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ANNUAL REPORTS


1922



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Columbia University
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ANNUAL REPORT
OF THE
PRESIDENT AND TREASURER
TO THE
TRUSTEES

WITH ACCOMPANYING DOCUMENTS
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CONTENTS

ANNUAL REPORT OF THE PRESIDENT OF COLUMBIA UNIVERSITY TO THE TRUSTEES

	PAGE
Introduction	I
Finance and Education	1
The Building Program	4
Baker Field	10
Salaries of Professors	12
Provisions for Retirement	14
Development of Columbia College	16
Conduct of Graduate Work	23
Legal Instruction and Legal Research	27
Contributions to the Study of Shakespeare	30
Schools of Mines, Engineering, and Chemistry	33
The Passing Show	35
Some Fallacies as to Fundamentals	39
Barnard College	43
Teachers College	46
College of Pharmacy	47
Gifts	47
Deaths of University Officers	49
Teaching Staff	50
The Site	51
Student Enrollment	51
Degrees Conferred	53

*REPORTS TO THE PRESIDENT OF THE
UNIVERSITY*

A. EDUCATIONAL ADMINISTRATION:	PAGE
The Dean of Columbia College	54
The Dean of the Faculty of Law	67
The Dean of the Faculty of Medicine	86
The Director of the Institute of Cancer Research	118
The Dean of the Faculty of Applied Science	125
The Dean of the Faculties of Political Science, Philoso- phy and Pure Science	138
The Director of the School of Architecture	148
The Director of the School of Journalism	156
The Dean of Barnard College	164
The Dean of Teachers College	183
The Director of the School of Education	188
The Director of the School of Practical Arts	193
The Dean of the College of Pharmacy	196
The Director of the Summer Session	199
The Director of University Extension	205
The Director of the School of Business	218
The Director of the School of Dentistry	227
The Director of University Admissions	232
The University Medical Officer	237
The Secretary	247
Appendices:	
1. Statistics Regarding the Teaching and Adminis- trative Staff	254
2. Report of the Appointments Office	270
The Registrar	273

B. THE LIBRARY:	PAGE
The Acting Librarian	327
<i>REPORT OF THE TREASURER TO THE TRUSTEES</i>	
	341
FINANCIAL REPORTS OF AFFILIATED INSTITUTIONS	
Barnard College	465
Teachers College	475
College of Pharmacy	481
Vanderbilt Clinic and Sloane Hospital for Women	487

ANNUAL REPORT
OF THE
PRESIDENT OF COLUMBIA UNIVERSITY

TO THE TRUSTEES:

The Annual Report prescribed by the Statutes of the University is submitted herewith, together with the reports of the chief administrative officers. The statements of fact and the several recommendations contained in these reports are earnestly commended to the attention of the Trustees and their appropriate committees.

The late Francis S. Bangs, whose notable service as Trustee is gratefully and affectionately remembered, used to say that it was the sole duty of the Committee on Finance to find whatever sums the Committees on Education and on Buildings and Grounds might state to be necessary to carry on adequately the work of the University. This is a characteristically blunt and emphatic way of stating an essential truth. The financial administration of a university is something quite distinct from the financial administration of an industrial or other money-making corporation. In the case of a university, there are no dividends to be paid, no surplus to be laid aside, no extensive depreciation accounts to be opened, and no bonds to be sold which require for the selling a balance sheet of a particular character. The financial administration of a university involves only the scrupulous and conservative care of the property and invested funds of the corporation, strict adherence to the terms of established trusts, and the application of the corporation's income from all sources to the support and

development of the work for which the university has come into being. Educational policy and educational needs dominate and direct the entire financial administration. The wisdom with which educational policies are formulated and carried out, and the skill and promptness with which educational needs are met, furnish the chief basis for that public confidence in the administration of a university which results in a steady flow of benefactions by gift and by bequest. In some cases, many of which are of large importance, gifts and bequests may be directly traced to the influence or suggestion of a given individual; more often, however, they are the result of that general and wide-spread feeling of confidence and regard which a well administered university brings into existence, first, in the community where it is placed, and second, in the nation which it aims to serve.

In the Annual Report for 1916 (page 10) it was stated that the University was under-capitalized for the proper conduct of the work which it was then doing and had in immediate contemplation, to the extent of about thirty million dollars; and that unless this great sum could be provided within a reasonable time, the work of the University would be gravely restricted and impeded. This colossal figure was not arrived at haphazard or without prolonged study of the University's needs and problems. Of the total amount, twelve million dollars were then thought to be necessary to provide a new site, new buildings, and proper endowment for the Medical School, while eighteen million dollars were needed for definite additions to the general resources and endowment of the University. Subsequent study of the problems growing out of the proposed removal and reconstruction of the Medical School made it necessary to estimate the needs of that part of the University, at present costs, at fifteen million dollars instead of at twelve million dollars. This

raised the total sum then thought necessary to thirty-three million dollars. Despite the fact that the intervening years include years of war, years of economic disorganization and depression, and years of much business uncertainty, it is with deep gratification that record may be made of the fact that more than twenty-three million dollars of the thirty-three million dollars which six years ago were said to be needed, have been paid or pledged to the University. That the remaining ten million dollars will come in due season is not to be doubted.

Toward the fifteen million dollars needed for the rebuilding and endowment of the Medical School, the following additions to the resources of the University have been made or pledged:

Estate of Joseph R. De Lamar.....	\$5,000,000.00
Mrs. Stephen V. Harkness and Edward S. Harkness, site for the Medical School, valued at	1,300,000.00
Mrs. Stephen V. Harkness, for endowment.....	1,300,000.00
Edward S. Harkness, for endowment.....	1,000,000.00
Carnegie Corporation, for building fund.....	1,000,000.00
General Education Board, for building fund.....	1,000,000.00
Rockefeller Foundation, for building fund.....	1,000,000.00
James N. Jarvie, for endowment fund of School of Dentistry.....	100,000.00
Anonymous donors, for endowment fund of School of Dentistry.....	26,000.00
<i>Total</i>	<u>\$11,726,000.00</u>

The sum of about four million dollars additional, to be added to the endowment of the Medical School, would care thoroughly and well for that important part of the University's work and would release a proportionate amount of the general income of the University for other undertakings.

Toward the eighteen million dollars asked for in 1916 for the general work of the University other than the Medical School, the following additions to the resources

of the University have been made by gift or bequest, or are pledged:

Estate of Amos F. Eno.....	\$4,500,000.00
Estate of Horace W. Carpentier.....	1,288,000.00
A. Barton Hepburn, by gift and bequest.....	800,000.00
George F. Baker, for the Stadium.....	650,000.00
Emerson McMillin, to erect a building for the School of Business.....	600,000.00
Estate of Mrs. Kate Collins Brown, for undergradu- ate scholarships.....	564,000.00
Mrs. Lydia C. Chamberlain, for graduate scholar- ships (income only).....	550,000.00
Estate of Robert B. Van Cortlandt.....	520,000.00
Estate of Mrs. Ellen C. Harris, to erect a science building and to provide a fund to care for the same, \$780,000, of which there is immediately available.....	515,000.00
Estate of F. Augustus Schermerhorn.....	260,000.00
Estate of S. Whitney Phoenix.....	240,000.00
Estate of Mrs. Sarah E. Mower.....	93,000.00
<i>Total</i>	<u>\$10,580,000.00</u>

While gifts and bequests to maintain undergraduate and graduate scholarships do not appear to aid directly the work of the University, they do accomplish that end indirectly, since they relieve the general income of the corporation of appropriations of considerable amount in aid of deserving students.

Some seven million or eight million dollars additional would enable the University to come fully abreast of its present undertakings, and to maintain them in vigor, effectiveness, and comfort.

The larger portion of this sum is needed to go forward without delay with the building program proposed in the Annual Report for 1919 (pages 31-36) and farther developed in the President's address to the University Council on February 15, 1921. The steady expansion of the University's work,

The Building
Program

both intensively and extensively, makes the immediate construction of additional buildings on Morningside Heights a necessity. Columbia College needs the exclusive use of Hamilton Hall, and of another building of equal size besides. The Law School needs complete possession of Kent Hall, and a building for the Departments of History, Economics, and Social Science, now housed there, must be erected to make this possible. Research in physics and chemistry is gravely hampered by the fact that there are not sufficient laboratories for advanced students and research workers; the demands of undergraduate teaching have claimed pretty much all the laboratory space now provided. The Library carries on its essential work at great inconvenience and under most embarrassing and costly limitations and restrictions. Fortunately, progress is making, and there is reason to hope that the entire program as heretofore outlined may be carried forward steadily and uninterruptedly to easy completion.

The Faculty House, which not only, for the first time, makes appropriate provision for the comfort and personal contacts of the teaching staff, but also sets free the site at the southwest corner of the Quadrangle for the construction of a building for the School of Business, is rapidly approaching completion and will doubtless be ready for occupancy about February 1, 1923. The cost of constructing and equipping this building, originally estimated at \$300,000, will be somewhat in excess of that sum, and will be met from the bequests of F. Augustus Schermerhorn of the Class of 1868, and of Mrs. Sarah E. Mower, made in memory of her brother, Mandeville Mower of the Class of 1856.

