			3	1	2	1	1			10
First-year special.....											
Total.....											40
Totals.....	47	2	1	41	42	10	16	13	13	2	187

APPENDIX III.

REPORT OF THE DEAN OF THE FACULTY OF PHILOSOPHY.

To The Provost of The University ;

SIR : I have the honor of submitting herewith a report upon the work of the Department of Philosophy during the academic year 1904-1905.

COMMITTEES.

The following members of the Faculty served during the year upon the Executive Committee :

Edgar F. Smith, Vice-Provost, *ex officio*,
Felix E. Schelling,
Amos P. Brown,
Charles L. Doolittle,
Edwin G. Conklin,
John C. Rolfe,
C. G. Child, Dean, *ex officio*.

THE FACULTY.

For promotions of members of the Faculty and Lecturers, I beg to refer to the report of the Dean of the College.

The following appointments were authorized by the Executive Committee :

Arthur C. Howland, Ph. D., Assistant Professor of Medieval History.

Roland G. Kent, A. M., Ph. D., Lecturer in Greek.

Mr. E. S. Corwin, Harrison Fellow in American History, was authorized to take the work of Assistant Professor Ames during his illness.

Dr. C. J. Mendelsohn, Harrison Fellow for Research in Classical Languages, and Dr. J. F. Willard, Harrison Fellow for Research in European History, were authorized to give instruction in accordance with the terms of their Fellowships. Dr. L. I. Neikirk, Harrison Fellow for Research in Mathematics, was authorized to give not only graduate instruction but also, by virtue of a precedent recently initiated, a certain amount of undergraduate instruction, the total number of hours in both Departments not to exceed the stated number permitted by the regulations.

At the opening meeting of the Department for the present year, held September 30, 1905, the record of the Department in scientific investigation for the past year was briefly reviewed. This review appeared, by courtesy of the Editor, in the *Alumni Register*, Vol. X. pp. 51-63. Reference is made to it here as dealing with the year covered by this Report. It affords gratifying evidence of the continued activity of the members of the Department, both Faculty and students, in the field of productive scholarship.

FELLOWSHIPS AND SCHOLARSHIPS.

Herman Ranke, Ph. D., Harrison Fellow for Research in Assyriology, completed during the year a volume of inscriptions to be known as "Tablets Dated in the Reign of the Rulers of the First Dynasty of Babylon." The volume will include copies of the tablets, an index of the names which appear in them, and an introduction in which is given a translation of a number of tablets in illustration of their character. Among other important results he has determined that Shamshi-Adad, an Assyrian king familiar from the early record but whose date had not been fixed, was a contemporary of Hammurabi. This work and the volume on "Early Babylonian Names"

published during the summer of 1904, of which Professor Newbold gave an account in his Report for the year 1903-1904 are the chief results of Dr. Ranke's incumbency of the Fellowship. He resigned it on December 31, 1904, to become Assistant Curator of the Egyptian Section of the Museum, but continued to give instruction in Assyrian and Egyptian until his resignation of this Curatorship to become Assistant Curator of the Egyptian Section of the Royal Museum at Berlin.

On January 1, 1905, Dr. Ranke was succeeded in the Harrison Fellowship for Research in Assyriology, under special terms of appointment, by Mr. Arno Poebel, a student for nine semesters in Indo-Germanic and Semitic languages in the Universities of Heidelberg, Marburg, Jena, and Zürich. Mr. Poebel has been engaged since his appointment in a study of the literature connected with the special work he is to pursue in connection with the tablets in the possession of the University, in transcribing and translating neo-Babylonian tablets dated in the reign of King Nabunaid, and in working on older Babylonian tablets, dated for the most part in the period of the first dynasty of Babylon and written, with one exception, in Sumerian.

James Field Willard, Ph. D., Harrison Fellow for Research in European History, was engaged throughout the year in investigating the subject of direct taxation during the period of the beginnings of Parliament, or, more precisely, from the reign of Edward I to and including the reign of Edward III. During the vacation of 1904, Dr. Willard pursued his investigations in England, and, by your permission, remained abroad until December examining the manuscript records of taxes in the Public Record Office and conducting research work in the British Museum. Dr. Willard's study is designed to cover the history of direct taxes of a national character, that is those laid immediately upon land or other property in the possession of all individuals and classes at one time, and not upon classes except when each and every member of a class was taxed. This, it will be seen, excludes customs and taxes upon a part

of the people or upon part of a class. Dr. Willard is also paying especial attention to the limits of the control of Parliament upon such taxes. After his return Dr. Willard continued his investigation, making use of the printed material available in this country.

Charles Jastrow Mendelsohn, Ph. D., Harrison Fellow for Research in Classical Languages, continued during the year the investigation into Plautus's use of word-play which he began in his doctoral dissertation. In his dissertation he considered word-plays on proper names. In his present study he has examined the use of words in double meanings. His memoir is practically ready for publication. It consists, primarily, of a collection of the occurrences of such word-plays and, secondly, of their classification into various divisions and subdivisions. In this classification that of Wartle is used in his "*Das Wortspiel bei Shakspeare*," with modifications, however, when they seemed advisable. Instances of words used in a double meaning are divided, by this classification, into two broad classes. Class I includes those cases in which the double meaning exists in the words of the speaker and does not require a remark of another character in the play to bring it out. Class II comprises those instances in which the double meaning is brought out by the dialogue, — i. e. more than one person takes part in the word-play. These two broad divisions are then sub-divided in as nearly similar a manner as was possible. The memoir will also include, as in the dissertation on the "*Name-Play*," a consideration of Plautus's preference for characters of one kind over others in allotting his word-plays. Statistics here, as in the case of the name-play, prove clearly that Plautus's favorite mouth-piece for a word-play is a slave, and that he hesitates to put a word-play into the mouth of a woman character, no matter what her station in life.

Roy Dykes Hall, Ph. D., Harrison Fellow for Research in Chemistry, continued, during the past year his study of the derivatives of columbium. The rich supply of material at his

command enabled him to solve certain unsettled points in regard to this element, namely :

1. He has shown that the element neptunium, announced in 1876 by Hermann, does not exist.
2. He has demonstrated that the reaction of titanium with hydrogen-peroxide, regarded as trustworthy for the detection of titanium in the presence of columbium, cannot be relied upon, because columbium itself—or something which it contains—gives a color upon the addition of hydrogen-peroxide very like that imparted to titanium salts by the same reagent.
3. He has shown that peroxyfluocolumbates may be easily prepared, and that they are yellow-colored objects, and not colorless, as had been observed by certain Italian chemists.
4. He has made a careful study of a long series of organic bases upon columbium derivatives, and obtained results which have since led to studies in entirely new directions with columbium. The outcome of these will be awaited with interest.

Lewis Irving Neikirk, Ph. D., Harrison Fellow for Research in Mathematics, continued during the year his researches in the Theory of Groups. The results of six months of work with regard to groups of order p^6 were anticipated by the publication in France by Potiou of a work on this subject. Dr Neikirk then began the determination of all types of abstract groups of order p whose generational operations correspond to the partition $(m-r, r)$. This is not yet completed. A memoir based upon his thesis, upon "Groups of order p^{m-3} ," part of which appeared in the *Transactions of the American Mathematical Society*, July, 1905, will shortly be published in full in the *Publications of the University*.

Everett Franklin Phillips, Ph. D., Fellow for Research in Zoology, continued his investigation of variation and correlation in the honey-bee (*Apis mellifera*, L.). This investi-

gation was begun in co operation with Dr. D. B. Casteel during the summer of 1903, and a brief statement of results was published in the *Biological Bulletin*, Vol. VI. pp. 18-37. As many new questions had been suggested, the work was again taken up during the summer of 1904, and was continued throughout the following year. The results are now practically ready for publication. The questions considered were: (1) Influence of the size of the cells on variation; (2) Comparative variability of sexes as influenced by parthenogenesis; (3) Variation in color; (4) Correlations in different planes of symmetry; (5) Correlation of adjacent veins; (6) Significance of correlation; (7) Abnormalities of venation. The standard methods of statistical work were used in all cases and the results expressed in mathematical terms. Dr. Phillips also acted during the year as Assistant to Professor Conklin in his course in Histology and Embryology. He was reappointed for 1905-1906, but resigned toward the close of the year to accept the responsible position of Expert in Agriculture in the Bureau of Agriculture at Washington.

Frank Julian Warne, Ph. D., University Fellow for Research in Economics, was engaged during the year upon a volume entitled "The Coal Mine Workers," a study of labor organization and a companion volume to his study on immigration, "The Slav Invasion and the Mine Workers," already published. The present volume has just been issued [1905] by Messrs. Longmans, Greene, and Company. During the year, Dr. Warne published the following articles:

"Some Industrial Effects of Slav Immigration," *Charities*, December 3, 1904.

"Railway Distribution of Immigrants," *Railway World*, December 10, 1904.

"The Miners' Union: Its Business Management," *Annals of the American Academy of Political and Social Science*, January, 1905.

"Labor Conditions in the Anthracite Region" (three articles), *Public Ledger* (Philadelphia), August 10, 11, 12, 1905.

John Louis Haney, Ph. D., University Fellow for Research in English, made during the year extensive additions to his stores of material for a new edition of his "Bibliography of Coleridge," in pursuit of which he has conducted correspondence with collectors and students of Coleridge in this country and abroad. The results of a study of the literary history of the University of Oxford were presented in a lecture entitled "The Literary Associations of Oxford University," delivered at the Central High School, April 7, 1905, and elsewhere. Dr. Haney also began a variorum edition of Coleridge's "Christabel," which he will continue so soon as he obtains access to certain rare editions which he has not been able to find in this country.

Isaac Husik, Ph. D., University Fellow for Research in Philosophy, continued his studies in the logic of Aristotle. In this connection he has written a paper, which awaits publication, entitled "Aristotle on the Law of Contradiction," in which he argues for an empirical interpretation of the Law of Contradiction, and discusses the meaning of a passage in the Posterior Analytics of Aristotle which Waitz and other writers on the subject (which the exception of Maier) misunderstood. In addition, Dr. Husik undertook, at the suggestion of Professor Newbold, a study of the history of Medieval Philosophy, with the object of sometime giving a course in the subject, which is one neglected in American institutions. It may also be mentioned that Dr. Husik's thesis on Messer Leon's Commentary, re-written and somewhat enlarged since presentation for the Doctorate in 1903, is printing with Brill in Leyden, and will appear about December. The section of the work dealing with the sources of Messer Leon's commentary, particularly the portion treating Messer Leon's indebtedness to Walter Burleigh, has been entirely re-written on the basis of an examination of Burleigh's "Super Veterem Expositio," a copy of which was loaned Dr. Husik by the kindness of Yale University.

Three University Fellowships for Research without stipend were created by the Board of Trustees and awarded to

candidates in Economics, English and Philosophy. The reports of the candidates appear in substance above.

A special University Fellowship in History for 1904-1905 in the sum of \$225.00 endowed by private and anonymous gift, was awarded by the Board of Trustees to Miss Elizabeth Girdler Evans of Dayton, Ohio.

In his report for the year 1903-1904, Professor Newbold, Dean of this Department, referred to the modifications of the regulations governing the award of Fellowships and Scholarships on the George Leib Harrison Foundation which were submitted to the Board of Trustees on November 3, 1903, and then approved. The Harrison "Senior" Fellowships had, until the modifications went into effect, been restricted to candidates holding the Doctorate of this University, and the Harrison Scholarships to its baccalaureates. These restrictions were removed. Further, the Harrison Fellowships, fourteen in number, created in 1896, which had been permanently assigned to given subjects, were made Fellowships at Large, assignable to any subject, similar to the five Fellowships at Large created in 1897. The purpose of these modifications, as Professor Newbold notes, was to make the competition on which awards are based more free, both by enabling a larger number of candidates to apply and by removing a limitation as a result of which, in the case of a majority of Fellowships, the merits of candidates were compared only with the merits of other candidates in a particular subject.

These modifications have been justified by their results. The responsibility of the Executive Committee in making its recommendations of candidates and its difficulty in performing its task promptly and equitably have been both increased and diminished, but in both cases in ways productive of good. They have been increased because of the increase in the number of candidates and the necessity of comparing the merits of candidates in different subjects. This leads to a still closer scrutiny of candidates and may lead to a demand for

fuller and more explicit evidence in regard to their claims. In the light of the statement which is in preparation of the scholarly records of Fellowships and Scholarships in the past, there can be no doubt of their high average quality. Increased scope of selection, however, and the increased pressure upon the several Departments to encourage the application of candidates able to emerge successfully from this more severe competition conduces directly to a still higher average. On the other hand the task of the Committee has been lightened because of the increased promptness with which awards may be made. If Departments have a prescriptive right to Fellowships, recommendations of candidates to the Committee may be deferred or delayed at pleasure, even to a point where the Committee may have to take a less deliberate and formal action than is consistent with their duty of controlling the decisions of the Group Committees. It need hardly be added, also, that promptness in making awards exacts promptness from applying candidates and is due in justice to candidates who have filed their applications at the date set by the regulations. Finally also the removal of the restriction rendering graduates of this University alone eligible, one incidental to the experimental stage of the history of the Foundation, tends to bring the system of awards more truly into accord with the generous spirit that animated its endowment.

In brief, I express the unanimous opinion of the Executive Committee that, in the light of present experience at least, the value of the modifications in question has been amply demonstrated.

STUDENTS.

Degrees were conferred upon forty-one students, fifteen receiving the degree of M. A., twenty-six that of Ph. D. A table showing the number of degrees, conferred in the past years will be found appended to this Report, and also a list of the candidates who received degrees, their present occupa-

tion, and the titles of the theses submitted by those who attained the doctorate. Attention may properly be directed to the number of graduates who received appointments to responsible academic positions.

Absence on leave has hitherto been granted only to those students who had completed an acceptable number of courses for the Doctorate or who were pursuing their work temporarily at another university. On November 4, 1904, it was enacted by the Executive Committee that leave of absence for a term or part of a term should be granted to a student submitting adequate reasons for his proposed absence and affirming his intention to resume work the following term. This action was approved by the Faculty at its stated meeting. The reasons submitted were convenience of record, retention of a hold upon students, to ensure their completion of their work, and partial correction of the statement of registration in the catalogue, which, though not representing the total for the year, is incorrectly quoted as representing it. No misrepresentation is involved; if students are prevented from returning their names are dropped in the Fasciculus and the number more than offset by additional matriculations at the mid-year. Of nine this year, two failed to return, a number substantially offset by fourteen matriculations at mid-year.

At its stated yearly meeting, the Faculty, acting in an advisory capacity, submitted to the Board of Trustees a resolution for the regulation of fees paid by students in other departments taking work in this Department, to the effect that such students, while paying full fees in their own Departments shall be allowed to take four courses (not yearly, but during their attendance) to be credited towards degrees without payment of tuition. This resolution was intended primarily to restrict the number of credited courses taken by undergraduates needing but few units to attain their baccalaureate degrees, but was framed to include students in the professional schools as well. In the latter relation it is not designed to encourage professional students in general to

pursue two courses simultaneously towards two degrees. This is wholly within the control of the Deans of the several Departments, as a student must obtain permission of his Dean to pursue work in another Department. It is designed only to encourage the exceptional student, who will unhesitatingly be given such permission, to profit to the full by the opportunities which the University affords, and to continue his relation with it as a student after taking his professional degree. By this arrangement a candidate for the Master's degree will have eight hours, and a candidate for the Doctorate will have twenty hours, to complete after leaving the professional school, if he take advantage only of the credits allowed him free.

The resolution in question was approved and enacted by the Board of Trustees at its meeting in October, 1905.

INSTRUCTION.

At its meeting in March, the Board of Trustees approved by resolution the creation of a group of courses open to the combined attendance of graduates and undergraduates for credit toward degrees in their respective Departments. The recommendation of this action by the Faculty at a special meeting held January 16, 1905, followed upon its approval by the Academic Council of the College and by the Executive Committee after its consideration by a joint conference of representative committees.

The courses in question form a group intermediate in character between those exclusively undergraduate and those exclusively graduate. They may include courses primarily undergraduate but of a grade which enables them to be credited as graduate courses, and courses primarily graduate, which qualified undergraduates may pursue to advantage.

The more important considerations which led to the creation of this group are as follows :

1. Duplication of courses in certain subjects is obviated. The proposed system permits simplification of the roster,

tends to conserve the energy of the teaching force, and renders possible its more effective distribution—is in brief, highly advantageous economically.

2. The arrangement of suitable courses for individual students is facilitated.

3. Progression from the B. A. to the M. A. degree is rendered more direct and logical.

4. Courses of this character had already been specially licensed in Biology and Psychology, and exceptionally authorized in special cases by the Executive Committee.

5. The admission of courses to this special status can be readily safeguarded.

6. The system has long been in use at other institutions, for example at Harvard, Yale, Columbia, Cornell, and Johns Hopkins.

In making its recommendation to the Board of Trustees, the Faculty of Philosophy called special attention to the fact that, as the courses in this Department are open to women as well as to men, the admission of women students to these courses was implied in the resolution. Their admission was, however, justified, as the non-coeducational character of the college would in no way be affected (Yale and Columbia may be cited in illustration), the courses would be of advanced character only, attended by a comparatively limited number of students, and our own experience of such courses, where exceptionally permitted, has confirmed that of other institutions where they exist, that, as regards this particular, no reason for objection offers itself.

The number of courses thrown open to the combined attendance of undergraduates and graduates will probably for some years remain relatively small, but in time some such systematic use of them will be made as is made elsewhere. It is certainly desirable that, where a subject permits it, an unbroken gradation should exist between courses primarily undergraduate and those primarily graduate: the line between the two has been too sharply drawn.

STATISTICS.

The statistical tables appended below call for brief comment. The facts concerning the registration for the year may be summarized as follows. The number of auditors, 16, was the same as for the previous year, and the number of students absent on leave, 19, was also the same. The number of regular students in residence, exclusive of Fellows for Research, namely 202 as against 179, shows an increase of 12.8%. The total number registered, 227 as against 207, shows an increase of 9.6%. The percentage of women students in regular standing was 15.1% as against 16.4% the previous year, and the total number of women students 19.8% as against 19.8% the previous year.

I. REGISTRATION.

NEW STUDENTS.

	Research Fellows.	Students holding a Baccalaureate Degree.	Auditors.	Total.
1904-05.....	1	87	13	101
1903-04.....	7	84	12	97
1902-03.....	2	78	10	90
1901-02.....	1	86	4	91
1900-01.....	1	55	8	64

OLD STUDENTS.

1904-05.....	8	115	3	99
1903-04.....	11	95	4	110
1902-03.....	9	99	6	114
1901-02.....	8	78	14	100
1900-01.....	8	87	17	112

TOTALS.

1904-05.....	9	202	16	227
1903-04.....	12	179	16	207
1902-03.....	11	177	16	204
1901-02.....	9	164	18	191
1900-01.....	9	142	25	176

The following table shows the number of women in the Department for the last ten academic years :

	1895-96	1896-97	1897-98	1898-99	1899-00	1900-01	1901-02	1902-03	1903-04	1904-05
Fellows and other students holding a degree.	13	13	18	21	32	27	31	37	34	36
Auditors.....	17	14	18	11	12	9	4	6	7	9
	—	—	—	—	—	—	—	—	—	—
Percentage of regular women students by years as above :	30	27	36	32	44	36	35	43	41	45
Percentage of total number of women to total number of students :	12	12	14	16	23	18	18	20.9	19	15.1
Percentage of Women Auditors to total number of Auditors :	18	15	22.5	20	25	20	18.5	21	19.8	19.8
	28	17.5	30	46	33	36	22	37.5	43.1	56.3

II. INSTITUTIONS REPRESENTED.

	A. B.	B. S.	Other Bacca- laureate Degrees.	Master's Degrees.	Ph. D.	Theo- logical Degrees.
Allegheny College	2	.....	.....	.....	.....	.....
Brown	2	.....	I	.....	.....	.....
Bryn Athyn	I	.....	.....	.....	.....	.....
Bucknell	4	.....	I	2	.....	.....
Calvin College.....	I	.....	.....	.....	.....	.....
Carlton .....	.....	I	.....	.....	.....	.....
Central University of Ken- tucky	I	.....	.....	.....	.....	.....
Chicago	I	.....	.....	.....	.....	.....
Colgate	I	.....	.....	I	.....	.....
College of City of New York	2	.....	.....	.....	.....	.....
Colorado .....	.....	I	.....	I	.....	.....
Columbia	3	.....	.....	I	.....	.....
Columbia University...	I	I	.....	I	.....	.....
Cornell.....	2	I in Math.	.....	.....	.....	.....
Crozer Theological Semi- nary .....	.....	.....	.....	.....	.....	I
Dartmouth .....	.....	.....	I	I	.....	.....
Dickinson	8	.....	.....	I	.....	.....
Drury	I	.....	.....	.....	.....	.....
Earlham .....	.....	.....	2	.....	.....	.....
Elmira College	I	.....	.....	.....	.....	.....
Franklin and Marshall ..	I	.....	I	.....	.....	.....

II.—INSTITUTIONS REPRESENTED.—*Continued.*

	A. B.	B. S.	Other Bacca- laureate Degrees.	Master's Degrees.	Ph. D.	Theo- logical Degrees.
General Theological Seminary						I
Harvard	3			3	I	
Haverford	4	2		2		
Heidelberg	I			I		
Illinois	I					
Indiana	3			2		
Johns Hopkins	2				I	
Juniata	I					
Karls Gymnasium	Grad.					
Lafayette	2		2			
Lebanon Valley	I	I				
Lehigh		I				
Lycée de Montbeliard ..	Grad.					
Marietta	I					
Michigan			I			
Moscow Imperial School ..	Grad.					
Muhlenberg	I					
Nashville	I	I		I		
Nebraska		I			I	
New York University	I		I	I		
Northwestern		2	I	2		
Oberlin	3			I		2
Pennsylvania	21	46	2	20	9	
Pennsylvania College	I					
Plon Gymnasium	Grad.					
Princeton	5			2		
Protestant Episcopal Seminary						I
Radcliffe	I					
Reale Gymnasium, Switzerland	Grad.					
Rutgers		2		I		
St. Andrew's, Scotland ..	Grad.	I in Agri.				
Swarthmore	6		4	3		
Temple College	7					
Texas		I		I		
Tokyo University	Grad.					
Toronto	I					
Ursinus	5					
Vassar	3					
Virginia	I			I		
Washington College	I			I		
Washington and Lee	I					
Washington State Uni- versity	I					
Washington University				I		
Wellesley	4					

II.—INSTITUTIONS REPRESENTED.—*Continued.*

	A. B.	B. S.	Other Bacca- laureate Degrees.	Master's Degrees.	Ph. D.	Theo- logical Degrees.
Wells	I					
Wesleyan		I				
Wilson	I					
Wisconsin		I	3	3		
Woman's College of Baltimore	I					
Yale	3			I		
Total number of degrees.....						277
Graduates of Foreign Institutions.....						7
Repeated						284
						73
Auditors						211
						16
						227

III. ELECTIONS OF REGULAR STUDENTS.

	1895-96		1896-97		1897-98		1898-99		1899-00		1900-01		1901-02		1902-03		1903-04		1904-05	
	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.
Assyrian.....	4	3	4	1	8	1	1	1	.....	2	3	2	5	3	3	3	3	3	4	3
Hebrew.....	2	7	3	6	2	6	2	2	4	.....	5	7	6	5	7	4	7	3	6	3
Arabic and Syriac.....	.....	2	.....	2	.....	1	1	2	.....	1	.....	2	.....	2	.....	5	1	5	1	7
Sanskrit.....	.....	3	.....	3	1	4	1	5	1	5	2	4	2	3	1	2	2	1	2	2
Greek.....	1	7	2	7	4	6	5	6	5	5	4	11	8	7	2	9	4	10	5	18
Latin.....	2	2	3	2	3	4	7	4	5	6	5	8	3	12	6	7	6	4	12	16
Germanics.....	1	2	1	2	.....	1	5	6	8	6	11	8	10	14	10	13	11	8	15	10
Romanics.....	2	3	2	4	.....	6	3	9	2	8	4	9	4	10	8	13	5	8	4	7
English Literature.....	5	7	4	10	7	11	13	5	14	3	17	6	18	3	22	5	19	6	31	6
English Philology.....	1	7	.....	6	.....	7	1	11	1	10	.....	15	3	15	.....	22	.....	15	1	18
Philosophy.....	14	29	9	26	8	15	4	14	5	8	7	13	14	15	19	22	12	18	10	12
Ethics.....	3	8	4	9	1	5	.....	4	.....	4	.....	4	.....	8	.....	8	.....	9	.....	3
Psychology.....	7	8	2	10	3	8	6	2	4	4	3	8	5	12	4	18	10	18	6	20
Pedagogy.....	11	15	11	7	4	8	8	9	8	2	7	5	12	5	16	6	13	10	21	11
American History.....	8	6	4	11	6	6	9	9	7	8	5	13	5	12	3	13	4	10	9	12
American Constitutional History.....	1	2	2	3	1	3	1	1	1	1	.....	1	.....	1	.....	2	.....	1	.....	2
European History.....	5	12	6	8	4	13	6	14	4	8	6	10	8	7	10	8	9	4	8	7
Economics and Statistics.....	4	28	6	16	5	12	7	8	5	8	9	12	6	10	4	11	14	5	18	13
Political Science.....	6	9	4	7	2	4	1	4	2	5	4	5	5	6	4	10	4	7	7	13
Sociology.....	.....	4	.....	1	.....	3	4	7	5	5	8	6	7	7	4	5	4	4	4	9
Mathematics.....	4	2	4	2	3	8	6	7	6	8	9	10	6	5	5	8	7	7	4	11
Astronomy.....	.....	1	.....	4	3	.....	4	1	3	4	6	4	1	3	1	3	1	4	4	2
Physics.....	.....	6	1	3	2	6	2	2	2	1	4	7	4	5	5	4	9	4	11	6
Chemistry.....	12	2	13	3	18	19	12	18	15	22	12	20	20	28	22	35	19	25	15	15
Geology.....	.....	10	.....	11	.....	10	.....	5	1	3	2	4	1	.....	2	2	1	.....	3	4
Mineralogy.....	1	7	1	7	1	7	.....	5	1	3	1	4	1	5	2	4	2	6	3	8
Botany.....	1	2	2	1	1	4	3	5	3	5	3	8	4	8	4	8	3	4	3	5
Zoölogy.....	3	4	3	3	6	5	9	7	8	5	8	9	7	4	6	4	6	2	8	5
Anthropology.....	.....	.....	.....	8	.....	8	.....	70	.....	94	.....	68	.....	113	.....	92	.....	153	.....	1
Minors not yet elected.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	134
Totals.....	98	194	91	182	94	188	120	240	122	244	142	284	164	328	173	346	177	354	215	381

IV. DEGREES CONFERRED SINCE OPENING OF DEPARTMENT.

Year	PH.D.			M.A.			M.S.			Total
	Men	Women	Total	Men	Women	Total	Men	Women	Total	
1889	1	.....	1	.....	.....	.....	.....	.....	.....	1
1890	1	.....	1	.....	.....	.....	.....	.....	.....	1
1891	7	.....	7	1	.....	1	.....	.....	.....	8
1892	4	1	5	.....	.....	.....	.....	.....	.....	5
1893	13	.....	13	2	2	4	.....	.....	.....	13
1894	9	3	12	3	2	5	.....	.....	.....	17
1895	14	2	16	1	1	2	1	.....	1	19
1896	16	2	18	6	4	10	1	.....	1	29
1897	21	3	24	2	.....	2	.....	.....	.....	26
1898	21	3	24	1	2	3	2	.....	2	29
1899	17	3	20	4	.....	4	1	.....	1	25
1900	14	1	15	8	3	11	1	.....	.....	26
1901	19	6	25	.....	3	3	.....	.....	.....	28
1902	13	1	14	6	2	8	.....	.....	.....	22
1903	27	2	29	9	3	12	.....	.....	1	42
1904	15	3	18	5	5	10	1	.....	1	29
1905	24	2	26	11	4	15	.....	.....	.....	41

Attention may be directed to the percentage of graduates of other institutions enrolled in the Department, which remains notably large, namely 70.5%. This, however, may lead to the inquiry whether our own graduates are properly represented. What relation the number of our graduates bears to the total number undertaking graduate work here and elsewhere it is difficult to ascertain precisely, but it seems clear that practically all who undertake graduate work elsewhere do so in conjunction with theological courses, or because they hold academic positions or are on leave of absence; the number is in any case inconsiderable. But is the number

who do undertake work what it should be? On examining the registration of the graduate schools of seven leading institutions, the percentage of their own graduates taking graduate work, excluding those who take a second baccalaureate degree in addition to that of a minor institution, proves to be respectively 14, 19.7, 19.8, 33.5, 46.5, 50, 52.1%, as against 29.5% with us. That the percentages of four institutions exceed ours may not be so significant as it might seem. It may be due to the fact that the University offers no course in Divinity (the students in which would pursue courses in this Department in conjunction with their theological work), to different regulations as regards leave of absence or study *in absentia*, or to other reasons. Without attempting to analyze these in the percentages, which would be difficult or perhaps impossible, it may however be asked whether the members of the Faculty do all they might to urge the claims of graduate study upon capable students. Special effort on the part of one Department last year certainly produced marked results. No undue pressure should, of course, be brought to bear upon a student in advising him in regard to the choice of a career. But, in the case of students intending to teach, the desirability of graduate preparation, either at once upon graduating or in a year or two, not only may with propriety, but should necessarily, be urged in opposition to his natural eagerness to "get to work" or his wholly indefensible later disposition to be satisfied with his equipment and position, either of which may render his career less efficient than it might otherwise have been. Other students, moreover, who evince special capacity, may, quite irrespective of their taking a degree or becoming teachers or even productive scholars, be encouraged to pursue the subjects for which they display special fitness. There is no reason why a graduate school should be exclusively a finishing school for teachers.

I trust that, in conclusion, it may not be unfitting for me to express my indebtedness to Professor Newbold for his

unfailing kindness and courtesy in giving me of his counsel. His successor has, indeed, to thank him for more than this. In the administration of no student body do so many and varied individual problems present themselves as in a graduate school; in other Departments of a university the students are largely legislated for in the mass—here the individual problem is of paramount importance. This variety and complexity in the individual problems dealt with, while aiding in the perception of guiding principles, may readily exert an influence, if the apparent exigency of special cases be allowed undue weight, to break down or prejudicially to modify by exceptional precedents the laws and regulations which are the expression of those principles. In continuing the labors of their predecessors, Professor Newbold and the Executive Committees serving with him have made many and most important contributions to the definition of the principles and the formulation of the regulations now in force in the Department—practically completing the responsible task of furnishing it with an administrative and educational system—and, further, have maintained them unwaveringly in their original integrity. This invaluable service, and this tradition as invaluable, may well receive express acknowledgment from their successors, who profit by them. I may also refer to the example set by Professor Newbold in respect to matters of record, completeness and accuracy in which depend in this Department to a very large degree upon the personal oversight of the executive officer. I sincerely desire to emulate, even though I may not equal, Professor Newbold's solicitude and scrupulous care in this regard.

The increase in the growth of the Department—more markedly noticeable in recent years—is due to its prudent governance in the past and the spirit which has animated its teaching force. The wise judgment which has characterized its administration, the continued maintenance of its strict rules controlling admission and of the stringency of its requirements for degrees, constant effort upon the part of the members of

its Faculty to uphold and to elevate its standards of scholarship in teaching and in private research—these ideal elements, together with the example afforded by its graduates and its exceptionally generous system of Fellowships and Scholarships, have been the effective factors. The conservation of these ideal elements alone will ensure permanence to our steady growth, our increased opportunities for usefulness.

Respectfully submitted,

CLARENCE G. CHILD,
Dean.

V. HIGHER DEGREES GRANTED, COMMENCEMENT DAY, 1905.

MASTER OF ARTS.

William Radcliffe Anson, A. B. (Ursinus, 1903): Germanics and French.

Resumes graduate work.

Harold Charles Barker, B. S. (Pennsylvania, 1903): Physics. Instructor in Physics and resumes graduate work.

Arthur Cleveland, A. B. (Pennsylvania, 1904): English and Latin.

Resumes graduate work.

Frank Levis Cloud, A. B. (Pennsylvania, 1904): Greek, Latin and Sanskrit.

Resumes graduate work.

Minnie Gertrude Eckels, Ph. B. (Bucknell, 1901): English and Germanics.

Shippensburg, Pa.

Ferdinand Harry Graser, B. S. (Pennsylvania, 1903): Economics.

Resumes graduate work.

Samuel B Heckman, Ph. B., A. B. (Earlham, 1893: Harvard, 1894): Germanics, Romanics, Pedagogy.

Absent on leave, 1905-1906.

1260 N. Park Ave.

Wesley Lynn Hemphill, A. B. (Pennsylvania, 1904): Classics, English.

Student, Princeton Theological Seminary, Princeton, N. J.,

Clinton Nevius Laird, A. B. (Pennsylvania, 1903): Chemistry, Mineralogy.

Teacher in Canton Christian College, Honglok, Canton, China.

Grace Edith MacLean, A. B. (Temple College, 1903): Romanics, English, Germanics.

Resumes graduate work.

Lillian Pace, B. S., M. A. (Columbian University, 1897, 1898):
Physics, Mathematics.

Instructor in Mathematics, Central High School, Washington, D. C.

Leonard Adolph Peck, B. A. (Yale, 1900): English, Germanics.

Instructor in English, Episcopal Academy and resumes graduate work.

Henry Baruch Sachs, B. S. (Pennsylvania, 1900): Germanics.
Absent on leave 1905-1906.

921 North 6th Street.

Ruth Elma White, A. B. (Dickinson, 1904): English, Germanics.

Teacher of English, Trenton High School, Trenton, N. J.

Winton John White, A. B. (Pennsylvania, 1904): Pedagogy,
Classics.

Resumes graduate work.

DOCTOR OF PHILOSOPHY.

Clarence William Balke, A. B. (Oberlin, 1902): Chemistry.

Thesis: *Double Fluorides of Tantalum*.

Harrison Fellow for Research in Chemistry.

Matthew Hume Bedford, A. B. (Central University of Kentucky, 1903): Chemistry.

Thesis: *Columbates*.

Instructor in Chemistry, University of Maine.

Charles Frederic Brede, A. B., A. M. (Haverford, 1880, 1893):
Germanics.

Thesis: *The German Drama on the Philadelphia Stage*.

Instructor in Northeast Manual Training School, Philadelphia.

Kent James Brown, A. B. (Dickinson, 1901): Germanics.

Thesis: *The Strong Verb in Fischart*.

Master in German in Carteret Academy, Orange, N. J.

John Linton Carver, B. S., A. M. (Swarthmore, 1893; Pennsylvania, 1903): English, Pedagogy.

Thesis: *The Valiant Scot, by J. W. Gent.*

Head of English Department, Friends' School, 15th and Race Streets.

Edward Samuel Corwin, Ph. B. (Michigan, 1900): History, Political Science.

Thesis: *The Attitude of France towards her Alliance with the United States in the American Revolution.*

Preceptor in History and Political Science in Princeton University.

Alice Lenore Davison, A. B. (Elmira College, 1902): Chemistry.

Thesis: *The Electrolytic Determination of Cadmium with the use of a Rotating Anode.*

Professor of Physics and Chemistry, College for Women, Columbia, South Carolina.

James Walker Downer, A. B., A. M. (University of Virginia, 1895, 1897): Latin.

Thesis: *Figurative Language in the Satiræ Petronius.*
University Fellow for Research in Latin.

Acting Professor of Latin, Friends' Central School, 15th and Race Streets.

Henry Fox, B. S., A. M. (Pennsylvania, 1899, 1903): Zoölogy, Botany, Chemistry.

Thesis: *The Pharyngeal Pouches and their Derivatives, in the Mammalia.*

Professor of Science, Temple College.

Robert Harvey Gault, A. B. (Cornell, 1902): Psychology, Neurology, Philosophy.

Thesis: *On Conditions Affecting the Maximal Rate of Voluntary Extensor and Flexor Movements of the Right Arm.*

Professor of Psychology and Pedagogy, Washington College, Charleston, Md.

Oliver Edmunds Glenn, A. B., A. M. (Indiana, 1902, 1903):
Mathematics.

Thesis: *The Determination of the Abstract Groups of
Order, p^2 , qr , p , q and r being distinct primes.*

Professor of Mathematics, Drury College, Springfield, Mo.

Julius Hillel Greenstone, A. B. (Pennsylvania, 1902): Hebrew,
Arabic, Philosophy.

Thesis; *The Turkoman Defeat at Cairo.*

Instructor in Jewish Education, Gratz College, Philadelphia.

Ulysses Sherman Hanna, A. B., A. M. (Indiana, 1895, 1898):
Mathematics.

Thesis: *The Bitangentials of the Plane Quintic and
Plane Sextic.*

Assisting Professor of Mathematics, University of Indiana,
Bloomington, Indiana.

Ernest Godfrey Hoffsten, B. S. (Pennsylvania, 1901);
English, Germanics.

Thesis: *The Floating Island, by William Strode, of
Oxford, written in 1636, and now for the first time
reprinted with introduction and notes from the quarto
of 1653 in the possession of the University of Pennsylvania.*

Instructor in English, McKinley High School, St. Louis, Mo.

Robert Harbison Hough, A. B., B. S., M. A. (University of
Nashville, 1890, 1892): Physics, Mathematics, Chemistry.

Thesis: *On the Mechanical Equivalent of the Heat of
Evaporation of Water.*

Instructor in Physics, University of Pennsylvania.

Solomon Huebner, B. L., M. L. (Wisconsin, 1902, 1903):
Economics.

Thesis: *The Business of Marine Insurance with Especial
Reference to the United States.*

Instructor in Commerce and Insurance.

Charles Moore Magee, A. B., A. M. (Pennsylvania, 1895, 1904): English.

Thesis: *The Epigrammatic Art in English Literature of the Classical School of the Seventeenth and Eighteenth Centuries.*

6 First Ave., Conshohocken, Pa.

Alice Madeline McKelden, A. B., M. A. (Columbian University, 1899; Pennsylvania, 1900): Mathematics and Physics.

Thesis: *Groups of Order $2m$, that contain Cyclic Subgroups of orders 2^{m-1} 2^{m-2} 2^{m-3}*

Instructor in Mathematics, Girls' High School, Philadelphia.

Thomas Warner Mitchell, A. B. (University of Washington, (state) 1900): Economics.

Thesis: *Stockholders' Profits from Privileged Subscriptions.*

Secretary of the School of Commerce, Accounts and Finance of the University of the City of New York.

Richard Heinrich Herman Christian Carl Ludwig Reithmüller, Graduate of Karls gymnasium, Heilbronn A. N.; Theologisches Seminar, Maulbronn und Blaubeuren: Germanics.

Thesis: *Johan U. L. Gleim's Imitations of the M. H. G. Minnesong.*

Harrison Fellow for Research in Germanics.

Burnett Smith, B. S. (Pennsylvania, 1900): Geology, Mineralogy, Zoölogy.

Thesis: *Senility among Gastropods.*

Harrison Fellow for Research in Geology.

Ralph Ogden Smith, B. S., A. M. (Rutgers, 1902; Pennsylvania, 1903): Chemistry.

Thesis: *The Rapid Precipitation of Lead and Mercury in the Electrolytic Way.*

Instructor in Chemistry, University of Wisconsin, Madison, Wisconsin.

Charles Wharton Stork, A. B., A. M. (Haverford, 1902; Harvard, 1903): English.

Thesis: *All's lost by Lust, a tragedy by William Rowley, edited with an introduction and notes from the quarto of 1633 in the Library of the University of Pennsylvania.*

University Fellow for Research at Oxford, England.

Clarence Stratton, B. S. (Pennsylvania, 1901): English, Romanics.

Thesis: *The Unnatural Combat, a tragedy by Philip Massinger, reprinted with notes and introduction, from the quarto of 1639 in the Library of the University of Pennsylvania.*

Instructor in English, Central High School, St. Louis, Missouri.

Samuel Edwin Weber, Ph.B. (Lafayette, 1901): Pedagogy, Psychology, Philosophy.

Thesis: *The Charity School Movement in Colonial Pennsylvania.*

Professor of Education and Psychology in the Cortland State Normal School, Cortland, N. Y.

James Renwick Withrow, B. S. (Pennsylvania, 1899): Chemistry.

Thesis: *The Electrolytic Precipitation of Gold with the Use of a Rotating Anode and the Rapid Analysis of Halides.*

Assistant Instructor in Chemistry, University of Illinois, Urbana, Ill.

APPENDIX IV.

REPORT OF THE DEAN OF THE FACULTY OF LAW.

To the Provost of the University :

SIR: I have the honor to submit the following report for the year ending August 31st, 1905.

REGISTRATION OF STUDENTS.

The number of students as compared with the number of students during the scholastic year 1903-04 is as follows :

1903-04.		1904-05	
First year.....	116	First year.....	133
Second year.....	83	Second year.....	81
Third year.....	98	Third year.....	68
Specials.....	12	Specials.....	15
Partials.....	13	Partials.....	6
	<hr/>		<hr/>
	322		303

As indicated, though the incoming class was larger than during the previous year, there was a decrease in the total number of students in the Department. This decrease was due to the size of the graduating class in June, 1904, this class being the last class entering prior to the present regulations for the study of Law in Pennsylvania. The effect of these regulations I have referred to in my report for the scholastic year 1903-4.

CHANGES IN THE TEACHING FORCE.

At the July meeting of the corporation Mr. Thomas Raeburn White, Assistant Professor of Law, presented his resignation. Mr. White has been connected with the Department, since his graduation in 1899, as Fellow, Instructor, Lecturer, and during the past year as Assistant Professor. He is a

teacher of ability and the members of the Faculty learn of his withdrawal,—which is due to the increased pressure of his private business—with regret.

MATTERS PERTAINING TO THE COURSE.

The new courses given last year were a course in Torts, supplementing Judge Dallas's work of the first year class, one hour per week, by Assistant Professor Bohlen, and a course in Torts two hours per week, to the second year class, which was also given by Professor Bohlen. The number of regular electives in the third year was not increased, but in addition to the voluntary courses heretofore given in Conveyancing and in Bankruptcy, a voluntary course in Admiralty was given by Mr. John F. Lewis. Mr. Lewis's lectures were most successful and it is hoped that an arrangement can be made to continue these lectures on alternate years. Mr. Russell Duane, to the great satisfaction of the Faculty, again dealt in a series of six lectures with the subject of preparation for trial.

One of the most significant addresses of the year was that delivered by Mr. Frank Pritchard of the Class of 1874 on "Legal Ethics." The address had a distinct educational effect, and the Department has requested Mr. Pritchard to put it into permanent shape so that the same may be used hereafter as a part of the reading recommended to the members of the graduating class.

The annual address was delivered by Mr. David T. Watson, of Pittsburg, on March 31st. Mr. Watson chose as his subject, "Practical Suggestions." The occasion was made significant by the attendance of several hundred members of the alumni and local Bar and by the consequent success of the reception of the Society of the Alumni of the Department of Law, held immediately after the address, in the main hall of the Law School Building.

Besides the voluntary courses and public lectures mentioned, the University invited Mr. Henry Flanders to deliver a number of discourses on "Legal Biography." The subjects selected by Mr. Flanders were certain members of the Supreme Court of the United States; namely, "Justice Wilson, Justice Washington, Justice Patterson, Chief Justice Taney, Chief Justice Ellsworth, Justice Iredell, Chief Justice Marshall, Chief Justice Story, and Chief Justice Jay.

The lectures were an unqualified success, and many of our students will, I believe, as a result, carry through life an interest in the personality of the great men of the past of our profession, from which interest they will derive both pleasure and profit. The Faculty have heard with satisfaction that the Trustees have arranged for the continuation of the lectures during the coming year.

At the meeting of the Faculty held in March, a number of changes were made in the regular course, to take effect during the coming scholastic year. The course in Blackstone to the first year class was abolished. This action on the part of the Faculty does not reflect the belief that a knowledge of Blackstone is unimportant. Experience, however, teaches us that a course based upon a text book is not worth the time consumed in class. If the text book is part of the necessary knowledge of the student he should be made to pass an examination therein, but the class room hours should be devoted to work which cannot be done outside. The Faculty believe that every student should have a knowledge of Blackstone, and while abolishing the course, have retained the examination. In the future, therefore, as in the past, no student will graduate from the University without first passing an examination in that subject.

By an action of the Faculty taken some two years ago, the number of hours per week in the third year class was increased from twelve to fourteen. This added one subject

to each man's course. Experience seems to have proved that this addition was unfortunate and that a student obtains more from his year if he confines himself to a few subjects, but spends a sufficient time on each to insure complete mastery. A certain amount of information is indispensable to the successful practice of any profession, but beyond a point which is soon reached, the important thing for the professional student is to obtain a thorough grasp of fundamental subjects. This he cannot do if he is required to take in any one year a large number of subjects or fill his mind with information which he has no time to assimilate.

At the same meeting of the Faculty it was determined to add to our electives a course in Suretyship. Assistant Professor Hening will have charge of this course. The course in the Statute Law of the State of Pennsylvania was enlarged so as to make it a course in Pennsylvania Law. As modified, the course will be a voluntary one; that is, not a regular elective. The new course is designed to meet the needs of those who expect on graduation to present themselves to the State Board of Law Examiners of Pennsylvania for examination for admission to the Bar.

BIDDLE MEMORIAL LIBRARY

The accession number on August 31st, 1904, was 31,480; the accession number to-day is 33,311 or an increase of 1831. This increase is divided as follows:

Text books.....	664
Reports.....	688
Statutes.....	123
Digests.....	65
Encyclopedia.....	22
Periodicals.....	185
Ordinances.....	8
Bar Association Reports.....	7
Public Documents.....	28
Dictionaries.....	13
Trials.....	28
Total.....	1831

On account of the character of the books bought this increase is not as large as during the previous year. The features of the year in the way of accessions were the South African Colonial Reports; a number of old English text books, and a fine set of French *Arrets* combining the reports of all the principal courts in France. These were all purchased through the Alumni Fund; the Biddle Fund or annual income, owing to the repayment of the debt due to the corporation for advances, being only sufficient to cover the continuations and the new American text books.

152,558 volumes were taken out by undergraduates in Sharswood and McKean Halls. This number is not quite so large as during the preceding year. The decrease is probably due to the fact that last year the professors in two subjects published case books. The use of McMurtrie Hall for graduate study, steadily increases. A part of the year all of the desks were assigned. No record is kept of the exact number of books given out in McMurtrie Hall but the Librarian believes that during the winter the number exceeds an average of 300 books a day.

There has been an increased use of the Library by students registered in the College Department. Several professors connected with the Wharton School of Finance and Commerce use the Library constantly. As a valuable light is thrown on the History of English speaking peoples by the Law Reports and other works on the sources of the law, there is every reason to suppose that the use of our Library by the professors and students of the College will continue to steadily increase.

PRIOR EDUCATION OF STUDENTS.

The following is a tabulated statement of the education of the First Year Class prior to entering the Department:

Candidates who held college degrees.....	45
Candidates who had been members of the Junior Class in a college of standing.....	2
Candidates who had been members of the Sophomore Class in a college of standing.....	9
Candidates who had been members of a Freshman Class in a college of standing.....	15
Candidates who were graduates of high or normal schools..	39
Candidates who had passed examinations in subjects not covered by a diploma from high or normal schools.....	4
Candidates who passed the entrance examinations.....	9
Candidates who entered on the certificate of the Pennsylvania State Board of Law Examiners.....	15
	<hr/>
	138

GEOGRAPHICAL DISTRIBUTION OF STUDENTS.

The states represented in the Department were as follows :

Delaware	4	Massachusetts	3
District of Columbia.....	5	New Jersey	27
Georgia.....	1	New York.....	2
Illinois.....	2	North Carolina.....	1
Iowa.....	2	Ohio.....	1
Kansas.....	1	Pennsylvania.....	255
Kentucky	1	Vermont.....	1
Maryland.....	3	Foreign Countries.....	3

SUMMARY.

New England States.....	4	Pennsylvania including	
Middle States.....	33	Phila.....	255
Western States.....	6	Foreign.....	3
Southern States.....	11		

AGE OF STUDENTS.

The average of the entering class was slightly higher than that of the previous year, being twenty-one and six months as compared with twenty-one and two months for 1903-04.

RESULTS OF EXAMINATIONS IN COURSE.

Of the 256 regular students taking the June examinations, 39 or 15 per cent. plus, failed to pass a sufficient number of examinations to obtain higher standing; or in the case of third year students, to graduate. Of these 39, 20 were members of the first year class, 13 of the second year class, and 6 of the third. The figures are above those of the previous year, when 10 per cent. plus of all who took the examinations failed. The average examination mark given last year was 74.4; during the previous year 75.5.

SCHOLARSHIPS.

There were eight holders of Faculty Scholarships, seven holders of City Scholarships and one holder of a Muir Scholarship, registered in the Department. All these scholarships carry full tuition. The total assistance given amounted to \$2,560.

PUBLICATIONS OF THE DEPARTMENT.

During the past year, besides the legal works produced by the members of the teaching force, there have been published under the auspices of the Department, three monographs: one by Mr. Morris Wolf on "Suggestions as to the Nature and Extent of Liability of Telegraph Companies for Failure to Properly Deliver Messages;" another by Mr. Henry Sandwith Drinker, Jr., on "The Use of the Phrase *Res Gestæ* in the Law of Evidence in Pennsylvania;" and a third by Mr. Horace Stern, on "The Limitations of the Power of a State under a Reserved Right to Amend or Repeal Charters of Incorporation."

It is believed each of these monographs constitutes a distinct contribution to the law. They have been widely read by members of the legal profession.

THE PHYSICAL HEALTH OF THE STUDENT BODY.

The physical health of the student body has given the Faculty concern. The course in law is one of difficulty. The examinations, coming of necessity at the end of the year's work, are apt to be given under trying weather conditions, and thus the strain inevitably accompanying the taking of examinations in a professional school is increased. We do not believe that our course is too hard for men who come to us well prepared, and devote their time, systematically and regularly, to the prescribed work. But we do believe that our course is too difficult to be taken by the student who is not, in the fall of the year, in good physical condition, or, who being in good physical condition in the fall, does not take intelligent pains to remain so throughout the scholastic year. While observation seems to show that the majority of men who come to us leave us better physically for the regular and systematic work of the school, we have each year a number of men who are either obliged to abandon the course or who pursue it only by an undue strain on their physical powers. There are many causes beyond the control of the University which account for some of the physical breakdowns. One cause, however, is the lack of good healthy exercise. Franklin Field, being occupied very largely during the spring and fall by those students who are either on University teams, or trying for such teams, affords outside of its running track only a limited opportunity for men in the Law School to secure exercise. In view of the severe competition for places on any university team, and also in view of the severe rivalry between universities in athletic contests, and the publicity attendant on such contests, it is practically impossible, except in rare cases, for a man to pass through the Law School, do justice to his work and to his own future as a professional man, and take the time and mental energy necessary to become and remain a

member of any of our athletic teams. As a consequence only a small fraction of our students can obtain the physical exercise which is essential to their well being by taking part in University athletics. The new gymnasium building will, I believe, do much to remedy this situation. It affords an opportunity, which every student may embrace without undue loss of time, for some daily exercise. Indoor exercise, however, and especially exercise which does not involve the playing of a game, and the mental relaxation accompanying that fact, has of necessity its limitations. For students in professional schools, the great majority of whom have neither the time nor the desire to engage in the strenuous athletic contests of their more leisurely college days, what is needed is the opportunity to engage for a short period two or three times a week in the playing of some game, such as association football, tennis, etc., where the element of play and the desire to win and the interest excited thereby exists, but where there is an entire absence of strain and of that special preparation which is, of necessity, connected with inter-university contests. Now that we have our splendid Gymnasium no greater benefit could be conferred upon the professional student by the University, as I observe such student in the Law School, than the existence in the immediate neighborhood of the University of one large or several small fields where the students who do not wish to engage in University athletics could feel that they could play one or other of the games which I have mentioned, or others of like character.

Respectfully submitted,

WM. DRAPER LEWIS,

Dean.

APPENDIX V.

REPORT OF THE DEAN OF THE FACULTY OF MEDICINE.

To the Provost of the University :

SIR : In submitting to you the report of the Department of Medicine for the academic year 1904-1905, permit me to call your attention first to the number of matriculates in the first year class. This class numbers 176, as compared with 140 in the class preceding, a gain of 20%. This in itself is very gratifying but it seems to me all the more so when taken into consideration with the fact that the records of other medical schools would seem to show that there has been either a decrease, no increase at all, or but a slight increase in the number of matriculates. The record of this School is therefore unique. Not only is this so of the condition in the fall of 1904, but sufficient statistics are at hand at this writing to show that this will be more conspicuously true of the class matriculating in 1905. We are confronted therefore with two conditions, the general falling off in the number of young men entering the medical profession and the exceptional experience of the Medical Department of this University—conditions which call for an explanation. The decrease in attendance cannot be explained by increased entrance requirements alone. This unquestionably accounts for the decrease that is always experienced when the higher requirements are inaugurated for the first time. But what of those schools where the higher standards for admission have been required for a number of years? No one will contradict the statement that the medical profession is over crowded and that the prospects of earning a decent livelihood are not as bright as they once

were. At the present rate there will have graduated from the Medical Schools of the United States, 50,000 physicians in the first eight years of this century. From 1882 to 1902 there was an increase in the number of matriculates in Medical Schools of about 100%. Based upon the proportion at the present time of one physician to 6000 population, there would be needed with the natural increase of population and the deaths in the ranks of the profession, an increase of 3000 physicians each year. In 1902 there were approximately 5000 graduates of Medical Schools thus leaving a surplus of 2000 physicians over and above that required to meet the demands. These statistics are quoted simply to show the over-crowded state of the profession and the increasing difficulties of its members to obtain a livelihood.

In Germany, for example, and in France, too, where the number of physicians proportionate to the population, is smaller than it is in this country, there is reported a decided diminution in the total number of medical students. It is believed by some that other professions, particularly the engineering profession, are attracting a larger number of young men at the present time.

To explain the increase in the number of matriculates at the University a number of factors must be taken into consideration. The completion and equipment of the New Medical Laboratories have been most influential factors. The increase in the facilities of laboratory instruction thus offered, together with the elaboration of a more comprehensive course in the clinical subjects have doubtless influenced a certain number of students in the selection of a medical school. The clinical material at our disposal is used to better advantage now than it ever has been in the past. But besides these educational advantages much of the increased popularity of the University is doubtless due to the constant efforts which are being made to make the student's life happier and to consider his welfare and advantage in every detail.

Many changes have been made in the curriculum, most of them consisting in expansion of the various courses. At the present time, however, every possible hour, within the limitations of the student's capacity, has been utilized and no radical changes will be rendered possible until a fifth year has been added to the curriculum. It is only a question of time, however, and that not very far distant when this radical step must be taken, since under the present conditions the student's time is so occupied with the regularly scheduled work and exercises, that he has scarcely any opportunity to review and digest the facts he has learned or to broaden his mind with collateral reading. When the day's work is done the average student has reached the limit of his capacity for any work which taxes his mental faculties and requires concentration of thought. This must be recognized as an unfortunate state of affairs, from which under the present régime there is no escape.

The teaching of medicine is daily becoming more and more complicated and the very nature of the advances, which have been made in the field of medicine, makes greater demands upon the student's intelligence, upon his knowledge of certain fundamental subjects, and upon his ability to appreciate the value of and to apply the scientific facts which he has obtained in the laboratory to the practical aspects of clinical medicine. It has well been said that "Modern Medicine consists of those facts, gathered from the various sciences, that are capable of utilization in either the prevention or cure of disease. All the physical sciences, at least the fundamental ones, have made and are still making contributions to medical knowledge and medicine can advance no faster than the sciences on which it is founded."

In order that the student may fully understand the subjects of the medical curriculum, as they are taught to-day, his preliminary education should include studies which are strictly speaking preparatory to his course in medicine. As

matters now stand a student may enter the Department without any preparation whatsoever leading up to his entrance upon the study of medicine. Looking at the matter solely from the standpoint of the student's best interests it is not fair that he should be allowed to undertake a course for the proper understanding of which he is unprepared. It is unreasonable to expect him to comprehend, for example, Ehrlich's side-chain theory or to understand the assimilation and utilization of food products in the human body if the individual has not had already a thorough course in the fundamental facts and theories of general medicine. It is unfair to expect him to understand the microscope, laryngoscope, X-rays, the mechanical principles involved in the causation and treatment of fractures and dislocations and in the production and correction of deformities, unless he is thoroughly familiar with the principles of physics. It will not be possible for him to keep in touch with the advances in medical science unless he has a reading knowledge of German and French.

I therefore recommend, Mr. Provost, for your serious consideration the question of increasing the requirements for admission to this department. It has always seemed to me improbable that the time will ever come when the degree of Bachelor of Arts or Science will be required for admission to all the high grade medical schools of the country. While it is more than desirable that the physician should be a man of culture, it does not follow that because an individual has pursued a course leading to the degree of Bachelor of Arts, he has received special preparation for the study of medicine. What should be required of a student seeking admission to a medical school is not a certain specified number of years of preliminary education, but a knowledge of certain specified subjects, subjects which will fit him for the course he is about to pursue. It is not necessary to discuss these in detail, but they may be said to include physics, chemistry, botany, zoölogy, comparative anatomy, and a reading knowledge of French and German. Such a preparation would be equivalent to that which

is required for admission to the Graduate Departments of the German Universities. The subject which above all others is engaging the minds of those interested in medical education is this question of entrance requirements. From one end of the country to the other the best element of the profession is exerting its influence through the State Boards of Medical Examiners and through other channels, in favor of higher standards, and each year we find more institutions added to the number of those which require more than a high school education. The Council on Medical Education of the American Medical Association presented a report upon the minimum requirements for admission to Medical Schools. The report was accepted and, if adopted by the State Boards of Medical Examiners, will require of each applicant on and after January 1, 1908, that he shall have had a five-year medical course, the first year to be devoted to physics, chemistry, and biology and such arrangements should be made that this year could be spent either in a school of liberal arts or in the medical school. Reference is made to this report simply to show the views that are prevailing throughout the medical profession. I am quite sure that the reputation of this department suffers to a very considerable degree from the fact that its requirements for admission have not been advanced commensurately with the advances that have been made in the medical sciences. This is unfortunate since in other respects, in its equipment, in the arrangement of its curriculum, and in its method of instruction, the department is held in high esteem.

Recognizing the desirability of increasing the number of matriculates who have had a college education, I would propose the incorporation of a plan whereby students from those literary colleges equipped to give thorough courses of instruction in bacteriology, chemistry, histology, and biology, be admitted to our second year class. The Dean of the Medical Department of the University of Chicago, in a recent letter to me, in speaking of the question of admission to advanced standing for work done in literary or scientific colleges, says

that "in many respects this is one of the most important questions which now present themselves to the Medical Colleges." These students would have received instruction in all the subjects covered in the first year of the medical curriculum with the single exception of human anatomy. In order that the student receive adequate instruction in this subject to make him eligible for admission to advanced standing, a systematic course of instruction in human anatomy might be included among those given in the Summer School. By such an arrangement we could offer students of literary colleges, not affiliated with a University, the same advantages offered the students in attendance at our own College Department, namely, two degrees in seven instead of eight years. Such a plan would, I believe, attract a number of students, who, having entered a literary college and planning eventually to study medicine, would be glad of the opportunity to save one year in the acquirement of their degrees. I propose this plan at this time because both in actual number and in percentage there are fewer students holding college degrees in the present first year class than in the class immediately preceding. There is also a slight decrease in the total number of students who have spent one or more years in a literary college.

One of the most important functions of a University is the fostering of research. There is no phase of medicine which does not offer an attractive field for original investigation; it is as true of the subjects touching upon clinical medicine, as of those dealing with the pure sciences. The opportunities of the practicing physician engaging in research are necessarily somewhat limited, owing to the demands made upon his time. The time of those engaged in the instruction of the pure sciences is free excepting at those hours set apart for lectures or demonstrations. Thus the fewer the number of hours of instruction the greater the number available for research. The members of our laboratory staff are I believe handicapped in this respect by the number of hours which

they must devote to student instruction and it would be well if some means could be adopted whereby they could have more time to engage in investigation. The present objectionable state of affairs might be alleviated to some extent, at least, if the Departments of Dentistry and Veterinary Medicine would provide as many demonstrators as may be necessary to conduct those courses of instruction given under the auspices of the Medical Department, namely, the courses in chemistry, anatomy, bacteriology, physiology and pathology. It is quite proper that the courses of instruction in these respective subjects should be open for all students of the University irrespective of department, but if this plan is continued, the staff should be increased. At present the staffs are no larger than is necessary to meet the demands of a department of Medicine. I respectfully propose therefore that the addition to these staffs be made sufficient to meet the burden imposed upon this department by those of Dentistry and Veterinary Medicine.

We regret to have lost by resignation from our teaching staff, Dr. Adolph W. Miller, first a Demonstrator and later an Assistant Professor of *Materia Medica*, and Dr. Robert W. Formad of the Histological Department, both of whom, for the past twenty and eighteen years respectively, have rendered the University most faithful and efficient services. We record also with regret the resignation of Dr. John M. Swan, who for the past ten years has been associated with the Department of Anatomy, first as Assistant Demonstrator of Anatomy and later as Demonstrator of Osteology, and of Dr. Arthur F. Coca, who served since 1900, first as Assistant Demonstrator and later as Demonstrator of Pathology.

HOSPITAL APPOINTMENTS

It is gratifying to be able to report that of the graduating class 73% received hospital appointments. Of the remaining members of the class, some refused appointments to engage

immediately in practice, others accepted positions as assistants, and some signified their intention of applying for admission to the medical services of the Army and Navy.

TABULATED STATISTICS.

TABLE I.

Fourth-year.....	131
Third-year.....	104
Second-year.....	130
First-year.....	176
Special.....	4
	<hr/> 545

TABLE II.

Candidates who held college degrees.....	34
Candidates who had been members of the Senior Class in a college of standing.....	9
Candidates who had been members of the Junior Class in a college of standing.....	6
Candidates who had been members of the Sophomore Class in a college of standing.....	15
Candidates who had been members of the Freshman Class in a college of standing.....	16
Candidates who had passed the entrance examinations.....	10
Candidates who had passed examinations in subjects not covered by diplomas from high school or normal school.....	15
Candidates who were graduates of high or normal schools, academies or seminaries.....	71
	<hr/> 176

TABLE III.

Alabama.....	2	Missouri.....	1
Arkansas.....	1	Nebraska.....	1
California.....	2	New Hampshire.....	5
Colorado.....	2	New Jersey.....	37
Connecticut.....	4	New York.....	21
Delaware.....	4	North Carolina.....	4
District of Columbia.....	4	Oklahoma.....	1
Florida.....	2	Ohio.....	18
Georgia.....	1	Oregon.....	1
Illinois.....	3	Pennsylvania.....	346
Indiana.....	6	Rhode Island.....	2

TABLE III. (Continued)

Iowa.....	3	South Carolina.....	I
Kansas.....	2	Texas.....	6
Kentucky.....	5	Utah.....	2
Maine.....	3	Vermont.....	I
Maryland.....	7	Virginia.....	4
Massachusetts.....	15	Washington.....	4
Minnesota.....	4	West Virginia.....	7
Mississippi.....	I	Wisconsin.....	I
		Foreign.....	II

SUMMARY.

New England States..	30	Pennsylvania, including	
Middle States.....	91	Philadelphia.....	346
Western States.....	11	Middle West.....	23
Southern States.....	33	Foreign.....	11

APPENDIX VI.

REPORT OF THE DEAN OF THE FACULTY OF DENTISTRY.

To the Provost of the University:

SIR: I have the honor to submit the following report of the condition of the Department of Dentistry for the the academic year 1904-05:

The total number of students matriculated, 1903-04,	359
Students of the Third Year	168
Students of the Second Year	81
Students of the First Year	90
Special Students	20
	— 359
Number of new matriculates, including those admitted to advanced standing	141

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

Australian College of Dentistry, Melbourne, Australia	3
Cincinnati College of Dental Surgery	1
Dental College of Geneva, Switzerland	1
Faculty of Physicians and Surgeons, Glasgow	1
Georgetown University, Dental Department	1
L'école Odontotechnique, Paris, France	1
Liverpool Dental Hospital, Liverpool, England	1
Medico Chirurgical College, Dental Department	1
Milwaukee Medical College, Dental Department	1
New York College of Dentistry	6
New York Dental School	1
Pennsylvania College of Dental Surgery	3
Pittsburg Dental College	1
Philadelphia Dental College	11
Royal College of Dental Surgeons, Ontario, Canada	1
Royal Dental Hospital, London, England	1
State University of Iowa	1

University of Breslau, Germany.....	I
University of Buffalo, Dental Department.....	I
University College of Medicine, Dental Department.....	I
University of Freiburg, Germany.....	I
University of Illinois, Dental Department.....	I
University of Liege, Belgium.....	I
University of Michigan, Dental Department.....	I
University of Southern California, Dental Department.....	I
University of Turin, Italy.....	I
Tokyo Dental College.....	I
Yale University.....	I
University of Zurich.....	3

The numerical representation of the several states and countries in the Department is as follows:

Middle States.....	186
Western States.....	12
New England States.....	52
Southern States.....	12
Pacific States.....	3
Australia.....	23
Austria.....	2
Belgium.....	1
Brazil.....	3
British West Indies.....	4
Canada.....	12
Chile.....	5
Cuba.....	2
District of Columbia.....	1
England.....	3
France.....	3
Germany.....	3
Holland.....	1
Italy.....	1
Japan.....	2
Mexico.....	2
New Zealand.....	13
Porto Rico.....	1
Russia.....	3
Scotland.....	1
South Africa.....	1
Spain.....	1
Sweden.....	1
Switzerland.....	4
Syria.....	1

SUMMARY.

United States.....	267
Foreign countries	92

The amount of work performed in the Operative and Mechanical Department has been as follows:

Number of clinical operations.....	28,194
Number of mechanical operations, including crown-and-bridge work and technic work.....	4,155
Number of patients.....	14,637
Amount of gold used for fillings exclusive of that used in mechanical work, ounces.....	95
Number of students in the graduating class.....	168
Number of students who received the degree.....	153

The total number of matriculates for the session 1904-05 is 359, being three less than the total number for the preceding session. A comparison of the totals of the first year registration as between this and the previous session shows an increase of 18 matriculates for the present first year class over the total of the same class for the preceding session. This increase in the first year registration is a gratifying indication of the tendency towards a return to our normal registration figures which were temporarily disturbed because of the agitation connected with the proposed four years' curriculum that was subsequently abandoned as stated in my previous report.

The number of matriculates admitted to advanced standing from other institutions for the present session is 50, being three less than the previous session, the close approximation of these two totals indicating that our relationship in this particular to other dental educational institutions continues to be normal and satisfactory. The cosmopolitan character of our student body has always been a characteristic feature of the Department of Dentistry. The total number of matriculates admitted from foreign countries for the previous session was 87 and for the present session 92, an increase in

foreign matriculates of about $1\frac{1}{2}$ per cent. of the total registration for the present session. A large proportion of those coming to us from foreign countries are qualified dental practitioners who enter the Department for post-graduate work. They are an especially desirable group of students from the fact that they represent a class that is seeking the highest professional equipment for its intrinsic value to them as practitioners and who are willing to secure the desired training at the cost of large personal sacrifice of time and money. The increase in the number of this class of earnest students is therefore a gratifying index of the reputation which our institution has achieved and is maintaining abroad, a position which is being continually strengthened by the loyalty of these same men when as our alumni they are scattered over all civilized countries of the globe.

With the concurrence of the administration the Faculty of the Department of Dentistry has officially announced an increase in the charge for tuition fees to \$150 per annum upon all new matriculates for the session of 1904-05. The wisdom and equity of this change is evident when it is considered that notwithstanding the enormously increased cost of furnishing a dental education in accordance with modern standards the present tuition charge is the same as that which has been in vogue for the past half century. Increased cost of equipment, involving laboratories elaborately fitted with expensive appliances, new additions to the curriculum, an increased teaching force and generally enlarged plant have combined to bring about the necessity for a more equitable charge for these improvements and facilities accessible to the dental student of to-day and it is confidently believed that the self-evident justice of the increased fee will be cheerfully and practically concurred in by future incoming classes.

There is an aspect of the clinical service of the Department of Dentistry which is worthy of attention, namely, its

importance as a public charity. The figures given in this respect representing the number of patients treated during the year do not include a considerable number who apply for the relief of pain and distress arising from dental troubles and various surgical diseases of the mouth and jaws. Inclusive of this latter class of cases, the total number of patients who have received attention during the year would considerably exceed fifteen thousand, and the service rendered to this large number of people has been gratuitous with the exception of a minimum charge for material where that has formed a necessary part of the treatment.

The service of dentistry, while it is less conspicuous than that of medicine or surgery from the fact that it less frequently involves the issue of life and death, is nevertheless a service for the relief of suffering, the improvement of personal appearance, and the betterment of the function of mastication, in the fulfilment of which latter office it is directly concerned with bodily health. It is for these reasons that I deem the clinical work of this Department to be worthy of recognition as one of the important charitable services which the University is conducting for the public welfare as well as in the interest of its own educational work.

There are two sources of educational activity connected with the Department to which I have not heretofore referred but which I deem now worthy of note, namely, the undergraduate dental Societies and the Penn-Dental Journal.

There are in active operation three undergraduate dental societies that hold regular meetings throughout the Academic session, in all of which papers upon topics of professional interest are read and discussed. The training afforded in this association work is of inestimable value to the participants not only in improving their powers of observation and precise reasoning, but as a preparation for a phase of future activity that is essential to professional success.

The prominence taken by our alumni generally in the larger activities of dentistry throughout the world is, in the judgment of our Faculty, in no small degree attributable to the excellence of the training which as undergraduates they have practically received in dental society work.

A worthy adjuvant to the activities of the undergraduate dental societies is the Penn-Dental Journal, the official professional organ of the dental student body. This periodical which is issued bi-monthly, was first issued in 1897. It constitutes the outlet for the best literary work of the undergraduate societies and of the student body generally. It is wholly under student management and has attained an enviable position among publications of its class, being frequently quoted by the leading professional periodicals both in this country and abroad. Its educational value is its most important feature, in which respect it is analogous to that of the undergraduate organizations. The journal has a considerable circulation among our alumni as well as among the undergraduate body. It has been self-supporting from the beginning.

No changes have taken place in the personnel of the teaching staff nor have any important changes been made in the curriculum.

I have pleasure in commending to your attention the general excellence of the work accomplished by the teaching staff during the session, and of recording the satisfaction felt by all connected with the Department of Dentistry as well as by its Alumni generally by reason of the formal recognition of the distinguished services to dentistry by a member of our faculty, Dr. James Truman, upon whom the University conferred its honorary degree of Doctor of Laws on "University Day" of last year.

Respectfully submitted,

EDWARD C. KIRK,
Dean.

APPENDIX VII.

REPORT OF THE DEAN OF THE FACULTY OF VETERINARY MEDICINE.

To the Provost of the University :

SIR : I have the honor to present this report on the Veterinary Department for the year ending August 31st, 1905.

The attendance of students during the year was as follows :

Students of the Third year class.....	13
Students of the Second year class.....	29
Students of the First year class.....	36
Special student.....	1
Total.....	79

The temporary building at 39th Street and Woodland Avenue that had been occupied by the Veterinary School and hospital since 1901, has continued in service during the past academic year. All plans for improving the courses of instruction are held in abeyance pending the provision of better facilities for teaching, as, under existing conditions all available energy and efforts are required to keep the grade of instruction up to previously established standards.

It is, therefore, with much gratification that I am enabled to refer to the reception of a gift of \$100,000 from a friend of the School, whose name is not to be revealed, and of an appropriation of \$100,000 from the Commonwealth. The income from the first mentioned donation is to be used for the support of the work of the Department, while the appropriation made by the Legislature and Governor is to be used for the erection of a much needed building.

Each of these provisions is most timely and encouraging, and each goes far to meet a vital need of the Institution. To the members of the Veterinary faculty, who have for years labored and sacrificed for the School with patience and devotion, the most encouraging feature of these additions to the resources of the Department is that now the permanency of the School and of the results of their work is assured.

Coupled with the appropriation from the Commonwealth is a stipulation to the effect that in the building that is to be erected with the public funds, laboratories shall be provided for the use of the State Livestock Sanitary Board in its work of investigation concerning the diseases of domestic animals. This arrangement, viewed broadly, appears to be of considerable advantage to the Commonwealth and to be useful to the School as well, in that it makes it possible for the School to be of more direct and of larger service to the State. Undoubtedly, the laboratory and research work of the State Livestock Sanitary Board can be done more satisfactorily, under more favorable conditions and at less expense at the Veterinary School than at any other place in Pennsylvania. At the same time there are educational possibilities associated with this work that would be lost if it were conducted elsewhere.

On the sixth of July a fire, due to an unknown cause, occurred in the temporary building of the Veterinary Department, which resulted in the destruction of the second floor of the building with its contents, and in considerable damage to the contents of the first floor. It has been possible to repair the building so that the work of the School and the hospital may proceed without material interruption. The most serious loss consisted in the destruction of the

museum specimens stored on the second floor. These specimens represented the accumulations of twenty years and it will be difficult to replace many of them.

The demands upon the School for veterinarians for special service continue greater than the supply. With the increased facilities that will be provided in the new building, additional instruction will, no doubt, be provided that will make it possible to furnish the extra training that is so urgently needed.

There is convincing evidence to show that the services of veterinarians are in increasing demand. The livestock industry is growing in all of its departments, excepting sheep husbandry, and so the interests that depend upon veterinary protection are enlarging. The farm animals of the United States have increased in value, according to the statistics gathered by the Secretary of Agriculture, \$249,000,000 since the census of 1900, or 9 per cent. Moreover, the services of veterinarians are becoming more valuable through the better training afforded by the schools, and are better appreciated than formerly. All of this has the effect of increasing the demands upon our school, which, fortunately, is now in position to prepare to more fully meet these demands. Altogether, the outlook for the future is bright and encouraging.