On East Field, immediately west of the Faculty House and the President's House, a residence hall for women enrolled in the University as graduate and professional stu-

dents, is under way, and, if no interruption occurs, should be ready for occupancy about April 1, 1924. This residence hall will provide rooms for three hundred and sixty-five students, together with appropriate accommodations for administrative and social purposes and for an infirmary. The first and second stories of the north wing of the building will make provision for the Women's Faculty Club. By this arrangement, both the men and the women members of the teaching staff will be cared for separately but in close association. The cost of this building, estimated at \$940,000, will be met from the general funds of the corporation.

Plans for the School of Business building, to be erected at the corner of Broadway and 116th Street opposite the School of Journalism, have been approved, and construction will begin in the near future, with a view to having the building ready for occupancy not later than the summer of 1924. This building will relieve greatly the pressure on the class rooms and lecture rooms in Hamilton Hall, in Kent Hall, and in the School of Journalism, will provide for the staff of the School of Business, and will contain a much needed auditorium with a seating capacity of about fourteen hundred. It would be a great gain if arrangements could be made to give in this auditorium the various undergraduate dramatic and musical performances that are now driven to a public hall through lack of a suitable place on the campus itself. The cost of this building, estimated at about \$850,000, will be met from the gift of \$600,000 for this purpose of the late Emerson McMillin of New York, and from the University's share in the residuary estate of the late A. Barton Hepburn, Trustee from 1917 to 1922.

The preparation of playing fields on Baker Field will make it possible to transfer there the outdoor sports and athletic activities that have heretofore taken place on

South Field, and to begin, as soon as plans are completed and approved, the construction of a Students' Hall as described elsewhere in this Report (p. 20), to round out the physical equipment of Columbia College and to make adequate material provision for the care and satisfaction of undergraduate students.

For the Departments of Chemistry and Chemical Engineering two buildings have been designed, to be placed on the west side of the Green, north of Havemeyer Hall. The building for chemistry will be in effect an extension of Havemeyer Hall to the north. The building for chemical engineering will extend from 119th Street to 120th Street on Broadway. The bequest of Mrs. Ellen C. Harris is available toward meeting the cost of one of these buildings, but an additional sum of probably \$1,000,000 must be had before the cost of construction of both can be met. At the moment the gift of this sum for this purpose is one of the University's most pressing needs. Until it is obtained, research work in chemistry and chemical engineering must mark time, and that is an occupation not without danger in the life of a university.

The completion of University Hall, with a capacious reading room and studies, with administrative offices, with Alumni Memorial Hall, and with the present gymnasium made over into an auditorium, is an undertaking of considerable magnitude. Nevertheless, when Students' Hall is under way, the time has come when University Hall should be pushed to completion. The experience of the University in finding funds with which to meet its steadily expanding needs, has been such as to justify the confident hope that the large sums needed to complete University Hall can be had in the not distant future.

On the site of East Hall there should be placed a building for the advanced and graduate work in history, economics, and social science, similar in general style and equipment to Philosophy Hall.

The building site on the Quadrangle immediately east of the Engineering Building, is an appropriate place for a building for the Departments of Botany, Zoology, Physiology, and Psychology, thus freeing Schermerhorn Hall, with an addition or extension to the north along Amsterdam Avenue whenever necessary, for the sole occupancy of the Department of Physics. The remaining work now cared for in Schermerhorn Hall should then be moved to Fayerweather Hall, which the Department of Physics would vacate.

The students of the Law School have formally requested that a residence hall be erected for the use of law students, to the end that they may not only attend lectures together and use the same library, but that they may live together. The value of such a residence hall to the work and influence of the Law School can hardly be overestimated. It is greatly to be hoped that some of those interested particularly in that part of the University's work will enable the Trustees to respond without delay to the expressed desire of the law students.

It is to be borne in mind that the provision of residence halls is quite as important and as essential a part of the work of the University as is the provision of libraries, laboratories, and class rooms. The chief purpose of university residence halls is not one of mere housing, but rather one of education and educational influence. The cost of residence halls, whether met from the general funds of the University or from gift or bequest, is to be regarded as an expenditure for necessary educational equipment and not primarily as an investment. If the residence halls can be so managed, without impairing their educational usefulness, as to produce a fair return on the sum invested in them, so much the better; but that consideration must always be a secondary one. In the construction of a library or a laboratory, the question is

never asked whether it will attract a sufficient number of students to increase notably the corporate income from tuition fees. In principle, the same is true of residence halls; but as a matter of practical experience at Columbia University, it is now demonstrated that well planned and well built residence halls can and do pay a reasonable return upon their cost without impairment of their educational value and influence.

Few things in the recent history of Columbia University are more interesting than the steady growth of the number of students of all classes who are in residence. Probably more than three thousand students now reside in residence halls, in fraternity houses, or in the immediate vicinity of the campus during the Winter and Spring Sessions and more than twice as many during the Summer Session. An increasing number of the teaching staff are living in the residence halls on Claremont Avenue or elsewhere nearby. The effect of these tendencies is helpful in the extreme. It has brought into existence a true university community in the very heart of one of the largest and most complex cities of the world. The significance of this fact, both for the University and for the city, increasingly attracts and justifies public attention.

It is not unusual to hear the plea that greater sums be expended upon scholarship and research and smaller sums upon buildings. It is, of course, elementary that a university consists primarily of men and only secondarily of buildings and grounds. Nevertheless, there must be a place where men may work, where scholars may carry on their studies in library or in laboratory, and where they may be assembled together for purposes of residence or instruction. At the present time Columbia University, so far as its material equipment is concerned, has reached the saturation point. Should new scholars be added to the faculties, there is no place in which they could do their

work. Should new research undertakings be planned, there are no libraries or laboratories in which they could be carried on. Inconveniences, sometimes costly and always depressing, are submitted to year in and year out, because the means are not at hand with which to provide better or increased facilities. It is for these reasons that the most imperative need of Columbia University at the present time is the carrying forward of the building program. When that has been done, the work of the University may be steadily improved in quality, its productive scholars may be made still more comfortable, and its libraries and laboratories may be multiplied and adequately furnished for use. Whoever shall be moved to provide the funds to erect one or more of the buildings already described, will be in the fullest sense a benefactor of the University.

The last Annual Report (pages 38-40) recorded the progress that had been made in the matter of acquiring a
Baker
Field
suitable athletic field for the use of students and alumni. The reasons were there given why the project to build a stadium on land reclaimed from the Hudson River between 116th and 120th Streets had been abandoned, and why an option had been taken to purchase the Dyckman property, twenty-six acres in extent, at Broadway and the Harlem River. The hope was expressed that so admirably conceived a plan as this might be made possible of early execution by public spirited citizens. The University had not long to wait. Mr. George F. Baker, whose name is held in highest honor and respect by men of affairs throughout the nation, offered with princely generosity to make it possible for the University to acquire the tract held under option. The purchase was made at an approximate cost of \$650,000. Mr. Baker's benefaction enabled the Univer-

sity to solve one of its most difficult and perplexing problems. The possession by Columbia of this admirably placed property marks another and long step forward in the complete development of our university work and life. That education is narrow and incomplete which does not include provision for the health, the physical exercise, and the play of those who are making formal and systematic preparation for life. An education made up of instruction alone would be singularly barren.

The newly acquired property, to which the Trustees have formally given the name of Baker Field, will enable the University not only to fulfill the ambitions and hopes of the students of today and tomorrow, but also to achieve one of the aims and ideals of its educational system. Here physical exercise can be had under almost perfect conditions; here the foundations of health and physical comfort can be firmly laid; here those personal associations that mean so much in after life, can be formed; and here character can be both tested and trained.

Moreover, through its possession and use of Baker Field, Columbia University can once more show its concern for the interests and the satisfactions of the people of New York: To this field they will shortly come in large numbers to enjoy those admirable spectacles of generous rivalry and free competition which stir the emotions and give wide-spread enjoyment. New York will be the gainer because Columbia is better furnished for its task.

The improvement of Baker Field and its adaptation to its new uses are already under way. In the spring of 1923 it will be at the service of the students and alumni of the University.

Despite the fact, or perhaps because of the fact, that the salaries of professors have been greatly increased in

recent years, certain problems have come to the surface that have required careful study. Each year urgent recommendations are received by the Committee on Education for special recognition in the forth-coming budget of the length of service or scholarly performance of some individual officer of instruction. It is never possible to deal satisfactorily with all recommendations of this kind, and the fact that some departments are insistent in making them while others are negligent, gives rise not infrequently to what may appear to be discrimination. In the opinion of the Advisory Committee on Educational Policy, the impression has prevailed in the University that the salaries of professors are not definitely fixed, that increases may and should be expected from time to time, and that recommendations for such increases should be annually made to the Trustees. For many years past the Annual Reports have emphasized the subject of adequate professorial salaries, and in response to these discussions and recommendations the present scale of salaries has been instituted, \$6000 being fixed as the minimum salary of a professor rendering full-time service.