With regard to the arrangement of the various courses of instruction, especially where the teaching of veterinary students interlocks with that of medical students, there is in some branches a need for readjustment that will lead to more specialization of teaching. This need has long been recognized but the School has not had the staff, space or supplies for doing the work that has been desired by the

faculty and students. The medical department has heretofore supplied and continues to supply invaluable assistance, which is very highly prized and appreciated. This question of the inter-relations of veterinary and other courses of instruction in Universities is now being actively discussed in European veterinary periodicals, on account of the closer relations that are being effected between veterinary colleges and Universities. The two Swiss veterinary schools, until recently separate and independent institutions, have been incorporated with the Universities of Bern and Zürich. The veterinary school in Munich is to become a department of the University of Munich, with a separate faculty. The Universities of Leipzig and Giessen have long had veterinary departments, and there is a movement on foot to join the veterinary schools of Berlin and Budapest with the Universities in those cities. In every case, the integrity of the organization of the Veterinary School and faculty is preserved, and the chief gain to the Veterinary School results from the right of its faculty to grant a University degree, and there is some saving in the equipment of laboratories and in providing instruction, by avoiding unnecessary duplication. All of this European development and experience is illuminating, and some of it is sure to be of service to us in the development of our work.

Plans for the new school and hospital buildings are being prepared with great care and are now practically complete.

Respectfully submitted,

LEONARD PEARSON,
Dean.

APPENDIX VIII.

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, 1905. The past year has been marked by a decided increase, both in the number of those registered as using the Library, and in the circulation of the books. As against 1729 noted for the year ending August 31, 1904, the number of readers registered for the past year was 1989, while the circulation of books reached the number 62,651 as against 53,854 for the preceding year, representing an increase of fifteen per cent. in the number of readers and of sixteen per cent. in the circulation.

The increase in the use of the Library extends to all departments, but is particularly noticeable in the College and in the Department of Philosophy. If, in addition to the figures furnished by the statistics of the Circulation Department, we consider that the students taking technical courses, Architecture, Chemistry, Civil and Mechanical Engineering, and Physics, as well as those pursuing Biological studies and Psychology, have special libraries at their disposal that are in constant use; and that the Law Library, which has its separate administration, is frequented by a daily average of over four hundred students, it will be safe to say that all but a very small percentage of the total registration of students in the University avail themselves of the privileges offered by the Library, and are dependent for help in their studies upon material furnished by the University's collections of books. This is, of course, as it should be, but it is worth noting that thanks to the active co-operation of the Provost and of the Library Committee it has been possible to bring the Library

much nearer to the standard required for the work mapped out in the various departments of the University.

On the other hand, it must be borne in mind that, corresponding to the steady growth of the University, the demands made upon the Library necessarily increase, and I feel, therefore, impelled at the outset of this report to urge again upon you, Mr. Provost, and upon the Board of Trustees, the imperative need of a more adequate Library endowment. In order to defray the cost of annual subscriptions to periodicals, and to have a substantial balance each year to continue the work of completing our files of periodicals and serial publications, an endowment of one hundred thousand dollars is needed. Of the large number of subjects represented by the departments of the University, only two, English Literature and Medicine, are provided with special endowment funds. We need similar funds ranging from five to ten thousand dollars for Architecture, Astronomy, Botany, Chemistry, Civil Engineering, Dentistry, Comparative Philology, Geology, Germanic Languages, Greek, History, Latin, Mathematics, Mechanical Engineering, Philosophy, Physics, Romanic Languages, Semitic Languages, and Zoölogy. For the division of History we have a nucleus in the fund of one thousand dollars contributed a few years ago by Mrs. Charles Stillé, with the interest of which a considerable number of valuable works have already been purchased. For Philosophy, also, we have a nucleus in the Krauth Fund, yielding about seventy-five dollars a year; and we likewise have a fund from the Pennsylvania Society for Promoting Agriculture, yielding about fifty dollars annually, which can be used for certain classes of books of value to the department of Botany. If these funds, and particularly the first two, could be increased to five thousand dollars, the work in the departments in question would be greatly facilitated. While there are pressing needs in all departments, I should like particularly to emphasize at present, next to the Periodical Fund, the necessity for more ample funds for History, which

covers such a large field and comprises various subdivisions both in the College and in the Graduate School. Would it not be possible to interest some among the numerous friends of the University to the extent of providing these special funds so urgently needed, ranging from five thousand to ten thousand dollars, to be devoted to the purchase of books on subjects designated by the donors, and the fund to be named in accordance with their wishes? It may be noted that all books purchased out of any special fund for the Library are marked by a book-plate designating the name given to the fund or the name of its donor.

GIFTS.

While during the past year the Library has not received any very large collections of books, smaller collections and single volumes, as well as monographs and pamphlets, have been received in such large numbers that it was found necessary to secure additional cataloguers in order to dispose of the rapidly growing accumulation. Among those who have regularly forwarded books of a miscellaneous character to the Library may be mentioned, as in former years, Provost Harrison, Dr. S. Weir Mitchell, Mr. J. G. Rosengarten, and Dr. Talcott Williams. Additions to the Text Book Library have been received from W. B. Saunders and Company, whose generosity in forwarding almost all of their medical publications merits especial mention, Messrs. Scott, Foresman and Company, William Wood and Company, and P. Blakiston's Sons; and the J. B. Lippincott Company invariably respond with the greatest courtesy to any request coming from the Library. Other individual donors were Professor E. J. Houston, who sent a set of his own publications, Dr. Horace Howard Furness, who donated four early and now rare editions of Sanskrit productions, and Hon. Mayer Sulzberger, who sent a number of interesting Armenian books. A gift of unique interest came to us from Mr. J. Hartley Merrick, of the Class of 1890, College, consisting of complete files of College

periodicals, as follows: *University Magazine*, *Chaff*, *Pennsylvanian*, *Red and Blue*, *Examiner*, and *Punch Bowl*, and also a file, not quite complete of the *University News*. With the kind co-operation of Dr. Ewing Jordan the Library also succeeded in completing its file of "Class Records," so that with Mr. Merrick's valuable gift we now have a practically complete collection of the material issued by undergraduates, that will be of service to the future historian of the University. The following members of the Faculty have very generously given the Library copies of their own publications,—Professor A. T. Clay, Dr. C. W. Dulles, and Dr. C. H. Frazier.

Among donations to the Library for special purposes we have received, in addition to the customary gift of three thousand dollars from a friend of the University (of which two thousand was given for books and one thousand dollars for subscriptions to periodicals), one hundred dollars from Mr. Samuel Castner, Jr., to purchase facsimiles of Vatican and Ambrosian codices, and one hundred dollars from Mr. J. G. Rosengarten for the purchase of current books pertaining to History; fifty dollars from the Society of the Alumni (College) for books of a general character for the benefit of College students. Messrs. William Dreer, Joseph Morwitz, and John W. Pepper contributed \$427 as a special fund for the purchase of botanical books. Mr. Rosengarten also placed at the disposal of the Department of History \$250 for the purchase of important serials, and another sum of six hundred dollars was subscribed by a friend of the University to enable Professor Cheyney to secure some important sets of memoirs and publications of historical societies needed for the work of graduate students. The same friend defrayed the cost of completing our set of the *Journal of the Royal Asiatic Society*.

FUNDS AND ACCESSIONS.

In addition to the special gifts, the Library had at its disposal, as in former years, \$1507.97, representing the income from the Agriculture, Krauth, Lippincott, Norris,

Pepper, Stillé, and Wagner Funds. An appropriation of \$1800 for periodicals was made by the Board of Trustees, supplemented by a special grant to cover a deficit of \$54.82. The Library also received \$1434.90 from the George Leib Harrison Foundation, of which sum \$253.33 represents a balance carried from the Fellowship Fund for 1903-04, and the remainder, \$1181.57, representing a maximum appropriation of one hundred dollars from each of sixteen Fellows. Out of the fund of lapsed balances we spent \$101.59. Out of a fund obtained from the sale of duplicates, fines collected by the Library, and the fees of special readers, \$406.41 was expended. Adding to this the amount of special gifts reported above, \$4301.98, we have \$9607.67 as the total sum spent for books and periodicals. During the year \$1731.27 was spent for binding, making a grand total for books and binding of \$11,338.94.

The accessions to the Library since August 31, 1904, were 8534 volumes, bringing the total number of books accessioned in the main Library on August 31, 1905, to 211,545. The Librarian of the Law Library reports that 1831 volumes were added during the year to the Biddle Memorial Library, making a total of 33,311, or a grand total of 244,856 volumes at present in the University's collections. The distribution of additions to the Main Library is represented by the following list:

	Gifts	Purchases	Total
General works.....	311	251	562
Philosophy	58	234	292
Religion.....	616	149	765
Sociology and Economics.....	1330	419	1749
Philology	285	188	473
Natural Science.....	538	667	1205
Useful Arts.....	372	144	516
Medicine	447	188	635
Fine Arts.....	119	71	190
Literature	756	835	1591
History	559	559	1118
Totals.....	5391	3705	9096

The difference between the total, 9096, and the accessions, 8534, represents books that were in the process of cataloguing at the date of the previous report.

PERIODICALS AND EXCHANGES.

As in former years, additions to periodicals have been made, largely through the Exchange Bureau and in part through gift. We at present receive 1360 periodicals, of which 662 are obtained by subscription, 197 through the Exchange Bureau, and 501 represent gifts.

A comparison of the number of exchanges received during the past year shows an increase of over 1300 entries. This increase is to be directly ascribed to the activity of the Exchange Bureau, through which we are steadily coming into closer touch with the universities, colleges and learned societies of this country, Europe and Asia. The willingness with which foreign institutions in most cases accede to a request for an exchange of publications, may be regarded as an indication of the value of what is published by the University, and it is therefore particularly desirable that adequate funds should be placed at the disposal of the University Publication Committee, to enable it to extend this important branch of the University's functions.

CATALOGUING.

The total number of volumes catalogued during the year was 8839, of which number 7341 represents the work done by our regular force and 1498 that done by the extra cataloguer engaged for the Jastrow Memorial Library and for the Brinton Collection. In addition, 3005 pamphlets and 1107 dissertations were catalogued, for the greater part by our own force.

REPORT OF EXCHANGES—1904-1905.

	Sept.		Oct.		Nov.		Dec.		Jan.		Feb.		Mar.		April.		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.
U. S. Government..	4	30	8	12	37	30	36	113	33	32	38	13	42	19	37	66	32	37	11	10	29	17	23	172	330	551
Foreign Govern'ts.	4	8	.....	.....	.....	14	3	23	2	13	.....	9	.....	23	2	22	1	7	.....	7	7	5	2	16	21	147
State	11	3	5	1	66	87	90	1	7	6	6	1	24	9	9	4	25	7	27	11	34	78	1	5	305	213
Municipal	1	2	4	.....	.....	8	1	1	2	5	1	5	3	.....	3	3	2	2	3	2	.....	1	3	2	23	31
U. S. Universities..	2	66	20	10	3	51	5	17	10	49	8	78	2	42	12	72	8	88	7	115	6	54	4	37	87	679
Foreign "	1	71	2	242	1	1811	2	29	7	200	.....	11	11	23	1	115	14	197	.....	280	.....	28	1	25	40	3032
Schools and Educational Societies..	.....	20	.....	.....	1	13	.....	3	.....	3	.....	3	.....	.....	.....	7	.....	5	1	10	.....	3	.....	2	2	69
U. S. Academies and Learned Societies	2	11	1	8	1	3	.....	11	2	12	2	9	2	3	2	14	2	5	3	9	5	6	.....	13	22	104
Foreign Academies and Learned Societies	2	1	.....	.....	2	7	2	28	8	7	.....	21	1	1	1	29	60	85	2	1	2	20	.....	19	80	219
Libraries .....	.....	3	.....	.....	2	7	.....	4	1	5	.....	2	1	17	1	48	1	24	.....	2	.....	10	.....	5	6	127
Hospitals and Charitable Institutions .....	.....	7	.....	.....	3	32	.....	4	.....	4	.....	5	2	23	.....	40	.....	3	.....	2	.....	15	.....	.....	5	135
Religious Organizations	1	1	.....	.....	1	5	.....	1	.....	3	.....	4	.....	6	.....	8	.....	5	1	5	.....	4	2	1	5	43
Social Clubs .....	.....	.....	.....	.....	3	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	1	.....	1	3	.....	.....	1	.....	44	6	49
Railroads .....	.....	4	.....	10	2	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	21
Miscellaneous .....	.....	.....	1	1	5	18	.....	3	2	23	1	174	2	24	16	109	4	15	1	5	1	9	.....	5	35	386
Total	28	227	41	284	127	2093	139	238	74	364	56	335	90	190	84	538	149	481	59	459	84	251	38	346	969	5806

The detailed statistics of the cataloguing department are as follows :

Date	Works	Vols.	Cards	Pph.	Diss.
Aug. 29 to Sept. 24, 1904.....	167	300	1365	62	...
Sept. 26 to Oct. 22.....	84	638	1502	11	...
Oct. 24 to Nov. 26.....	244	893	2067	1215	...
Nov. 28 to Dec. 24.....	251	701	2101	62	...
Dec. 26 to Jan. 28, 1905.....	266	575	3014	45	358
Jan. 30 to Feb. 25.....	119	399	1715	231	64
Feb. 27 to Mar. 25.....	176	540	2594	85	245
Mar. 27 to April 22.....	252	585	2496	35	230
April 24 to May 27.....	257	824	2817	131	210
May 29 to June 24.....	436	783	2021	675	...
June 26 to July 22.....	270	634	2328	163	...
July 24 to Aug. 26.....	94	469	1436	95	...
Total.....	2616	7341	25456	2810	1107

CATALOGUING OF ACCUMULATION.

Date	Works	Vols.	Cards	Pph.	Diss.
Aug. 29 to Sept. 24, 1904.....	63	64	604	...	...
Sept. 26 to Oct. 22.....	84	91	1025	...	...
Oct. 24 to Nov. 26.....	50	54	850	...	...
Nov. 28 to Dec. 24.....	182	338	622	...	...
Dec. 26 to Jan. 28, 1905.....	189	219	892	...	...
Jan. 30 to Feb. 25.....	119	224	1085	...	...
Feb. 27 to Mar. 25.....	219	286	2022	186	...
Mar. 27 to April 22.....	142	170	1066	9	...
April 24 to May 27.....	47	52	414	...	...
May 29 to June 24.....	...	...	...	...	...
June 26 to July 22.....	...	...	...	...	...
July 24 to Aug. 26.....	...	...	...	...	...
	1095	1498	8580	195	....
	2616	7341	25456	2810	1107
Total for year.....	3711	8839	34036	3005	1107

BINDING.

The work of the binding department for the past year was considerably larger than the year before, owing to the larger number of books received unbound, and to the increase in the number of volumes that had to be sent to the binders

for repairs. The following table shows the number of volumes sent to the binders each month :

Aug. 29 to Sept. 24, 1905.....	441
Sept. 26 to Oct. 22.....	347
Oct. 24 to Nov. 26.....	407
Nov. 28 to Dec. 24.....	216
Dec. 26 to Jan. 28, 1905.....	293
Jan. 30 to Feb. 25.....	349
Feb. 27 to Mar. 25.....	388
Mar. 27 to April 22.....	316
April 24 to May 27.....	378
May 29 to June 24.....	504
June 26 to July 22.....	794
July 24 to Aug. 26.....	432
Total.....	4865

CIRCULATION.

The registration of readers during the past year has been as follows :

Officers of University, Professors and Instructors....	199
Students, College.....	850
Medical Department.....	246
Law.....	141
Dental.....	105
Veterinary.....	10
Fellows.....	25
Department of Philosophy.....	175
Teachers' Courses.....	71
	1623
Special readers (including 46 students of the Protestant Episcopal Divinity School and of the Department of Theology of Ursinus College).....	92
Readers paying \$3.00 a year.....	25
Employees of the University.....	50
	167
Total.....	1989

Of the total number of books, 62,651, given out during the past year, 9408 were used in the Library during the evening hours. It is gratifying to note that the number of students using the Library in the evening is increasing from

year to year, last year's attendance representing an increase of 35 per cent. over the previous year, and the circulation of books in the evening showing an increase of 21 per cent. over the year before. The wisdom of keeping the Library open up to a late hour has thus been fully justified.

The following figures furnish the statistics for the attendance of students in the reference room, but do not include those using the larger room where the current numbers of periodicals are kept:

Students using the Reference Room from 8.30 A. M. to 6 P. M.

Sept. 30 to Oct. 22, 1904	2751
Oct. 24 to Nov. 26.....	4658
Nov. 28 to Dec. 24	3851
Dec. 26 to Jan. 28, 1905.....	3531
Jan. 30 to Feb. 25.....	3332
Feb. 27 to March 25.....	3857
March 27 to April 22.....	3332
April 24 to May 27.....	4433
May 29 to June 17.....	624
Total	30,369

Students using the Library from 6 to 10 P. M.

Sept. 30 to Oct. 22, 1904.....	796
Oct. 24 to Nov. 26.....	1590
Nov. 28 to Dec. 24.....	1273
Dec. 26 to Jan. 28.....	1415
Jan. 30 to Feb. 25, 1905.....	1274
Feb. 27 to March 25.....	1438
March 27 to April 22.....	1286
April 24 to May 27.....	1795
May 29 to June 17.....	436
Total.....	11,303

The circulation of books by classes is furnished by the following statistics:

	Home use	Library use	Total
General Works.....	505	6,200	6,705
Philosophy	780	702	1,482
Religion.....	847	1,208	2,055
Sociology and Economics.....	3,758	9,704	13,462

	Home use	Library use	Total
Philology	748	593	1,341
Natural Sciences.....	1,338	3,815	5,153
Useful Arts.....	658	3,493	4,151
Medicine.....	356	792	1,148
Fine Arts.....	200	166	366
Literature.....	9,497	7,876	17,373
History.....	3,294	6,121	9,415
Totals.....	21,981	40,670	62,651

The circulation arranged by months was as follows:

Aug. 29 to Sept. 24, 1904.....	387	330	717
Sept. 26 to Oct. 22.....	1,593	2,703	4,296
Oct. 24 to Nov. 26.....	2,784	5,643	8,427
Nov. 28 to Dec. 24.....	2,308	4,598	6,906
Dec. 26 to Jan. 28, 1905.....	2,680	5,179	7,859
Jan. 30 to Feb. 25.....	2,349	4,441	6,790
Feb. 27 to March 25.....	2,381	4,867	7,248
March 27 to April 22.....	2,292	4,772	7,064
April 24 to May 27.....	2,528	5,613	8,141
May 29 to June 24.....	1,091	1,071	2,162
June 26 to July 22.....	719	637	1,356
July 24 to Aug. 26.....	869	816	1,685
Totals.....	21,981	40,670	62,651

As in former years, we have been in a position to loan books to a large number of institutions, and in return have received like courtesies from sister institutions. We are under especial obligations to Harvard University, the Library Company of Philadelphia, and to Columbia University, that have invariably responded to our requests for the loan of books which were not to be found on our shelves.

The examination of books in the stack has proceeded regularly during the year, and I am happy to report that the losses are exceedingly few. On the other hand, we have lost, as in former years, quite a number of books from the alcoves in the inner reading room, and it is much to be deplored that there should be among the students some who are not restrained from appropriating University property made accessible for the benefit of their fellow-students.

SEMINAR AND DEPARTMENTAL LIBRARIES.

The total number of volumes now deposited in the seminar and departmental libraries is 28,890, of which number 12,638 are in the upper floors of the Library building, and 16,252 distributed in the various departmental buildings.

I cannot close this report without referring to the loss that the Library has sustained in the retirement of Mr. W. W. Frazier from the Chairmanship of the Library Committee. During the ten years of his incumbency of that office, he devoted himself with whole-souled energy to the upbuilding of the Library. With his co-operation, the improved methods of modern Library economy were introduced in the management of its affairs. His generous aid made it possible to undertake the extensive task of recataloguing the entire collection of books, the result of which has been to produce a card catalogue that meets the highest standard required in a university library. A reading room with a capacity for 20,000 reference volumes has been fitted up, additional shelving for 30,000 volumes in the book-stack provided, and constant and extensive additions to the collections were made at his instance.

Besides his care for the Library, in which he was seconded by his associates on the Committee, he manifested a personal interest in the welfare of all engaged on the Library staff, so that through his retirement not only does the University lose a valued co-worker, but all at the Library a kind and honored friend. It is our earnest hope that the severance of official relations will not preclude his continuing to manifest an active interest in the development of the institution, to the advancement of which he contributed so largely through his time, his energies and his means.

I have the honor to be, Sir,

Obediently yours,

MORRIS JASTROW, JR.,

Librarian.

APPENDIX IX.

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

To the Provost of the University :

SIR : I present herewith a report upon the growth of the Wistar Institute of Anatomy and Biology and the activities therein during the year ending August 31, 1905.

With regret I record the resignation, on December 10, 1904, of Dr. Horace Jayne as Director of the Institute.

Dr. Jayne's long and conscientious service as Director is marked by many important steps in the development of the Institute. The beginning of an Institute Library by gift of several hundred volumes of valuable scientific books, and the increase of the museum collections by purchase from his own funds, are incidents which showed his devotion to the Institute and to his science. Dr. Jayne left to his successor a foundation well equipped with the results of years of careful work, and with plans matured upon which to build the future.

On January 11, 1905, Dr. Milton J. Greenman was elected to succeed Dr. Jayne as Director of the Institute.

With a view to the more successful achievement of the main object of the Institute, a conference of ten leading American anatomists was called to meet at the Institute, on April 11 and 12, and consider its future development and its relation to similar institutions, and especially to the investigators in anatomy. This conference, through its committee, made the following recommendations, which were presented to the Institute :

1. The principal object of the Institute to be research.

This would involve :

- (a) the appointment of a chief of investigation in one or more fields ;
 - (b) the appointment of research assistants, as well as men who shall divide their services between the museum proper and research ;
 - (c) the appointment of technical assistants.
2. Research. The research shall be :
- (a) In the field of neurology,
 - (b) comparative anatomy and embryology.
3. Relations. The committee recommends :
- (a) that a subvention to the Journal of Anatomy be granted ;
 - (b) that a committee be appointed to consider the relations of the Wistar Institute to American anatomists ;
 - (c) that the Wistar Institute apply to the Association of American Anatomists for co-operation.
4. The committee recommends that an Advisory Board of ten be appointed for general purposes :
- (a) to form a sub-committee on neurology, as well as other sub-committees that may be needed ;
 - (b) to establish relations with the committee of the International Association of Academies for Brain Investigation, and with other committees for collective investigation.
5. The committee would further state that while the general trend of work above outlined is recommended for the present, there is no intention to advise a limitation of the activities of the Institute to it exclusively.

In carrying out the general policy proposed at this conference, the Wistar Institute created an Advisory Board of Anatomists, and elected the following anatomists as members :

Dr. Lewellys F. Barker, Professor of Medicine, Johns Hopkins University, Baltimore, Md.

Dr. Edwin G. Conklin, Professor of Zoölogy, University of Pennsylvania, Philadelphia, Pa.

Dr. Henry H. Donaldson, Professor of Neurology, University of Chicago, Chicago, Ill.

Mr. Simon H. Gage, Professor of Histology and Embryology, Cornell University, Ithaca, N. Y.

Dr. G. Carl Huber, Professor of Histology and Embryology, University of Michigan, Ann Arbor, Mich.

Dr. George S. Huntington, Professor of Anatomy, Columbia University, New York, N. Y.

Dr. Franklin P. Mall, Professor of Anatomy, Johns Hopkins University, Baltimore, Md.

Dr. J. Playfair McMurrich, Professor of Anatomy, University of Michigan, Ann Arbor, Mich.

Dr. Charles S. Minot, Professor of Histology and Human Embryology, Harvard Medical School, Boston, Mass.

Dr. George A. Piersol, Professor of Anatomy, University of Pennsylvania, Philadelphia, Pa.

The Advisory Board organized by electing Dr. Charles S. Minot chairman, and Dr. Milton J. Greenman permanent secretary. It then proceeded to appoint the following committees :

- (1) On Neurology and the Establishment of Relations with the International Association of Academies, Dr. Lewellys F. Barker, Dr. Henry H. Donaldson, Dr. Franklin P. Mall, Dr. J. Playfair McMurrich, Dr. Charles S. Minot. This committee to elect its own chairman.
- (2) On Relations of the Wistar Institute to American Anatomists, Professor Simon H. Gage, chairman ; Dr. George A. Piersol, Dr. G. Carl Huber.
- (3) On Comparative Anatomy and Embryology, Dr. George S. Huntington, chairman ; Dr. Edwin G. Conklin, Dr. Franklin P. Mall.

I present the foregoing report of this conference in detail, since it promises to be a most important factor in the development of the Institute, and it is with great satisfaction that I record the entire approval of this action by General Wistar, the donor.

Through the assistance of the Advisory Board, the interests of American anatomy are being co-ordinated, and it is hoped that this Institute may become an important central institute for investigators in this department of science.

The recommendations of the Advisory Board are being carried out as rapidly as is consistent with proper manipulation of details and as the available income will permit. I am pleased to report in this connection the acquisition of Dr. Henry H. Donaldson as Professor of Neurology. Dr. Donaldson comes to the Institute in the interests of neurology, and with a sense of responsibility to the Advisory Board, who recommended him. He was selected as the proper person to lead American research in Neurology, and will assume charge of this department of the work of the Institute on October 1, 1905. Other appointments to the neurological staff are now pending.

**Professor of
Neurology**

The Committee on the Relations of the Wistar Institute to American Anatomists has been active, and early in September will issue a circular letter addressed to the anatomists of the country, inviting their co-operation and extending to them the privileges of the Institute.

The Committee on Neurology and the establishment of relations with the Committee of the International Association of Academies for Brain Investigation has established the desired relations, and three members of our Advisory Board are now members of the Central Committee of the International Association of Academies. They are Doctors Donaldson, Mall and Minot.

**Committees
of Advisory
Board**

The building of a research museum, such as the Wistar Institute is intended to be, depends upon the investigators working therein. There can be no museum without research, and there can be no research without a museum. They are interdependent. Our efforts during the past year have been devoted in part to the collection of such materials or specimens as are useful in the research work of the laboratories. From the laboratories have come many specimens which have served their purpose for present researches, and are now stored in the museum to serve some future investigation. A typical illustration of this we have in the series of sections of embryos permanently mounted upon glass slips, prepared with great care and labor, which having been used to show the development of some organ or tissue, are equally valuable to show many other structures. Of this class of material we have added to the museum collection thirty-four series of embryos, comprising 434 slides. Forty-four stages of developing shad were collected at the Torresdale Fish Hatchery, and most carefully prepared by Dr. H. D. Senior, for his work on this form, while an equal number of stages of the cod and flatfish were collected at the Woods Hole Station of the United States Bureau of Fisheries. I wish here to express my gratitude to the Commissioner of the Bureau of Fisheries for the privileges granted us in making these collections. By courtesy of Armour & Co., Dr. J. M. Stotsenburg was able to make a most complete collection of pig embryos from the abattoir in Chicago. These embryos are most skillfully prepared and will supply our laboratories for a long time to come.

A large number of specimens of traumatic dislocation of the femur and fracture of the bones of the leg and thigh have been collected during the year. These specimens are of interest from a surgical standpoint, and will be of much greater

interest later, when the results of some researches in the mechanics of fracture and dislocation, now being prosecuted in the laboratory, have been published.

There have been registered, in the museum catalogue, 283 accessions, representing more than five thousand specimens. Most important of these may be mentioned the race skeletons, including seven Chinese, one Sandwich Islander, and one Filipino, a skeleton of the Bison and a series of human infant brains.

Nine loans of specimens have been made from the museum, comprising thirty-six specimens. Twelve of these were loaned for lecture purposes, while twenty-four specimens were sent out to other laboratories, including University of Michigan, Smith College, and University of Leipzig for research purposes.

**Loans of
Specimens**

Considerable use has been made of the museum collections by authors who sought material for illustrative purposes on the subject of which they were writing.

Although no accurate record has been kept, it is very evident that the number of visitors to the museum has been increased to a marked degree during the past year.

To the equipment of the museum we have added six more standard free standing museum cases, and one "A" case, all made under our supervision in our own shop.

The increase of work in the laboratories has necessitated large expenditures in equipment. During the early part of the year our attention was devoted to the proper equipment for the preparation of fresh anatomical material and its dissection, under fluid for museum purposes. A metal topped table, with central sink, and a compressed air apparatus, operated by a water pump, in the basement, were installed. New dust-proof closets and lockers, and a large steel framed

**Laboratories
Equipment**

stack for shelving, were erected in the Neurological Laboratory, thus affording the much needed storage space for instruments and specimens. Two microscopes, two microtomes and a paraffine oven, with all their many accessories, have been added to the equipment.

A wall table of wood and iron has been erected around three sides of the neurological laboratory, affording ample facilities for five workers in well lighted space.

The preparation of museum specimens and research materials has been actively carried on by two Junior Associates in Anatomy and one technical assistant.

Laboratory Work I am pleased to report that the elaborate osteological preparations of the bones of the human skull which have been so extensively used by students in the museum, are nearly completed. While this series has been most attractive to medical students and others, I am inclined to think that in the future we can devote our energies to better advantage to a higher grade of anatomical work.

During the year there have been published two papers by Mr. Henry W. Fowler, of the Academy of Natural Sciences, upon the fishes of our collection, with the result that fourteen new species and two new genera have been described, and one paper on the Lymph Drainage of the Human Tonsil, by Dr. Geo. B. Wood, has come from our laboratory.

Publications The work on the Mechanics of Dislocation of the Hip Joint which is being carried on by Dr. Oscar H. Allis is nearing completion and promises to be one of the most remarkable works of its class.

Special Research The library has been increased by the addition of seventy-four new volumes, of which twenty-eight were gifts from Dr. George A. Dorsey, Professor Simon H. Gage, Dr. Horace Jayne, Dr. S. Weir Mitchell, Dr. J. M.

Stotsenburg, University of Chicago Press, General I. J. Wistar and the United States Government. The regular subscriptions to forty-two journals and eleven periodically appearing monographs have been continued. The periodicals have been bound and the pamphlets classified, placed in cases and properly arranged. The cataloguing has proceeded as time permitted, although there is much of this work yet to be done.

Library

Work in the shop has been actively carried on by the usual number of men, but owing to the extra demands made upon it to supply apparatus for the laboratories and library, it is much behind with its work. I wish here to speak of the increasing satisfaction which our little machine shop has given to us in the production of special apparatus and museum equipment, and of the economical consideration in repairs to steam heating and electric lighting apparatus, and to plumbing about the building.

Shop

Work

During the year no inconsiderable amount of money has been expended to keep the building in perfect repair. Some furniture has been added and preparations are now being made to receive the new accessions to our scientific staff, who are expected at the beginning of the new year.

Repairs

Alterations

Respectfully submitted,

MILTON J. GREENMAN,

Director.

APPENDIX X.

DEPARTMENT OF ARCHÆOLOGY.

To the Provost of the University of Pennsylvania :

SIR : During the year ending August 31 last the Department of Archæology has continued its work on lines laid down during its early history. The year has been eventful, and despite some drawbacks, has been one of considerable advance.

The Free Museum of Science and Art, where its home work is done, and in which its collections are housed, has been open to visitors daily during the College year. The number of visitors during the year was 38,684, being 6740 more than the previous year.

The lecture course was continued during the winter, the Archæological Institute giving its welcome co-operation as heretofore.

The Board of Managers gave the use of the building for other than its own purposes during the year as follows : October 28, 1904, for a reception to first year classes of the University given by the Provost and Mrs Harrison. December 28-31, for meetings of the American Association for the Advancement of Science, including a reception on the evening of December 28, to members of the Association by the Provost and Mrs. Harrison. January 28, 1905, for a meeting in the afternoon of the Delaware Valley Naturalists' Union, and lecture in the evening. Faculty Teas were held on February 22, and May 6. On the latter date there occurred the formal opening of the Wanamaker bronze collection, replicas from Herculaneum and Pompeii, with lecture by

Dr. Bates. April 13 for a reception of the American Philosophical Society. May 25, for a lecture by Dr. Clay to the students and Professors of the Lutheran Theological Seminary. The Museum was also open three evening for visits of the Summer School students of the University, on July 14, 21, and 28. On each of these occasions Professor Hugh A. Clark delivered a lecture on Musical Instruments, illustrating his talks with instruments from the Frishmuth collection in the Museum.

The Board of the Department would like to call the particular attention of the University, and of learned societies, to the desirability of the Museum as a place for holding receptions and meetings: the Board being glad to give the use of the Museum for such purposes for the very small cost of the wages of the employes and of the coal and light used.

During the year the second number of the Transactions was issued. Reference to other publications of the Department is made in the accompanying Reports of the several Sections.

During the spring a second Prize Essay contest was held, open to the students in the higher grades in the City Grammar Schools, and to all in the High, Normal, and Manual Training Schools; Dr. Brumbaugh and Dr. Talcott Williams having the competition in charge. To them and to the other members of the Committee, as well as to the donors of the prizes, the Department wishes to express its thanks for enabling it to bring itself more closely in touch with the scholastic life of the City. Competitive drawing was this year added to the contest. The ability shown in the drawings, as well as in the essays, speaks highly for the quality of teaching in our schools.

During the year the by-laws were altered, arranging the Board of Managers into four classes of four persons each, the term of office of but one class expiring each year. Four persons will, therefore, hereafter be nominated annually by the

members of the Department to the Trustees of the University.

At the January meeting of the Board the Hon. John Wanamaker was elected to fill the vacancy in the list of Vice-Presidents, caused by the death of Professor Maxwell Sommerville. Professor Sommerville's death, and his benefactions to the Department were noted in the last Report of the Provost. During the coming year the Department will receive the first payments of income from his two bequests, first for the general expenses of the Department, and second for the maintenance and care of his collections.

Dr. Hermann Ranke, Assistant Curator of the Egyptian Section, was, during the spring, offered a position in Egyptology under Professor A. Erman in the Royal Museum, Berlin. Dr. Ranke felt that the offer could not be refused, he, therefore, returned to Germany in June.

Clarence S. Fisher, the architect of the last expedition to Nippur, has continued in the employ, first of the Babylonian Committee, and later of the Department, completing his notes, drawings and models which had been begun in the field. Having now finished this work he left the service of the Department during June last.

Dr. Bates, Assistant Professor of Greek in the University of Pennsylvania, and Curator of the Mediterranean Section of the Department, in the spring secured leave of absence for one year, in order to avail himself of the offer of the Chair of Greek in the American School of Classical Study in Athens. On his arrival in Athens he found the Director of the School on his deathbed. Dr. Bates was almost immediately made Director of the School for this year—a position he will fill with great credit, and doubtless much benefit to himself and to the Department.

Mr. Francis P. Sibley, the Treasurer of the Department as well as of the University of Pennsylvania, after a long and trying illness, was compelled to resign both posts as Treas-

urer on May 19. It was with great regret that we were compelled to sever this connection, and it is with greater regret that we have to note Mr. Sibley's death on July 2.

At the end of February the Department suffered great loss by the resignations of Mrs. Cornelius Stevenson, President of the Department, and Curator of the Egyptian Section; Mr. Samuel T. Bodine, Vice President; Dr. W. H. Furness 3d, Secretary, and Curator of the General Ethnology Section; and Messrs. Calvin Wells and Justus C. Strawbridge of the Board of Managers. Some weeks later Mr. C. Hartman Kuhn resigned from the Board, and Mrs. John Harrison and Messrs. Thomas S. Harrison and C. A. Brinley from the Board of Advisory Managers. The services of each of these to the Department (particularly of the officers and members of the Board of Managers) had been of the very greatest importance to the work of the Department. Mrs. Stevenson's association therewith being contemporaneous with the very life of the Department, her individuality having impressed itself upon its work during the many years of her Secretaryship, and latterly of her Presidency. Mr. Wells, Dr. Furness, Mr. Bodine, Mr. Kuhn, and Mr. Strawbridge had long served the Department, and had contributed most liberally, in time, money and collections, to its success.

Those who remain to carry on the work of the Department are most sensible of the loss the Department has sustained. Fortunately, each of our former colleagues has expressed his or her willingness to help the Department by advising with the Board when requested.

No attempt was made during the Departmental year (ending August 31) to fill the vacancies caused by these resignations but at the date of the writing of this Report it is with pleasure that the Board reports that the vacancies have been filled as follows: Mr. B. Franklin Pepper, Mr. Edward Brinton Smith, Mr. James Hay, Dr. Norton Downs, Mr. Jacob S. Disston. Mr. Pepper was also elected Secretary; Mr. Eckley B. Coxe, Jr., Vice President; Dr. Gordon, Curator of the Gen-

eral Ethnology Section, and Dr. Bates of the Mediterranean Section.

In the Egyptian Section the work of accessioning the specimens has been continued, and the mastaba of Ra-ka-pu which was presented to the Museum by the Honorable John Wanamaker, has been erected in a room in the basement of the building and is now open to the public. The granite sarcophagus, also presented by Mr. Wanamaker, while not belonging to the mastaba, has been placed in the room, owing to the lack of space for displaying it elsewhere.

Mr. Eckley B. Coxe, Jr., again generously subscribed to the work of the Egypt Exploration Fund, and as a consequence the Museum has been enriched by a collection of over one hundred specimens from Ehnasya, Sedment, Deir el Bahari and Oxyrhynchus, including portions of wax tablets which show traces of writing, sandals, dice, reed pens, wooden combs, alabaster vases and a large limestone slab of an early king, probably of the VIth Dynasty.

The Section is indebted to the generosity of the American Exploration Society for a fine gold octodrachm of Arsinoë, two gold solidii of Valentinian and a turquoise in gold setting, the latter probably of the XVIIIth Dyn. These specimens were all found at Ehnasya, Egypt.

Mrs. Cornelius Stevenson has presented to the Department her collection of scarabs, amulets and textiles which had been deposited in the Museum.

Miss Boyd reports that in the preparation of the illustrated article which will be published at an early date on the excavations of the American Exploration Society in Gournia and Vasiliki, Crete, that from April 18 to August 3 last she was in Crete, devoting all her time to the preparation of plans and drawings, a complete catalogue of the Gournia findings in the Candia Museum, and detailed description of the site. From four to five weeks of this time was spent in Gournia itself, the rest in Candia. Mr. W. Sejk, an architect whose work for Dr. Doerpfeld at Troy, for the German excavations at Per-

gamon, and for the British School in Laconia, in sixteen days of very hard work measured the site at Gournia and Vasiliki, and on his return to Athens devoted a month to preparing a plan of the entire town of Gournia and sections of two important houses, also a plan and section of the excavations at Vasiliki. Mr. Helvor Bagge, who previously prepared excellent water-color drawings of some of the Gournia pottery, made three more such drawings, full size and full color, and by another process has copied some five hundred objects for illustration. While this work was going on in Crete a small insurrection was under way on the island. This added an element of uncertainty, though fortunately, there was no actual danger to life.

The Board takes pleasure in transmitting herewith the account of the work in the other Sections of the Department in a Report from each Curator.

The Board reports that all employes of the Department, in whatever capacity, have during the past year, done their work with great faithfulness and earnestness of purpose.

The Museum building is in a very good condition, the regular force of employes having made minor repairs and having done some painting during the summer.

The publications of the Department have been placed in the Museum for sale, and arrangements are now being made to have photographs of the more important specimens in the collections also placed on sale.

Respectfully submitted,
S. F. Houston
Acting President.

To the Acting President:

SIR: The work of labelling and cataloguing ethnological collections, referred to in the report for last year was continued during last winter and spring. Measures were also

adopted for the greater security and more effective preservation of these collections.

From information gathered from various sources I learned during last winter that the Indian tribes of Alaska are rapidly changing their habits of life and showing a tendency to die out under the influence of the white intruders who have recently begun to penetrate that territory in considerable numbers. In order therefore to be in advance of this movement, I was enabled by the Acting President to spend the summer in Alaska collecting specimens and other data of scientific value for the Museum. My investigations were directed especially to the tribes occupying the unfrequented and unexplored parts of the interior and of the Bering Sea Coast. As a result of the summer's work the Museum has received a large collection representing the three typical culture areas of Alaska and containing many very rare specimens and others that are quite unique. A large number of photographs and other ethnological data of great interest were obtained for the Museum by this timely expedition. During my summer's travels I was constantly reminded of the urgent necessity for immediate measures for making further collections among the surviving tribes in North America. The material which would give a proper knowledge of the American Indian is becoming scarcer every year and the time is very near when such materials will be no longer available in any form. Our knowledge of many of the existing tribes is very meagre and the collections in the Museum are still far from adequate to represent the several types of aboriginal culture on our continent. While on the Pacific Coast I visited the Lewis and Clark exposition and purchased several collections for the Museum. Apart from these accessions, the following purchases have been made since September 1st, 1904: A collection made among the tribes of the Congo Basin by the Reverend Dr. Leslie; a collection of ivories from Point Barrow; a collection of southwestern Indian basketry and textiles and a collection of Indian basketry from Louisiana.

Count Tereshima of Tokyo, Japan, has presented, through the Provost, a model of Japanese armour. Mrs. William Frishmuth has added fifty specimens to the collection of musical instruments which bears her name. Gifts have been received from Miss Helen Landell, Dr. H. C. Shurtleff, Dr. C. S. Potts, and Miss Florence Keen.

As librarian of the Museum I have the pleasure to report that during the year the library has received 155 exchanges, and as a gift from Mrs. Cornelius Stevenson a collection of 1583 books and pamphlets relating chiefly to Egyptian archæology.

Respectfully,
G. B. GORDON.

TO SAMUEL F. HOUSTON ESQ.,

Acting President of the Department of Archæology.

DEAR SIR: I have the honor to submit the following brief report on the work of the Babylonian and General Semitic Section during the past year.

The Curator assisted by his associates devoted considerable time to the examination of the large number of cuneiform tablets and other antiquities stored in the basement of the Museum, and to the plan of rearranging the show cases preparatory to the issue of a guide through the collections. Nearly 3000 antiquities were catalogued and a number of objects placed on exhibition, including two new types of terracotta sarcophagi from Nippur and a small but representative collection of pre-Sargonic bronze and stone objects from Fâra, the probable site of the Babylonian city of Shuripak, previously presented to the Museum by Mrs. I. C. Hilprecht.

At the same time the preparation of new volumes of "The Babylonian Expedition of the University of Penn-

sylvania," published through the generosity of Mr. Eckley Brinton Coxe, Jr., was carried on vigorously. In the early spring Dr. Herman Ranke, until Jan. 1, 1905, Harrison Research Fellow in Assyriology, issued his "Early Babylonian Proper Names" (Series D, Vol. III of the whole work). Four other volumes are ready for the press, viz., "Tablets dated in the Reign of the Rulers of the First Dynasty of Babylon," by Herman Ranke (Series A, Vol. VI, Part 1.); "Exercises and Copies from the Temple School at Nippur," by H. V. Hilprecht (Series A, Vol. XIII, Part 1.); "Mathematical, Metrological and Chronological Tablets from the Temple Library at Nippur," by H. V. Hilprecht (Series A, Vol. XIV, Part 1); "Administrative Archives from the Temple Library of Nippur at the Time of the Cassite Rulers" (with incomplete dates), by A. T. Clay (Series A, Vol. XXII). Besides, the preparation of the manuscript of four other volumes of Series A and Series D, by H. V. Hilprecht, A. T. Clay, and W. J. Hinke is far enough advanced to assure their publication in the near future.

"A Topographical Map from Nippur," was discussed in the "Transactions of the Department of Archaeology" (Vol. 1, Part III, pp. 223-225), by Dr. Clay, who at the same time endeavored to advance the usefulness of the Department by a series of well attended public lectures.

In the interest of his researches on the unbaked and unfortunately much mutilated tablets from the Temple Library of Nippur, the Curator left on May 1, for the Imperial Ottoman Museum in Constantinople, where he remained till nearly the end of June, again most cordially supported in his work by His Excellency Hamdy Bey, Director General of the Museum, and becoming the recipient of extraordinary favors on the part of His Imperial Majesty the Sultan and his Government, for which he acknowledges his warm gratitude.

It is especially gratifying to refer to the remarkable development of the work of photographing and casting in charge of Mr. Witte. At times the applications for photographs, casts

and lantern slides became so numerous that the work of repairing the large number of antiquities from Nippur not yet catalogued had to be postponed.

Respectfully,

H. V. HILPRECHT,

Curator.

To the Acting President:

SIR: The Curator begs to make the following report or the year ending August 31st, 1905.

The most important work accomplished in the Section during the past year has been the putting in place of the Wanamaker collection of reproductions of the bronzes in the Naples Museum. This collection has been set up in Pepper Hall and in the two alcoves adjoining in the east wing. A few objects have not been exhibited for lack of space, but nearly the whole collection is now open to the public. The value of this collection for students of ancient art and of private antiquities is great, and its presence in the Museum adds much to the beauty of this Section. On the occasion of the opening of the collection the Ladies of the Faculties of the University gave a tea and the Curator lectured on the bronzes.

In addition the valuable Greek marbles presented to the Museum by Mrs. Lucy Wharton Drexel which were reported last year have also been put upon exhibition.

Unfortunately the installation of these new exhibits has reduced the space formerly given to Greek and Etruscan vases, the collection of Greek vases although small is very valuable and should be better exhibited.

Dr. Henry C. Shurtleff has presented specimens from the Temple of Diana at Ephesus and from Pompeii.

During the past year the Curator has continued his work on the material in the Section and has published a paper in the "Transactions" on the Etruscan inscriptions in the Museum.

Many of these inscriptions were previously unpublished, or incorrectly published, although they are important for students of Etruscan.

Interesting papers were contributed by Miss Harriet A. Boyd and Miss Edith H. Hall on their work at Gournia, and by Mr. Richard B. Seager on his excavations at Vasiliki, and Dr. Alfred Emerson contributed an article on the Torso of a Hermes in the Drexel Collection of Greek and Roman statuary.

This year the subjects for the prize compositions offered by the Museum to school children were both chosen from this Section.

It is hoped that the friends of this Section of the Museum may continue their interest so as to increase its collections, especially in the field of Greek vases.

WILLIAM N. BATES.

APPENDIX XI.

REPORT OF THE PRESIDENT OF THE HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA. FOR THE YEAR 1905.

To the Provost of the University :

The year 1905 may be characterized as one of prosperity and progress to our Hospital.

We are pleased to state that the Laundry and Isolation Buildings commenced last year are now completed and in active use. We believe we have one of the most thoroughly equipped Hospital Laundries in the State; and where formerly a large portion of our laundry work had to be sent outside, with our new laundry we are now able to do all the work much more effectively.

The Isolation Building is entirely completed and ready for any infectious case that may occur in the main Hospital. We believe this will be a great protection to the other patients as well as enabling us to more thoroughly protect the infected patient who heretofore had to be sent to the Municipal Hospital.

Three Sun Parlors have been erected to the wards in the Gibson Wing. Every ward now has a sun parlor and any one who visits the Hospital can readily see the comfort and pleasure the sick and suffering obtain from these sun parlors.

Two new suites for private patients have been provided, thus increasing our accommodations for that class of persons. It is specially noticed that the demand for private rooms is

increasing every year and our rooms are constantly occupied, with many waiting for them to be vacated. It is becoming very evident that the public feel that at a well conducted Hospital, better service and attention can be obtained than in their own homes.

We have also removed our ambulance stable from the Hospital grounds and have fitted up a building for that purpose in the neighborhood, which with telephone connection, enables us to do as effective service as heretofore,

The management is under obligations to Drs. deSchweinitz and Frazier for the furnishing of the Eye and Surgical Dispensaries, respectively, and we feel confident their generosity will result in a much more efficient and satisfactory Dispensary service.

During the year, the Hospital received \$10,191.60 for an endowed bed in a private room to be named the "Maxwell Sommerville Room," and \$5000 for an endowed bed in memory of "Richard Horner Wyeth." Tablets suitably inscribed have been prepared and placed in the corridor of the Hospital.

The number of Hospital days was 81,938. During the summer, two wards were closed owing to the building of the Sun Parlors, otherwise the number of days would have been greater. There were 3565 patients admitted, an increase of 117 over the previous year. The free patients numbered 2385, or almost two-thirds of the whole number admitted, again showing how large a portion of our service is free. The cost of maintaining the Hospital was \$191,837.81, a decrease of \$9564.31 in comparison to the year 1904. The indebtedness on August 31st, 1905, was \$13,009.21 against \$21,387.66 in August, 1904, showing a decrease of \$8378.45.

The Executive Committee have been untiring in their efforts during the past year to maintain the high standard of

the service. Our Superintendent, Miss Smith, and her assistants have shown the same careful attention to all their duties.

The thanks of the management are again due to the Board of Women Visitors for their many acts of generosity in the way of supplies to the different wards. To the Medical Staff as well as to those connected with the Dispensaries our thanks are again tendered.

JOHN SAILER,
President.

APPENDIX XII.

REPORT OF THE PUBLICATION COMMITTEE.

To the Provost of the University;

SIR: As a result, we believe, of our appeal through you to friends of the University for additional funds to prosecute our work, your Committee is enabled to report the issue of several monographs of importance as contributions to knowledge on behalf of the University since the year ending August 31, 1904. The titles thereof follow, along with the titles of those manuscripts ready for publication so soon as the necessary funds may be in hand.

TITLES ISSUED IN 1904-1905.

SERIES IN ASTRONOMY.

Results of Observations with the Zenith Telescope of the Flower Astronomical Observatory, from October 1, 1901, to December 18, 1903. By Charles L. Doolittle.

Measures of 900 Double and Multiple Stars made with the Eighteen-inch Refractor of the Flower Astronomical Observatory. By Eric Doolittle.

SERIES IN HISTORY.

The Suffrage Franchise in the Thirteen English Colonies in America. By Albert E. McKinley.

SERIES IN POLITICAL ECONOMY AND PUBLIC LAW.

The Organization of Ocean Commerce. By J. Russell Smith.

SERIES IN MATHEMATICS.

Groups of Order p^m which Contain Cyclic Subgroups of Order p^{m3} . By Lewis I. Neikirk.

CONTRIBUTIONS FROM THE BOTANICAL LABORATORY,
Eight Papers, with Plates. By O. P. Phillips, et al.

CONTRIBUTIONS FROM THE ZOÖLOGICAL LABORATORY.

(For the year 1904.)

Part. 1. Nine Separata.

Part. 2. Study of the Behavior of Lower Organisms.

By Herbert S. Jennings.

Memoir—The Organization and Cell-Lineage of the Ascidian Egg.

TITLES ACCEPTED AND AWAITING PUBLICATION :

SERIES IN PHILOLOGY AND LITERATURE.

George Chapman and "The Tragedie of Chabot Admiral of France." By Ezra Lehman. (In press.)

A Study of the Poetry of John Donne. By Martin G. Brumbaugh. (In preparation.)

SERIES IN PHILOSOPHY.

The Datum of Knowledge; *das Gegebene* in the Transition from Kant to Fichte. By William T. Paullin, Jr. (In preparation.)

SERIES IN ASTRONOMY.

(1) Description, and Determination of the Longitude, of the Flower Astronomical Observatory. By Charles L. Doolittle. (In preparation.)

In connection with the issue of these serial publications, the University maintains exchange relations with one hundred and seventy-two institutions of learning and scientific societies—a relationship which, we believe, is not without reciprocal profit to our correspondents, both here and abroad.

Your Committee has also published, under the University imprint, the usual "Proceedings of University Day" (February

22, 1905), and the "Proceedings of Commencement Day" (June 14, 1905).

In conclusion, your Committee again presents for your thoughtful consideration the great importance of making liberal provision for the timely publication of the results of research work done under the auspices of the University. And we feel that we cannot do better, in emphasizing this point, than by quoting the final paragraph of our last report to you on this same topic, as follows :

"There is probably no branch of University activity more important in its effect upon the standing of a University in the academic world than the continuous and systematic publication of original material through the issue of serial monographs. We therefore make an urgent appeal through you to those who may be disposed to aid in maintaining the University Publications to contribute liberally to their support, and thereby to further one of the highest aims of the University, which is to stimulate scholarly investigation and to diffuse and promote knowledge among men."

EXCHANGE BUREAU.

FOREIGN EXCHANGES.

- Aachen, Technische Hochschule, Preussen, Deutschland.
- Academie des Inscriptions et Belles Lettres, Institut de France, Paris, France.
- Amsterdam Bibliothèque de l'Université (pour la Société Mathématique), Holland.
- Amsterdam, Koninklijke Akademie van Wetenschappen, Nederland.
- Asiatic Society of Bengal, Calcutta, India.
- Basel, Universitäts-Bibliothek, Schweiz.
- Berlin, Akademie der Wissenschaften, Deutschland.
- Berlin, Koenigl. Museum für Naturkunde Zoologische Sammlung, Deutschland.
- Berlin, Universitäts-Bibliothek, Deutschland.
- Bern, Universitäts-Bibliothek, Schweiz.

- Bernice Pauahi Bishop Museum, Honolulu, Hawaii.
Bonn, Universitäts-Bibliothek, Preussen, Deutschland.
Bordeaux, Société d'Economie Politique, France.
Braunschweig, Technische Hochschule, Deutschland.
Bremen, Komitee für die Bibliothek, Deutschland.
Breslau, Koenigliche Universitäts-Bibliothek, Deutschland.
Brünn, K. K. Technische Hochschule, Mähren, Oesterreich.
Bruxelles, Jardin Botanique de l'Etat, Belgique.
Cambridge Philosophical Society, England.
Cambridge University Library, England.
Canadian Institute, Toronto, Canada.
Ceylon, India; Royal Botanic Gardens.
Chile, University of, Santiago, Chile.
Christiania, Sweden; Botanic Garden.
Congo Museum, Bruxelles, Belgique.
Constantinople, Imperial Ottoman Museum, Turkey.
Darmstadt, Technische Hochschule, Hessen, Deutschland.
Dorpat, Imper. Universitat, Russia.
Dresden, Konigl. Botanischer Garden, Deutschland.
Dresden Technische Hochschule, Sachsen, Deutschland.
Ecole Pratique des Hautes Etudes, Paris, France.
Edinburgh, Royal Society of, Scotland.
Egyptian Government School of Medicine, Cairo, Egypt.
Erlangen, Koenigliche Universitäts-Bibliothek, Bayern, Deutschland.
Ethnological Survey for Philippine Islands, Manila, P. I.
Florence, R. Istituto Botanico di Firenze, Italia.
Freiburg, i. B., Universitäts-Bibliothek, Baden, Deutschland.
Geneve, Universite de Geneve, Suisse.
Genua, Reg. Universita degli Studi, Italia.
Giessen, Universitäts-Bibliothek, Deutschland.
Glasgow, Natural History Society of, Glasgow, Scotland.
Gottingen, Koenigliche Gesellschaft der Wissenschaften, Preussen, Deutschland.
Gottingen, Universitäts-Bibliothek, 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, France.
Jamaica, Institute of, Kingston, W. I.
Jamaica, Public Gardens and Plantations, Kingston, W. I.
Japan, Department of Education, Tokyo, Japan.
Jena, Universitäts-Bibliothek, Sachsen-Weimar, Deutschland.
Karlsruhe, Technische Hochschule, Baden, Deutschland.
Kazan, l'Université Imperial (de la Société Physics Mathématique), Russie.
Kiel, Koenigl. Universitäts-Bibliothek, Preussen, Deutschland.
Koenigsberg, Koenigl. Universitäts - Bibliothek, Preussen, Deutschland.
Leiden, Rijks Universiteit, Nederland.
Leipzig, Universitäts-Bibliothek, Sachsen, Deutschland.
Liège, l'Université de, Liège, Belgique.
Linnean Society of New South Wales, Elizabeth Bay, Sydney, Australia.
London, Royal Society of, Burlington House, London, England.
Louvain, l'Université Catholique de, Belgique.
Lund, Kong. Universitet, Sverige.
McGill University Library, Montreal, Canada.
Manchester, University of, England.
Marburg, Universitäts-Bibliothek, Preussen, Deutschland.
Marine Biological Association, Plymouth, England.
Marseilles, France ; Institut Colonial et du Jardin Botanique.
Moskau, Imper. Maskovskij Universitet, Russia.
Munchen, Technische Hochschule, Bayern, Deutschland.
Munster, Koenigl. Akademie-Bibliothek, Preussen, Deutschland.
Musée Social, Paris, France.
Nancy, Université de, France.
Naples, Reale Istituto D'Incoraggiamento di Napoli, Italia.
New South Wales Royal Society of, North Sydney, Australia.
Oxford University, Bodleian Library, England.

- Padua, Reg. Università degli Studi, Padua, Italia.
Palermo, Circolo Matematico di Palermo, Italia.
Palermo, R. Orto Botanico di Palermo, Italia.
Perugia, Reg. Università degli Studi, Perugia, Italia.
Philippine Museum, Manila, P. I.
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.
Rome, R. Istituto e del R. Orto Botanico di Roma, Italia.
Royal Horticultural Society, London, England.
Royal Institution of Great Britain, London, England.
St. Andrew's University, Scotland.
St. Etienne Societe D'Agriculture, Departement de la Loire,
France.
St. Petersburg, Imper. Universitet, Russia.
Sapporo, Imperial College of Agriculture, Sapporo, Japan.
Sardinia, Le Matematiche Pure ed Applicate, Italia.
Société D'Agriculture, Departement de la Loire, Saint Etienne,
France.
Strassburg, Universitäts-Bibliothek, Strassburg, Elsass, Deutschland.
Stuttgart, Technische Hochschule, Wurttemberg, Deutschland.
Sydney Observatory, New South Wales, Australia.
Toronto University Library, Toronto, Canada.
Tubingen, Koenigl. Universitäts - Bibliothek, Wurttemberg,
Deutschland.
Upsala, Kong. Universitets-Bibliotek, Upsala, Sverige.
Utrecht, Rijks Universiteit, Utrecht, Nederland.
Wien, K. K. Naturhistorisches Hofmuseum, Oesterreich-
Ungarn.
Wien, Technische Hochschule, Oesterreich-Ungarn.
Wien, K. K. Universitäts-Bibliothek, Oesterreich-Ungarn.
Wurzburg, K. K. Universität, Bayern, Deutschland.
Zurich, Switzerland ; Botanical Gardens.

DOMESTIC EXCHANGES.

- Academy of Natural Sciences, Philadelphia.
American Academy of Arts and Sciences, Boston, Mass.
American Catholic Historical Society, Philadelphia.
American Jewish Historical Society, Washington, D. C.
American Museum of Natural History, New York City.
American Philosophical Society, Philadelphia.
Ames Botanical Laboratory, North Easton, Mass.
Boston Public Library, Boston, Mass.
Brooklyn Institute of Arts and Sciences, Brooklyn, N. Y.
Brown University, Anatomical Museum, Providence, R. I.
Buffalo Society of Natural Sciences, Buffalo, N. Y.
California Academy of Sciences, San Francisco, Cal.
California, University of, Berkeley, Cal.
Carnegie Institution, Washington, D. C.
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.
Cincinnati Society of Natural History, 312 Broadway, Cincinnati, O.
Cincinnati, University of, Cincinnati, O.
Colorado College Scientific Society, Colorado Springs, Colo.
Colorado University, Boulder, Colo.
Columbia University Library, New York City.
Congress, Library of, Washington, D. C.
Cornell University Library, Ithaca, N. Y.
Davenport Academy of Sciences, Iowa.
Denison University Library, Granville, Ohio.
Detroit Public Library, Mich.
Free Library of Philadelphia.
Harvard University Library, Cambridge, Mass.
Illinois, University of (State Laboratory of Natural History), Urbana, Ill.

- Iowa State Historical Society, Iowa City, Iowa.
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.
Leland Stanford, Jr., University Library, Palo Alto, Cal.
Lloyd Library, The, Cincinnati, Ohio.
Massachusetts Horticultural Society, Boston, Mass.
Massachusetts Institute of Technology, Boston, Mass.
Michigan, University of, Ann Arbor, Mich.
Missouri, University of, Columbia, Mo.
Montana, University of, Biological Station, Missoula, Montana.
Nebraska, University of, Lincoln, Nebraska.
New York Botanical Garden, New York City.
New York Public Library, New York City.
New York, University of State of, State Library, Albany, N. Y.
Northern Indiana Historical Society, South Bend, Ind.
Oberlin College, Oberlin, Ohio.
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.
Radcliffe College, Cambridge, Mass.
Rush Medical College Library (University of Chicago), Chicago, Illinois.
Smithsonian Institution, Washington, D. C.
Texas Academy of Science, Austin, Texas.
Trinity College Historical Society, Durham, N. C.
United States Census Office Library, Washington, D. C.
Vermont, University of, Burlington, Vt.
Virginia Historical Society, Richmond, Virginia.
Wisconsin Natural History Society, Milwaukee, Wisconsin.
Wisconsin, University of, Madison, Wisconsin.
Yale University Library, New Haven, Conn.

Total receipts through Exchange Bureau :

3032 dissertations and official publications from foreign universities.

679 dissertations and official publications from United States universities.

323 publications from United States and foreign learned societies and from schools.

4034

196 periodicals.

Respectfully submitted,

EDWIN GRANT CONKLIN,

Chairman.

APPENDIX XIII.

REPORT OF THE GRADUATES' APPOINTMENT COMMITTEE.

To the Provost of the University :

DEAR SIR: I have the honor to transmit herewith a report of work done during the past year in connection with the appointment of members of the University to teaching positions:

There are registered on the Committee's books one hundred and fifty-three (153) applicants for teaching positions. Many of those registered are already teaching, but desire to better their positions. The Committee has received direct inquiries from forty-four (44) educational institutions looking towards filling vacancies, and in thirty-three (33) of these cases nominations have been made.

A list of schools, colleges, etc., to which appointments have been made during the past year is appended. In this list is included also a record of appointments secured through the recommendation of the heads of departments in the College.

Seventy-two (72) persons are registered with the Committee as applicants for tutoring work only.

Respectfully submitted,

EDGAR F. SMITH,

Chairman.

Illinois :

University of Illinois, Urbana..... 2

Maine :

University of Maine, Orono..... 1

Michigan :

University of Michigan, Ann Arbor 1

Missouri:

Central College, Fayette	I
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New York:

College of City of New York.....	I
----------------------------------	---

Vassar College, Poughkeepsie	I
------------------------------------	---

Pennsylvania:

Central High School, Philadelphia	I
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Chestnut Hill Academy, Chestnut Hill	I
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Yeates School, Lancaster.....	I
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Johnstown High School	I
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Northeast Manual Training School, Phila.....	2
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Episcopal Academy, Philadelphia.....	I
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Friends' Select School	I
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Girls' High School, Philadelphia.....	5
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Miss Gordon's School for Girls, Phila	I
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Villa Nova College.....	I
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Allegheny College, Allegheny	I
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Lehigh University	I
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University of Pennsylvania	5
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South Carolina:

Woman's College, Columbia	I
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Virginia:

Ladies' Academy, Staunton	I
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Washington, D. C.:

Central High School	I
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Wisconsin:

University of Wisconsin, Madison.....	2
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Total	34
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APPENDIX XIV.

To the Provost of the University:

SIR: At a meeting of the Board of Trustees, held May 23, 1904, the following recommendations were approved:

1st: That the course in Physical Education be made an integral part of the University curriculum, and that the Gymnasium be under the control of the Trustees.

2nd: That the course in Physical Education shall be optional in the Department of Philosophy, the Gymnasium not being open to women.

3rd: That in the Professional Schools the course shall be optional except to students under 21 years of age, who, in the opinion of the Director stand in need thereof.

4th: That in the College, including students, in Arts, Science, and Wharton School, the course be obligatory upon all students under 21 years of age, and upon all over that age for whom the Director may consider it advisable.

This necessitated the complete reorganization and extension of the Department as then constituted, and the appointment of a Director. I have the honor of submitting to you the first annual report as Director of the Department under these revised regulations.

The fact that the system of physical education at Pennsylvania has been occasionally referred to as one of compulsory athletics, shows that the distinction between athletics and physical education is not clear to all minds; so that in this first report I feel that this difference should be defined, if the aims and scope of the work undertaken are to be thoroughly appreciated, and the principles for which it stands are to be clearly apprehended.

The education of the bodily activities is a mere incident in most athletic games—an important one it is true—but the

game is, or should be, a spontaneous expression of the play instinct of youth, rather than an educational scheme deliberately designed for his physical betterment.

The scheme of physical education at this University must be specially adapted to the conditions of the college student; and the main requirements are for

- (1) Increased respiratory power,
- (2) Development of the neglected muscle groups of the arms, chest, and abdomen, and
- (3) The training of neuro-muscular control, which is lamentably lacking in so many cases that present themselves for examination.

Games may be used to advantage in many of these cases, and others may have had a good start before they come to us. But for the great mass of men who enter in the first year it is necessary to begin with the simplest movements and exercises, going to more and more complicated work as progress warrants it. In this way the student receives in his four years' course a complete education of his strength, speed, agility, and endurance; besides more than a bowing acquaintance with the elementary and fundamental movements of those games and sports like boxing, fencing, wrestling, and swimming, without which no man can be called educated in the highest sense.

The propriety of including physical education in a college course, and of requiring at least a minimum, with opportunities for much more, I need scarcely more than state at this time. The experience of other institutions in which regulated physical exercises have been required over a number of years of all students shows a consistent and marked decrease in the sick list from the freshman year to the time of graduation.

A thorough examination, with advice, at the beginning of a student's course, may mean the difference between continued disability or progressive failure in health, and a constant improvement in his physical condition. It is only by this means that he can be developed harmoniously into the

all round citizen,—no one part forced at the expense of another—the finished product; a man not only able to will and to plan but having acquired the vitality and physique to do and to execute.

The building that is dedicated to this work is entirely fire-proof in construction; the floors and columns being concrete. Both entrances lead to spacious vestibules, near which are the offices of the Athletic Association and those of the Director of the Department. From this point one passes to a gallery, overlooking the swimming pool on the ground floor, 100 feet long by 30 feet wide, containing nine feet of water at one end, and four feet six inches at the other.

At either end of the basement are team dressing rooms or football, track athletics, and baseball, etc., with adjoining shower bath room, tailor shop, drying room, and trainer's room. One wing is for visitors and guests, and the other for the Varsity team. On the same floor as the swimming pool, are rooms for boxing, fencing and rowing.

Passing up a broad flight of stairs, one will find himself upon a raised platform, commanding a view of Weightman Hall, 144 feet long by 70 feet wide; lighted not only by ample windows, but also by a roof of glass. It is here that the more serious work of physical education is done.

On this floor, in both wings, are the locker rooms, with originally 1500 in place, and a recent addition of 1000 more.

The committee, in deciding upon the plans, clung firmly to the idea that the building must be for the development of the health and strength of the student body as a whole, and that while special activities should be encouraged, they should be encouraged only as auxiliaries to this main purpose.

Before the formal opening, which took place on December 14th, 1904, the equipment of apparatus and furnishings had to be designed; but work was begun early in October, by the examination of the candidates for the football squad (65 in number) in the temporary wooden shed, since removed, that served as a dressing room for the teams. These were

recorded upon typewritten sheets until more suitable forms were determined upon. The designs and arrangement of apparatus for the main exercise hall, and the various smaller rooms had also to be made to fit our rather unusual conditions, and provide for the accommodation of 3000 students, and for five daily classes of 150 men each. This signified the employment of new methods for clearing the floor and setting up the various pieces of fixed apparatus, which has always been a difficult problem. It was accomplished by having the parallel bars, horses and bucks, set upon standards made to fit into sockets sunk in the concrete beneath the floor. In this way they are readily interchangeable, and when not in use they are stored upon trucks that occupy but little space. The horizontal bars, which are adjustable, are also fitted in floor sockets, and are readily hauled up to the iron girders of the roof; and thus the floor can be completely occupied by apparatus, or completely cleared for a large class in less than three minutes.

The examination of the general student body was begun in November and carried on almost continuously until spring. In this work I had the valued help of Mr. J. Leonard Mason, appointed instructor in gymnastics in October, 1904, and of Mr. Charles E. Suiter, who had been appointed assistant instructor at the same time, and who resigned last spring to accept the position of Director of Physical Education at Lehigh.

An analysis of the first 1000 men examined is of interest as showing the nature and extent of the defects most frequently found, and as a guide to the prescription of exercises to combat these conditions.

594 men presented marked defects of some kind, of which, 160 had uneven shoulders, the right shoulder being lower in all but twenty cases; while 84 showed well advanced lateral curvature of the spine. In 209 the chest was flattened, and the shoulders round, to the extent of making the carriage awkward, unsightly, and interfering with respiratory movement. These men were almost all capable of being straight-

ened and developed enormously by proper exercises. 217 men showed a breaking down of the arches of the foot, most of them capable of great improvement, with an increase in comfort and efficiency by the regulated exercises prescribed on cards sent to each one after the examination. These exercises were first given under the personal supervision of myself, Mr. Mason, or Mr. Suiter. Many of these men have shown marked improvement as a result of following out this work, and have reported their progress monthly.

Hernia was found unprotected by proper means, in 12 cases, and the change from an active to the comparatively sedentary student life showed, by derangement of the gastrointestinal functions, in 200 more.

These figures will serve to give an idea of the nature of the defects found, and do not include the number of men whose heart or lungs were not in condition to warrant their engaging in the more violent forms of athletic sports and games; and who were prevented from doing themselves permanent injury.

While these examinations were going on, voluntary classes were started on the gymnasium floor in Mr. Mason's charge as soon as the first of the apparatus was in place. These classes met daily until the regular work could be organized.

The Gymnasium was formally handed over by the Committee on December 14th, 1904, and formally accepted by the University. The presentation address was delivered by Professor J. William White, representing the Committee. It was reprinted in pamphlet form with the replies to it, and sent to all subscribers to the Fund.

A tentative start was made in February, 1905, by forming classes to include all from whom the regulations required a definite amount of exercise. The enrolment for regular gymnasium work showed nearly 600 names on the class lists; 184 excused as being on teams, and 77 excused on account of physical disability making a total of 861 men.

Owing to the lateness in the session and the inevitable

delays in designing the various forms and procedures necessary at the beginning of so great a scheme many men were excused from the rule, pending a revision of the regulations, which took place during the summer, and now reads :

"In the following cases a certain amount of gymnastic or athletic work will be required, for which the student will receive credit on the basis of laboratory work. In all other cases the work will be optional.

College and Wharton School.—Two periods will be required in The College and Wharton School, lasting one hour each, of all full students, and of partial and special students as provided by a special form ; the work to be graded and made progressive throughout the four years.

Exceptional cases to be excused from this requirement when approved jointly by the Director of the Department of Physical Education and the Dean of the Department.

Professional Schools.—The same amount of work will be required from members of the first and second years in the Department of Medicine, and from members of the first year in the Departments of Law, Dentistry, and Veterinary Medicine.

EXCEPTIONS.

First. All full students who have, in the opinion of the Director of the Department of Physical Education, had an equivalent amount of work at this, or another, University or College.

Second. Holders of a College degree in Arts or Science.

Third. Those having some physical disability.

Membership and regular attendance at practice of any of the athletic squads of the University will be taken as an equivalent for gymnasium work while the man is in active training, the attendance being reported weekly."

The classes were popular with those who took the work, from the start, and, in the spring, when the weather permitted of it, they were conducted on Franklin Field in the open air.

An examination for physical ability was made at the end

of the session, and it is to be hoped that some practical method will be designed to test progress in physical education that will correspond in some degree at least to the examinations of the more scholastic branches.

The installing and the testing of the apparatus continued during the summer, but was not completed until October, 1905, when it was finally accepted under guarantee.

In track and field athletics, Dr. Shell, Instructor in athletics, reported about 50 men in training for the various events, Franklin Field being used in fine weather, and the indoor track under the south stand during inclement weather.

The swimming pool was the first part of the Gymnasium that was ready for use. In October, 1904, Mr. George Kistler was appointed Instructor of swimming, with an assistant, and was placed in charge of the new pool. As each student came up for physical examination he was given a card which was presented to Mr. Kistler, who examined him as to his ability, and, when necessary, gave him instruction. Following is Mr. Kistler's report:

"Of 610 men who reported, 466 were found to have some knowledge of swimming, 144 could not swim at all. Of these 144 men 61 were taught to swim, and their cards returned properly certified. 83 failed to return their cards, of which, about one half have learned to swim, making a total of at least 100 who were taught to swim last year. It was found that it requires about six lessons to teach the average beginner to support himself, and make progress in the water unaided; and many more lessons to obtain any great degree of proficiency.

During the winter there were 9 meets, which included a lecture on methods of resuscitation of the exhausted or apparently drowned swimmer. In addition there was held for the first time here the Inter-Collegiate swimming Championships, and, in the spring, an Inter-Scholastic meet, in which were represented practically all the preparatory schools in this district. The pool has been an exceedingly popular

part of the Gymnasium equipment, and at times the daily average of bathers was over two hundred."

Although fencing was not a regular part of the course last year, space was provided for it in the Gymnasium, the work being ably conducted by Mr. Leonardo Terrone.

Professor Charles E. Dana kindly delivered a lecture on the "Evolution of the Sword" and "Sword Play," which were illustrated by examples from his collection. This was followed by an exhibition by members of the Fencing Club and visitors. It has been thought wise to introduce some of the elementary movements of fencing into the regular class work, and, to that end, Mr. Terrone has been appointed a regular Instructor of fencing to the University.

Boxing and Wrestling were under the control of the Boxing and Wrestling Club, for which was provided a room in the Gymnasium, but in future it will be taken over directly by the Department. The first Inter-Collegiate Wrestling championship meet was held in March.

The rowing room was fitted up with sixteen rowing machines, on which the Crew candidates did their indoor training, from January till March, under the direction of Mr. Ellis F. Ward. About 40 men were in training during this period.

Provision was also made for indoor baseball and lacrosse practice by a system of nets in Weightman Hall, but I would strongly urge the necessity of providing for these sports elsewhere, as the place is unsuitable, and it is inconvenient to keep the floor space free at the hours required.

So much of the health and comfort of the student's life depend upon the efficiency of his eyes, that it seems particularly important to find out their exact condition at the beginning of a four-year course, in which they will be under constant and oftentimes severe strain. It is more especially to errors of refraction that attention must be paid, for slight errors which are not to be distinguished by a superficial examination, may produce most distressing symptoms, if left uncorrected. This is particularly true of astigmatism and

hypermetropia, which does not appear, except by the most careful tests in addition to those used to detect myopia.