The study of this whole subject by the Advisory Committee on Educational Policy and by the Committee on Education led to the conclusion that the problem of salaries would be more adequately solved than heretofore if the University were to adopt the policy of maintaining a definite number of more highly paid positions, these to be increased in number from time to time as the resources of the University permit and to be kept filled by new designations as death, resignation, or retirement might create vacancies. It would then be clearly understood that unless the compensation of a given officer were increased in order to fill an existing vacancy in one of the more highly paid posts, the salaries of professors would

remain definitely at the stated minimum. It was felt that the adoption of such a policy would make clear just what might be the resources and intentions of the University in the matter of salaries. It would also make clear to the teaching staff that increases in salary are not ordinarily to be expected except as one of the more highly paid positions might fall vacant. The conclusion was reached that such a system would have more satisfactory results than one which encourages the idea that salaries may constantly be increased on request or on urgent departmental recommendation.

The Committee on Education, in formulating recommendations for the budget for 1922-1923, acted in accordance with these findings. They did not propose that the sums named in their present recommendations should be regarded as final or that there should be any limit put to the freedom of action of the Trustees in meeting any exceptional case or emergency that might arise. Under date of March 6, 1922, the Committee made the following recommendations to the Trustees and framed their budget proposals in accordance with these recommendations:

1. That ten professorial positions be created with the salary of \$10,000 each.
2. That twenty-five professorial positions be created with the salary of \$7500 each.
3. That all other professorial salaries be maintained at \$6000.
4. That vacancies in groups 1 and 2, as they may occur, be filled on the grounds of service and scholarly endeavor from the general staff of the University.
5. That additional positions be created in groups 1 and 2 whenever it may be necessary to call to the University professors at salaries higher than the normal minimum of

\$6000, in order that the number of more highly paid professorships to be filled by promotion from the staff be not decreased.

In making these recommendations, the Committee explicitly stated that it was not their intention to recommend that the normal minimum salary of a professor remain always at \$6000, but merely to establish the principle that unless a professor at a salary of \$6000 be advanced to one of the vacant positions at a higher salary, his compensation will remain at \$6000 until it is practicable to raise the salaries of the entire group of professors in receipt of that salary to, say, \$6500 or \$7000. In such case, it might of course be desirable at the same time to raise the salaries of the group receiving \$7500 to \$8000 or \$9000, and the salaries of the group receiving \$10,000 to, say, \$12,000. Such changes as these would, however, not affect the principle involved, but would be entirely dependent upon the available resources of the University. That the University should aim to pay a salary of not less than \$10,000 to a professor of long service and distinction, is certainly sound policy.

The Statutes of the University now make satisfactory provision for the retirement of academic officers. Those teachers and administrative officers who were in service before July 1, 1917, may avail themselves of the provisions of the Statutes, Section 67, and take advantage of the non-contributory system of retiring allowances provided by the Carnegie Foundation for the Advancement of Teaching. All others—and one day this will include every officer of the University—come under the terms of the provisions of Section 68 of the Statutes, and may, with the cooperation of the University, take advantage of the contributory plan of retiring allowances provided by the Carnegie

Provisions for
Retirement

Foundation through the Teachers Insurance and Annuity Association of America.

If every officer appointed since July 1, 1917, elects to take advantage of these provisions of the Statutes, no foreseen complication will ensue. On the other hand, if some officers elect to take advantage of these provisions and others do not, then the time will certainly come when the Trustees will be embarrassed by the appeal made to their sentiments by an academic teacher or his friends to grant a retiring allowance despite the fact that the individual in question has not brought himself under the provisions of the Statutes, Section 68. If the Trustees fail to grant such requests, they will be criticized as being unfeeling and hard-hearted. If, however, they do grant these requests, they will in so doing discriminate against those teachers who have for years borne their share of the cost of the contributory system of retiring allowances. It is desirable to face this question frankly now and not to postpone its consideration until some concrete case arises and the damage is done. It would appear to be necessary for the Trustees to take one of two courses of action in these premises: first, formally to resolve, and firmly to maintain that resolve, that no officer who fails to take advantage of the provisions of the Statutes, Section 68, will under any circumstances be granted a retiring or disability allowance; or second, to make action under these provisions of the Statutes obligatory upon all officers appointed since July 1, 1917. Either alternative has its embarrassments, but it is not easy to see how a choice between these alternatives can be avoided. The matter is not one which affects in any way academic officers who come under the provisions of the Statutes, Section 67; but it does affect all of those appointed since July 1, 1917, and those who may hereafter be appointed.

From the reports of the Carnegie Foundation, it appears

that fourteen colleges and universities have already dealt with this question by making obligatory the teacher's participation in the contributory plan. The institutions that have taken this action are, among universities, Chicago, Clark, Fisk, Michigan, Pittsburgh, Queens, Toronto, Vanderbilt, and Wesleyan; and among the colleges, Colorado, Occidental, Packer, Whitman, and Williams.

It is always desirable, if it can possibly be done in fairness, to avoid turning what is in reality an advantage into an obligation. If a course of action can be devised that will put all officers of the University upon an equal footing while avoiding making obligatory the provisions of the Statutes relative to the contributory plan of retiring allowances, that is certainly the course to pursue.

For some years past, the strengthening of Columbia College, the increase of material provision for the comfort and satisfaction of its students, the reconstruction on sound lines of its program of study, and the definite fixing of its permanent place at the foundation of our University system, have been matters of chief concern. No part of the University has received more solicitous care and none has benefited more by the changes and developments of the past decade. What remains to be done is not to institute new policies, but to carry steadily forward to completion those wise and judicious measures that are already under way.

The undergraduate program of study has been notably improved. A most unhappy result of the elective system introduced a generation ago, and one that was not foreseen, was the destruction of that common body of knowledge which held educated men together in understanding and in sympathy. For more than a thousand years educated men had pursued pretty much the same studies, had read pretty much the same books, and had gained a

Development
of Columbia
College

common stock of information concerning man and nature. The elective system first weakened and then destroyed that common body of knowledge, and as a result brought in its train intellectual, moral, social, and political consequences that are nothing less than grievous. The narrowing of one's field of information to the subject in which he early displays the greatest interest, means cutting him off from intellectual contact and sympathy with all but his own fellow specialists. Intellectual, moral, and social unity is broken up, and classes, cliques, and groups become first influential and then dominant. Civilization cannot be so maintained, much less advanced. If the educated men and women who are the natural leaders of modern society have little or nothing in common, the doom of such leadership is sealed.

It was manifestly impossible and undesirable, for many reasons, to reinstate the old prescribed program of college studies. The world had outgrown it; but the world had not outgrown, and will never outgrow, the principles upon which that prescribed course of study was based. In seeking for a substitute, and with the direct aim of providing a common body of knowledge and a field of common interest for the undergraduates in Columbia College, the Faculty wrought out and introduced the course of instruction known as Introduction to Contemporary Civilization, attendance upon which is prescribed for freshmen five times weekly. This course, which claims the energies of some twenty of the most competent and zealous of the College teachers, has been from the outset a pronounced success, and is now fortunately being imitated elsewhere. By its survey of the origins and present character of the fundamental problems which confront the world of today, it offers a body of instruction both interesting in itself and highly practical, whether as a foundation for more advanced knowledge or as a means of uniting

those who follow the course by a common bond of much strength, no matter how diverse may be their later and more special studies. The making and the introduction of this course have been a distinct achievement and a contribution, both original and rich, to the solution of the American college problem.

The College Faculty is now prepared to go a step farther, and as soon as the material is prepared, to introduce a second course of this general character in the form of an Introduction to Modern Science. This course will offer to the undergraduate a systematic and well-knit exposition of the fundamental assumptions, laws, and methods of modern science, and will serve as the best possible introduction to the closer study of some particular science. It is often remarked that while for sixty years past immense sums have been spent upon natural science, and while the natural sciences have in that period rendered service to mankind that is literally enormous, no substantial headway has been made in bringing the general or popular mind under the influence of scientific methods and scientific ideals. It may fairly be asked whether an explanation of this curious result is not to be sought in the fact that the study of science has been and is so highly specialized. The teacher of physics or of chemistry is glad and willing to bend every energy to the training of future physicists or chemists, but he is apt to show no great patience or skill in dealing with the problem of making the fundamentals of his science known to the intelligent man who is not a specialist. There is a real lack here, and if the Introduction to Modern Science now being prepared by the College Faculty shall be successful in supplying it, Columbia College will have rendered yet another great service to American education. Through McVickar Columbia College introduced the teaching of economics in America. Through Davies it made familiar the French mathematical

texts that were much superior to the English texts that had been in earlier use. Through Anthon it poured out before the American student the riches of European scholarship in the fields of classical philology, history, and archaeology. Through Lieber it offered the soundest and clearest teaching ever given of the fundamental principles of civil liberty. Through the working out and establishment between 1880 and 1892 of the combined college and university course, it pointed the way to the development of the junior college and to the readjustment of American higher education in a manner which, through saving of time and waste and the better adjustment of studies to the student's capacity and interest, constituted a contribution to the organization of higher education in America that is nothing short of epochal. If now through its group of active and devoted scholars of this day Columbia College can, by its Introduction to Contemporary Civilization and its Introduction to Modern Science, repair the damage done by the elective system, it will once again have laid American education under a heavy debt.