Dr. Posey, the ophthalmologist of the Department, conducted the examinations, assisted by ten qualified physicians from the various hospitals. Appointments were made in groups of fifty. If the vision was discovered to be fair or below normal in either eye; if headache or other symptoms of eye strain were complained of, an immediate test for glasses was advised. If the vision was noted to be slightly defective, re-examination was advised, but not until the holidays, when the college work is not so seriously interrupted. If the tests indicated normal vision and healthy eyes, the student was so advised and his ocular condition was pronounced satisfactory.

While I do not believe it is a function of the University, or of the Department, to prescribe glasses or other treatment, as a routine practice, I believe that it is our duty to put a man upon his guard, and explain to him the fact that a pair of glasses may be to him an important and increasingly valuable investment.

The statistics of the last two years' examinations are now being compiled, in preparation for a special report in which it is expected that important information will be obtained as to the frequency and progress of ocular defects among college students, with recommendations for proper treatment of these conditions.

In future reports, such questions as posture, and the examination of the heart, blood-pressure, etc., may be discussed more in detail. Although space will not permit me to enlarge upon their importance at present the Department of Physical Education must take them into consideration, since they have so direct an influence on the health, safety and efficiency of the student.

The whole is respectfully submitted.

R. TAIT MCKENZIE,

Professor of Physical Education and Director of the
Department.

APPENDIX XV.

UNIVERSITY BIBLIOGRAPHY.

Covering the period from August 31, 1904, to September 1, 1905.

ABBOTT, ALEXANDER C.

Principles of Bacteriology. Seventh Revised and Enlarged Edition. (Lea Bros. & Co., Philadelphia, 1905.)

Annual Report of the Chief of the Bureau of Health of Philadelphia for 1905.

ADLER, LEWIS H., Jr.

The Treatment of Internal Hemorrhoids by the Injection Method. (*Pennsylvania Medical Journal*, January, 1905.)

A Further Contribution to the Study of Pruritus Ani, with Special Reference to Its Local Treatment. (*New York Medical Journal*; *Philadelphia Medical Journal*, July 9, 1905.)

ALBURGER, HENRY R.

Anthracosis of the Liver in Pulmonary Tuberculosis. (*Transactions of the Philadelphia Pathological Society*, 1905.)

ALLYN, HERMAN B.

The Diagnosis of Tuberculous Cavities in the Lung. (*Transactions of the College of Physicians of Philadelphia*, 1904; *American Medicine*, February, 1905. (American Medicine Publishing Co., Philadelphia.)

Remarks upon a Case of Severe Appendicitis ending in Recovery without Operation. (*Medicine*, January, 1905.)

AMES, HERMAN V.

Report of the Public Archives Commission for 1905. (*Annual Report of the American Historical Association for 1904*. Government Printing Office, Washington, D. C., 1905.)

Some Peculiar Laws and Customs of Colonial Days. Read before the Pennsylvania Society of the Order of the Founders and Patriots of America, pp. 26. (Printed for the Society, Philadelphia, 1905.)

ANSPACH, BROOKE M.

Inversion of the Uterus; the Treatment in Cases Complicated by Necrosis of the Inverted Part. (*American Medicine*, November, 1904.)

Care of Surgical Cases in the Gynecological Department of the University Hospital. (*University of Pennsylvania Medical Bulletin*, December, 1904.)

The Diagnosis and Treatment of Acute Pelvic Peritonitis of Gonorrhœal Origin. (*New York Medical Journal*; and *Philadelphia Medical Journal*, March, 1905.)

ASHHURST, ASTLEY P. C.

History of Appendicitis, in "Appendicitis; its Diagnosis and Treatment," by Dr. John B. Deaver, Philadelphia, (P. Blakiston's Son and Co., 1905.)

Enlargement of the Prostate. (With Dr. John B. Deaver, P. Blakiston's Son & Co., 1905.)

Acute Flexion (Jones's Position) in the Treatment of Supracondylar Fractures of the Humerus. (*American Journal of the Medical Sciences*, 1905, Vol. i, 992.)

BERGEY, DAVID H.

The Status of Our Knowledge of Sero-therapeutics. (*American Medicine*, Vol. viii, No. 23, pp. 964-967, December, 1904.)

Management of Transmissible Diseases. (*Ibid.*, Vol. x, No. 6, pp. 234-236, August, 1905.)

BEYEA, HENRY D.

Gastroptosis, With Special Reference to the Surgical Treatment; The Operation of Gastropexy. (*American Medicine*, Vol. iii, No. 15, pp. 629-634, October, 1904.)

Retrodisplacement of the Uterus; An Experience of Eleven Years In Its Treatment. (*University of Pennsylvania*

Medical Bulletin, November, 1904; *Pennsylvania Medical Journal*, February, 1905.)

The Technique of the Operation of Ventrosuspension of the Uterus. (*American Journal of Obstetrics*, Vol. li, No. 4, 1905.)

BISPHAM, GEO. TUCKER.

The Principles of Equity; A Treatise on the System of Justice Administered in Courts of Chancery. (Seventh Edition.) (The Banks Law Publishing Company, New York, January, 1905.)

BOHLEN, FRANCIS H.

The Basis of Affirmative Obligations in the Law of Tort. (Published by the Department of Law, University of Pennsylvania, 1905.)

BRUMBAUGH, MARTIN G.

The Training of the Sunday-school Teacher. (Twenty-five articles in *Sunday-school Times*, Philadelphia, 1905.)

Jack Horner's Educational Creed. (*Ohio Educational Monthly*, December, 1904.)

Sunday-school Leaflets, Parts 1, 2, 3, 4 and 5. Being a correspondence course in the Training of a Sunday-school Teacher. (Sunday-school Times Co., Philadelphia, 1905.)

Education in Puerto Rico. An address before the Lake Mohonk Conference, 1904. (*Volume of Proceedings*.)

A New School Management. (*Ohio Educational Monthly*, February, 1905.)

The Training of the Teacher, pp. 91. (Sunday-school Times Co., Philadelphia, 1905.)

Nature as Educator. Commencement address at George School, Pa., 1905. (Privately printed.)

Current Educational Ideals. (*Puerto Rico School Record*, March, 1905.)

The Public School System of Puerto Rico. (*New York Observer*, April, 1905.)

- The Simplification of the Secondary School Curriculum:
An address before the Association of Colleges and Secondary Schools for the Middle States and Maryland.
(*Volume of Proceedings*, 1905.)
- Relation of the Teacher to the Curriculum: An address before the International Sunday-school Convention, Toronto, Canada. (*Ibid.*)
- The Moral Teaching of Jesus, pp. 68. (Juniata College Press, 1905, Huntingdon, Pa.)
- The Charity School Movement in Colonial Pennsylvania. Dr. S. E. Weber. The Introduction. (W. J. Campbell, Philadelphia, 1905.)
- The Making of a Teacher, pp. 367. (Sunday-school Times Co., 1905.)

BURR, CHARLES W.

- Intermittent Lameness and other Nervous Symptoms of Peripheral Arterial Disease. (*American Medicine*, September, 1904.)
- Aneurism of the Descending Thoracic Aorta, Causing Erosion of the Vertebrae and Symptoms Simulating Pott's Disease. (*University of Pennsylvania Medical Bulletin*, March, 1905.)
- Loss of the Sign Language in a Deaf Mute from Cerebral Tumor and Softening. (*New York and Philadelphia Medical Journal*, June, 1905.)
- Peripheral Obliterating Arteritis as a Cause of Triplegia following Hemiplegia and of Paraplegia. With Dr. Carl D. Camp. (*American Journal of the Medical Sciences*, June, 1905.)
- Insanity of Puberty. (*Journal of the American Medical Association*, July, 1905.)

CAMP, CARL D.

- Autochthonous Sinus Thrombosis of the Cerebral Dura. With Dr. W. G. Spiller. (*Journal of the American Medical Association*, September, 1904.)

Fibrous Nodules in the Cerebral Pia-Arachnoid Causing the Appearance of Tuberculous Meningitis. (*University of Pennsylvania Medical Bulletin*, January, 1905.)

Muscular Atrophy, Degeneration of the Tregeminus Nerve and of the Lateral Columns, and Anemic Changes in the Spinal Cord Occurring in Tabes Dorsalis. (*Ibid.*)

Peripheral Obliterating Arteritis as a Cause of Triplegia following Hemiplegia and of Paraplegia. With Dr. Charles W. Burr. (*American Journal of the Medical Sciences*, June, 1905.)

A Case of Visual Hallucination and Crossed Amblyopia with Vascular and Degenerative Lesions in the Calcarine Cortex and Other Portions of the Occipital Lobe; also with Atrophy of the Pregeniculæ and Optic Tracts. With Dr. Charles K. Mills. (*American Journal of Insanity*, Vol. lxii, No. 1, 1905.)

The Difficulty of Diagnosing Between Tabes and Cerebro-spinal Syphilis, with a Report of Two Illustrative Cases. (*University of Pennsylvania Medical Bulletin*, July-August, 1905.)

CALVERT, PHILIP P.

Robert McLachlan. (*Entomological News*, Vol. xv, pp. 226-228, pl. xvi., portrait. Philadelphia, September, 1904. 8vo.)

Odonata of Mexico and Central America. (*Biologia Centrali-Americana, Neuroptera*, pp. 145-196, pls. 6-8. London, R. H. Porter and Dulau & Co., June, 1905, quarto).

CARPENTER, JOHN T.

The Ocular Symptoms of Lesions of the Optic Chiasm; with the Report of Three Cases of Bitemporal Hemianopsia. (*Journal of the American Medical Association*, January, 1905.)

Congenital Defect of Abduction Associated with Retraction of the Eyeball. (*University of Pennsylvania Medical Bulletin*, March, 1905.)

CHEYNEY, EDWARD P.

The European Background of American History. (*The American Nation*, New York, 1904.)

CLAY, ALBERT T.

Topographical Map from Nippur. (*Transactions Department of Archaeology*, Vol. i, Part iii, 1905.)

CONKLIN, EDWIN G.

Experiments on the Origin of the Cleavage Centrosomes. (*Biological Bulletin*, Vol. vii, September, 1904.)

The Early Embryology of Chordates in the light of the Development of Ascidians. (*Science*, xxi, No. 529.)

Experimental Studies on the Ascidian Egg. (*Ibid.*, xxi, No. 532.)

Organ-Forming Substances in the Eggs of Ascidians, with 24 Photomicrographs of Living Eggs, etc. (*Biological Bulletin*, viii, March, 1905.)

The Organization and Cell-Lineage of the Ascidian Egg. (*Journal Academy Natural Sciences*, Philadelphia, xiii, No. 1, pp. 1-120, Plates i-xii.)

The Mutation Theory from the Standpoint of Cytology. (*Science*, xxi, No. 536.)

Mosaic Development in Ascidian Eggs. (*Journal Experimental Zoölogy*, ii, No. 2, pp. 145-223, with 82 figures in text.)

CRAIG, FRANK A.

Diagnosis of Advanced Tuberculosis. (*Medical News*, September, 1904.)

Examination of the Blood in Pulmonary Tuberculosis; with Special Reference to Prognosis. (*American Journal of the Medical Sciences*, September, 1905.)

CRYER, MATTHEW H.

Typical and Atypical Occlusion of the Teeth in Relation to Correction of Irregularities. (*Dental Cosmos*, September,

1904, S. S. White Dental Mfg. Co., Philadelphia. *Transactions of the New York State Dental Society*, 1904.)

Use of Roentgen Rays in Studies of Normal and Pathological Anatomy of the Face. (*American Journal of Medical Science*, February, 1905.)

Retarded Eruption of the Teeth; their Liberation or Extraction. (*Journal of the American Medical Association*, November, 1904. *International Dental Journal*, January, 1905.)

Some Uses of Roentgen Rays in the Study of the Internal Anatomy of the Face. (*Dental Cosmos*, January, 1905.)

Extraction of Teeth. (*American Text Book of Operative Dentistry*, Third Edition. Lea Bros. and Company, Philadelphia, 1905.)

DAVIS, EDWARD Z.

Translations of German Poetry in American Magazines, 1741-1810. (*Americana Germanica Press*, Philadelphia, 1905.)

DAVIS, GWILYM G.

The Treatment of Fractures. (*Transactions of the Philadelphia Academy of Surgery*, Vol. vii, 1905. *Annals of Surgery*, 1905.)

Nephrolithotomy, (*Ibid.*)

DOOLITTLE, CHARLES L.

The Work of the Flower Observatory. (*Vierteljahrsschrift der Astronomischen Gesellschaft*, Zweiter Heft, 1905.)

Results of Observations with the Zenith Telescope from October 1, 1901, to December 28, 1903. With a re-discussion of the series 1896-1898, quarto, 108 pages. (University of Pennsylvania Publications, *Series in Astronomy*, Vol. ii, Part 2, 1905.)

DOOLITTLE, ERIC.

Secular Perturbations of the Earth. (*Astronomical Journal*, No. 574.)

Secular Perturbations of Mars by the Action of Saturn.
(*Ibid.*)

Secular Perturbations of Mars by the Action of Mercury.
(*Ibid.* No. 576.)

Re-measurement of the Hough Double Stars. (*Science*,
May, 1905.)

A Lost Double Star. (*Popular Astronomy*, Vol. xiii, No. 7.)

Measures of 1066 Double and Multiple Stars. (University of
of Pennsylvania Publications, *Series in Astronomy*, Vol. ii,
Part 3.)

DULLES, CHARLES W.

The Charity School of 1740. The Foundation of the Uni-
versity of Pennsylvania. (*University of Pennsylvania*
Medical Bulletin, December, 1904. Reprint, 8vo, pp. 29.)

ELMER, WALTER G.

The Etherization of Children. (*Archives of Pediatrics*, June,
1905.)

ENDELMAN, JULIO.

The Metabolic Factor in its bearing upon Inflammatory
Conditions of the Human Mouth; Stomatitis Simplex and
Complex. (*Dental Cosmos*, Vol. xlvii, p. 192.)

Notes on the Therapeutics of Post-Extraction Accidents.
(*Transactions Fourth International Dental Congress*, Vol.
ii, p. 57.)

Pathology and Prophylaxis. (*Pacific Dental Gazette*, Vol.
xiii, p. 591; *Transactions Lewis and Clark Dental Con-*
gress, Portland, Oregon, 1905.)

History of the Organization of the International Dental
Federation. (*Bulletin of the I. D. F.*, Philadelphia, July,
1905.)

FETTEROLF, DANIEL W.

The Lloyd Reaction for Morphin and Other Alkaloids.
(*American Medicine*, Vol. ix, Nos. 21, 22 and 23. May-
June, 1905.)

FRANCINE, ALBERT P.

The Incidence of Gastric and Duodenal Ulcer in Philadelphia. Read in symposium on Gastric Ulcer, County Medical Society. (*American Journal of the Medical Sciences*, March, 1905.)

Acute Carbon Bisulfid Poisoning. (*American Medicine*, May, 1905.)

FRAZIER, CHARLES H.

Physiological Extirpation of the Ganglion of Gasser. Read at the Fifty-fifth Annual Session of the Surgical Section of the American Medical Association, June, 1904. (*Journal of the American Medical Association*, October, 1904.)

Remarks upon the Surgical Aspects of Tumors of the Cerebellum. (*New York Medical Journal*; *Philadelphia Medical Journal*, February, 1905.)

Surgery of the Head, Neck and Chest. (*Progressive Medicine*, March, 1905.)

The Various Methods of Opening the Skull for the Removal of Tumors of the Brain. Read before the Medical Society of the State of New York, February 1, 1905. (*Transactions of the Medical Society of the State of New York*, 1905.)

The Treatment of Surgical Palsies and Athetosis by Nerve Anastomosis and Transplantation. With Dr. W. G. Spiller. (*Journal of Nervous and Mental Diseases*, May, 1905.)

FRY, HORACE P.

Notes on Mechanical Drawing. Prepared for the use of Students in Mechanical Engineering at the University of Pennsylvania. (Printed for the University, The John C. Winston Co., August, 1905.)

FUSSELL, M. HOWARD.

The Value of Various Forms of Hemoglobinometers to the General Practitioner. (*Journal of the American Medical Association*, September, 1905.)

Polynuria in Typhoid Fever. (*Medical News*, September, 1904.)

A Case of Uncinariasis. (*University of Pennsylvania Medical Bulletin*, December, 1904.)

GILDERSLEEVE, NATHANIEL.

Studies on the Bactericidal Action of Copper on Organisms in Water. (*American Journal of the Medical Sciences*, May, 1905.)

GORDON, GEORGE B.

The Serpent Motive in the Ancient Art of Central America and Mexico. (*Transactions Department of Archæology*, Vol. i, Part iii, 1905.)

GRAYSON, CHARLES P.

Section on Laryngology and Rhinology. (*Progressive Medicine*, Lea Brothers and Company, March, 1905.)

GRIFFITH, J. P. CROZER.

Pachymeningite Spinale Hemorrhagique. (*Traite des Maladies de l'Enfance*, 1905.)

A Case of Cerebrospinal Fever. (*Archives of Pediatrics*, May, 1905.)

Diet After the Age of One Year. (*American Medicine*, February, 1905, p. 195.)

Umbilical Cord Hernia. (*Archives of Pediatrics*, March, 1905.)

A Case of Chorea Fatal, Apparently, from Excessive Muscular Action. (*American Medicine*, April, 1905.)

Congenital Obliteration of the Bile Ducts. (*Archives of Pediatrics*, April, 1905.)

GWYN, NORMAN B.

Typhoid Fever; Accidental Infection with Bacillus of Malignant Edema or Bacillus Acrogenes Capsulatus. (*Proceedings of Philadelphia County Medical Society*, June-September, 1905.)

Comparison Between the Results of Blood Cultures Taken During Life and After Death. (*Journal of Infectious Diseases*, Vol. ii, No. 3, 1905.)

HARLAND, WILLIAM G. B.

The Problem of the Treatment of Laryngeal Tuberculosis. (*American Journal of the Medical Sciences*, June, 1905.)

Papillomas in Child Occluding Both Nostrils. (*American Medicine*, April, 1905.)

Anesthesia Hemiplegia as a Complication of the Mastoid Operation. (*Archives of Otology*, No. 5, 1905.)

HARSHBERGER, JOHN W.

Methods of Determining the Age of the Different Floristic Elements in Eastern North America. (Report Eighth International Geographic Congress 1904, pp. 601-607.)

The Comparative Age of the Different Floristic Elements of Eastern North America. (*Proceedings of the Academy of Natural Sciences of Philadelphia*, 1904 pp. 601-615.)

The Relation of Ice Storms to Trees. (Publications of the University of Pennsylvania. *Contributions from the Botanical Laboratory*, Vol. ii, pp. 345-349.)

Original Centers Concerned in North American Plant Dispersal. (*Proceedings Academy Natural Sciences of Philadelphia*, 1905, p. 2.)

Suggestions Toward a Phytogeographic Nomenclature. (*Science, New Series*, xxi, p. 789, May, 1905.)

HARTE, RICHARD H.

The Surgical Treatment of Intraspinal Tumors. Read before the American Surgical Association, July, 1905, (*Annals of Surgery*, 1905.)

A Study of Perforation in Typhoid Fever. Read before the American Medical Association in July, 1905. (*Journal American Medical Association*, 1905.)

HARTZELL, MILTON B.

Benign Cystic Epithelioma, and its Relationship to So-called Syringocystadenoma, Syringocystoma, and Hæmangioen-

- dothelioma. (*British Journal of Dermatology*, October, 1904; *British Medical Journal*, October, 1904.)
- Granuloma Pyogenicum (Botryomycosis of French Authors) (*Journal Cutaneous Diseases*, November, 1904.)
- Disease of the Nails Accompanied by Arthritis of the Distal Joints of the Fingers and Toes. (*University of Pennsylvania Medical Bulletin*, October, 1904.)
- The Treatment of Lupus Erythematosus by Repeated Refrigeration with Ethyl Chloride. (*Journal American Medical Association*, December, 1904.)

HAWK, PHILIP B.

- A Study of the Conditions Following the Establishment of the Eck Fistula in Dogs. (*American Journal of Physiology*, 1905, xiii, p. 14.)
- On the Influence of Copious Water Drinking. (*University of Pennsylvania Medical Bulletin*, March, 1905.)
- A Report of Feeding and Injection Experiments on Dogs After the Establishment of the Eck Fistula. (*Proceedings of the Society for Experimental Biology and Medicine*, Vol. ii, April, 1905.)
- The Influence of Hemorrhage upon Metabolism. (Chemical Publishing Co., Easton, Pa., June, 1905.)

HILPRECHT, HERMAN V.

- Babylonian Life at the Time of Ezra and Nehemiah. (*The Sunday School Times*, September, 1904.)
- Editorial Notes to Hermann Ranke; Early Babylonian Personal Names, Vol. iii. of Series D. (*Researches and Treatises of the Babylonian Expedition of the University of Pennsylvania*. Edited by H. V. Hilprecht, Philadelphia, 1905.)

HIRST, BARTON C.

- Text Book of Diseases of Women. (Second Edition, August, 1905.)

Treatment of Retro-displacement of the Uterus Based on an Analysis of 653 Cases. (*Therapeutic Gazette*, 1905.)

Case of Post-typhoid Ovarian Abscess and a Case of Post-typhoid Suppurative Cholecystitis with a Gallstone and an Intraperitoneal Abscess. (*American Medicine*, Vol. ix, February, 1905.)

The Methods of Inducing Labor. (*Ibid.*, Vol. ix, May, 1905.)

HOUGH, ROBERT H.

The Mechanical Equivalent of the Heat of Vaporization of Water. (*American Journal of Science*, August, 1905.)

HOYT, DANIEL M.

Studies to Determine the Accuracy of the Stanton Blood Pressure Apparatus. (*University of Pennsylvania Medical Bulletin*, June, 1905.)

A Research Upon the Action of Alcohol Upon the Circulation. With Dr. Horatio C. Wood. (*National Academy of Sciences*, Vol. x, 3d Memoir, 1905.)

HUEBNER, SOLOMON.

Relation of the German Government to the Promotion of Commerce. (*Annals of the American Academy of Political and Social Science*, November, 1904; pp. 95-109.)

Marine Insurance in the United States. (*Ibid.*, September, 1905, pp. 241-299.)

JASTROW, MORRIS, JR.

Die Religion Babylonians und Assyriens, Parts vii and viii. (Ricker, Giessen, 1905.)

Semitic Study Series, No. 5. With Prof. Richard Gottheil. (Brill, Leiden, 1905.)

The Tower of Babel. (*The Independent*, April, 1905.)

JENNINGS, HERBERT S.

Contributions to the Study of the Behavior of Lower Organisms. (Seven Papers.) 256 pp. (The Carnegie Institution of Washington, Washington, D. C., Publication 16.)

The Behavior of Paramecium: Additional Features and General Relations. (*Journal of Comparative Neurology and Psychology*, Vol. xiv, 1904, pp. 441-510.)

Physical Imitations of the Activities of Amœba. (*American Naturalist*, Vol. xxxviii, pp. 625-642.)

The Basis of Taxis and Certain Other Terms in the Behavior of Infusoria. (*Journal of Comparative Neurology and Psychology*, Vol. xiv, pp. 138-143.)

JOHNSON, EMORY R.

The Responsibilities of International Leadership. (*Annals of the American Academy of Political and Social Science*, July, 1905.)

Some Recent Governmental Influences Upon the Geographic Distribution of Commerce. (Report of the Eighth International Geographic Congress, pp. 815-822.)

KELSEY, CARL.

A Plea for Light. (*South Atlantic Quarterly*, October, 1904.)

Studies in Local Philanthropy. (Friend's First Day School Committee, Philadelphia, November, 1904.)

KENT, ROLAND G.

The Date of Aristophanes' Birth. (*Classical Review*, April, 1905, pp. 3.)

The City Gates of Demetrias. (*American Journal of Archaeology*, 1905, No. 2, pp. 4.)

LAMBERTON, WILLIAM A.

Thucydides; Books ii and iii, Greek Series for Colleges and Schools; Edited under the Supervision of Hubert Weir Smyth, Eliot Professor of Greek Literature in Harvard University. (American Book Company, 1905.)

LEARNED, MARION D.

Schiller's Literarische Stellung in Amerika. (*Marbacher Schillerbuch*, Stuttgart, 1904.)

Harmonie der Rassen in Amerika und der Volkerfriede.

Paper read in English by the author as Chairman, at the opening of the Germanic Congress, St. Louis, September 16, 1904. (*German American Annals*.)

Schiller the Poet of the People. (*Zur Schiller Gedenkfeier*, Chicago, May 9, 1905.)

The Evolution of Schiller's Idea of Freedom. Memorial address delivered in the Academy of Music, Philadelphia, at the Centennial of Schiller's Death. (*German American Annals*, June, 1905.)

German Influence on American Literature Before 1800. Paper read at the International Congress of Arts and Science, St. Louis, 1904.

German Influence in America. Address before the Literary Societies of Roanoke College. (*Roanoke College Bulletin*, 1905.)

LEWIS, WILLIAM DRAPER.

Interference in Trade. A Collection of Cases on Strikes, Boycotts, etc., with Notes. (Published by the Author, 1905.)

Pepper and Lewis' Digest of Decisions and Encyclopedia of Pennsylvania Law. Volumes xx and xxi. With George Wharton Pepper and Algernon Sydney Biddle. (Rees Welsh & Company, Philadelphia, 1904-05.)

Should the Motive of the Defendant Affect the Question of His Liability? The Answer of the Trade and Labor Cases. (*Columbia Law Review*, February, 1905.)

The Closed Market; the Union Shop and the Common Law. (*Harvard Law Review*, April, 1905.)

The American Cases on Trade and Labor Disputes. (*American Law Register*, August, 1905.)

LOEB, LEO.

Immunity and Adaptation. (*Biological Bulletin*, Vol. ix, No. 3, August, 1905.)

Über das endemische Vorkommen des Krebses beim Thiere.

(*Centralblatt f. Bacteriologie*, Bd. xxxvii, Heft 2.)

Über eine die Blutgerinnung hemmende Substanz in *Anchylostoma caninum*. With A. J. Smith. (*Ibid.*, Bd. xxxvii, Heft 1.)

Über hypertrophische Vorgänge bei der Follikel atresie nebst Bemerkungen über die Oocyten in den Marksträngen und über Teilungserscheinungen um Ei und Ovarium des Meerschweinchens. (*Arkiv mikros Kopische Anatomie und Entwicklungs geschichte*. Bd. 65, 1905.)

On Some Conditions Determining Variations in the Energy of Tumor Growth. (*American Medicine*, August, 1905. Vol. x, No. 7.)

The Coagulation of the Blood. (*Medical News*, April, 1905.)

Studies on Cell Granula and Amœboid Movements of the Blood Cells of *Limulus*. (*University of Pennsylvania Medical Bulletin*, May, 1905.)

On the Effect of Intraperitoneal Injections of Leech Extract on the Coagulation of Exudate; a Preliminary Note. (*Ibid.*, July-August, 1905.)

Untersuchungen über Blutgerinnung. (*Zeitschrift für die gesamte Biochemie*, Bd. vi., Heft, 6-17.)

MARBURG, EDGAR.

Tests of Reinforced Concrete Beams. (*Proceedings of the American Society for Testing Materials*, Vol. iv, pp. 508-524, 1905.)

MARSHALL, JOHN.

The Volume of Nitrogen Evolved from One Gram of Urea by the Action of Alkaline Sodium Hypobromite Solution. With Dr. Leon A. Ryan. (*University of Pennsylvania Medical Bulletin*, February, 1905.)

MARTIN, EDWARD.

Genito-Urinary and Venereal Diseases. With Dr. J. William White. (Sixth edition.) (J. B. Lippincott Co., Philadelphia, 1905.)

McCARTHY, DANIEL J.

- Spondylose Rhizomylique; A Study of the Relative Frequency of Spinal Involvement in Rheumatoid Arthritis, With Autopsy Findings. (*New York and Philadelphia Medical Journal*, April, 1905.)
- A Cystic Papillomatous Ependymoma of the Choroid Plexus of the Lateral Cerebral Ventricle. A Contribution to the Classification of Gliomata. (*University Medical Bulletin*, Vol. xvii, page 262.)
- Cholesteatoma Vasculosa of the Choroid Plexus of the Lateral Cerebral Ventricle. (*Ibid.*)
- The Formation of Bone Tissue Within the Brain Substance. A Contribution to the Inclusion Theory of Tumor Formation. (*Ibid.*)
- Two Cases of Korsakoff's Psychosis; with Neuropathologic Findings in One of the Cases. With Dr. R. V. Patterson. (*American Medicine*, July, 1905.)
- Localized Cortical and Sub-Cortical Hemorrhagic Softening Secondary to Tuberculous Lesions of the Meninges. (*Transactions of the Third International Congress on Tuberculosis*. Masson and Co., Paris, 1905.)
- Landry's Paralysis Complicating Pulmonary Tuberculosis in which the Klebs-Löffler Bacillus was Found in the Pure Culture. (*Ibid.*)
- Localized Tuberculous Meningitis: (a) To the Motor Area of One Cerebral Hemisphere. (b) To the Cerebella Fossa. (*Ibid.*)
- Tuberculosis of the Nervous System. (*First Annual Report of the Henry Phipps Institute*. Philadelphia, 1905.)

McCLELLAN, WILLIAM.

- Notes on Power Production. (*Engineering News*, Vol. lii, p. 582, December, 1904.)
- The Electrical Engineer in Heavy Traction Work. (*Journal of the Engineers' Club of Philadelphia*, April, 1905.)
- On the Use of the Falling Plate Oscillograph as a Phase-

meter. (*Proceedings of the American Philosophical Society*, Vol. xlv, pp. 166, 1905.)

Note on Interference with the Bi-Prism. (*American Journal of Science*, Vol. xix, p. 294, April, 1905.)

Choice of Motors in Steam and Electric Practice. (*Transactions of American Institution of Electrical Engineers*, June, 1905.)

McDANIEL, WALTON B.

Biographies of Catullus and Martial: Encyclopedia Americana. (*Scientific American*, New York, 1905.)

McFARLANE, J. MUIRHEAD.

The History, Structure and Distribution of *Sarracenia Catesbaei*, Ell. (Publications of the University of Pennsylvania. *Contributions from the Botanical Laboratory*, Vol. ii, p. 427-434.)

Statement Regarding Publications from the University Botanical Department. (*Ibid.*, Vol. ii, pp. 435.)

New Species of *Nepenthes*. (*Science*, 1905.)

The Structure of the Lignified Cell-wall. (*Ibid.*)

MEIGS, EDWARD B.

A Mechanical Theory of Muscular Contraction and Some New Facts Supporting It. (*American Journal of Physiology*, August, 1905.)

MERRICK, J. HARTLEY.

Pennsylvania's Portraits. (*Alumni Register*, University of Pennsylvania, December, 1904.)

MIKELL, WILLIAM E.

Cases on Criminal Law. (Published by the Author, Philadelphia, September, 1903.)

MILLS, CHARLES K.

Aphasia and the Cerebral Zone of Speech. (*American Journal of the Medical Sciences*, September, 1904.)

- Subdivisions of the Concrete Concept Area of the Human Cerebrum. (*Medical News*, November, 1904.)
- Treatment of Aphasia by Training. (*Journal of the American Medical Association*, December, 1904.)
- Paranoia, Especially with Reference to Its Definition, Subdivisions and Its So-Called Acute Variety. (*Proceedings of the American Medico-Psychological Association*, Vol. xi, 1904.)
- Some Forms of Insanity Due to Alcohol, Especially in Their Medico-Legal Relations. (*American Medicine*, Vol. ix, February, 1905.)
- The Diagnosis of Tumors of the Cerebellum and the Cerebello Pontile Angle, Especially with Reference to Their Surgical Removal. (*New York Medical Journal*; *Philadelphia Medical Journal*, February, 1905; *Philadelphia Hospital Reports*, Vol. vi, 1905.)
- Morphinomania, Cocomania and General Narcomania and Some of Their Legal Consequences. (*International Clinics*, Vol. i, 15th series, April, 1905.)
- Myasthenia Gravis. (*Medical Fortnightly*, Vol. xxvii, June, 1905.)
- The Motor Area of the Human Cerebrum, Its Position and Subdivisions, with Some Discussion of the Surgery of the Motor Region. With Dr. Charles H. Frazier. (*University of Pennsylvania Medical Bulletin*, July-August, 1905.)
- A Case of Visual Hallucinations and Crossed Amblyopia with Vascular and Degenerative Lesions in the Calcarine Cortex and Other Portions of the Occipital Lobe; also with Atrophy of the Pregenicula and Optic Tracts. With Dr. C. D. Camp. (*Proceedings of the American Medico-Psychological Association*, Vol. xii, 1905; *American Journal of Insanity*, Vol. vi, 1905.)

MOORE, J. PERCY.

- Description of a New Species of Earthworm (*Diplocardia longa*) from Georgia. (*Proceedings Academy of Natural Sciences of Philadelphia*, 1904, pp. 813-818, text figures.)

A New Species of Sea-Mouse (*Aphrodita hastata*) from Eastern Massachusetts. (*Ibid.*, 1905, pp. 294-298, text figures.)

Some Marine Oligochaeta of New England. (*Ibid.*, pp. 373-399, Plates xxii and xxiii.)

New Species of Polychaeta from the North Pacific, chiefly from Alaskan Waters. (*Ibid.*, 525-554, Plates xxxiv-xxxvi.)

Five New Species of Pseudopotamilla from the Pacific Coast of North America. (*Ibid.*, 555-569, Plate xxxvii.)

MÜLLER, GEORGE P.

Accessory Pancreas in Wall of Stomach. (*Proceedings Philadelphia Pathological Society*, September, 1904.)

Pathology of Cholecystitis. (*Brooklyn Medical Journal*, January, 1905.)

MUSSER, JOHN H.

Motives in Medicine. (*University of Pennsylvania Medical Bulletin*, October, 1904.)

NEWBOLD, WM. ROMAIN.

Bibliographical Taurellus. (*Journal of Philosophy, Psychology and Scientific Methods*, Vol. ii, No. 5, p. 125, March, 1905.)

NORRIS, RICHARD C.

The Ultimate Results of Induced Labor for Minor Degrees of Pelvic Contraction. (*American Journal of Obstetrics*, Vol. 1, No. 3, 1904.)

Artificial Dilatation of the Cervix in Obstetrics. (*American Medicine*, Vol. ix, No. 20, May, 1905.)

Obstetric Section. (*Progressive Medicine*, Lea Bros. & Co., Philadelphia, August, 1905.)

OSTHEIMER, MAURICE.

Enuresis in Children. With Dr. I. V. Levi. (*Journal of the American Medical Association*, December, 1904.)

Incontinence of Feces in Children. (*University of Pennsylvania Medical Bulletin*, February, 1905.)

The Prevention of Summer Diarrhea. (*Journal of the American Medical Association*, August, 1905.)

PATTEN, SIMON N.

Young Wives in Industry. (*Independent*, December, 1904.)

PEPPER, GEORGE WHARTON.

The Transfer of Interests in Associations. (*American Law Register*, two papers; December, 1904 and April, 1905.)

A Digest of Decisions and Encyclopedia of Pennsylvania Law. With Dr. William Draper Lewis. (Rees Welsh & Company, Philadelphia, Vols. 19-20-21.)

POSEY, WM. CAMPBELL.

Associated Movements of the Head and Eyes in Infants. With Dr. S. McC. Hamill. (*American Journal of the Medical Sciences*, November, 1904.)

Some Observations Upon the Non-Operative Treatment of Squint; The Worth Amblyoscope. With Dr. H. Maxwell Langdon. (*New York Medical Journal*; *Philadelphia Medical Journal*, December, 1904.)

A Case of Perinaud's Conjunctivitis. (*American Journal of the Medical Sciences*, February, 1905.)

Intermittent Exophthalmus; with Report of a Case. (*Journal of the American Medical Association*, February, 1905.)

Some Ophthalmological Phases of the Diseases of the Accessory Sinuses of the Nose. (*Journal of Eye, Ear and Throat Diseases*, March-April, 1905.)

Intraocular Tuberculosis; with the Report of Two Cases. (*Ophthalmology*, April, 1905.)

Recurrent Oculo-Motor Palsy; with the Report of a Case. (*American Journal of the Medical Sciences*, April, 1905.)

Conjunctivitis Petrificans. (*Annals of Ophthalmology*, April, 1905.)

Keratitis Disciformis; with the Report of a Case. (*Ophthalmic Review*, May, 1905.)

Some Ocular Reflexes. (*Pennsylvania Medical Journal*, June, 1905.)

Conjunctival Irritation Excited by Proximity to a Horse. (*Journal of the American Medical Association*, June, 1905.)

POTTS, CHARLES S.

A Case of Traumatic Cervical Hematomyelia and Complete Division of the Cord, with Probable Dislocation of the Fifth Cervical Vertebra. Remarks on the Location of the Centre for the Biceps Reflex. (*Journal of Nervous and Mental Diseases*, June, 1905.)

A Case of Amyotrophic Lateral Sclerosis in which the Symptoms were Unilateral and Ascending. (*University of Pennsylvania Medical Bulletin*, July-August, 1905.)

QUINN, ARTHUR H.

Oliver Hopkinson. (*Alumni Register*, University of Pennsylvania, April, 1905.)

RANDALL, B. ALEXANDER.

The Treatment of Otitic Septicemia. (*Journal of the American Medical Association*, November, 1904.)