But the best possible program of college study does not make a college. Stephen Leacock, writing in England some two years ago, put his finger on the truth when he said:

"As a college teacher I have long since realized that the most that the teacher, as such, can do for the student is a very limited matter. The real thing for the student is the life and environment that surround him. All that he really learns, he learns, in a sense, by the active operation of his own intellect and not as the passive recipient of lectures. And for this active operation what he needs most is the continued and intimate contact with his fellows. Students must live together and eat together, talk and smoke together. Experience shows that that is how their minds really grow. And they must live together in a natural and comfortable way. They must eat in a big dining room or hall, with oak beams across

the ceiling and the stained glass in the windows, and with a shield or tablet here and there upon the walls to remind them between times of the men who went before them and left a name worthy of the memory of the college. If a student is to get from his college what it should give him, a college dormitory, with the life in common that it brings, is his absolute right. A university that fails to give it to him is cheating him."

Even an admirable program of study and an attractive residence hall are not sufficient. There must be in addition playing fields, where outdoor exercise and manly sport may be had, and there must be adequate and well furnished rooms for those voluntary and often informal undertakings and associations that play so large a part in undergraduate life.

The University in its care for Columbia College is pressing steadily forward toward the accomplishment of all these ends. About one-half of the whole body of undergraduate students are in college residence in either Hartley Hall or Livingston Hall, or in fraternity houses in the neighborhood of the campus. Playing fields, quite ideal in character and extent, are provided for through the munificent gift of George F. Baker in the field which is to bear his name. It remains now to add to the equipment of the College a building to contain a suitable dining hall and commons, a modern gymnasium, ample rooms for alumni and undergraduate organizations, whether literary, dramatic, athletic, or other, together with special provision for honor students, and for such studies, reading rooms, and class rooms as shall relieve the pressure upon Hamilton Hall and make it possible to care properly for the instruction and the daily life of a College membership not in excess of two thousand. The immediate planning of such a building, to be placed on the southerly side of South Field, was formally recommended by the President to the

Trustees on May 25 last and the recommendation has been generally and warmly approved. This notable building, to be so designed as properly to face and to balance the Library, might well be made a memorial to the late Amos F. Eno, whose great benefaction to the University has now been judicially confirmed, and whose expressed faith in Columbia University and its future is a matter of record. So soon as there is demonstrated demand for additional residence halls, there is ample space on South Field for them.

When the development of Columbia University was first projected, President Barnard directly raised the question whether the College might not profitably be discontinued, and the entire resources of the University devoted to the advanced and professional work upon which he had set his heart. At that time the College was small and struggling and no one could have foreseen its great expansion into the Columbia College of today. The resources of the corporation were limited and hard pressed, and even the liveliest of imaginations would not have predicted the great flow of benefactions which have since that time strengthened and enriched the University. It then seemed to President Barnard and to many others that a choice must be made between discontinuing Columbia College and abandoning hope of building Columbia University. As the problem was studied, however, it became increasingly clear that Columbia University could not be developed save upon the basis of Columbia College as a foundation, and that in turn Columbia College would gain and not lose if a great university system were to grow up about and above it. These hopes and predictions have been completely borne out by the happenings of the past forty years. When President Low took office, he made patient study of this problem, and threw the weight of his great influence on the side of maintaining the College

as the foundation upon which the University should arise. That policy was adopted, and its working out has given all possible satisfaction. The University has strengthened and enriched the College in ways that were not foreseen, while the College has poured and is pouring into the University a great body of eager and ambitious students well prepared to carry a heavy burden of advanced and professional work.

In 1920 the Dean of Columbia College pointed out that during the five years preceding (which included the years of war) no fewer than sixty-four per cent. of those who received the baccalaureate degree from Columbia College continued in the University to pursue graduate or professional studies. Of this sixty-four per cent., those who continued their studies through the exercise of a professional option during their undergraduate years numbered about two-thirds, or forty-four per cent. of the total. The remaining twenty per cent. of the total entered upon University work after graduation from Columbia College. These figures are certainly exceptional, and prove beyond peradventure the value of the College to the University and the measure in which the University in turn depends upon the College.

In its long history Columbia College was never so useful or so prosperous as now. Its student body was never before so representative of all parts of the country and of all classes of the population. Its undergraduate spirit was never better, and the scholarly and humane spirit which pervades it is a source of deep satisfaction not only to the Dean and Faculty of the College but to the entire University.

The beginnings of genuine graduate work in the United States, at Johns Hopkins University in 1876, at Columbia University in 1880, and elsewhere, were under fortunate

conditions. A few men of strong personality and of ripe scholarship surrounded themselves in more or less informal fashion with small groups of eager and ambitious college graduates. Fifty years ago, and even less, the highest type of college graduate often chose an academic career and made severe sacrifices to prepare himself for it. The relations at that time between the directing scholars and their youthful associates and apprentices were always cordial and often intimate. Mind directly shaped mind, and the scholarly method was learned rather by imitation than through instruction. As the number of graduate students multiplied, and as the inevitable academic machinery to care for their needs was brought into existence, graduate work began to lose something of its spontaneity and informality, and became more or less highly organized. It was not long before an imposing array of rules for the guidance of graduate students made their appearance. The study of certain topics or of certain groups of topics was prescribed or enjoined. Elaborate and detailed lecture courses came into existence and tended to displace the constant and informal conferences between the older and the younger scholar. Under such circumstances it is not strange that graduate work assimilated itself increasingly to undergraduate work, both in spirit and in method, and that it tended to become undergraduate work prolonged and extended.

Conduct of
Graduate Work

The distinction between the two types of work is not a hard and fast one, but it rests upon the acquisition by the youth of a disciplined maturity. This disciplined maturity will be reached in some cases at an earlier period than in others, but without it genuine graduate work is impossible. The notion sometimes advanced that a sound method for conducting graduate work is also the sound method for conducting the kindergarten and

elementary school, rests upon a complete misunderstanding of the whole educational process and of the purpose for which that process exists.

The essentials for successful and productive graduate work are four: strong, guiding personalities, rich in scholarship; opportunity for personal contact and close relationship between these personalities and those who come to them for stimulus and for guidance; the necessary equipment or apparatus for independent study and research, whether in libraries, in museums, or in laboratories; and the responsibility placed upon the graduate student for carrying on his own special studies without prescribed attendance upon given lectures or any other restriction upon his own disposition of the time spent in academic residence. The University need only make sure, first, that the graduate student gives evidence of having attained that disciplined maturity which alone will make graduate study profitable and productive; second, that he pays such substantial fee as will be his reasonable contribution toward the cost of maintaining the institution whose privileges he seeks and enjoys; and third, that he demonstrates by personal performance that he has carried his studies so far forward in some part of his chosen field as to have mastered the method of investigation therein and to have indicated the direction in which some addition, however slight, to the sum total of human knowledge may be gained. Whether he has attended any formal courses of lectures, should be a matter of small concern to the University. This is for the graduate student himself to choose and decide. He will often gain more from coming to know something of the personality and method of scholars in other fields than his own than by listening to a formal course of lectures on some topic in the field of his choice.

At present, graduate faculties themselves offer too

many courses of instruction, and model their graduate work too largely upon those forms and methods that are found successful in undergraduate teaching. Were a university professor to confine himself in a single academic session to one course of lectures given, say, four times weekly, it would perhaps be the ideal plan. This course of lectures would naturally offer not an array of facts to be found on the printed page but the lecturer's interpretation of facts, thus conveying directly to the minds of his hearers the results of his own ripe reflection and of his own scholarly endeavor. The rest of his time should be spent upon productive scholarship and in personal conferences with the group of advanced students who have attached themselves to him. Whether these conferences take the form of a seminar or not is a matter of indifference; but they offer the university professor the surest and most successful method of developing his own scholarly ideals in the minds of younger men. When the German universities were at the height of their reputation and influence, they were striving to follow the path here indicated, and some of them did so with marked success. It would be unfortunate in the extreme were the rapid growth in size of American graduate schools to result in fastening upon the American universities a form of highly organized and minute control of the time and effort of the graduate student that would in effect interfere with the controlling purpose of all graduate work, and take from the student that sense of independence and personal responsibility which are vital elements in the life and work of a true scholar.

It is not at all difficult to organize the advanced work of a department in letters, in history, in economics, or in social science precisely as a department in the experimental sciences is organized, with a director as presiding genius and guide and a competent staff in constant attendance

for consultation and criticism. It is through the application of this method that the best work is done in the experimental sciences, and it is by the application of this method that the best work may be done in other fields as well. Scholarly companionship is the surest foundation for scholarly influence.

It is important that the University should not yield to the strong tendency which a group of scholars often manifests to add to their number only those who are like-minded. Naturally and properly, in making new appointments to the staff the University will seek only men who are agreeable and effective as companions and associates. It would, however, be an error of considerable magnitude and one which, if persisted in, would limit a university's usefulness, to appoint only such scholars as held views of disputed and debatable subjects that were in close agreement with those of the scholars who had preceded them in university membership. Mere stubborn othermindedness is an unlovely and unwelcome characteristic, and is not referred to in what is here written; but it is a distinct gain if the staff of a university includes men who approach the problems of philosophy, of economics, and of social science from different points of view. Either one has faith that truth, when known, will conquer error, or he has not. If one has that faith, while he will avoid arming error in its struggle for existence, he will not make the mistake of strengthening it by a form of proscription which gives offense to fair and open-minded men. There is, of course, a limit to open-mindedness. Mathematicians have no place in their company for a teacher, however talented, who believes that the circle can be squared or that the sum of the interior angles of a triangle is other than two right angles. Similarly, the physicist and the chemist would not accept as colleague a gifted teacher who might with sincere conviction hold views in contradiction to

some laws of nature which they look upon as fundamental. There are similar limits of reasonableness and common sense beyond which dissent can not be encouraged in philosophy, in economics, or in social science. The difficulty is not so much to fix these limits in the abstract as to make application of them in particular cases.

There is a great advantage to a university in drawing into its fellowship mature men who have given evidence of originality and power in letters or in science but who have not previously been actively engaged in teaching. There are not a few instances in which such men have notably strengthened a university by reason of the freshness of their point of view and the absence of any limitation set upon their advanced work by habits acquired in undergraduate teaching. A few such men will always be welcome in any true university and will give to its advanced work new inspiration and power.

The discussions that are now going on before the American Bar Association and the Bar Associations of various states as to legal education and the conditions of admission to the practice of law, are likely to have excellent and far-reaching results. That legal education has fallen into ruts and that it has never been subjected to critical examination from the standpoint of educational principle, is generally admitted. In fact, legal education has been treated too largely as a matter of law and too little as a matter of education.

Legal
Instruction
and Legal
Research

The bar itself is now acutely conscious of the imperfections of the existing system of training for the profession of law, and quite appropriately is leading the way toward improvement. Law schools in the United States have, ever since their establishment, been cast in a common mold. They have slavishly imitated the

program of instruction and the methods of teaching followed in one or two of the older and more influential law schools, and there has been no such searching criticism of either the program of study or the methods of instruction as has been the case with letters and with science. Such critical examination should be no longer delayed, and Columbia University may render a distinct service by undertaking it. A great teacher does not of necessity leave behind him a great school. If it be true that an institution is but the lengthened shadow of a man, one must be certain that the man who hopes to build an institution really casts a shadow. Many powerful personalities come and go in the fields of higher and professional education without contributing in any important way toward the permanent character and influence of the institutions which they have served. Imitation is no doubt sincerest flattery, but critical examination of proposed courses of action and of the principles upon which these rest, is wiser than imitation.

In American life the profession of law plays so much more important a part than anywhere else in the world that the training and qualifications of lawyers are matters of increasingly large public interest and importance. That the conventional discipline of law students in private or municipal law is too narrow and too technical is now quite generally admitted. The study of Blackstone, some time since abandoned, had its advantages. Not infrequently under conditions as they now exist a practicing lawyer has had some years of professional experience before he gains a clear idea of the relations between law and ethics, economics, and social science. The whole field of public law has come to have new importance. There was a time when the counsel who raised a point of constitutionality was thought to be quibbling in defense of a weak case. He is now quite likely to be pleading for the protection of

some one of the fundamentals of civil liberty. Administrative law, the study of which in the United States was begun at Columbia not much more than a generation ago, was at first thought to have had little application to American conditions; but as those conditions have rapidly changed, administrative law has come to have large and very practical importance in the daily life of the several states and of the nation. It would not be becoming to indicate in advance of a systematic and scholarly inquiry into all these subjects what changes might well be made in the existing program of legal study; but that the inquiry should be made and prosecuted with vigor is quite certain.

The building up of research in the field of public and private law is an enterprise upon which the University should expend some organized effort. Since the establishment in 1880 of the School of Political Science, there has been in America a university faculty of the highest competence engaged in cultivating and promoting research in the field of public law, of economics, and of social science, as well as in training men for the public service, diplomatic and other. Many of those who have prosecuted these advanced studies have not been graduates in law, and it is important that a larger number of law graduates should be drawn into this field of interest and activity. The bar needs such among its active members, and the universities need such among their teachers. The study of legal history and the comparative study of legal systems, as the writings of Maitland abundantly illustrate, offer most inviting fields of investigation, and the results are pretty certain to have quick and important practical application in the public life and the legal practice of today. It has been said that Edward Livingston, once Secretary of State of the United States and Minister to France, and Edward D. White, formerly Chief Justice

of the United States, found a large part of their public usefulness and distinction to rest upon their profound knowledge of both the civil and the common law. If a good background of historical knowledge were given to the students of law, the number among them who would be drawn toward advanced study and research would almost certainly increase. These are problems not alone for the Faculty of Law but for the University as a whole.

Perhaps there is no better way to make plain both within and without the University the extent and importance of Columbia's constant and continuing service to scholarship than by bringing together a list of the contributions made in recent years in a single field or subject of study. Probably there will be no dispute as to the fact that Homer, Dante, Shakespeare, and Goethe are the four most outstanding figures in the history of the literature of western civilization, and that the writings which bear their names are both perennial sources of enjoyment and of inspiration and compelling invitations to farther study and interpretation. Of these, Shakespeare, of course, stands closest to us because his speech is ours. Surely it is significant to find that some three hundred years after his death, eager scholars on this side of the Atlantic are constantly devoting themselves and guiding others to the intimate study of some aspect of Shakespeare's life and works.

It is a matter of justifiable pride that within a relatively short period of time the impressive list of publications relating to Shakespeare and the Elizabethan drama, whose titles are here given, should have been produced by a single group of American scholars. The students and teachers of English and Comparative Literature in Columbia University have severally or in cooperation

Contributions
to the Study of
Shakespeare

recently completed and published the books whose titles follow:

Shakesperian Studies, contributed by twenty members of the Department of English and Comparative Literature in Columbia University under the general editorship of Professors Brander Matthews and Ashley H. Thorndike. (New York: Columbia University Press, 1916.)

ALBRIGHT (Victor O.)—The Shaksperian Stage. (New York: Columbia University Press, 1909.)

ARNOLD (Morris L.)—The Soliloquies of Shakespeare. (New York: Columbia University Press, 1911.)

AYRES (Harry M.), Editor—The Merchant of Venice, in the *Tudor Shakespeare*. (New York: The Macmillan Company, 1912.)

BOLWELL (Robert W.)—The Life and Works of John Heywood. (New York: Columbia University Press, 1921.)

CUNLIFFE (John W.), Editor—A Midsummer-Night's Dream, in the *Tudor Shakespeare*. (New York: The Macmillan Company, 1912.)

FANSLER (Mrs. Dean S.)—The Evolution of Technic in Elizabethan Tragedy. (Chicago: Row, Peterson and Company, 1914.)

FORSYTHE (Robert S.)—The Relation of Shirley's Plays to the Elizabethan Drama. (New York: Columbia University Press, 1914.)

FREEBURG (Victor O.)—Disguise Plots in Elizabethan Drama. (New York: Columbia University Press, 1915.)

GILDERSLEEVE (Virginia C.)—Government Regulation of the Elizabethan Drama. (New York: The Columbia University Press, 1908.)

Editor—King Lear, in the *Tudor Shakespeare*. (New York: The Macmillan Company, 1912.)

HUNT (Mary Leland)—Thomas Dekker. (New York: Columbia University Press, 1911.)

LAWRENCE (William W.), Editor—Much Ado About Nothing, in the *Tudor Shakespeare*. (New York: The Macmillan Company, 1912.)

- MATTHEWS (Brander)—Shakespeare as a Playwright. (New York: Charles Scribner's Sons, 1913.)
 Editor, with A. H. Thorndike—Shaksperian Studies. (New York: Columbia University Press, 1916.)
- NASON (Arthur H.)—James Shirley, Dramatist. (New York: A. H. Nason, 1915.)
- ODELL (George C. D.)—Shakespeare from Betterton to Irving. (New York: Charles Scribner's Sons, 1920.)
- RISTINE (Frank H.)—English Tragicomedy. (New York: Columbia University Press, 1910.)
- THORNDIKE (Ashley H.)—Shakespeare's Theater. (New York: The Macmillan Company, 1916.)
 Editor, with W. A. Neilson—The Tudor Shakespeare, 40 vols. (New York: The Macmillan Company, 1911-13.)
 Editor, with W. A. Neilson—Romeo and Juliet, in the *Tudor Shakespeare*. (New York: The Macmillan Company, 1911.)
 Editor, with W. A. Neilson—Facts About Shakespeare, in the *Tudor Shakespeare*. (New York: The Macmillan Company, 1913.)
 Editor, with Brander Matthews—Shaksperian Studies. (New York: Columbia University Press, 1916.)
 Tragedy. (New York: Houghton, Mifflin and Co., 1908.)
- WOOD (Alice I. P.)—The Stage History of Shakespeare's King Richard. (New York: Columbia University Press, 1909.)
- WRIGHT (Ernest H.)—The Authorship of Timon of Athens. (New York: Columbia University Press, 1911.)

In addition, these two volumes are about ready for publication:

- WELLS (Henry W.)—Poetic Imagery, Illustrated from English Literature during the Lifetime of Shakespeare.
- AYRES (Harry M.)—Shakespeare's Pronunciation.