Notes on Neoplasms of the Ear. (*Transactions of the Otological Society*, 1904.)

The Alphabetical Index of the American Otological Society. (*Ibid.*)

Some Facts About Artificial Drumheads and Other Aids of Hearing. (*Monthly Cyclopedia of Practical Medicine*, Vol. viii, 1905.)

Notes on Otitic Epilepsy. (*Transactions of the American Otological Society*, 1905; *American Journal of the Medical Sciences*, August 1905.)

Alphabetical Index of the American Otological Society. (*Transactions of the Society*, 1905.)

REICHERT, EDWARD T.

A Second Coagulation of the Blood due to a Substance that is not Identical with Fibrinogen and Coagulable by Saturat-

tion by Neutral Oxalate. (*Journal of Experimental Medicine*, April, 1905.)

RHEIN, MEYER L.

Oral Infection and Sterilization. (*Journal of the American Medical Association*, September, 1904.)

RIESMAN, DAVID.

Some Remarks on Physical Diagnosis: 1. Transmanual Auscultation. 2. Ulnar Palpation. (*American Medicine*, Vol. ix, p. 649, April, 1905; *Pennsylvania Medical Journal*, p. 741, September, 1905.)

ROLFE, JOHN C.

Some References to Seasickness in the Ancient Writers. (*American Journal of Philology*, xxv, pp. 192-200.)

Article *Vergil*. (*Encyclopedia Americana*, 1904.)

Article *Horace*. (*Ibid.*, 1905.)

Extracts from a Teacher's Note-book. An Address to the New York Latin Club. (*The Latin Leaflet*, Nos. 112-116, 1905.)

ROWE, LEO S.

The Reorganization of Local Government in Cuba. (*Annals of the American Academy of Political and Social Science*, Vol. xxv, No. 2., March, 1905.)

The Relation of Municipal Government to American Democratic Ideals. (*Journal of Sociology*, Vol. xi, No. 1, July, 1905.)

Status of Municipal Government in the United States. (*Blatter fur Vergleichende Rechtswissenschaft und Volkswirtschaftslehre*, August, 1905.)

RYAN, LEON A.

The Volume of Nitrogen Evolved from One Gram of Urea by the Action of Alkaline Sodium Hypobromite Solution. With Dr. John Marshall. (*University of Pennsylvania Medical Bulletin*, February, 1905.)

SAFFORD, FREDERICK H.

- The Problem of Seven People At a Round Table. (*American Mathematical Monthly*, Springfield, Mo., March, 1905.)
A Study of the Unique Tangent to a Cardioid. (*Ibid.*, August, 1905.)

SAILER, JOSEPH.

- Eventration of the Diaphragm, with a Report of a Case, With Dr. Robert Rhein. (*American Journal of Medical Sciences*, April, 1905.)
Lead Poisoning. A Study of the Gastric Contents in Twelve Cases. With Dr. John Speese. (*Journal of the American Medical Association*, May, 1905.)

SHELLING, FELIX E.

- The Queen's Progress, and Other Elizabethan Sketches. (Houghton, Mifflin and Co., Boston, 1904.)
The Elizabethan Newspaper. (*Book News*, June, 1905.)

SCOTT, J. ALISON.

- Medical and Surgical Considerations in Pyo-Pericarditis, With Report of Cases. With Dr. Robert G. LeConte. (*American Journal of the Medical Sciences*, September, 1904.)
Case of Cancer of the Esophagus Simulating Thoracic Aneurism. (*University of Pennsylvania Medical Bulletin*, December, 1904.)
A Study of Fifty Cases of Perforation in Typhoid Fever. (*Ibid.*, May and June, 1905.)

SCHWEINITZ, GEORGE E. de

- The Ophthalmic Year-Book for 1905. With Dr. Edward Jackson. (The Herrick Book and Stationery Co., Denver, Colo., 1905.)
American Edition of Haab's Operative Ophthalmology. (W. B. Saunders and Co., 1905.)
Tuberculosis of the Choroid; Perforation of the Sclera;

Extension Posteriorly, with Involvement of the Optic Nerve; Histological and Bacteriological Examination of the Specimen. With Dr. E. A. Shumway. (*Ophthalmic Record*, December, 1904.)

Extirpation of the Lachrymal Sac. (*Philadelphia General Hospital Reports*, 1905; *Ophthalmic Record*, February, 1905.)

Traumatic Aniridia. (*Transactions of the Section of Ophthalmology of the College of Physicians of Philadelphia*, February, 1905; *Ophthalmic Record*, April, 1905.)

Three Cases of Sarcoma of the Choroid and One of the Glioma of the Retina. With Dr. B. F. Baer, Jr. (*Transactions of the Ophthalmic Section of the College of Physicians of Philadelphia*, February, 1905; *Ophthalmic Record*, April, 1905.)

The Ocular Symptoms of Cerebellar Tumor. (*New York Medical Journal*; *Philadelphia Medical Journal*, February, 1905.)

Concerning Metastatic Ophthalmitis, with the Report of a Case of This Affection Which Developed Thirty-one Days After Confinement. (*University of Pennsylvania Medical Bulletin*, May, 1905.)

Address to Nurses of the Lakeside Hospital. (*Proceedings of the Lakeside Hospital School for Nurses*, Cleveland, O., May, 1905.)

Concerning Melanoma of the Choroid, with the Report of One Case of This Character and of a Pigmented Sarcoma of the Choroid Early in Its Development. With Dr. E. A. Shumway. (*Ophthalmic Record*, July, 1905.)

SHUMWAY, DANIEL B.

Schiller's Message to the Twentieth Century. (*German American Annals*, June, 1905.)

SHUMWAY, EDWARD A.

Conjunctivitis Nodosa; with Histological Examination. With Dr. G. E. de Schweinitz. (*University of Pennsylvania Medical Bulletin*, November, 1904.)

Tuberculosis of the Choroid; Perforation of the Sclera; Extension Posteriorly with Involvement of the Optic Nerve; Histological and Bacteriological Examination of the Specimen. With Dr. G. E. deSchweinitz. (*Ophthalmic Record*, December, 1904.)

Histological Examination of the Eyes in a Case of Amaurotic Family Idiocy. (*American Journal of the Medical Sciences*, January, 1905.)

The Association of Optic Neuritis and Facial Paralysis. (*Journal of the American Medical Association*, February, 1905.)

Concerning Melanoma of the Choroid, with the Report of one Case of this Character, and of a Pigmented Sarcoma of the Choroid Early in its Development. With Dr. G. E. de Schweinitz. (*Ophthalmic Record*, July, 1905.)

SITER, E. HOLLINGSWORTH.

The Use of Iodide of Silver in Urethritis. (*University of Pennsylvania Medical Bulletin*, May, 1905.)

SMITH, ALLEN J.

Posture in Cardio-vascular Disease. (*Monthly Encyclopedia of Medicine*, January, 1905.)

Dibothridium Megalocephalum. With Mr. B. F. Veeder. (*Transactions Philadelphia Pathological Society*, 1905.)

Histological Changes Encountered in the Thymus and Elsewhere in a Case of Congenital Hypotonia. (*Ibid.*)

SMITH, BURNETT.

Senility Among Gastropods. (*Proceedings Academy of Natural Sciences*, Philadelphia, April, 1905.)

SMITH, EDGAR F.

Observations on Columbium and Tantalum. (*American Philosophical Society*, xlv, p. 151.)

The Use of the Rotating Anode and Mercury Cathode in Electro-Analysis. First paper. (*Journal American Chemical Society*, 1905.)

Some Observations on Columbium. (*Ibid.*)

The Rapid Precipitation of Antimony in the Electrolytic Way. (*Ibid.*)

The Use of the Rotating Anode and Mercury Cathode in Electro-Analysis. Second paper. (*Ibid.*)

SMITH, J. RUSSELL.

The Organization of Ocean Commerce. (University of Pennsylvania Publications. *Series in Political Economy and Public Law*, No. 17.) Pp. 155, with map.

The Economic Importance of the Plateaux of Tropic America. (*Bulletin of American Geographical Society*, August, 1905.)

SOLIS-COHEN, MYER.

The Pasteur Treatment for Rabies Administered at the Patient's Home. (*Therapeutic Gazette*, May, 1905.)

How to Observe Symptoms. (*Trained Nurse*, July-August, 1905.)

Pasteur Treatment at the Patient's Home. (*Medical Notes and Queries*, March, 1905.)

SPILLER, WILLIAM G.

Diseases of the Nervous System. (*Progressive Medicine*, September, 1904.)

Autochthonous Sinus Thrombosis of the Cerebral Dura, with a Report of Three Cases. With Dr. C. D. Camp. (*Journal of the American Medical Association*, September, 1904.)

Physiologic Extirpation of the Ganglion of Gasser: Further Report on Division of the Sensory Root for Tic Douloureux Based on the Observations of Four Cases. With Dr. C. H. Frazier. (*Journal of the American Medical Association*, October, 1904.)

A Case of Uncomplicated Hysteria in the Male, Lasting Thirty Years, with Post-mortem Examination. With Dr. S. Weir Mitchell. (*Journal of Nervous and Mental Disease*, October, 1904.)

- Syphilis of the Nervous System. (*International Clinics*, Vol. iii, Fourteenth Series, 1904.)
- A Further Study on the Sensory Segmental Zone of the Umbilicus. With Dr. T. H. Weisenburg. (*Review of Neurology and Psychiatry*, October, 1904.)
- A Pathological Study of the Amaurotic Family Idiocy. (*American Journal of the Medical Sciences*, January, 1905.)
- The Treatment of Acute Anterior Poliomyelitis by Nerve Transplantation. With Dr. C. H. Frazier. (*Journal of the American Medical Association*, January, 1905.)
- Congenital or Localized Hypotonia of the Muscles in Childhood (Myatonia Congenita.) (*University of Pennsylvania Medical Bulletin*, January, 1905.)
- Congenital Spastic Rigidity of the Limbs (Congenital Hyper-tonia, Little's Disease.) (*Ibid.*)
- Primary Degeneration of the Pyramidal Tracts; a Study of Eight Cases with Necropsy. (*Ibid.*, January and February, 1905.)
- Symptomatology, Pathology and Treatment of Choreiform Movements. (*Journal of the American Medical Association*, February, 1905.)
- Recurrent Oculomotor Palsy, with a Report of a Case. With Dr. W. C. Posey. (*American Journal of the Medical Sciences*, April, 1905.)
- Myesthenia Gravis, with Paralysis Confined to the Ocular Muscles. With Dr. E. U. Buchman. (*Ibid.*)
- The Treatment of Cerebral Palsies and Athetosis by Nerve Anastomosis and Transplantation. With Dr. C. H. Frazier. (*Journal of Nervous and Mental Disease*, May, 1905.)
- Atrophy of Bone in Progressive Muscular Dystrophy. (*Review of Neurology and Psychiatry*, June, 1905.)
- Presidential Address: The Importance in Clinical Diagnosis of Paralysis of Associated Movements of the Eyeballs (Blicklahmung), Especially of Upward and Downward Associated Movements. (*Journal of Nervous and Mental Diseases*, July and August, 1905.)

The Occasional Clinical Resemblance Between Caries of the Vertebrae and Lumbothoracic Syringomyelia, and the Location Within the Spinal Cord of the Fibers for the Sensations of Pain and Temperature. (*University of Pennsylvania Medical Bulletin*, July and August, 1905.)

STEELE, J. DUTTON.

Pleural Effusion in Heart Disease. (*Journal of the American Medical Association*, October, 1904.)

The Tests for Occult Blood in the Feces. (*Pennsylvania State Medical Journal*, January, 1905.)

Occult Blood in the Feces and its Clinical Significance. (*American Journal of the Medical Sciences*, July, 1905.)

Diseases of the Digestive Tract and Allied Organs, Liver, Pancreas and Peritoneum. (*Progressive Medicine*, December, 1904.)

STENGEL, ALFRED.

Varieties of Splenic Anemia. (*American Journal of the Medical Sciences*, September, 1904.)

The Heart and Circulation in Pregnancy. With Dr. W. B. Stanton. (*University of Pennsylvania Medical Bulletin*, October, 1904.)

A Note on Laboratory Teaching in the University of Pennsylvania. (*Ibid.*, September, 1904.)

A Further Report on Chronic Acetanilid Poisoning. (*American Journal of the Medical Sciences*, August, 1905.)

[Edited. American Edition of Nothnagel's System of Medicine. 10 Vols. (W. B. Saunders & Co.) Vol. ix, Malaria, Influenza and Dengue. Vol. x, Diseases of the Kidneys and of the Spleen. Vol. xi, Diseases of the Blood.]

SWAN, JOHN M.

Report of a Case of Cyst of the Cerebellum. (*New York Medical Journal*; *Philadelphia Medical Journal*, February, 1905.)

A Study of the Metabolism of a Vegetarian. (*American Journal of the Medical Sciences*, June, 1905.)

Six Lectures on the Diseases of the Blood. A course of Lectures delivered at the Special Spring Course in Medicine, at the Philadelphia Polyclinic and College for Graduates in Medicine, May 1 to May 20, 1905. (*New York Medical Journal*; *Philadelphia Medical Journal*, 1905.) Lecture I, Technique, July 1 and 8, 1905. Lecture II, The Leukocytes and the Leukocytoses, July 15. Lecture III, The Secondary Anemias, July 29. Lecture IV, Chlorosis and Pernicious Anemia, August 12 and 19. Lecture V, Leukemia, Hodgkin's Disease and Chloroma, September 2 and 9. Lecture VI, Malaria, September 23 and 30.

THOMAS, T. TURNER.

Typhlitis and Appendicitis. (*Therapeutic Review*, October, 1904.)

Ligation of Both Common Carotid Arteries. (*Annals of Surgery*, November, 1904.)

TYSON, JAMES.

Address on Tuberculosis. Delivered in Minneapolis, Minn., April, 5, 1904. (*Colorado Medical Journal*, October, 1904.)

Diffuse Dilatation of the Oesophagus due to Cardiospasm. With Drs. Edward Martin and Joseph S. Evans. (*Transactions of the Association of American Physicians* for 1904; *New York Medical Journal*, October, 1904.)

Wire Nail in the Appendix Removed Post-mortem. (*University of Pennsylvania Medical Bulletin*, December, 1904.)

Suprarenal Extract in the Treatment of Cardio-Vascular Disease. (*Monthly Cyclopedica*, February 1905.)

WEISENBURG, THEODORE H.

A Further Study of the Sensory Segmental Area of the Umbilicus. With Dr. W. G. Spiller. (*Review of Neurology and Psychiatry*, September, 1904, Edinburgh, Scotland.)

Pseudobulbar Palsy. Report of Three Cases with Necropsy and of Three Without Necropsy. (*University of Pennsylvania Medical Bulletin*, January, 1905.)

Bulbar Symptoms Occurring with Carcinoma of Parts Other Than the Nervous System, and Resulting from Intoxication. (*Ibid.*)

The Pathology of Cerebellar Tumors. (*New York and Philadelphia Medical Journal*, February, 1905.)

A Clinical Study of Hemiplegia in an Adult. (*Journal of the American Medical Association*, February, 1905.)

Carcinoma of the Nervous System. (*Proceedings of the Philadelphia County Medical Society*, 1905.)

A Study of the Contractures in Organic Nervous Diseases and Their Treatment. (*University of Pennsylvania Medical Bulletin*, July-August, 1905.)

WEYGANDT, CORNELIUS.

The Irish Literary Revival. (*The Sewanee Review*, October, 1904.)

Miss Eva Gore-Booth as Mystic. (*The Gael*, December, 1904.)

A Cottage on the Wissahickon Hills. (*House and Garden*, May, 1905.)

The Poetry of Laurence Binyon. (*The Sewanee Review*, July, 1905.)

WHITE, J. WILLIAM.

The Present Position of the Surgery of the Hypertrophied Prostate. (*Annals of Surgery*, December, 1904.)

Sixth Edition of White and Martin on Genito-Urinary Surgery. (J. B. Lippincott & Co., Philadelphia, 1905.)

WIEDER, HENRY S.

Attempted Suicide by Morphine Defeats Suicide by Potassium Cyanide. (*Therapeutic Gazette*, December, 1904.)

Uremia with Pericarditis, Clinical and Pathological Reports. With Dr. Harold L. Springer. (*New York Medical Journal* and *Philadelphia Medical Journal*, March, 1905.)

Tuberculous Meningitis with Congenital Stricture of the Rectum. With Dr. Harold L. Springer. (*Ibid.*)

Brain Injury. 1. Loss of One Quarter of Brain Substance with Consciousness and Ability to Talk Retained Until Death. 2. Fracture of Skull with Porencephalia. (*American Medicine*, Vol. viii, No. 4, pp. 166-167, July, 1904.)

WILLARD, De FOREST.

Ostitis Deformans. (*University of Pennsylvania Medical Bulletin*, November, 1904; *Medicine*, January, 1905, p. 59; *Reprint.*)

Knee Ankylosis. (*Pennsylvania Medical Journal*, January, 1905, Vol. vii, p. 218; *Reprint.*)

Management of Injuries of the Knee Joint. (*American Medicine*, 1905, Vol. ix, pages 979-982; *Transactions American Therapeutic Society*, 1905; *Reprint.*)

Senile Atrophy of Cranial Bones; Congenital Deficiency of Bones. (*Transactions Philadelphia Academy of Surgery*, December, 1904; *Annals of Surgery*, Vol. xli, p. 787, May, 1905.)

Duodenal Ulcer; Gastroenterostomy. (*Transactions Academy of Surgery*, Vol. vii. *Annals of Surgery*, Vol. xli, No. 5, p. 786, May, 1905.)

WILLSON, ROBERT N.

Syphilis of the Lung Simulating Phthisis. With Dr. W. E. Hughes. (*Medical News*, February, 1905.)

Syphilis with Late or Absent Secondary Eruption. (*New York Medical Journal*; *Philadelphia Medical Journal*, 1905.)

Relief of Uremic Hemiplegia and other Uremic States by

- lowering Intra Cranial Pressure. (*Journal American Medical Association*, July, 1905.)
- Diagnosis of Incipient Thoracic Tuberculosis (Monograph) (*International Clinics*, Vol. ii, 1905.)
- The Negative Value of Kernig's Sign. (*American Journal Medical Sciences*, August, 1905.)

WOOD, ALFRED C.

- Gallstone Obstruction of the Bowel ; Report of a Case ; Removal of One Stone from the Bowel and a Second from the Gall Bladder : Recovery. (*American Medicine*, May, 1905.)
- Complete Avulsion of the Scrotum, Left Testis and Skin Covering the Penis. (*American Journal of Dermatology*, June, 1905.)
- Transmesenteric Hernia of the Appendix Vermiformis. (*Annals of Surgery*, August, 1905.)

WOOD, HORATIO C.

- Therapeutics ; its Principles and Practice. Twelfth Edition. With Dr. Horatio C. Wood, Jr. (J. B. Lippincott Co., Philadelphia, 1905.)
- A Research Upon the Action of Alcohol Upon the Circulation. With Dr. Daniel M. Hoyt. (*Memoirs of the National Academy of Science*, Vol. x.)

WOOD, HORATIO C., JR.

- The Use of Methylene Blue in Malarial Fevers. (*Transactions of the Philadelphia County Medical Society*, November, 1904.)
- A Study of Apocynum Cannabinum. (*Journal of the American Medical Association*, December, 1904.)
- Therapeutics : Its Principles and Practice ; Twelfth Edition. With Dr. H. C. Wood. (J. B. Lippincott Co., 1905.)
- Proprietary Therapeutics. (*Journal of the American Medical Association*, June, 1905 ; *Columbus Medical Journal*, July, 1905.)

YOUNG, JAMES K.

The Etiology of Congenital Absence of the Tibia. (*University of Pennsylvania Medical Bulletin*, November, 1904.)

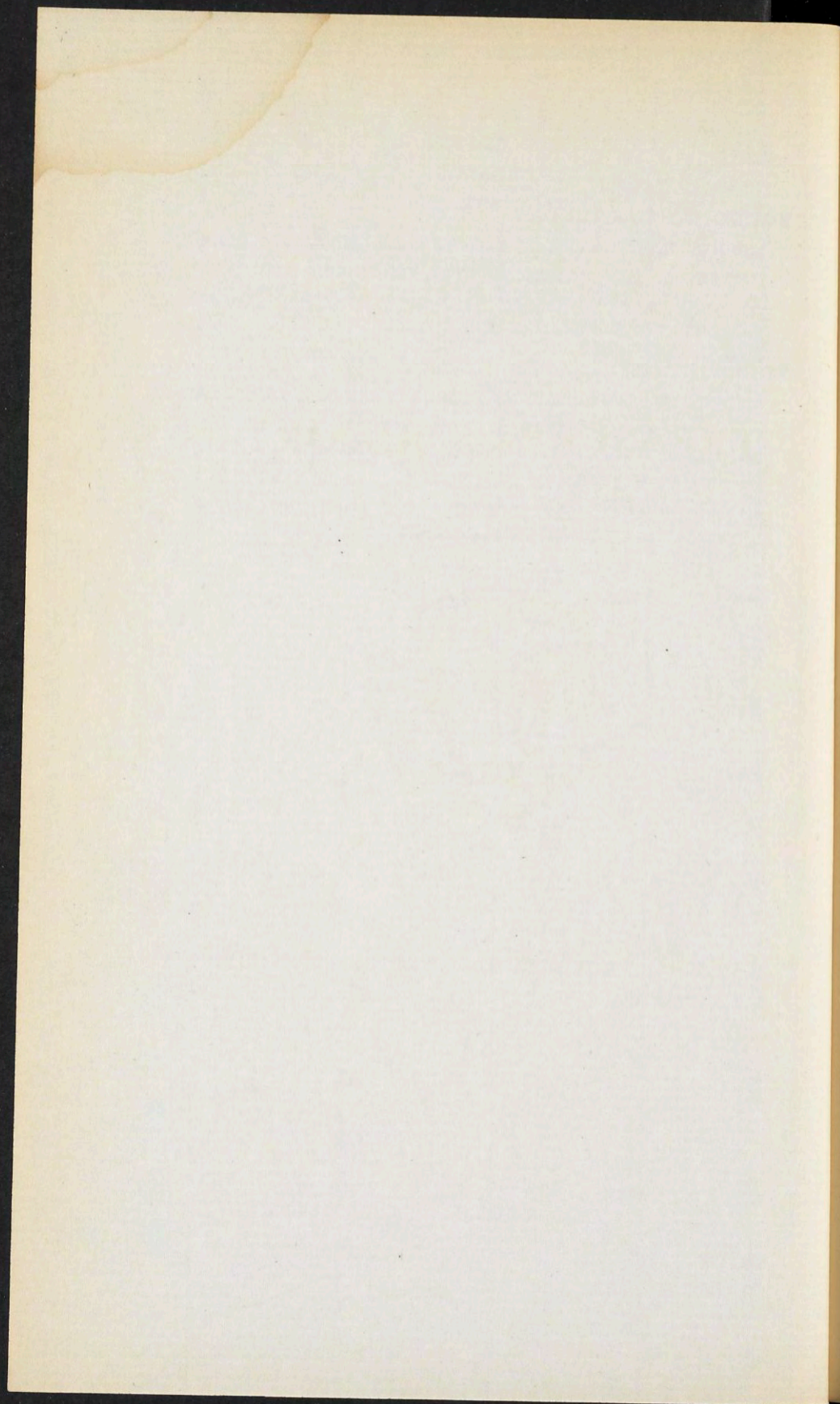
Handbook of Anatomy. Second Edition. Revised and Enlarged. (F. A. Davis Co., Philadelphia, 1905.)

YOUNG, JAMES T.

The Results of Higher Commercial Education. (*Proceedings National Educational Association*, July, 1905.)

The Essential Elements of Study in a University Course in Commerce. (*Ibid.*)

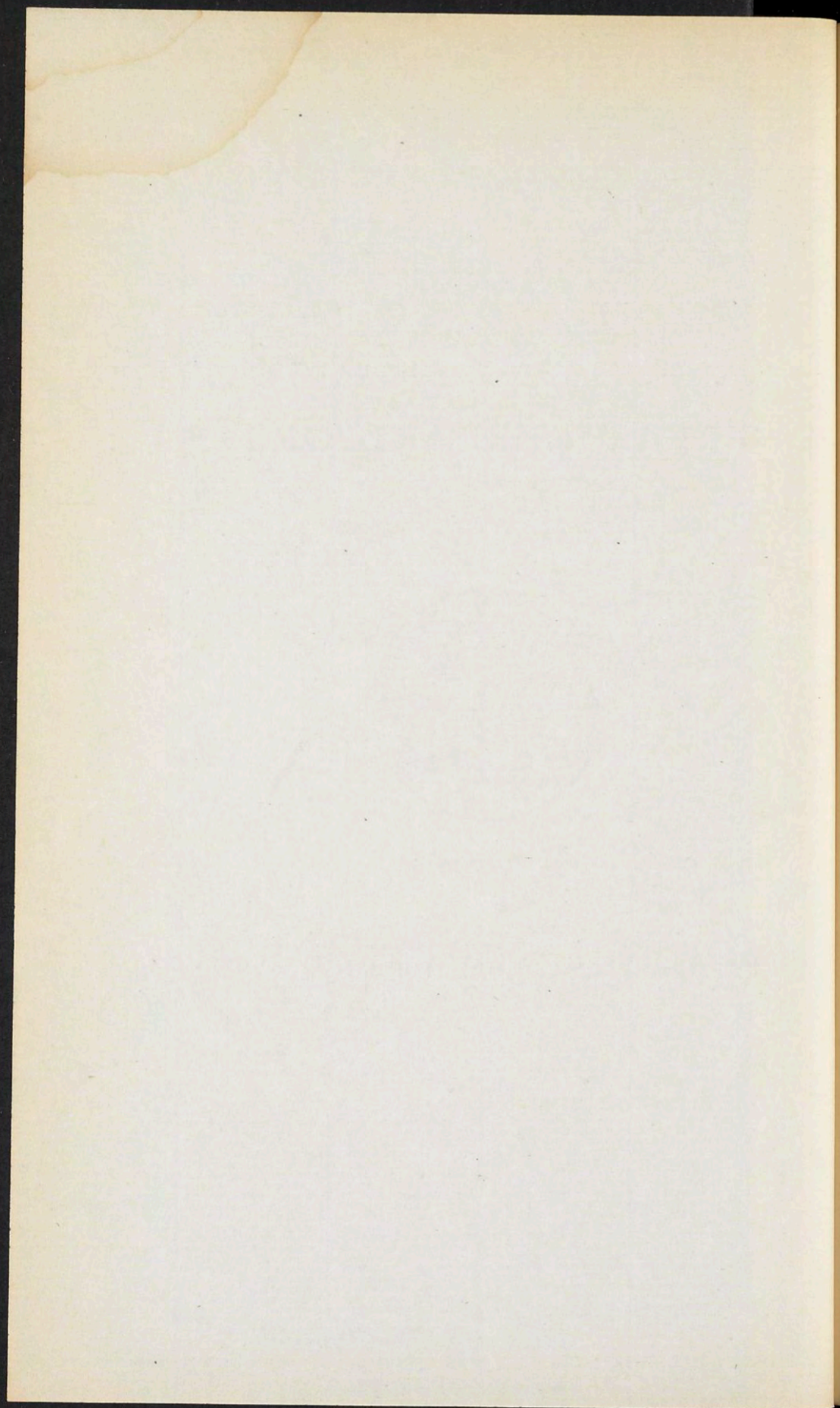
The Executive Power. (*Proceedings of American Political Science Association*, December, 1904.)



TREASURER'S REPORT.



For the Year Ending August 31, 1905.



REPORT OF THE TREASURER OF THE UNIVERSITY OF PENNSYLVANIA.

GENERAL BALANCE SHEET.

Assets :

I. Real Estate.....	\$6,436,694 15	
II. Libraries, Museums, Apparatus, Furniture and Perpetual Insurance deposits	1,907,090 16	
III. Securities :		
Railroad and Corporation Bonds.....	\$2,897,466 38	
Stocks.....	459,273 33	
	<u>3,356,739 71</u>	
IV. Mortgages:		
On property in Philadelphia and vicinity..	\$363,545 00	
On property in Chicago, etc.....	118,500 00	
	<u>482,045 00</u>	
V. Ground Rents.....	57,153 95	
VI. Loans on Collateral.....	58,842 07	
	<u>\$12,298,565 04</u>	
VII. Cash Balances in Various Trust Companies and Banks :		
To credit of Investment funds :		
University Trusts.....	\$50,565 02	
Building funds.....	57,729 77	
Hospital funds.....	24,220 65	
To credit of funds not for Investment :		
University.....	7,680 84	
Hospital.....	13,682 39	
To credit of Income :		
University	13,764 68	
To credit of Administration	72,202 15	
	<u>239,845 50</u>	
	<u>\$12,538,410 54</u>	

Liabilities :

Bonds Central Light and Heat Station	\$30,000 00
Mortgage, No. 3451 Woodland Avenue.....	5,500 00
Advances to Trusts by Administration.....	24,632 84
Advances to Land purchases, Building funds, etc.....	34,209 23
Loan to Veterinary Hospital.....	10,400 00

104,742 07

Excess of Assets.....

\$12,433,668 47

REAL ESTATE.

IN PHILADELPHIA.

IN FIFTH WARD.

Premises No. 224 Stampers Street	\$1,800 00
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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
“ Bread and Quarry.....	1,000 00

IN TWENTY-SEVENTH WARD.

Plot of ground between Thirty-fourth and Thirty-sixth, Spruce 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
Biological Building.....	36,844 98
Plot of ground between Connecting Railway 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, Woodland Avenue and Police Station.....	20,000 00
John Harrison Laboratory of Chemistry....	113,607 82
Henry Howard Houston Hall.....	134,544 57
Dormitory Building, first section.....	344,268 67
Dormitory Building and Memorial Tower, second section.....	242,048 01
Dormitory Building, third section.....	33,608 80
Dormitory Building, fourth section.....	1,085 62
Central Light and Heat Station.....	186,050 83
Department of Hygiene Building	50,000 00
Department of Hygiene Laboratory.....	15,001 75
Premises Nos. 3328, 3330, 3332, 3334, 3336, 3338 Walnut Street	37,000 00
Premises Nos. 3340, 3342, 3344, 3346, 3348 3350 Walnut Street.....	47,500 00
Premises No. 1021 Chestnut Street.....	44,000 00
“ No. 1029 Chestnut Street.....	50,000 00
“ Chestnut Street Opera House....	350,000 00
“ No. 3451 Woodland Avenue.....	5,500 00
“ “ 4053 Spruce Street.....	6,500 00
“ “ 4057 Spruce Street.....	6,700 00
“ “ 4059 Spruce Street.....	7,000 00
“ “ 249 South Forty-first Street..	4,800 00
“ Woodland Avenue, between Thirty-sixth and Thirty-seventh Streets.	30,000 00
Department of Dentistry Building.....	129,851 08
Dining Hall.....	14,799 58
Law School Building and Lot	432,187 38
Museum Science and Art.....	391,831 08
Randal Morgan Laboratory of Physics.....	76,885 90
Premises Thirty-third and Locust.....	29,125 00
New Medical Laboratory.....	622,894 08
New Engineering Department Building....	368,714 43
Plot of ground, Thirty-fourth to Thirty-fifth and Spruce to Pine	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.....	50,000 00

James Dundas Clinic.....	6,098 67
Anna D. Scott Memorial.....	15,000 00
X-Ray plant.....	25,000 00
Sun Parlor.....	7,867 91
Isolation Ward.....	21,776 41
New Laundry.....	14,382 04

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 Meadow Street.....	20,000 00

IN CHESTER COUNTY, PA.

Farm property, Glenloch, Chester Co.....	29,782 50
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IN DELAWARE COUNTY, PA.

Reese Wall Flower Observatory grounds..	15,821 84
“ “ “ Professor's residence..	11,808 25

IN ELK AND MCKEAN COUNTIES, PA.

About seven hundred acres.....	5,054 71
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IN SEA ISLE CITY, N. J.

Marine Biological Laboratory.....	3,700 00
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IN MANCHESTER, MASS.

Sundry lots of ground.....	15,463 42
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IN HOLLY BEACH, N. J.

Sundry lots of ground.....	1 00
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\$6,436,694 15

LIBRARIES, MUSEUMS, APPARATUS, FURNITURE, AND PERPETUAL INSURANCE.

College Apparatus and furniture.....	\$122,819 56
Department of Medicine Apparatus and furniture.....	101,560 42
Department of Law Apparatus and furniture.....	146,419 04
Department of Dentistry Apparatus and furniture.....	26,850 08
Department of Hygiene Apparatus and furniture.....	21,024 86
Department of Veterinary Medicine Apparatus and furniture.....	11,422 00
University Library—Books, etc., Apparatus and furniture.....	477,720 04
New Engineering Building Apparatus and furniture.....	27,011 58
Museum Science and Art Collections, Apparatus and furniture	690,000 00
New Medical Laboratories, Apparatus and furniture	63,208 37
Randal Morgan Laboratory of Physics, Apparatus and furniture.....	21,338 68
Wistar and Horner Museum, Collections and furniture.....	40,000 00
Towne fossils, collections and furniture....	5,011 13
Flower Observatory Apparatus and furniture	24,098 78
Hospital furniture.....	60,511 43
Houston Hall furniture.....	22,891 21
Dormitory furniture.....	12,944 38
Dining Hall furniture.....	1,200 00
Orthopædic Machine Shop.....	2,000 00
X-Ray Apparatus.....	5,000 00
	<hr/>
	\$1,883,031 56
Perpetual Insurance on College Buildings..	\$10,089 00
On Veterinary Buildings.....	900 00
“ Hospital Buildings.....	4,671 50
“ Hospital Buildings, Gibson Wing ..	900 00
“ Hospital Building, Nurses' Home..	900 00
“ Biological Buildings.....	300 00
“ Central Light and Heat Building...	1,000 00
“ Department of Hygiene Building...	875 00
“ Chemical Laboratory Building.....	1,200 00

On Department of Dentistry.....	\$2,437 50	
" Flower Observatory Building	200 00	
" Trust properties in City.....	585 60	
		<u>\$24,058 60</u>
		<u>\$1,907,090 16</u>

SECURITIES.

RAILROAD AND CORPORATION BONDS.