It is in such ways that a University justifies its title to intellectual leadership and draws to itself the most eager and most promising of the youth of the nation who look to scholarship as a career.

Now that so ample provision has been made for the Medical School, and the other professional and technical schools of the University are on so satisfactory a basis, the time has come to give more special and concentrated attention to the advanced and research work of the University in the whole field of engineering. The line of separation between pure and applied science is increasingly difficult to discern and to maintain. The real distinction would appear to lie not so much in the subject matter as in the spirit with which the work of research is carried on. The applications in industry and in commerce of the principles and facts which constitute chemistry, physics, and mechanics, for example, are made possible only by reason of a thorough understanding of those principles and facts. When research in the field of natural and experimental science was young in the United States, and when the dominant motive and interest of the people were largely material, it was perhaps not difficult to distinguish between what came to be called the field of pure science and that of applied science. Conditions have, however, sharply changed during the past generation, and the intermingling of the two is very considerable, even if it be not complete.

Schools of Mines,
Engineering, and
Chemistry

The policy of the University in accepting eight years ago the recommendation of the Faculty of Applied Science to elevate the standard of admission to the Schools of Mines, Engineering and Chemistry, and to turn those schools definitely to the task of training leaders of the engineering profession and research workers, has resulted in greatly reducing the enrollment of students, and has left several departments of instruction over-equipped for the work which they have to do, at least during the period when the new policy is establishing itself. Meanwhile, there has been some discussion, both within the Faculty

and among other members of the University, as to whether the policy adopted justifies itself or is not somewhat in advance of public opinion. Probably no one would counsel going back to the former policy of accepting students for the Schools of Mines, Engineering and Chemistry direct from the secondary schools. That would be to abandon a fixed principle of our university organization and development, and to turn aside from a task which but few institutions, among them Columbia, can do at all, to resume the task which almost any institution of higher learning can accomplish if it chooses. The real question under discussion would appear to relate to the details of the existing plan of admission and instruction, and not to the principles upon which that plan is based.

There are signs that opinion is moving in the direction of the policy that was adopted eight years ago. The Dean of the Faculty of Applied Science points out in his report that the importance attached here at Columbia to the humanities and to fundamental scientific studies as the basis of an advanced technical or professional training, is increasingly recognized elsewhere. A group of representatives of the most important engineering schools in the Middle Western states have unanimously approved a five-year program of study for engineering students, with a view to giving the time gained to the study of the humanities and fundamental scientific subjects. Whether the program of engineering study be one of five years or of six years, is probably of less importance than its content, and the possibility of the fundamental instruction being given by a large number of colleges and scientific schools, many of whose students would naturally transfer to Columbia to complete their engineering course. That there is ground for careful examination of all that relates to the program of study in the Schools of Mines, Engineering and Chemistry, is obvious, and steps are taking to make that examina-

tion in the broadest way possible and with complete sympathy for the ideals which the University has set up.

Quite apart from the program of study, however, the Schools of Mines, Engineering and Chemistry need extensive additions to their equipment for advanced instruction and research. In several departments the staff should be strengthened. The additional provision for instruction and research in chemistry and chemical engineering, which is part of the building program already described, will bring great relief. In addition, there is need of testing laboratories with modern equipment, placed so as to be most accessible by rail and by water to those who would naturally wish to make use of them. If the projected buildings for chemistry and chemical engineering could be speedily erected, if the desired testing laboratories could be built at a convenient point, if the research equipment of the several engineering departments could be strengthened and modernized, and if the staff could be increased at two or three important points, the Schools of Mines, Engineering and Chemistry would speedily find themselves on a basis as satisfactory as the School of Medicine or the School of Law. Making a direct appeal, as the work of these schools does, to the productive industries of the country, it should not be difficult for the University to obtain the considerable sums that are needed to put these schools on a thoroughly satisfactory basis as to both personnel and equipment.

The spirit and temper of journalism, which may perhaps be fairly described as day-to-dayness, is the besetting vice of the present day and generation. It is the enemy of constant and continuing interest in any serious subject, and it elevates superficiality to the plane of an occupation. We have at our disposal a quick record of contemporary happenings of

The Passing
Show

more or less interest and importance, and an abundance of critical comment upon them, which could not have been foreseen or foreshadowed a hundred years ago. This has been an incalculable gain to civilization and to the education of public opinion. Puck has not only put a girdle round about the earth in forty minutes, but his electric spark has annihilated time and made of space a mere convenience. If this vast development were kept by the public in its proper place and treated with a due sense of proportion, there would be no ground for critical comment. What has happened, however, is that the spirit and temper of journalism, of this day-to-dayness, have spread over pretty much the whole of mankind and have substituted a rapid survey of the surface of things for a sound and well balanced understanding of their length and breadth and depth. It is as if one were to stand upon the shore of the ocean and attempt to estimate the movements of its waters, the secrets of its depths, and the variety of its influences by watching the waves that with greater force or less roll up on the sands hour after hour. What is called news, that is, a happening which is deemed to have an immediate emotional or intellectual interest, occupies not only the first place but the only place in the mind that has surrendered itself to the spirit of journalism. The most recent happening must be instantly reported, even at the cost of complete accuracy. Time will not permit the sort of inquiry that may be needed to substantiate a rumor or to interpret correctly an incident or event. As a result of experience, the daily press comes to have an almost uncanny instinct for dealing at short notice with these matters without going far astray. But nevertheless, when this habit of mind is communicated to the larger public which is untrained and undisciplined, the results are nothing short of deplorable. With such the printed word comes to have an authority

which the writer of it would never venture to assume, and a bit of misinformation, once started on its way, travels with incredible speed, while the correction or denial goes haltingly and inconspicuously after.

This spirit and temper have notably invaded American education to its grave undoing. It is less than half a century since an urbane and accomplished professor in Columbia College used to advise his students to spend no time upon a book that was not at least a hundred years old, since, if a book had not survived that long, there was no telling whether it was worth reading or not. Today the number of younger students who know the names of a dozen books that are a hundred years old, much less read them, is not very large. That this is not an event of yesterday, is well illustrated by that passage in *Martin Chuzzlewit* in which Charles Dickens makes an American with a military title reply to Martin Chuzzlewit's inquiry as to the condition of poetry, the theater, literature, and the arts in the United States, in these words: "We are a busy people, Sir, and have no time for reading mere notions. We don't mind 'em if they come to us in newspapers along with almighty strong stuff of another sort, but darn your books."

A passion for information as to current events has driven out both knowledge and scholarship. These events may or may not be correctly reported and interpreted. They may or may not be of considerable or permanent importance. Given only the fact that they are current events, they are hastened upon the attention of curious youth with all the paraphernalia that would accompany the revelation of a fundamental law of nature or an interpretation of the rise and fall of the Roman Empire. It is an instinct of this point of view and of this method of mental occupation to put the newest book in the place of the best book and the newest theory in the place of the

soundest theory. Since the time of Thomas à Kempis and John Bunyan it has not been usual for a "best seller" to find its way into the history of literature. Novelty, instead of arousing suspicion by reason of its very newness, offers attraction by reason of its departure from that which has heretofore been. To find this spirit and temper so widely abroad in the world is distressing enough; but to find it invading the school and college is disheartening in the extreme.

The educational institutions of the nation, like its courts, have been supposed to be above the ebb and flow of mere temporary passion or passing appetite, and to deal with those far-reaching principles and well established laws that hold the moral and intellectual order together, give it coherence, and make possible its understanding. Current events have significance only if noted and judged, to use Spinoza's noble phrase, *sub speciê aeternitatis*.

The one competent judge of the significance and importance of current events, is he who is so soundly grounded in the meaning of events that have gone before that he can judge the newest happenings not according to their newness but by their value. They may be new and of highest significance; they may also be new and of no importance whatsoever. Novelty is neither a recommendation nor an obstacle. It marks simply the latest change in the content of the eternal time order. An education which does not understand this fact, or an education which neglects to emphasize and to interpret this fact, is little, if any, better than no education at all. The search for truth is something quite distinct from the search for novelty. To quote Victor Hugo's well known words: *Ceci tuera cela*.

The United States Bureau of Education, accepting a popular distinction which is based upon complete mis-

understanding of the fundamental principles underlying American education, publishes from time to time statistical data concerning what it describes as public and private universities, colleges, and professional schools. In America there is not and can not be any such thing as a private university, college, or professional school, unless perchance an institution bearing that name and conducted for private gain be permitted to flourish under the laws governing the District of Columbia or some one of the states whose educational legislation is exceptionally backward. The only distinction known to American political science and American public law is that between tax-supported and non-tax-supported universities, colleges, and professional schools. The tax-supported institutions of this class are, by authority of the state, erected within the field of government for public service; the non-tax-supported institutions of this class are erected by the same state within the field of liberty for a like public service. The state takes two different ways to accomplish one and the same aim. Both types of institution draw their authority from the state, and both are in every respect public; but only those which fall within the field of government are directly supported by tax. Those which fall within the field of liberty are not infrequently assisted by the exemption from taxation of so much of their property and income as is directly used for purposes of education.

Some Fallacies as
to Fundamentals

Neglect to observe these fundamental principles of American education may lead, and in some cases is actually leading, to serious and most un-American departures from sound educational practice.

It is elementary doctrine that in the United States the state defines the sphere of individual liberty directly or indirectly, and by so doing protects the individual against

the government. Through the government the individual is also protected against encroachment from elsewhere. When once the distinction between state and government is grasped and also the farther distinction between the sphere of government and the sphere of liberty, then it becomes merely a matter of expediency to be determined by a study of the facts in each concrete case and by argument, whether and how far a given undertaking that is charged with a public interest should be assigned to the sphere of government or to the sphere of liberty. The traditional American tendency, and it is a sound tendency, has been to leave as many undertakings as possible in the sphere of liberty.

There exist in the United States three different types of educational institution, all of which rest upon the power and authority of the state. The first of the three depends wholly, and the second partly, upon government. The third type is without any direct governmental relationship whatsoever. The three types are these:

1. Those institutions which the government establishes and maintains, such as the common schools, the public libraries, and the state universities.

2. Those institutions which the government authorizes, such as incorporated schools, colleges, and universities, which gain their powers and privileges from a charter granted by the proper governmental authority, and which are often given aid by the government in the form of partial or entire exemption from taxation.

3. Those institutions which the state permits, because it has conferred on the government no power to forbid or to restrict them, such as unincorporated private-venture educational undertakings of various kinds.

The American educational system is made up of all these, and whether a given school, college, or university is national or not does not in the least depend upon the

fact that it is or is not governmental. It may be governmental, and strangely local and provincial; or it may be non-governmental, and nation-wide in its interest and influence. France and Germany have great national universities which are governmental; Great Britain and the United States have great national universities which are non-governmental. Whether a given institution be truly national or not depends, in the United States, upon whether it is democratic in spirit, catholic in temper, and without political, theological, or local limitation and trammelings. It may be religious in tone and in purpose, and yet be national, provided only that its doors be not closed to any qualified student because of his creed.

It is well established American doctrine that private initiative must be protected from monopoly, whether government-made or artificially created by combination or control of natural resources. This principle applies quite as much in the field of education as in any other part of our national life. The notion that all youth must be cast in a common mold, cared for in a common institution, and trained under one and the same set of influences, might be acceptable in the *Republic* of Plato or in the political science of Prussia, but it is not acceptable in the United States. Education is primarily and fundamentally a parental and family privilege and duty. The parents of a child are responsible before God and man for its upbringing and its preparation for an honorable and useful life. It is an essential part of American civil liberty that parents may train their children in such wise and in such form of religious faith as they may prefer and choose. In our American theory the government steps in, not to monopolize education or to attempt to cast all children in a common mold or forcibly to deprive them of any religious training and instruction, but merely to prevent damage to the state itself. The government offers

a free opportunity to every child to receive elementary education, and usually much more than that, in tax-supported schools. It is, however, in no sense the business of the government in our American political philosophy to attempt to monopolize education or to prevent the freest choice by parents of the teachers and schools for their children. As one looks back on the history of American education during the past three generations, it becomes a matter for regret that the government had recourse to compulsion rather than to inducement in the attempt to protect the state against the evils of illiteracy and indiscipline. If the government had early taken the ground that since ample opportunity for instruction and training was provided for all by public tax, it would not permit any one to exercise the right of suffrage or to share the full privileges of citizenship who could not show evidence that he had either taken advantage of the opportunity which the government provided or had gained equivalent instruction and discipline elsewhere, the embarrassments, the friction, and the bad example of compulsory education laws might have been avoided, and the tax-supported schools still more eagerly resorted to by reason of the advantages to be gained, rather than because of the punishment which failure to attend them might involve. It is perhaps too late now to substitute a sounder system for the less sound one that has been built up. But the American people should learn their lesson and avoid repeating in any other field of endeavor the substitution of the instrument of force and compulsion for that of reasonableness and persuasive inducement.

Much of the unclear thinking relative to education, and not a few of the unhappy and dangerous proposals concerning it that are made from time to time, are the result of failing to recognize that the school is but one of three cooperative agencies in a well rounded education, and

that it can not bear the whole burden of education and should not be asked to do so. Education is a cooperative undertaking in which family, school and church have each an appropriate part to bear. Any doctrine or any public act which makes cooperation between these three agencies impossible or even difficult is a backward step, an un-American step, and a step fraught with disaster to sound education.

That the family has been withdrawing from effective participation in the educational process even where it was qualified to play a significant part, is commonplace. That the church has, save in scattered instances, failed to rise to the height of its opportunity, is also commonplace. If family and church did their full duty or anything approaching it, many of the severe criticisms now brought against schools and colleges would disappear. The school and the college can not bear their own proper burden and at the same time make up for the delinquencies of the family and the deficiencies of the church. The school and the college can cooperate with the family and the church, but they can not provide substitutes for these.

During the year special and intensive study has been made of matters relating to Barnard College and its position in the University system. The impelling motive to this study was financial, since the annual budget of Barnard College revealed a marked insufficiency of income to meet the reasonable needs of the institution. As must sooner or later be the case when any financial inquiry is undertaken in an educational system or institution, questions wholly educational were quickly raised. Barnard College is incorporated in the educational system of the University in a peculiarly intimate and effective way. It is not simply, as is often the case elsewhere, an allied or affiliated institu-

Barnard
College

tion; it is bodily incorporated into the University system and its representatives share in the responsible direction of all University policies.

Barnard College undertakes to support and maintain certain officers of instruction, but these officers of instruction are appointed and reappointed by the University according to its custom, and their standing is the same in all respects as that of other like officers in the University. That is to say, while there are University officers appointed upon the Barnard College foundation, there are no Barnard College officers who are not University officers and appointees. The members of the teaching staff who are on the Barnard College foundation are as fully members of the University departments under which their several subjects of major interest fall, as are any others. This fortunate relationship has not always been made as much of as is possible. In particular, the interchange of teaching services between teachers upon the Barnard College foundation and other University teachers has been awkward and cumbersome. By concurrent action of the Trustees of the University and the Trustees of Barnard College—which concurrent action, in fact if not in form, modifies the inter-corporate agreement as previously existing—the system of formal exchange of services as heretofore practiced is done away with. Instead a natural and easily administered system is introduced, by which, if a course given by an officer on the Barnard College foundation is open to and attended by students from parts of the University other than Barnard College, a proportionate part of the students' tuition fee is paid by the University to Barnard College. A similar practice is followed in case Barnard College students follow courses of instruction offered by officers not on the Barnard College foundation. In order to prevent any abuse or unfairness arising in the administration of this system, the deans and

faculties concerned will control the list of courses to be offered. An immediate advantage of this plan to Barnard College is found in the fact that if it is desired to offer to Barnard College students a certain amount of instruction in a given field, not sufficient to justify the appointment of a professor on full-time service, advantage may be taken of the University relationship to open to Barnard College students a course in that subject given by a teacher already in the service of the University. This is a very distinct gain, both for Barnard College and for the University as a whole.

It is also important for Barnard College that teachers appointed for work primarily therein, should be able to participate in advanced and graduate instruction and be given opportunity to do so. Otherwise, the teaching in Barnard College would tend to become less effective and less scholarly than that in other parts of the University, and the highest type of scholar would be reluctant to accept an invitation to an appointment on the Barnard College foundation. Under the arrangement now approved, these difficulties disappear entirely. A proposed appointment to a professorship or associate professorship on the Barnard College foundation will be subjected to the same scrutiny as if the appointment were to be made in other parts of the University. In this way, it will undoubtedly be possible to invite from time to time upon the Barnard College foundation scholars of distinction and high reputation. The Barnard College undergraduates will get the benefit of their teaching, and they themselves will get the inspiration and stimulus of full University opportunity for expression of their scholarly ambitions.

Following the prolonged and careful study of the sources of income, the budget of Barnard College for the current year has been so prepared as to avoid any deficit in the cost of the year's operations. It is confidently

hoped that this fortunate condition will continue. If Barnard College were in position to increase its residence hall accommodation, its work would be fairly well provided for and its expansion could follow the provision of additional capital resources by gift or bequest.

There is one question affecting Barnard College, which is of general University importance and which affects other parts of the University as well. Is it reasonable to expect women teachers to continue effective college and university work until reaching the age which has been fixed for retirement? It is certainly true that the age of retirement was fixed with men only in mind. The minimum age of possible retirement under the Statutes is sixty-five. The average age of retirement is over sixty-seven, while the tendency for a man in good health is to remain in service still longer. Will the same be true in the case of women? An affirmative answer seems very doubtful. If, then, the University should look forward to retiring its women teachers at an earlier age than its men teachers, the conditions of this problem should be given most careful study in order that there may be at hand an adequate basis of facts upon which to found a policy.

The work of Teachers College goes steadily forward *ohne Hast, ohne Rast*. The Faculty of Education is strengthened whenever opportunity offers by the most distinguished and successful scholars and teachers in their several fields. The work of Teachers College now reflects with substantial accuracy and completeness the various educational movements and tendencies that mark present day education in the United States. Indeed, the more significant and constructive of these movements and tendencies are quite likely to be found going forward under the guidance and leadership of graduates of this part of the University system.