	Cost.
58,000 Atlanta Gas Light Co. 1st Mtg. 5's, 1947	\$56,750 00
103,000 Athletic Association University of Pennsylvania...	103,000 00
15,000 Atlantic Coast Line Railway 1st Cons. 4's, 1952...	14,250 00
50,000 Atchison, Topeka & Santa Fe Railway Gen. Mtg. 4's, 1995	49,777 50
17,000 Bethlehem Iron Co. 1st Mtg. 5's, 1907.....	17,000 00
3,300 Bloomsburg & Sullivan R. R. 1st Mtg. 5's, 1923..	3,300 00
1,600 Bloomsburg & Sullivan R. R. 2d Mtg. 5's, 1928...	1,600 00
200 Bloomsburg & Sullivan R. R. Scrip.....	66 66
2,000 Buffalo & Susquehanna R. R. 1st Mtg. 5's, 1913..	1,990 00
2,000 Brooklyn, N. Y., Union Gas Co. 1st Mtg. 5's, 1945	2,000 00
25,000 Baltimore & Ohio R. R. 1st Mtg. 4's, 1948	25,050 00
67,000 Baltimore & Ohio R. R. prior lien 3½'s, 1925	63,590 00
55,000 Baltimore & Ohio R. R. prior lien 3½'s, 1925, Southwestern Division.....	50,400 00
50,000 Bethlehem Steel Co. purchase money Mtg. 6's, 1998	60,000 00
500 Brooklyn Union Gas Debenture.....	500 00
12,000 Boston & Worcester Street Railway 1st Mtg. 4½'s, 1923	11,975 00
5,000 Chicago Gas Light & Coke Co. 1st Mtg. 5's, 1937	5,000 00
2,500 County of St. Louis, Minn. 6's, 1907.....	2,500 00
22,000 City of Galveston, Tex., 40 year Ltd. 5's, 1934....	22,000 00
15,000 Choctaw, Oklahoma & Gulf R. R. Gen. Mtg. 5's, 1919	15,050 00
29,000 Chicago & Erie R. R. 1st Mtg. 5's, 1982.....	31,975 00
30,000 Central Light & Heat Station 5 4-10's.....	30,000 00
25,000 Consumers' Light, Heat and Power Co. 1st Mtg. 5's, 1938	25,000 00
1,000 City of Pittsburg Refunding 5's, 1910.....	1,130 00
1,000 Central R. R. of New Jersey Gen. Mtg. 5's, 1987..	1,120 00
25,000 Citizens' Railway, Indianapolis, 1st Cons. Mtg. 5's, 1933.....	24,000 00
75,000 Chesapeake & Ohio R. R. Co. Gen. Mtg. 4½'s, 1992	75,000 00

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	Cost.
10,000 Connecticut Railway & Lighting Co. 1st Mtg. 4½'s, 1951	\$10,000 00
45,000 Chicago, Burlington & Quincy Railway, Illinois Division 3½'s, 1949	41,118 75
10,000 Chesapeake & Ohio Railway Car Trust 4's, 1913 ..	9,657 00
5,000 Choctaw, Oklahoma & Gulf R. R. Cons. Mtg. 5's, 1952	5,000 00
60,000 Denver & Rio Grande R. R. 1st Consol. Mtg. 4's, 1936	59,555 00
12,000 Elmira & Williamsport R. R. Co. Income Bonds 5's, 2862	12,000 00
30,000 Evansville & Terre Haute R. R. 1st Mtg. 5's, 1942	30,600 00
53,000 Erie R. R. prior lien 4's, 1996	48,082 50
93,000 Equitable Ill. Gas Light Co. 1st Mtg. 5's, 1928	94,350 00
57,800 Electric & People's Traction Trust Certif. 4's, 1945	57,423 75
5,000 Fairmount Coal & Coke Co. 1st Mtg. 4's, 1919 ..	5,000 00
30,000 Hudson County Gas Co. 1st Mtg. 5's, 1949	30,000 00
50,000 International Nav. Co. 1st Mtg. 5's, 1929	50,000 00
15,000 Indianapolis Street Railway Co. Gen. Mtg. 4's, 1933	13,037 50
91,000 International Nickel Co. Sinking Fund 5's, 1932 ..	91,000 00
25,000 Indianapolis Traction & Tunnel Co. 1st Mtg. 5's, 1933	24,147 50
60,000 Jersey City, Hoboken & Paterson Street Railway 1st Mtg. 4's, 1949	50,000 00
25,000 Jersey City & Bergen Railway 1st Mtg. 4½'s, 1923	25,937 50
23,000 Kansas City, Mo., Gas Co. 1st Mtg. 5's, 1922	21,882 50
1,350 Lehigh Coal & Nav. Co. Cons. Loan 4½'s, 1914 ..	1,471 50
34,000 Lehigh Valley Coal Co. 1st Mtg. 5's, 1933	33,850 00
6,000 Lehigh Valley R. R. Car Trust 4½'s, 1910	6,120 00
25,000 Lehigh Valley Traction Co. 1st Mtg. 4's, 1929	23,000 00
5,000 Lehigh Valley R. R. Reg. 7's, 1910	5,000 00
51,000 Louisville & Nashville R.R. Unified Gold 4's, 1940	51,197 50
52,000 Long Island R. R. Unified Mtg. 4's, 1949	52,225 00
1,000 Lehigh Valley R. R. Consol. Mtg. 4½'s, 1923	1,060 00
8,000 Lehigh Coal & Navigation Co. 4's, 1914	8,000 00
8,000 Lehigh & Wilkes-Barre Coal Co. 4½'s, 1910	8,000 00
5,000 Metropolitan Street Railway, Kansas City, Mo. Gen. Mtg. 5's, 1909	4,894 17
41,000 Missouri, Kansas & Texas R. R. 1st Mtg. 4's, 1990	40,743 75
8,000 Mortgage Trust Co. 4's, 1911	6,880 00
15,000 Montreal Lt., Heat & Power Co. 1st Mtg. 4½'s, 1932	15,000 00
25,000 Market St. Elevated Pass. Ry. 1st Mtg. 4's, 1955 ..	25,000 00
13,000 Norfolk & Western R. R. Co. 1st Mtg. 6's, 1932 ..	13,000 00

	Cost.
25,000 North Hudson Light, Heat and Power Co. Mtg. 5's, 1938	\$25,000 00
31,000 Northern Pacific R. R. prior lien 4's, 1997	31,000 00
55,000 Norfolk & Western R. R. 1st Cons. Mtg. 4's, 1996	54,018 75
25,000 Norfolk & Western R. R. Equip. Trust 4's, 1909 ..	24,522 50
1,000 North Penna. R. R. Gen. Mtg. 3 3-10's, 1953	1,000 00
21,000 N. Y., Phila. & Norfolk R. R. Co. 1st Mtg. 4's, 1939	21,000 00
8,000 Norfolk and Western Railway Equip. Trust 4's, 1913	7,688 00
1,000 Norfolk Pacific Ry. Gen. lien and land grant 3's, 2047	770 00
22,000 Ohio River R. R. 1st Mtg. 5's, 1936	22,510 00
10,000 Oregon Short Line 25-year Refund 4's, 1929	9,687 50
3,000 Phila. & Reading R. R. Cons. 7's, 1911	3,000 00
25,000 Phila. & Reading R. R. 4's, 1937	25,000 00
3,000 Pittsburg, Shenango & Lake Erie R. R. 1st Mtg. 5's, 1940	3,000 00
40,000 Pittsburg Consol. Gas Co. 1st Mtg. 5's, 1948	41,000 00
500 Phila. Country Club 1st Mtg. 5's, 1940	500 00
9,000 Phila. & Erie R. R. Gen. Mtg. 5's, 1920	10,665 00
25,000 Phila. & West Chester Traction Co. 1st Mtg. 5's, 1918	25,000 00
1,000 Penna. & N. Y. Canal & R. R. Consol. Mtg. 4's, 1939	980 00
2,000 Penna. & N. Y. Canal & R. R. Consol. Mtg. 5's, 1939	2,240 00
1,000 Phila., Wilmington & Baltimore R. R Stock Trust 4's, 1921	1,085 00
2,000 Phila. & Erie R. R. Reg. 4's, 1920	2,180 00
20,000 Phila. Electric Gold Trust 5's, 1918	19,993 75
30,000 Penna. Steel Equip. Trust 3½'s, 1908	28,912 50
20,000 Penna. Steel Equip. Trust 3½'s, 1909	19,624 80
21,000 People's Pass. Railway Stock Trust 4's, 1943	21,735 00
125,000 Reading Co. and P. & R. Coal & Iron Co. Gen. Mtg. 4's, 1997	118,201 25
10,000 Raleigh & Gaston R. R. 1st Mtg. 5's, 1947	10,332 50
500 Roby Street Dock & Factories Co. 6's, 1907	500 00
7,000 Rochester Railway & Light Co. 5's, 1954	7,000 00
15,000 Reading Co. (Jersey Central Collateral) 4's, 1951 ..	14,955 00
1,000 Susquehanna Coal Co., Guar. by Penna. R. R. Co. 6's, 1911	1,000 00
III,000 San Antonio & Aransas Pass. R. R. 1st Mtg. 4's, 1943	107,405 00

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	Cost.
25,000 Scranton Traction Co. 1st Mtg. 6's, 1932.....	\$25,000 00
10,000 Syracuse Rapid Transit Co, 1st. Mtg. 5's, 1946....	10,000 00
21,000 Second Avenue (Pittsburg) Traction Co. 1st Mtg. 5's, 1934	21,000 00
25,000 St. Louis Merchants' Bridge Co. 1st Mtg. 6's, 1929	25,000 00
9,000 Sunbury, Hazleton & Wilkes-Barre R. R. 1st Mtg. 5's, 1928	8,380 00
400 Sunbury, Hazleton & Wilkes-Barre R. R. 2d Mtg. 6's, 1938	393 50
25,000 St. Louis Terminal Cupples Station and Property 1st Mtg. 4½'s, 1917.....	24,468 75
20,000 St. Louis, Iron Mountain & Southern R. R., land grant 5's, 1931	20,000 00
25,000 Schuylkill Traction Co. Gold Mtg. 5's, 1943.....	25,000 00
5,000 Southern Pacific R. R. Stock Collat. 4's, 1949.....	5,000 00
10,000 St. Louis, Memphis & Southeastern R. R. Co. 4½'s, 1909.....	9,900 00
25,000 Toledo, Ohio, Electric Street Railway Co. 1st Mtg. 5's, 1912.....	25,000 00
1,000 Tuckerton R. R. Co. 1st Mtg. 6 s, 1910.....	1,000 00
10,000 Third Avenue R. R. 1st Consol. Mtg. 4's, 2000....	10,150 00
10,000 Terminal Railway Asso., St. Louis, Gen. Mtg. 4's, 1953	9,850 00
50,000 Toledo, St. Louis & Western R. R. Co. Prior lien Gold 3½'s, 1925.....	45,488 25
25,000 United Railways Co. Gold Trust 4's, 1949.....	21,250 00
50,000 United Railways of St. Louis 1st Gen. Mtg. 4's, 1934	45,375 00
7,000 United Traction Co., Pittsburg, Gen. Mtg. 5's, 1907	7,280 00
600 University Club Gold 5's, 1922.....	600 00
20,000 Union Pacific R. R. 1st Mtg. land grant 4's, 1947..	18,500 00
10,400 Veterinary Hospital Bonds	10,400 00
2,500 Wilmington, Columbia & Augusta R. R. 1st Mtg. 6's, 1910.....	2,500 00
13,000 Wabash R. R. Co. 2d Mtg. 5's, 1939.....	13,000 00
34,000 Williamsport Gas Co. 1st Mtg. 5's, 1939.....	34,420 00
57,000 Western N. Y. & Penna. R. R. Gen. Mtg. 4's, 1943	54,411 25
23,000 Wheeling & Lake Erie R. R. 1st Consol. Mtg. 4's, 1949	21,562 50
32,000 West Chester Lighting Co. 1st Mtg. 5's, 1950.....	32,140 00
40,000 Wilmington & Chester Traction Co. Collat. Trust 5's, 1918.....	40,632 50
	<u>\$2,897,466 38</u>

STOCKS.

		Cost.
10	Shares American Dredging Co.....	\$1,000 00
10	" American Snuff Co., pfd.....	1,000 00
27	" Brooklyn Union Gas Co. common.....	2,160 00
17	" Continental Pass. Rway. Co.....	2,635 00
500	" Delaware & Bound Brook R. R.....	105,500 00
80	" Fidelity Trust Co.....	35,600 00
10	" Green & Coates Sts. Pass. Rway. Co.....	1,580 00
50	" Germantown Pass. Rway. Co.....	7,250 00
86	" Insurance Co. of North America.....	2,022 00
20	" Iron Mountain Car Trust.....	20,344 00
16	" Lehigh Valley R. R., pfd.....	800 00
4	" Lehigh Valley R. R. common.....	176 00
10	" Lehigh Coal & Nav. Co.....	500 00
61	" Norfolk & Western R. R.....	5,550 00
17	" North Penna. R. R.....	1,836 00
475	" Pennsylvania R. R.....	26,911 08
2,238	" Phila. & Reading R. R. 2d pfd.....	107,042 00
72	" Provident Life & Trust Co.....	44,482 00
78	" Penna. Salt Mfg. Co.....	7,795 50
350	" Phila. Traction Co.....	34,183 75
10	" Phila. Co. common.....	500 00
12	" Phila. & Trenton R. R. Co.....	3,348 00
11	" Phila., Germantown & Norristown R. R.....	1,815 00
134	" Safe Deposit & Trust Co., Pittsburg, Pa.....	7,370 00
9	" Second & Third Sts. Pass. Rway. Co.....	2,727 00
120	" Wm. Cramp & Sons Ship & Engine Building Co.....	6,000 00
17	" Western National Bank.....	1,530 00
25	" Union Pacific R. R. pfd.....	1,500 00
500	" United Traction Co., Pittsburg, Pa., pfd.....	25,000 00
4	" United N. J. R. R. & Canal Co.....	1,116 00
		<u>\$459,273 33</u>

MORTGAGES.

ON PROPERTY IN PHILADELPHIA AND VICINITY.

No. 707 Lydia Street.....	\$700 00
Wallace and Nineteenth Streets.....	6,000 00
Lancaster Avenue and Rockland.....	2,750 00
Cheltenham Township, Montgomery Co., 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
" 2262, 2318, 2320 North Front Street.....	8,000 00
" 1343 Mount Vernon Street.....	2,700 00
" 2977 Frankford Avenue.....	4,000 00
" 2987 Frankford Avenue.....	4,000 00
Camden, N. J.....	7,500 00
Thirty-Fifth Ward, City.....	70,000 00
No. 549 North Second Street.....	3,000 00
Manchester, Mass.....	1,000 00
Gray's Ferry Road and Thirtieth Street.....	2,000 00
No. 3451 Woodland Avenue.....	5,500 00
South, Marston and Thirty-third Streets.....	35,000 00
No. 2504 North Broad Street.....	5,500 00
No. 131 Richmond Street.....	1,500 00
Moreland Township, Montgomery Co., Pa.....	3,300 00
No. 2224 Montrose Street, Phila.....	600 00
West Chester Road, Chester Co., Pa.....	111,175 00
Cape May County, N. J.....	35,000 00
	<hr/>
	\$363,545 00

COUPON MORTGAGES.

In Chicago, Illinois.....	\$25,000 00
" " ".....	25,000 00
" " ".....	7,500 00
" " ".....	20,000 00
" " ".....	7,000 00
" " ".....	2,500 00
" " ".....	2,000 00
" " ".....	16,000 00
" " ".....	6,500 00
" " ".....	7,000 00
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	\$118,500 00

GROUND RENTS IN PHILADELPHIA.

No. 29 North Sixth Street.....		\$2,500 00
" 533 North Front Street.....		426 67
" 535 North Front Street.....		426 67
" 537 North Front Street.....		426 67
Green and New Market Streets.....		III II
Moore and Otsego Streets.....		3,000 00
Oakford, Manton, and Twenty-second Streets, 6 at \$800 each.....		4,800 00
Stiles and Nineteenth Streets.....		900 00
Gray's Ferry Road.....		42,519 00
No. 13 and 15 Parkham Street.....		400 00
" 618 South Seventh Street.....		444 50
" 128 North Water Street.....		I,133 33
Lebanon, Pa.....		66 00
		<hr/>
		\$57,153 95
Loans on Collateral.....	\$24,632 84	
" " ".....	10,123 40	
" " ".....	5,000 00	
" " ".....	5,000 00	
" " ".....	8,582 24	
" " ".....	103 59	
" " ".....	5,400 00	
		<hr/>
		<u>\$58,842 07</u>

UNIVERSITY ENDOWMENTS.

	Amount Invested.	Amount Uninvested.
General Fund.....	\$3,075,656 90	\$691 00
J. Herman Raht Fund.....	250 00	
Phi Kappa Sigma Fund.....	400 00	
Keble Fund.....	13,193 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	
J. H. Towne Fund.....	446,478 76	3,501 88
John Welsh Fund.....	51,947 39	885 77
A. Whitney Fund.....	48,114 43	2,000 00
Scholarship Fund.....	4,644 57	
Benjamin Franklin Scholarship Fund.....	10,026 12	
Samuel V. Merrick Scholarship Fund.....	3,560 60	
Class 1878 Scholarship Fund.....	5,000 00	
Matthew Baird Scholarship Fund.....	5,013 06	
E. Otis Kendall Scholarship Fund.....	5,000 00	
Adam Seybert Fund.....	49,045 74	4,300 00
Chair of Christian Ethics Fund.....	3,015 36	
Alumni Hall Fund.....	6,663 79	
Hector Tyndale Fellowship Fund.....	12,194 78	
S. W. Roberts Fund.....	1,114 83	
Wharton School Fund.....	529,425 00	
Assyrian Fellowship Fund.....	189 55	
Pepper Professorship of Hygiene Fund.....	59,400 00	
J. Rhea Barton Fund.....	49,865 48	5 00
J. Gillingham Fell Fund.....	1,243 69	
Auxiliary Faculty Medical Fund.....	29,797 96	1,750 98
Leidy Chair of Anatomy Fund.....	1,994 49	
Botanic Garden Fund.....	4,302 99	
Department of Biology Fund.....	62,855 22	300 00
I. V. Williamson Fund.....	47,488 00	42 00
George S. Pepper Residuary Legatee Fund..	33,020 87	4,333 00
Francis S. Pepper Scholarship Fund.....	7,150 00	
Chair of Pedagogy Fund.....	250 00	
Henry Reed Prize Fund.....	743 12	
Latin Prize Fund.....	1,025 80	
Oratory Prize Fund.....	360 80	
English Composition Prize Fund.....	200 00	
Arthur Spayd Brooke Memorial Prize Fund..	1,000 00	

	Amount Invested.	Amount Uninvested.
J. Warner Yardley Prize Fund.....	\$500 00	
Class 1880 Prize Fund.....	1,000 00	
Allen Memorial Prize Fund.....	1,000 00	
P. Pemberton Morris Prize Fund	1,000 00	
Joseph M. Bennett Bequest Fund.....	523,461 75	\$7,151 26
Rev. C. P. Krauth Library Fund	1,621 06	
Agriculture Library Fund.....	916 00	
Pepper Medical Library Fund.....	7,708 19	
Tobias Wagner Library Fund.....	11,947 59	207 08
J. B. Lippincott Library Fund.....	7,000 00	
Isaac Morris Library Fund.....	5,233 69	
Reese Wall Flower Fund.....	191,482 24	
John Harrison Laboratory of Chemistry Fund	114,829 82	
Veterinary Fund.....	31,800 70	
Joseph M. Bennett Fund (Bennett Hall).....	17,500 00	
Howard Houston Hall Fund.....	157,435 78	
Howard Houston Hall Endowment Fund....	500 00	
Dormitory First Section Fund.....	355,016 58	
Dining Hall Fund	14,799 58	
Dental Hall Fund	159,138 66	
Wistar and Horner Museum Fund.....	40,110 11	
Department of Law Fund.....	7,735 08	
John F. Frazer Fund.....	11,259 37	
Department of Hygiene Fund.....	190,688 05	97 50
Laboratory of Hygiene Fund.....	15,001 75	
Thomas A. Scott Fellowship Fund	11,725 00	
Joseph M. Bennett Endowment Graduate Department.....	45,737 50	
A. S. Biddle Fund.....	20,250 00	
Simon Muhr Fund.....	9,490 60	31 25
George L. Harrison Foundation.....	627,506 55	3,613 36
Stillé Memorial Library Fund.....	1,000 00	
John Stewardson Memorial Fund.....	17,667 26	479 30
John White Field Scholarship Fund.....	10,000 00	
Pepper Hall Endowment Fund.....	50,012 50	
University Fund for Women	100 00	
Professors' Retiring Fund.....	6,776 25	
Clark Chair of Assyriology Fund.....	99,925 00	
Thomas S. Stewart Scholarship Fund.....	5,000 00	
Robert Morris Scholarship Fund.....	5,000 00	
James Logan Scholarship Fund.....	5,000 00	
Garrett Scholarship Fund.....	10,000 00	
Thomas H. Powers Scholarship Fund.....	5,000 00	
Hartman Kuhn Scholarship Fund.....	5,000 00	

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	Amount Invested.	Amount Uninvested.
Charles Brinton Coxe Scholarship Fund.....	\$5,000 00	
Cadwallader Scholarship Fund.....	4,937 50	\$87 50
Rev. James Latta Scholarship Fund.....	5,000 00	
Louise Harrison Scholarship Fund.....	5,122 50	
Stephen Greene Scholarship Fund.....	5,000 00	
Blanchard Fund.....	54,887 50	
Suddards Fund.....	997 50	2 50
Albert Wilson Memorial Scholarship Fund...	2,495 00	102 95
Sinking Fund.....		625 00
Bond Interest.....		535 98
Spencer Morris Prize Fund.....	9,925 00	
George Barnett Scholarship Fund.....	5,000 00	
J. B. Lippincott Veterinary Fund.....	97,712 50	283 75
Eckley B. Coxe Scholarship Fund.....	5,000 00	
Erskine Hazard Dickson Memorial Fund....	25,000 00	
Martha Austin McDowell Scholarship Fund..	4,950 00	50 00
Erskine Hazard Dickson Memorial Lib. Fund.	1,970 00	30 00
John H. Converse Scholarship Fund.....	4,906 20	93 80
Mask and Wig Club Fund.....	4,950 50	
Sommerville Collection.....		19,364 16
	<hr/> \$7,693,082 90	<hr/> \$50,565 02

Hospital Endowments.	Amount Invested.	Amount Uninvested.
General Fund.....	\$943,457 31	\$9,094 19
Hahn Ward Fund.....	54,689 75	
Alumni Ward Fund.....	10,045 25	
Mrs. G. W. Norris Fund.....	10,000 00	
Bement Fund.....	5,000 00	
Ward Chronic Diseases Fund.....	280,147 56	2,467 16
Dr. William Pepper Clinical Laboratory Fund	25,030 00	
I. V. Williamson Hospital Fund.....	47,621 25	32 50
Children's Ward Fund.....	32 07	
Henry Seybert Fund.....	58,239 77	377 54
George S. Pepper Fund.....	74,572 33	307 12
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 Sick Children.....	48,995 00	1,005 00
Dr. D. Hayes Agnew Bequest for Maternity Hospital.....	1,000 00	

Hospital Endowments.	Amount Invested.	Amount Uninvested
Children's Medical Ward Fund	\$990 00	
Andrew C. Butler Fund	5,432 67	
Ligonier Fund	41,218 06	\$197 72
Children's Orthopedic Ward Fund	14,140 00	
Nurses' Home Fund	450 00	
A. Sydney Roberts Apparatus Fund	6,264 54	
John White Field Fund	5,000 00	
Abby Willing Peters Fund	5,000 00	
Maternity Fund	24,846 20	150 05
Edward Rhodes Memorial Fund	3,401 51	
Alfred Gustavus Baker Fund	5,000 00	
Abraham and Mary Baker Fund	5,100 00	
Mary B. K. Wainright Fund	5,000 00	
Hamilton Disston Fund	3,000 00	
Percival Roberts Fund	3,000 00	
Thomas Harrison Fund	5,100 00	
Langstroth Fund	500 00	
Richard Heckscher Fund	5,031 25	
Woodward Fellowship Fund	20,912 50	154 24
Josephine S. Wentz Fund	5,000 00	
Thomas Elkinton Fund	4,500 00	167 91
George W. Vogel Fund	10,011 81	
Diet Kitchen Fund	1,500 00	
Emily M. Harrison Fund	4,981 88	18 12
Edward Roberts, Jr., Fund	5,000 00	
Mary Kay Fund	5,000 00	
Hiram Brooke Fund	4,987 50	12 50
Anna D. Scott Memorial Fund	15,000 00	
Sinclair Tousey Bed Fund	4,955 00	45 00
Sabin Woolworth Colton 3d Bed Fund	3,000 00	
Sommerville Bed Fund		10,191 60
	<hr/> \$1,968,899 17	<hr/> \$24,220 65

Building Funds.	Amount Invested.	Amount Uninvested.
Free Museum Science and Art	\$391,831 08	\$17,919 40
Dormitories and Memorial Tower, Second Section	258,244 48	
Law School and Lot	582,024 18	
Randal Morgan Laboratory of Physics	125,540 40	2,133 00
Randal Morgan Laboratory of Physics Equip- ment	20,288 68	2,824 86
Premises Thirty-third and Locust Streets	29,125 00	

Treasurer's Report.

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Building Funds.	Amount Invested.	Amount Uninvested.
New Engineering Department Building.....	\$368,714 43	\$10,357 65
New Engineering Department Building Equip- ment.....	27,011 58	
New Medical Laboratory Building.....	668,880 80	\$317 60
New Medical Laboratory Apparatus.....	20,221 65	
Dormitory, Third Section.....	50,580 33	502 88
Dormitory, Fourth Section.....	1,085 62	22,164 38
Sun Parlor.....	7,867 91	
Sun Parlor, Ward G.....		1,500 00
Isolation Ward.....	21,776 41	
New Laundry.....	14,382 04	
X-Ray Plant.....	25,000 00	
Veterinary Building.....		10 00
	<hr/> \$2,612,574 59	<hr/> \$57,729 77

Income Account.	Amount received, including Balance, August 31, 1904,	Amount Expended.	Balance.
General Fund.....	\$1,901 86	\$1,901 86	
J. Herman Raht Fund.....	12 50	12 50	
Phi Kappa Sigma Fund.....	20 00	20 00	
Keble Fund.....	1,340 11	1,340 11	
Elliott Cresson Fund.....	212 12	212 12	
Tobias Wagner Fund.....	265 00	265 00	
Bloomfield Moore Fund.....	752 25	752 25	
Thomas A. Scott Fund.....	2,471 36	2,471 36	
John H. Towne Fund.....	13,551 54	13,551 54	
John Welsh Fund.....	2,380 66	2,380 66	
A. Whitney Fund.....	2,276 86	2,276 86	
Scholarship Fund.....	170 16	170 16	
Benjamin Franklin Scholarship Fund.....	526 30	526 30	
Samuel V. Merrick Scholarship Fund.....	140 40	140 40	
Class 1878 Scholarship Fund....	100 00	100 00	
Matthew Baird Scholarship Fund	300 66	300 66	
E. Otis Kendall Scholarship Fund	100 00	100 00	
Adam Seybert Fund.....	2,714 78	2,714 78	
Chair Christian Ethics Fund....	376 90		\$376 90
Alumni Hall Fund.....	311 28	311 28	
Hector Tyndale Fellowship Fund	614 06	614 06	
S. W. Roberts Fund.....	55 74	55 74	
Wharton School Fund.....	18,280 58	9,379 20	8,901 38
Assyrian Fellowship Fund.....	9 48	9 48	

Income Account.	Amount received, including Balance. August 31, 1904.	Amount Expended.	Balance.
Pepper Professorship of Hygiene			
Funds.....	\$3,041 52	\$3,041 52	
J. Rhea Barton Fund.....	1,748 52	1,748 52	
J. Gillingham Fell Fund.....	26 19	26 19	
Auxiliary Faculty Medicine Fund	1,201 56	1,201 56	
Leidy Chair Fund.....	98 33	98 33	
Botanical Garden Fund.....	208 62	208 62	
Department Biology Fund.....	52	52	
I. V. Williamson Fund.....	1,967 44	1,967 44	
George S. Pepper Residuary			
Legatee Fund.....	1,740 56	1,740 56	
Francis S. Pepper Fund.....	337 22	337 22	
Chair of Pedagogy Fund.....	11 88	11 88	
Henry Reed Prize Fund.....	125 97	24 00	\$101 97
Latin Prize Fund.....	173 17	40 00	133 17
Oratory Prize Fund.....	51 75		51 75
English Composition Prize Fund	34 83	8 00	26 83
Arthur Spayd Brooke Memorial			
Prize Fund.....	190 00	166 70	23 30
J. Warner Yardley Prize Fund..	124 94		124 94
Class 1880 Prize Fund.....	300 17		300 17
Allen Memorial Prize Fund.....	55 58	40 00	15 58
P. Pemberton Morris Prize Fund	40 14	40 00	14
Joseph M. Bennett Bequest Fund	26,965 20	26,965 20	
Rev. C. P. Krauth Library Fund.	111 69	93 64	18 05
Agricultural Library Fund.....	92 29	44 71	47 58
Dr. William Pepper Library			
Fund.....	562 69	361 84	200 85
Tobias Wagner Library Fund...	616 88	449 80	167 08
J. B. Lippincott Library Fund...	567 32	462 18	105 14
Isaac Norris Library Fund.....	273 49	84 99	188 50
Reese Wall Flower Fund.....	2,712 53	2,698 03	14 50
Veterinary Fund.....	963 94	963 94	
Houston Hall Endowment Fund.	23 74	23 74	
Dormitory First Section Fund...	100 00	100 00	
Wistar and Horner Museum			
Fund.....	5 50	5 50	
Department of Law Fund.....	386 76	386 76	
John F. Frazer Fund.....	405 54	405 54	
Department of Hygiene Fund...	5,498 93	5,498 93	
Thomas A. Scott Fellowship			
Fund.....	359 24	359 24	
Joseph M. Bennett Endowment			
Graduate Department Fund.	2,340 90	2,212 65	128 25

Treasurer's Report.

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Income Account.	Amount received, including Balance, August 31, 1904.	Amount Expended.	Balance.
A. S. Biddle Fund.....	\$958 30	\$958 30	
Simon Muhr Fund.....	291 28	291 28	
George L. Harrison Foundation.	27,768 26	27,768 26	
Stillé Memorial Library Fund...	86 72	18 26	\$68 46
John Stewardson Fund.....	1,762 06	1,070 57	691 49
John White Field Scholarship Fund.....	454 57	414 57	40 00
Pepper Hall Endowment Fund..	2,723 00	2,198 00	525 00
University Fund for Women....	20 00		20 00
Professors' Retiring Fund.....	1,189 40		1,189 40
Clark Chair of Assyriology Fund	4,275 85	4,275 85	
Thomas S. Stewart Scholarship Fund.....	200 00	200 00	
Robert Morris Scholarship Fund	250 00	250 00	
James Logan Scholarship Fund..	250 00	250 00	
Garrett Scholarship Fund.....	467 08	467 08	
Thomas H. Powers Scholarship Fund.....	236 76	236 76	
Hartman Kuhn Scholarship Fund	250 00	250 00	
Charles Brinton Coxe Scholar- ship Fund.....	200 00	200 00	
Cadwalader Scholarship Fund ..	177 50	177 50	
Powers Professorship Salary Fund.....	40 00	40 00	
Rev. James S. Latta Scholarship Fund.....	200 00	200 00	
Louise Harrison Scholarship Fund.....	240 00	240 00	
Stephen Greene Scholarship Fund.....	200 00	200 00	
Blanchard Fund.....	1,512 50	1,512 50	
Suddards Fund.....	60 00	60 00	
Albert Wilson Memorial Scholar- ship Fund.....	90 00	90 00	
Spencer Morris Prize Fund.....	325 00	20 75	304 25
George Barnet Scholarship Fund	100 00	100 00	
J. B. Lippincott Veterinary Fund	3,312 50	3,312 50	
Eckley B. Coxe Scholarship Fund.....	225 00	225 00	
Erskine Hazard Dickson Me- morial Fund	820 00	820 00	
Martha Austin McDowell Scholar- ship Fund.....	112 50	112 50	

Income Account.	Amount received, including Balance, August 31, 1904.	Amount Expended.	Balance.
Erskine Hazard Dickson Library Fund.....	\$46 20	\$46 20	
Mask and Wig Club Fund.....	45 00	45 00	
Department of Archæology and Paleontology Fund.....	30 00	30 00	
Randal Morgan Laboratory of Physics Fund.....	1,050 00	1,050 00	
Dormitory Second Section Fund	400 00	400 00	
	<hr/>	<hr/>	
	\$152,719 63		\$13,764 68
Less Balances August 31, 1904.....	4,154 27		
	<hr/>		
Net Income.....	\$148,565 36		

FUNDS NOT FOR INVESTMENT.

	Amount received, including Balance, August 31, 1904.	Amount Expended.	Balance.
General Fund.....	\$719 81	\$719 81	
Botanical Garden Fund.....	2,299 70	2,299 70	
Eugene Delano Prize Fund.....	50 00	50 00	
"J. S. H." Prize Fund.....	75 00	75 00	
Library—Philosophy Fund.....	55 16	55 16	
“ Medieval Fund.....	8 43	8 43	
“ Warren Fund.....	46 31	41 30	\$5 01
“ Periodicals Fund.....	3,464 79	2,824 12	640 67
“ Dante Fund.....	52 23		52 23
“ Blue Book Fund.....	1 31	1 31	
“ Botany Fund.....	374 19	352 63	21 56
“ Old English Plays Fund	642 13	461 83	180 30
“ Alumni Fund Biddle Library.....	1,765 69	1,603 97	161 72
“ Music Fund.....	279 24	30 17	249 07
“ Insurance Fund.....	6 68	6 00	68
Chemical Laboratory Apparatus Fund.....	1,618 48	73 65	1,544 83
Medical Bulletin Fund.....	2,043 14	2,043 14	
Contributions to Veterinary Fund	2,000 00	2,000 00	
New Gymnasium Fund.....	1,500 00	1,500 00	

Treasurer's Report.

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Income Account.	Amount received, including Balance, August 31, 1904.	Amount Expended.	Balance.
Alliance Française Fellowship Fund.....	\$300 00	\$300 00	
College Settlement Fund.....	200 00	200 00	
Increase College Salaries Fund..	12,150 00	12,150 00	
Special Geography Fund.....	87 68	13 08	\$74 60
Library Franklin Manuscripts Fund.....	83 40	83 40	
Naples Table Fund.....	50 00	50 00	
Woods Hall Table Fund.....	50 00	50 00	
Contributions Current Expenses University Fund.....	6,073 82	5,073 82	1,000 00
Contributions Salaries Adminis- tration Library Fund.....	270 00	270 00	
Eckley B. Cox, Jr., Fund.....	4,385 82	1,438 05	2,947 77
Mrs. E. W. Harrison Fund for Collection of Casts.....	26 27		26 27
Architecture Lecture Course Fund.....	9 92		9 92
" Equipment Fund..	301 43	57 50	243 93
" General Fund.....	171 52		171 52
" Peabody Fund.....	12 42		12 42
Law School Monograph Fund..	333 30	35 75	297 55
Needy Students' Aid Fund.....	5,188 00	4,138 00	1,050 00
University Publication Fund...	3,942 59	2,291 58	1,651 01
Fellowship in History Fund....	225 00	225 00	
Interest Account.....	1,226 59	1,226 59	
Frazer Debate Prize Fund.....	100 00	100 00	
Campus Fund.....	3,586 52	1,620 05	1,966 47
Contributions Current Expenses Library Fund.....	628 99	473 54	155 45
Architecture Salary Fund.....	3,590 00	3,590 00	
Architecture Fellowship Fund...	1,000 00	1,000 00	
Law Library Fund.....	5,116 64	5,016 22	100 42
Sundry Friends of the University Fund.....	40,000 00	40,000 00	
John C. Ropes Fund.....	4 95		4 95
University View Fund.....	1,175 00	398 00	777 00
College Apparatus Fund.....	1,679 60	1,659 55	20 05
James Truman House Dormitory Fund.....	50 00		50 00
Christian Association U. of P. Fund.....	250 00	250 00	
Flanders Lecture Course Fund..	1,125 00	1,000 00	125 00

University of Pennsylvania.

Income Account.	Amount received, including Balance, August 31, 1904.	Amount Expended.	Balance.
Epiadiascope Fund.....	\$100 00		\$100 00
Gymnasium Deficiency Fund ...	1,475 00		1,475 00
Frazier Special Medical Fund...	850 00	\$193 64	656 36
Houston Hall Library Fund	710 09		710 09
Veterinary Insurance Fund.....	4,008 77		4,008 77
			<hr/> \$20,490 62
Less Temporary Loans.....			12,809 78
			<hr/> <hr/> \$7,680 84

UNIVERSITY TRUSTS ACCOUNT.

BALANCE SHEET.

Dr.	Balance August 31, 1904.....	\$193,071 01
To	Donations for Investment... \$379,496 31	
"	Donations not for Investment 247,225 40	
		\$626,721 71
"	Investments sold or paid.....	147,401 53
"	Income received	148,565 36
"	Premium received.....	1,651 00
"	Increase in Capital	112,223 09
"	Tuition Fees Transferred.....	5,116 64
"	Advances to Trusts by Administration....	88,905 07
"	Amount received from Departments account Sinking Fund and Interest.....	9,910 53
"	Interest received.....	3,784 02
"	Return Premium, Insurance of Veterinary Buildings, cancelled.....	4,047 27
"	Sales of material.....	275 10
"	Cash returned.....	321 70
		<u>1,148,923 02</u>
		\$1,341,994 03
Cr.		
By	Investments made.....	\$516,286 15
"	Premiums and Accrued Interest.....	4,921 31
"	Income transferred to Administration....	102,884 98
"	Funds transferred to Administration.....	49,637 45
"	Taxes, Water Rent, Repairs, Insurance and Legal Expenses.....	9,209 12
"	Cash Payments on account Trusts.....	29,790 71
"	Advances by Administration paid.....	83,396 90
"	Amount paid on account Sinking Fund and Interest.....	10,750 00
"	Amount paid on account Buildings, Grounds and Equipment.....	349,247 24
"	Loss of Capital, Veterinary Hospital Buildings, torn down.....	52,129 86
"	Amount paid on account loan Law Library.....	2,000 00
"	Loan, Department of Physical Education..	3,500 00
		<u>1,213,753 72</u>
	Balance August 31, 1905.....	<u>\$128,240 31</u>

ADMINISTRATION.

GENERAL BALANCE SHEET.

Balance August 31, 1904.....	\$68,596 31	
Bursar's Cash	600 00	\$69,196 31
<hr/>		
Dr.		
To Tuition Fees.....	\$368,082 35	
“ Graduation Fees.....	8,408 87	
“ Income from Trusts.....	102,884 98	
“ Funds not for Investment.....	49,637 45	
“ Amounts received from Departments :		
Veterinary Hospital.....	\$9,565 00	
Central Light and Heat		
Station.....	52,785 55	
Dormitories.....	56,420 51	
Department of Repairs....	6,636 65	
	<hr/>	\$125,407 71
“ Advances to Trusts returned.....	84,637 05	
“ Students' Deposits received.....	18,810 75	
“ Sinking Fund.....	10,000 00	
“ Gymnasium fees.....	7,047 20	
	<hr/>	844,112 67
Cr.		
By Salaries Educational.....	\$367,414 82	
“ Salaries Administration.....	101,756 39	
“ Current Expense Account.....	192,633 65	
“ Prize Money paid.....	592 99	
“ Advances to Trusts.....	90,145 22	
“ Students' deposits returned ¹	14,250 81	
“ Transfer to Trusts.....	5,116 64	
	<hr/>	771,910 52
Balance August 31, 1905.....		<u><u>\$72,202 15</u></u>

ANALYSIS OF ADMINISTRATION ACCOUNTS.

		Surplus.	Deficit.
College :			
Current Expense Ac-			
counts.....	\$70,460 23		
Salaries, Education...	209,894 32		
“ Administration			
tion.....	11,559 58		
	<hr/>	\$291,914 13	
Tuition Fees.....	\$177,711 25		
Income.....	65,751 17		
	<hr/>	243,462 42	
	<hr/>		\$48,451 71

Department of Medicine :			
Current Expense Ac-			
counts.....	42,074 64		
Salaries, Education...	71,632 94		
“ Administration			
tion.....	14,289 02		
	<hr/>	\$127,996 60	
Tuition Fees.....	\$106,707 18		
Income.....	2,783 11		
	<hr/>	109,490 29	
	<hr/>		18,506 31

Department of Law :			
Current Expense Ac-			
counts.....	\$12,220 31		
Salaries, Education...	30,466 02		
“ Administration			
tion.....	6,635 69		
Transfer to Law Li-			
brary.....	5,116 64		
	<hr/>	\$54,438 66	
Tuition Fees.....	\$42,638 70		
Income.....	1,345 06		
	<hr/>	43,983 76	
	<hr/>		10,454 90

Department of Dentistry :			
Current Expense Ac-			
counts.....	6,147 79		

		Surplus.	Deficit.
Salaries, Education...	\$29,003 32		
“ Administration.....	3,201 00		
	<hr/>	\$38,352 11	
Tuition Fees.....		34,170 33	
		<hr/>	\$4,181 78

Department of Hygiene :

Current Expense Account.....	\$2,264 56		
Salaries, Education...	3,333 53		
“ Administration.....	540 00		
	<hr/>	6,138 09	
Tuition Fees.....	\$50 00		
Income.....	8,899 69		
	<hr/>	8,949 69	
		<hr/>	\$2,811 60

George L. Harrison Foundation :

Salaries, Education...	\$16,209 73
Income.....	16,209 73

Department of Veterinary Medicine:

Current Expense Account.....	\$4,194 03		
Salaries, Education...	4,375 00		
“ Administration.....	1,705 83		
	<hr/>	\$10,274 86	
Tuition Fees.....	\$6,804 89		
Income.....	3,562 50		
	<hr/>	10,367 39	
		<hr/>	92 53

Department of Veterinary Hospital :

Current Expense Account.....	\$7,715 39		
Salaries, Administration.....	5,646 41		
	<hr/>	\$13,361 80	
Receipts.....	\$9,565 00		
Income.....	443 94		
	<hr/>	10,008 94	
		<hr/>	3,352 86

Treasurer's Report.

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Surplus.

Deficit.

Department of Repairs :

Current Expense Account.....	\$4,729 66	
Salaries, Administration.....	840 00	
	<u>\$5,569 66</u>	
Receipts.....	<u>6,636 65</u>	\$1,066 99

Central Light and Heat Station :

Current Expense Account.....	\$43,369 85	
Salaries, Administration.....	13,649 96	
	<u>\$57,019 81</u>	
Receipts.....	<u>52,785 55</u>	\$4,234 26

SUMMARY :

Deficits :

College.....	\$48,451 71	
Department of Medicine.....	18,506 31	
" " Law.....	10,454 90	
" " Dentistry.....	4,181 78	
" " Veterinary Hospital.....	3,352 86	
Central Light and Heat Station.....	<u>4,234 26</u>	\$89,181 82

Surplus :

Department of Hygiene.....	\$2,811 60	
" " Veterinary Medicine.....	92 53	
" " Repairs.....	<u>1,066 99</u>	\$3,971 12

Net Deficit.....

\$85,210 70

Dormitory :

Receipts.....		\$56,420 51
Salaries, Administration.....	8,619 30	
Current Expenses.....	<u>16,798 84</u>	\$25,418 14
		<u>\$31,002 37</u>

HOSPITAL.

GENERAL BALANCE SHEET.

Balance August 31, 1904.....		\$15,201 39
Receipts :		
From Investments sold or paid off.....	\$64,768 50	
" Premiums received.....	545 00	
" Donations for Investment.....	73,678 30	
" Donations not for Investment.....	133,698 16	
" Income from Invested Funds.....	48,495 69	
" Additional Capital.....	7,905 38	
" Receipts at Hospital.....	17,170 50	
" Interest on Bank Balances.....	64 26	
		<hr/> 346,325 79
Total Receipts.....		\$361,527 18
Expenditures :		
Paid to Superintendent.....	\$128,460 44	
Investments made.....	110,383 40	
Accrued Interest paid	148 39	
Premiums paid.....	168 75	
Alterations and Repairs to Real Estate	10,169 36	
Legal Expenses.....	1,240 15	
Paid Woodward Fellow	430 58	
" Mrs. W. Romaine Newbold, Treasurer....	20 00	
" Mrs. John L. Muckle, Jr., Treasurer.....	20 00	
" Mrs. Edward Browning, Treasurer.....	60 85	
" Maintenance Pepper Laboratory.....	5,746 90	
" on account X-Ray Building	17,290 00	
" " X-Ray Apparatus	3,758 96	
" " Orthopedic Machine Shop	1,400 00	
" " Sun Parlor.....	6,667 91	
" " Isolation Ward.....	21,776 41	
" " New Laundry.....	14,382 04	
		<hr/> 322,124 14
Balance August 31, 1905.....		<hr/> \$39,403 04
Of which there are :		
Special Funds.....	\$15,182 39	
Funds for Investment.....	24,220 65	
		<hr/> \$39,403 04

HOSPITAL TRUST ACCOUNT.

INCOME RECEIVED FROM TRUSTS, FROM AUGUST 31, 1904, TO AUGUST
31, 1905, INCLUSIVE.

General Fund.....	\$16,560 72
Hahn Ward Fund.....	2,963 23
Alumni Ward Fund.....	451 32
Mrs. G. W. Norris Fund.....	514 73
Bement Fund.....	400 00
Ward Chronic Diseases Fund.....	7,114 81
Pepper Clinical Laboratory Fund.....	3 60
I. V. Williamson Hospital Fund.....	1,962 16
Children's Ward Fund.....	1 66
Henry Seybert Fund.....	3,707 92
George S. Pepper Fund.....	2,973 57
Recto-Genito-Urinary Fund.....	202 42
A. M. Powers Fund.....	180 00
M. W. Eskens Fund.....	250 00
Dr. Agnew Hospital Fund.....	154 73
Dr. Agnew Bequest for Care of Children.....	1,832 34
Dr. Agnew Bequest for Maternity Hospital....	50 00
Children's Medical Ward.....	40 00
Andrew C. Butler Fund.....	241 06
Ligonier Fund.....	1,997 32
Children's Orthopedic Ward Fund.....	700 00
A. Sydney Roberts Apparatus Fund.....	160 94
John White Field Bed Fund.....	227 30
Abby Willing Peters Bed Fund.....	227 25
Maternity Fund.....	1,553 98
Edward Rhoades Memorial Fund.....	166 42
Alfred Gustavus Baker Fund.....	250 38
Abraham and Mary Baker Fund.....	112 50
Mary B. K. Wainright Fund.....	24 00
Hamilton Disston Fund.....	120 00
Percival Roberts Fund.....	120 00
Thomas Harrison Fund.....	200 00
Langstroth Fund.....	30 00
Richard Heckscher Fund.....	200 00
Woodward Fellowship Fund.....	873 08
Wentz Bed Fund.....	201 49

Thomas Elkinton Fund.....	\$212 50
George W. Vogel Fund	454 00
Diet Kitchen Fund.....	60 00
Emily M. Harrison Fund.....	200 26
Edward Roberts, Jr., Fund.....	200 00
Mary Kay Fund.....	200 00
Hiram Brooke Fund.....	225 00
Sinclair Tousey Fund.....	100 00
Sabin W. Colton, 3d., Fund	75 00
	<hr/>
	<u>\$48,495 69</u>

DONATIONS TO THE UNIVERSITY.

ARCHÆOLOGY AND PALEONTOLOGY DEPARTMENT.

Sommerville Estate, Maxwell, Deceased.....	\$17,919 40
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ARCHITECTURE EQUIPMENT FUND.

Bodine, Samuel F.....	100 00
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ARCHITECTURE GENERAL FUND.

Rosengarten, Joseph G.....	100 00
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ARCHITECTURE SALARY FUND.

" Anonymous ".....	\$100 00
Austin, H. O.....	10 00
Baker, Frank L.....	10 00
Baum, George C.....	10 00
Bissell, E. T.	10 00
Bodine, F. L.....	10 00
Brockie, A. H.....	10 00
Clarke, J. O.....	10 00
Davis, Miss Martha.....	10 00
Davis, Paul A., 3d.....	10 00
DeGelleke, G. J.....	10 00
Dentz, J. G.....	10 00
Dick, G. A.....	10 00
Dowler, T. C.....	20 00
Duhring, H. L.....	20 00
Edmunds, F. D.....	10 00
Fisher, C. S.....	10 00
Frank, J. Horace.....	10 00
Githens, A. M.....	10 00
Grant, Charles C.....	10 00
Hays, William Charles.....	20 00
Heacock, J. Linden.....	10 00
Hill, M. Walter.....	10 00

Hokanson, O. M.....	\$10 00
Johnson, V. L.....	10 00
Jory, H. G.....	10 00
Karcher, W. T.....	10 00
Kast, M. G.....	10 00
Kintzing, L.....	10 00
Kleeman, William.....	10 00
Kalbe, Arno.....	20 00
Kuenzli, E. O.....	10 00
Kropff, H. M.....	10 00
Leisenring, L. M.....	10 00
Magaziner, Louis.....	10 00
Medary, M. B.....	10 00
Miles, J. S.....	10 00
Mills, C. S.....	10 00
Neff, Conrad F.....	10 00
Oakley, T.....	10 00
Okie, R. B.....	10 00
Perot, R. L.....	10 00
Perrot, Emile G.....	10 00
Rommel, F. A.....	10 00
Ruhe, Wallace E.....	10 00
Rush, Louis H.....	20 00
Shrigley, A.....	10 00
Sinkler, J. P. B.....	10 00
Spaulding, W. H.....	10 00
Scull, William Ellis.....	100 00
Smith, Edward B.....	100 00
Stuart, P. G.....	10 00
Taylor, G. H.....	20 00
Trumbower, W.....	10 00
Ward, A. L.....	10 00
Wetterau, Carl.....	20 00
Wilcox, W. R. B.....	20 00
Willauer, A. E.....	10 00
Willing, J. E.....	10 00
Wright, H.....	10 00
Zantzinger, C. C.....	10 00
Ziegler, C. A.....	10 00

 \$970 00

BLANCHARD FUND.

Blanchard, The Misses.....	25,000 00
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Treasurer's Report.

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BOTANIC GARDEN FUND.

Botanical Society of Pennsylvania.....	\$1,199 70	
Magee, Miss Fannie S.....	250 00	
Magee, Miss Eliza J.....	250 00	
Morris, John T.....	250 00	
Morwitz, Joseph.....	100 00	
Presser, Theodore.....	200 00	
Rosengarten, Joseph G.....	50 00	
	<hr/>	\$2,299 70

CAMPUS FUND—THROUGH MRS. C. C.
HARRISON.

Beckwith, Mrs. Harriet M.....	\$20 00	
Brock, Mrs. R. C. H.....	25 00	
Brooke, Mrs. George.....	10 00	
Clark, Miss Frances.....	10 00	
Coxe, Alexander B.....	50 00	
Dana, Charles E.....	5 00	
Dolan, Thomas.....	1,000 00	
Ellis, Rudolph.....	50 00	
Fisher, Mrs. James Logan.....	10 00	
Hacker, Mrs. Charles.....	10 00	
Harris, Mrs. Mary Powers.....	50 00	
Harrison, Mrs. C. C.....	84 50	
Harrison, Thomas S.....	50 00	
Heckscher, Mrs. Richard.....	10 00	
Hinchman, Mrs. Lydia.....	10 00	
Hutchinson, Miss Margaretta.....	15 00	
Ingersoll, Charles Edward.....	10 00	
Lesley, R. W.....	10 00	
McKean, Mrs. Thomas.....	100 00	
Morris, Mrs. Lydia T.....	10 00	
Paul, Dr. James.....	20 00	
Paul, James W., Jr.....	25 00	
Paul, Miss Mary W.....	10 00	
Reilly, Thomas A.....	25 00	
Schweinitz, Dr. George E. de.....	25 00	
Smith, Mrs. Elizabeth T.....	5 00	
Spencer, John Thompson.....	10 00	
Valentine, John R.....	50 00	
Winpenny, Mrs. J. Bolton.....	10 00	
	<hr/>	\$1,719 50

CHEMICAL LABORATORY APPARATUS FUND.

Myers, Angelo.....	\$500 00
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CHRISTIAN ASSOCIATION—UNIVERSITY OF
PENNSYLVANIA.

Dickson, Mrs. Samuel.....	\$250 00
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COLLEGE APPARATUS FUND.

Brooks, James C.....	\$500 00
Gerstley, Louis	250 00
Gest, John M.....	79 60
Kohn, Simon I. and Samuel	500 00
Kribs, H. G.....	250 00
Rosengarten, Joseph G.....	100 00
	<hr/>
	\$1,679 60

COLLEGE SETTLEMENT FUND.

Lewis, Lawrence.....	200 00
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DORMITORY—THIRD SECTION.

Caldwell, J. Albert.....	\$250 00
Davis, John C. S.....	250 00
Fletcher Estate, George A., Deceased.....	1,000 00
Graves, N. Z.....	1,000 00
Helme, William E.....	250 00
Snellenberg, Samuel.....	500 00
Stinson, Samuel B.....	250 00
Wagner, John and Sons.....	500 00
Woodside, John W.....	1,000 00
	<hr/>
	\$5,000 00

DORMITORY—FOURTH SECTION.

"Anonymous"	\$2,500 00
Carruth, John G.....	2,500 00
Greene, Stephen.....	5,000 00
Harrison, Mrs. C. C.....	5,000 00
Merrick, J. Vaughan.....	500 00
Potts, Mrs. Joseph D., through Mrs. C. C. Harrison.....	5,000 00
Rosengarten, Miss Fanny.....	500 00
Rosengarten, Joseph G.....	500 00
Smith, A. Lewis.....	250 00
Stewart, Ralph C.....	1,000 00
Townsend, Charles C.....	500 00
	<hr/>
	\$23,250 00

DORMITORY—TRUMAN HOUSE.

Miller, W. D.....	50 00
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ENDOWMENT FUND, UNIVERSITY—THROUGH
MRS. C. C. HARRISON.

Coxe, Eckley B., Jr.....	\$5,000 00	
Harrison, Alfred C.....	1,000 00	
Potts, William M.....	5,000 00	
Roberts, Miss Fannie A.....	1,000 00	
Roberts, Miss Eliza C.....	1,000 00	
Willing, Edward S.....	1,000 00	
		\$14,000 00

EPIADIASCOPE FUND.

Palmer, Dr. H. G., Treasurer.....	100 00
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ERSKINE HAZARD DICKSON MEMORIAL FUND.

Dickson, Mrs. Samuel.....	25,000 00
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ERSKINE HAZARD DICKSON MEMORIAL
LIBRARY FUND.

Dickson, Mrs. Samuel.....	2,000 00
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FELLOWSHIP—ALLIANCE FRANCAISE.

Rosengarten, Joseph G.....	300 00
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FELLOWSHIP—ARCHITECTURE.

Henszey, William P.....	1,000 00
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FLANDERS LECTURE FUND.

Paul, J. Rodman, Treasurer.....	1,125 00
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FRAZIER SPECIAL MEDICAL FUND.

Through Dr. Charles H. Frazier.....	850 00
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GENERAL FUND.

American Academy of Political Science.....	\$1,307 82
Converse, John H.....	1,000 00
Dolan, Thomas.....	1,000 00
Field Estate, Eliza W. S. P., Deceased.....	4,719 81
Frazier, George H.....	211 00
Harrison, C. C.....	100 00
Houston, Samuel F.....	100 00
Jeanes, Isaac W.....	500 00
Jones, J. Levering.....	100 00
LeConte, Dr. Robert G.....	100 00

Lewis, Morris J.....	\$100 00	
Lippincott, J. Bertram.....	100 00	
McCullough, Edmund H.....	100 00	
Magee, Horace.....	250 00	
Mask and Wig Club.....	180 00	
Merrick, J. Vaughan.....	100 00	
Mitchell, Dr. S. Weir.....	100 00	
Morgan, Randal.....	100 00	
Paul, Miss Mary W.....	300 00	
Rosengarten, Joseph G.....	100 00	
Several Friends of the University.....	40,000 00	
Sinkler, Dr. Wharton.....	100 00	
Smith, Walter George.....	100 00	
	<hr/>	\$50,768 63

GYMNASIUM FUND.

Powers, Thomas H.....	1,500 00
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GYMNASIUM DEFICIENCY FUND.

Burnham, Williams & Co.....	\$250 00	
Coxe, Eckley B., Jr.....	100 00	
Dickson, Samuel.....	250 00	
Houston, Samuel F.....	100 00	
Jones, J. Levering.....	50 00	
Madeira, Louis C., Jr.....	50 00	
Merrick, J. Vaughan.....	100 00	
Morgan, Randal.....	267 00	
Nichols, H. S. P.....	10 00	
Pepper, George Wharton.....	25 00	
Rosengarten, Joseph G.....	268 00	
Wood, Richard.....	5 00	
	<hr/>	1,475 00

HOUSTON HALL LIBRARY.

Through Mrs. C. C. Harrison, Jr.	710 09
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INCREASE OF COLLEGE SALARIES.

" Anonymous ".....	\$400 00	
Garrett, Mrs. Walter.....	500 00	
Gest, John B.....	250 00	
Harris, Mrs. Mary Powers.....	2,500 00	
Lea, Henry C.....	5,000 00	
Powers, Thomas H.....	1,000 00	
Rosengarten, Miss Fanny.....	500 00	
Rosengarten, Joseph G.....	1,000 00	
Vauclain, Samuel M.....	1,000 00	
	<hr/>	12,150 00

Treasurer's Report.

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LAW SCHOOL MONOGRAPH FUND.

Through Dr. William D. Lewis..... \$296 30

LIBRARY, ALUMNI FUND—BIDDLE.

Alumni Law Department..... 1,125 00

LIBRARY—BOTANY.

Pepper, John W..... 125 00

LIBRARY—CURRENT EXPENSE.

Castner, Samuel, Jr.....	\$100 00	
College Alumni.....	50 00	
Dickson, Samuel.....	25 00	
Frazier, W. W.....	11 00	
Rosengarten, Joseph G.....	231 07	
		417 07

LIBRARY—MRS. FRANKLIN.

Rosengarten, Joseph G..... 83 40

LIBRARY—SALARIES ADMINISTRATION.

Rosengarten, Joseph G..... 270 00

MASK AND WIG CLUB.

Mask and Wig Club..... 5,000 00

MEDICAL BULLETIN.

Frazier, George H.....	\$1,500 00	
University Press.....	500 00	
		2,000 00

NAPLES TABLE.

Hitchcock, Miss F. R. M..... 50 00

NEW MEDICAL LABORATORY APPARATUS.

Woodward, Dr. George..... 2,947 50

NEEDY STUDENTS' AID FUND.

Bonnell, George B.....	\$100 00
Brown, William A.....	50 00
Collins, Henry H.....	1,000 00
Curtis Publishing Co.....	1,000 00
Harrison, Mrs. George L.....	400 00

Hering, Walter E.....	\$250 00
Jeffries, J. H.....	125 00
Lewis, Lawrence.....	300 00
Lewis, Henry.....	250 00
Magee, Christopher, Jr.....	160 00
Moore, Samuel, Jr.....	50 00
Rosengarten, Miss Fanny.....	250 00
Rosengarten, Joseph G.....	153 00
Sternberger, Samuel.....	100 00
	<hr/>
	\$4,188 00

NEW ENGINEERING DEPARTMENT.

Allen, W. F.....	\$100 00
Bancroft, John.....	1,000 00
Barney, Charles D. & Co.....	1,000 00
Beaumont, C. O.....	1,000 00
Bell, Samuel, Jr.....	125 00
Bioren, John S.....	100 00
Blabon, Edward L.....	250 00
Boltz, John H.....	250 00
Brill, J. G. Company.....	2,000 00
Brock, Arthur.....	1,000 00
Bromley, Edward.....	500 00
Brooks, James H. A.....	250 00
Bullitt, W. C.....	500 00
Castner, Samuel, Jr.....	1,000 00
Chandler Bros. & Co.....	250 00
Clark, Clarence M.....	500 00
Clark, E. W. & Co.....	1,000 00
Clark, E. W. Jr.....	1,000 00
Clothier, Isaac H.....	500 00
Clyde, B. Frank.....	1,000 00
Colton, S. W., Jr.....	1,000 00
Dannenbaum, Morris.....	100 00
Delany, Charles.....	250 00
Devlin, Thomas.....	1,000 00
Downs, Dr. and Mrs. Norton.....	10,000 00
Drexel, George W. C.....	500 00
Dwight, E. Waterman.....	1,000 00
Ely, Theodore N.....	100 00
Engineers Fraternity Mu Phi Kappa.....	500 00
Fairchild, Mrs. Samuel E.....	350 00
Fleisher, Simon B.....	250 00
Fouse, L. G.....	250 00
Frazier, W. W., Jr.....	500 00

Treasurer's Report.

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Fuguet, Howard.....	\$1,000 00
Gilpin, Charles.....	1,000 00
Graves, Nelson Z.....	500 00
Griscom, C. A.....	2,500 00
Grundy, William H. & Co.....	250 00
Guggenheim, William.....	2,500 00
Hagedorn, Joseph H.....	50 00
Hale, Henry S.....	125 00
Harrison, William W.....	1,000 00
Hendrickson, S. A.....	500 00
Hinchman, Charles S.....	1,000 00
Hipple, Frank K.....	250 00
Jeanes, Henry S.....	200 00
Jones, J. Levering.....	1,000 00
Kohn, Simon I. and Samuel.....	500 00
Kremer & Strubing.....	500 00
Latta, Thomas L.....	500 00
Leas, David P.....	500 00
Lemoine, L. R.....	200 00
Lit Bros.....	500 00
Lit, S. D.....	200 00
Lloyd, Malcom.....	500 00
McCahan, W. J.....	3,000 00
McFadden, George H.....	1,000 00
McFadden, J. Frank.....	250 00
McGlinn, John.....	500 00
McIlhenny, John.....	500 00
McNeely, George H.....	1,000 00
McOwen, F.....	1,000 00
Mack, John M.....	1,000 00
Matthieu, John P.....	1,000 00
Merz, Leon.....	50 00
Morgan, George P.....	250 00
Moore, E. J.....	500 00
Morris, John T.....	1,000 00
Naylor, John S.....	125 00
Plumb, Fayette R.....	250 00
Ralph, J. D. H.....	250 00
Riley, Lewis A.....	250 00
Rosengarten, Joseph G.....	1,000 00
Rushton, R. H.....	500 00
Scattergood, Thomas.....	250 00
Schmidt, Edward A.....	1,000 00
Shannon, J. Jacob.....	250 00
Sheafer, Arthur W.....	500 00

Sheafer, Henry...	\$500 00	
State of Pennsylvania.....	30,000 00	
Sugar Apparatus Mfg. Co.....	250 00	
Sullivan, J., Sons Mfg. Co.....	500 00	
Taylor, Hollinshead W.....	300 00	
Taylor, Nathan A.....	500 00	
Townsend, John W.....	250 00	
Voorhees, Theodore.....	250 00	
West, Harry F.....	100 00	
Wetherill, J. Price.....	2,500 00	
Williams, Ellis D.....	250 00	
Wolf & Co.....	500 00	
Wood, George.....	500 00	
Wood, Stuart.....	500 00	
Wood, Walter.....	500 00	
	<hr/>	\$97,225 00

NEW MEDICAL LABORATORY FUND.

Downing, R. W.....	\$1,000 00	
Francine, Dr. A. P.....	200 00	
Grant, William S.	1,000 00	
Griffith Estate, Mary C., Deceased.....	5,000 00	
Hancock, E. A.....	500 00	
Henszey, William T.....	5,000 00	
Horner, Samuel Jr.....	1,000 00	
Isman, Felix.....	250 00	
Ivins Estate, William, Deceased.....	1,500 00	
McManes, Mrs. Catharine.....	12,500 00	
Peirce, Harold.....	500 00	
Potter, Dr. Thomas C.....	500 00	
Rosengarten, Joseph G.....	1,000 00	
Wampole, Henry K. & Co.....	250 00	
Wilson, Dr. Benjamin B.....	250 00	
	<hr/>	30,450 00

PRIZE FUNDS.

Delano :	
Delano, Eugene.....	50 00
Frazier Debate :	
Frazier, William W., Jr.....	100 00
"J. S. H." :	
Hitchcock, Miss F. R. M.....	75 00
Spencer Morris :	
Estate of Spencer Morris, Deceased.....	10,212 75

RANDAL MORGAN LABORATORY.

"A Friend to Science"..... \$25,000 00

SCHOLARSHIPS.

George Barnet :	
Halstead, Mrs. David	\$5,000 00
Cadwalader :	
Cadwalader, John.....	1,000 00
Converse :	
Converse, John H.....	5,000 00
Eckley B. Coxé :	
Coxe, Mrs. Eckley B.....	5,000 00
Martha Austin McDowell :	
McDowell, J. Austin.....	5,000 00
	<hr/>
	21,000 00

SOMMERVILLE COLLECTION.

Estate of Maxwell Sommerville, Deceased..... 19,364 16

UNIVERSITY PUBLICATION FUNDS.

Alumni Society	\$100 00
Burnham, George.....	50 00
Clark, E. W., Jr.....	100 00
Colton, S. W., Jr.....	100 00
Cuyler, Thomas DeWitt.....	100 00
Duane, James May.....	100 00
Harris, Joseph S.....	1,000 00
Jones, Thomas F.....	100 00
Joyce, William H.....	100 00
Lea, Henry C.....	100 00
McFadden, George.....	100 00
Riebenack, M.....	100 00
Rosengarten, Joseph G.....	200 00
Turner, William J.....	100 00
Wood, Stuart.....	100 00
	<hr/>
	2,450 00

UNIVERSITY VIEW FUND.

Ashbrooke, William S.....	\$25 00
Burroughs, J. H.....	50 00
Church, Arthur L.....	100 00
Clapp, B. Frank	100 00
Harrison, Alfred C.....	100 00
Harrison, C. C.....	100 00
Houston, Samuel F.....	100 00

Jones, J. Levering.....	\$100 00	
Lippincott, J. Bertram.....	100 00	
Perot, Effingham L.....	100 00	
Rosengarten, Joseph G.....	100 00	
Thayer, John B.....	100 00	
Wood, R. Francis.....	100 00	
	<hr/>	\$1,175 00

VETERINARY BUILDING.

Gibson, Miss Juliet.....	10 00
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VETERINARY DEPARTMENT—CURRENT
EXPENSE.

Lippincott, J. Bertram.....	\$1,000 00	
Lippincott, Walter.....	1,000 00	
	<hr/>	2,000 00

VETERINARY FUND—J. B. LIPPINCOTT.

Goodwin, Mrs. J. J.....	100,000 00
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WHARTON SCHOOL.

Wharton, Joseph.....	111,000 00
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WOODS HALL TABLE.

Hitchcock, Miss F. R. M.....	50 00
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DONATIONS TO THE HOSPITAL.

BED FUNDS.

MOULTON H. FORREST BED :

Forrest, Mrs. Emma L.....	\$600 00
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ANNA M. POWERS BED :

Harris, Mrs. Mary Powers.....	300 00
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SABIN WOOLWORTH COLTON 3D, BED :

Colton, S. W., Jr.....	3,000 00
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SINCLAIR TOUSEY BED :

Tousey, Benjamin.....	5,000 00
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MAXWELL SOMMERVILLE BED (PRIVATE ROOM).

Estate of Maxwell Sommerville, Deceased.....	10,191 60	
		\$19,091 60

CHILDREN'S MEDICAL WARD.

Austin, James S.....	\$200 00	
Auxiliary Committee, Ward G.....	200 00	
Crozer, Mrs. George K.....	200 00	
Griffith, Mrs. B.....	200 00	
		800 00

CHILDREN'S ORTHOPEDIC WARD.

Austin, Mr. and Mrs. James S.....	\$200 00	
Collins, Mrs. Henry H.....	200 00	
Conrad, Mrs. Thomas K.....	200 00	
Dickson, Mrs. Samuel.....	450 00	
Harris, Mrs. J. Campbell.....	200 00	
Moulton, Mrs. Byron P.....	200 00	
Page, Mrs. Joseph F., Jr.....	200 00	
Porter, Hon. and Mrs. W. W.....	200 00	
Saturday Club of N. J.....	200 00	
Townsend, Mrs. John W.....	200 00	
		2,250 00

GENERAL FUND.

Baldwin Locomotive Works	\$500 00	
Blanchard, Miss Anna	200 00	
Charity Ball Committee	2,200 00	
City of Philadelphia	375 00	
Henszey, William P.	5,000 00	
Kay Estate, J. Alfred, Deceased.	1,000 00	
McFadden, George H.	2,324 25	
Morris Estate, Sarah P., Deceased.	2,000 00	
Pennsylvania R. R.	248 40	
Smith, Charles.	25 00	
Sommerville Estate, Maxwell, Deceased.	8,959 70	
State of Pennsylvania.	55,000 00	
Welsh, Mrs. J. Lowber.	150 00	
	<hr/>	\$77,982 35

ISOLATION WARD.

State of Pennsylvania.	21,776 41
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MAINTENANCE PEPPER CLINICAL
LABORATORY.

Through Dr. Alfred Stengel.	6,978 64
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MATERNITY HOSPITAL.

Fields Estate, Eliza W. S. P., Deceased.	\$4,719 81	
Newbold Estate, Mary Scott.	5,000 00	
	<hr/>	9,719 81

NEW LAUNDRY.

State of Pennsylvania.	10,000 00
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SUN PARLOR.

McFadden, J. Frank.	\$500 00	
McFadden, George H.	1,675 75	
Stengel, through Dr. Alfred.	594 71	
	<hr/>	2,770 46

SUN PARLOR—WARD G.

Auxiliary Committee, Ward G.	\$250 00	
Browning, Mrs. Edward.	250 00	
Women's Auxiliary Committee Dept. Surgery. .	1,000 00	
	<hr/>	1,500 00

WARD CHRONIC DISEASES.

Marshall Estate, Sarah, Deceased.....	\$37,527 00
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X-RAY PLANT.

State of Pennsylvania	17,290 00
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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 31st August, 1905, and found them to be correct and carefully kept. The foregoing report of the Treasurer is in accordance with the books, and the schedule of securities therein agrees with the securities which were on hand 31st August, 1905.

Respectfully yours,

[Signed]

LYBRAND, ROSS BROS. & MONTGOMERY,
Certified Public Accountants.

7th February, 1906.

REPORT OF THE ASSISTANT TREASURER OF THE DEPARTMENT OF ARCHÆOLOGY.

FOR YEAR ENDING AUGUST 31ST, 1905.

RECEIPTS :

Balance, August 31, 1904.....		\$6,945 83
Annual Dues		3,945 00
General Fund :		
Donations :		
Samuel F. Houston ...	\$1,000 00	
Calvin Wells.....	1,250 00	
Thomas Dolan.....	1,000 00	
Mrs. Lucy Wharton Drexel	1,000 00	
John Wanamaker	1,000 00	
Samuel T. Bodine.....	1,500 00	
John H. Converse.....	1,000 00	
Eckley B. Coxe, Jr.....	1,500 00	
Justice C. Strawbridge.....	500 00	
E. W. Clark	500 00	
Dr. William Henry Furness, 3rd	1,080 00	
Bernard N. Farren	50 00	
James F. Sullivan.....	100 00	
		11,480 00
Income from Endowment Fund :		
University of Pennsylvania Endowment		
Fund.....	\$2,223 75	
Interest, Mt. Washington Street Railway		
Co. Bonds.....	100 00	
Interest, New Mexico Railway and Coal		
Co. Bonds.....	250 00	
Interest, Seacoast Railway Co. of New		
Jersey Bonds.....	250 00	
		2,823 75
Egyptian and Mediterranean Fund :		
Donations :		
Mrs. John Harrison	\$100 00	
John Wanamaker	3,400 00	
E. B. Coxe, Jr.	500 00	
Interest	6 37	
		4,006 37
American Exploration Society :		
Donations :		
Calvin Wells.....	\$500 00	
Interest.....	93	
		500 93

Building Fund :

Interest	\$17 82
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General Ethnology Fund :

Donations :

Mrs. Lucy Wharton Drexel.....	\$1,450 00	
Samuel T. Bodine.....	500 00	
Eckley B. Coxe, Jr.....	500 00	
Dr. and Mrs. George B. Woodward...	1,000 00	
Mrs. Charles W. Henry	1,000 00	
Samuel F. Houston	1,000 00	
William R. Philler.....	5 00	
Fisher Corlies Morgan.....	10 00	
Interest	6 15	
		5,471 15

Prize Essay Fund :

Donations :

George B. Bonnell.....	\$20 00	
H. G. Ward	20 00	
John B. Gest.....	20 00	
Miss E. C. Roberts.....	10 00	
Dr. Charles W. Burr.....	5 00	
Miss Emily Lehman.....	5 00	
Mrs. C. A. Griscom	5 00	
C. A. Griscom, Jr.....	5 00	
Miss Frances Clark	10 00	
Miss M. A. Burnham.....	25 00	
W. B. Whitney.....	5 00	
Mrs. Jones Wister.....	5 00	
S. P. Avery, Jr.....	10 00	
Miss Clara Comegys.....	5 00	
Mrs. Randall Morgan	25 00	
George C. Boldt	10 00	
Henry C. Lea.....	20 00	
Miss Sallie Sharpe	5 00	
W. W. Justice	5 00	
Mrs. Lucy Wharton Drexel.....	50 00	
Dr. C. H. Thomas	5 00	
Mrs. G. M. Conarroe.....	15 00	
Robert C. Ogden.....	20 00	
Miss Bertha Babbitt	5 00	
Mrs. G. B. Roberts.....	\$10 00	
John T. Morris.....	10 00	
George F. Edmunds.....	10 00	
James Barr Ames	10 00	
George C. Thomas.....	10 00	
Interest	50	360 50

Babylonian Fund, Nippur :

Donations :

C. C. Harrison.....	\$250 00
Samuel T. Bodine.....	250 00
Clarence H. Clark.....	250 00
George C. Thomas.....	125 00
Samuel F. Houston.....	125 00
Joseph S. Clark.....	50 00
E. W. Clark, Jr.....	50 00
C. M. Clark.....	50 00
H. L. Clark.....	50 00
Percy H. Clark.....	50 00
Interest	6 22

\$1,256 22

Babylonian Publication Fund :

Sale of Publications	\$52 26
Interest	42

52 68

C. Hartman Kuhn Fund, Interest.....

24

Carl Edelheim Excavation Fund, Interest.....

52 69

Endowment Fund, Life Membership.....

100 00

Lucy Wharton Drexel Medal Fund, Interest...

52 37

Dillwyn Parrish Collection Fund, Interest.....

32 20

Boyd Publication :

Donations :

Mrs. Samuel F. Houston	\$100 00
Calvin Wells.....	100 00

200 00

General Fund :

Sale of Slides and Photographs.....	\$17 35
Sale of Publications	87 47
Refunds	133 42
U. of Pa., Prop. of Bal. in A. A. A. S. Fund..	50 00
Receptions.....	46 49
Interest on Deposits.....	58 74

393 47\$37,691 22

DISBURSEMENTS.

General Fund :

Printing Publications	\$709 80
Supplies and Expenses	3,909 12
Lecture Fees.....	242 00
Repairs	108 76
Coal.....	1,275 92
Telephones.....	239 27
Salaries	13,704 56

\$20,189 43

Department of Archæology

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American Exploration Society	524 82
Egypt and Mediterranean Fund.....	3,900 00
Building Fund.....	174 82
General Ethnology Fund	6,394 17
Prize Essay Fund	389 40
Babylonian Fund, Nippur.....	1,081 36
Dillwyn Parrish Collection Fund.....	150 00
Boyd Publication Fund.....	200 00
Lucy Wharton Drexel Medal Fund.....	6 00
Balances, August 31, 1905 :	
General Fund.....	\$225 12
American Exploration Society	43 49
Egypt and Mediterranean Fund	323 67
General Ethnology Fund	27 41
Building Fund	775 96
Babylonian Fund, Nippur.....	352 86
Babylonian Publication Fund.....	52 68
C. Hartman Kuhn Fund.....	12 70
Carl Edelheim Excavation Fund	174 34
Endowment Fund.....	1,017 52
Lucy Wharton Drexel Medal Fund.....	91 69
Dillwyn Parrish Collection Fund.....	1,590 68
	<hr/>
	4,688 12
Deficit :	
Prize Essay Fund	6 90
	<hr/>
	\$4,681 22
	<hr/>
	\$37,691 22
	<hr/>

Respectfully submitted,

JANE M. McHUGH,
Assistant Treasurer.

We hereby certify that we have audited the accounts of the Department of Archæology of the University of Pennsylvania for the year ended 31st August, 1905, and found them to be correct, and the securities and cash on deposit were found to be in accordance with the books. The foregoing report of the Treasurer was found to agree with the books of account.

[Signed]

LYBRAND, ROSS BROS. & MONTGOMERY,
Certified Public Accountants.

PHILADELPHIA,
5th December, 1905.