Teachers
College

Fortunate provision of the sums needed to build and equip a library building for Teachers College has enabled construction to begin, in the hope that the summer of 1924 will see completed this marked and greatly needed addition to the resources of the College and the University. The provision heretofore made for the library of Teachers College, confessedly temporary in character, has long since been outgrown. The new library will not only serve the purpose for which it is building, but will also set free greatly needed space elsewhere.

The year under review has been exceptionally significant in the history of the College of Pharmacy. The corporate debt has been discharged, an adjoining piece of property has been purchased, and a greatly needed addition to the physical equipment of the College is already under construction. Coincident with these important happenings, the character and work of the student body have markedly improved. Since about as many applicants for admission were turned away as could be accepted, it is plain that the Faculty is now in position to offer instruction only to the best trained and best informed of those who seek to enter the first year class.

In the Report of the Treasurer, pages 343 to 463, will be found a detailed list of the gifts and bequests received during the year. The total amount of these additions to the corporate funds is \$2,428,020.64.

The largest items in this very large total are the gift of Mr. George F. Baker for the purchase of an athletic field, \$646,940.59; a farther payment by the executors of the estate of Joseph R. De Lamar, \$794,987.49; a payment by the executors of the estate of A. Barton Hepburn, Trustee from 1917 to 1922, \$75,000; a payment by the

executors of the estate of S. Whitney Phoenix, of the Class of 1859, \$226,921.35; a payment by the executors of the estate of Robert B. Van Cortlandt, of the Class of 1882, \$325,752; and a payment by the executors of the estate of F. Augustus Schermerhorn, of the Class of 1868, \$229,536.52. Particular attention is invited to the large number of individual donors, to the wide distribution of their gifts over a large number of academic undertakings, and to the steady increasing provision thus made for research and apparatus for research.

For the purpose of comparison with previous reports, there follows a summary of gifts and money received during the year by the several corporations included in the University.

Purpose	Columbia University	Barnard College	Teachers College	College of Pharmacy	Totals
General Endowment	\$1,135,188.91	\$195,790.73	\$4,508.00	\$25,000.00	\$1,360,487.64
Special Endowments	324,621.35	11,200.00	115,591.30	108.00	451,520.65
Buildings and Grounds	656,377.13		481,843.36		1,138,220.49
Immediate Use	311,833.25	4,808.73	3,510.00		320,151.98
<i>Total</i>	<i>\$2,428,020.64</i>	<i>\$211,799.46</i>	<i>\$605,452.66</i>	<i>\$25,108.00</i>	<i>\$3,270,380.76</i>

The following statement records the gifts made in money alone since 1890 to the several corporations included in the University:

1890-1901	\$5,459,902.82
1901-1921	36,799,380.99
1921-1922	3,270,380.76
<i>Total</i>	<i>\$45,529,664.57</i>

The following officers of the University have died since the publication of the last Annual Report:

On January 25, 1922, A. Barton Hepburn, a Trustee of the University since 1917, in the seventy-sixth year of his age.

On February 3, 1922, Margaret I. Adam, Associate in History in Teachers College, Exchange Lecturer from Bedford College, University of London, September 1921, in the thirty-third year of her age.

Deaths of
University
Officers

On February 9, 1922, Peter B. Olney, a Trustee of Teachers College since 1892, in the seventy-ninth year of his age.

On March 15, 1922, George V. Wendell, Ph.D., Professor of Physics, in the fifty-first year of his age.

On March 26, 1922, Porter F. Chambers, M.D., Professor of Clinical Gynecology, in the sixty-ninth year of his age.

On April 7, 1922, Mary Henley Peacock, Instructor in Household Arts (Foods and Cookery) in Teachers College, in the forty-eighth year of her age.

On May 14, 1922, Henry Marion Howe, LL.D., Emeritus Professor of Metallurgy, in the seventy-fourth year of his age.

On July 18, 1922, Charles R. Miller, Editor-in-Chief of the New York Times, and a member since its establishment of the Advisory Board of the School of Journalism, in the seventy-fourth year of his age.

On August 7, 1922, Romiett Stevens, Ph.D., Associate Professor of Education in Teachers College, in the fifty-sixth year of her age.

On August 11, 1922, William Sloane, A.B., President of the Board of Managers of the Presbyterian Hospital, and a member of the Joint Administrative Board: Columbia University-Presbyterian Hospital, in the fiftieth year of his age.

On August 25, 1922, William A. Dunning, LL.D., Lieber Professor of History and Political Philosophy, in the sixty-fifth year of his age.

On September 9, 1922, Alexander Smith, LL.D., Professor of Chemistry retired, in the fifty-seventh year of his age.

On October 28, 1922, John B. Pine, L.H.D., of the class of 1877, Trustee of the University from 1890 until his death, Clerk of the Trustees for thirty-two years, and Attorney for the University, in the sixty-sixth year of his age.

For record and for comparison with previous years, there follow the usual tabular statements as to the University site, teaching staff, student enrollment, and number of degrees conferred for the academic year 1921-1922.

Tabular
Statements

TEACHING STAFF

Teaching Staff	Columbia University	Barnard College	Teachers College ¹	College of Pharmacy	Total ²	
					1921	1922
Professors	219	21	28	4	207	219
Associate Professors	76	8	14	4	76	76
Assistant Professors	139	13	30	5	128	139
Associates	80	6	8	..	83	88
Instructors	236	18	88	3	358	327
Curators	2	..	..	..	2	2
Lecturers	69	14	35	..	88	104
Assistants	116	10	48	..	140	164
Clinical Assistants	55	..	..	..	57	55
University Extension not included above	308	..	..	..	330	308
Summer Session not included above	135	..	..	..	116	135
<i>Total</i>	<i>1,435</i>	<i>90</i>	<i>251</i>	<i>16</i>	<i>1,585</i>	<i>1,617</i>
Administrative Officers not enumerated above as teachers	45	20	23	3	62	66
Emeritus and Retired Officers	24	..	1	2	26	24
<i>Total</i>	<i>1,504</i>	<i>110</i>	<i>275</i>	<i>21</i>	<i>1,673</i>	<i>1,707</i>

¹ Excluding the Horace Mann, Speyer and Lincoln Schools.

² Excluding duplicates.

THE SITE

	Square Feet	Acres
A. 1. <i>At Morningside Heights</i>		
Green and Quadrangle	734,183	16.85
South Field	359,341	8.25
East Field	90,825	2.08
Columbia House	1,809	.041
Maison Française	1,809	.041
Residence of the Dean of the College	1,809	.041
Residence of the Chaplain	1,809	.041
Claremont Avenue Property	29,000	.679
	1,220,585	28.023
2. <i>At West 50th Street</i>	75,312	1.73
3. <i>Baker Field</i>	1,143,885	26.26
	2,439,782	56.013
B. Barnard College	177,466	4.07
C. Teachers College		
1. <i>At 120th Street</i>	153,898	3.53
2. <i>At 121st Street</i>	17,750	.407
3. <i>At 121st Street and Morningside Drive</i>	17,575	.403
4. <i>At Speyer School</i>	4,917	.112
5. <i>At Van Cortlandt Park</i>	575,843	13.22
<i>Total for Teachers College</i>	769,983	17.672
D. College of Pharmacy	7,516	.172
<i>Grand Total in New York City</i>	3,394,747	77.927
E. Camp Columbia, Morris, Conn.		585.3
<i>Total</i>		663.227

STUDENT ENROLLMENT

The total enrollment of students at the Winter, Spring, and Summer Sessions, as compared with that for the year 1920-1921, is shown in the following table:

		Totals	Gain	Loss
I. RESIDENT STUDENTS				
A. WINTER AND SPRING SESSIONS				
<i>Undergraduate Students:</i>				
Columbia College	2,061		98	
Barnard College	734			14
University Undergraduates	90		84	
<i>Total Undergraduates</i>		2,885	168	
<i>Graduate and Professional Students:</i>				
Political Science, Philosophy and Pure Science	1,520		217	
Architecture	69			5
Business	420		59	
Dentistry	13		5	
Journalism	146		9	
Law	694		110	
Medicine	377			24
Mines, Engineering and Chemistry	206		15	
Pharmacy	684		131	
Teachers College:				
Education	1,976		265	
Practical Arts	1,953		253	
Unclassified University Students	245		42	
<i>Total Graduate and Professional Students</i>		8,303	1,077	
B. SUMMER SESSION (1921) including Undergraduate, Graduate, Professional, and Unclassified Students		11,809	2,029	
C. UNIVERSITY EXTENSION				
Regular Courses (Net)		9,131		
<i>Gross Total Resident Students</i>		32,128	2,492	
Less Double Registration		2,708		
<i>Net Total Resident Students</i>		29,420	2,068	
II. NON-RESIDENT STUDENTS				
UNIVERSITY EXTENSION				
Extramural Courses		2,500	1,159	
Home Study Courses		285	47	
Special Courses		893		97

DEGREES CONFERRED

During the academic year 1921-1922, 2,525 degrees and 661 certificates and diplomas were conferred, as follows:

COLUMBIA COLLEGE:		SCHOOL OF BUSINESS:	
Bachelor of Arts	315	Bachelor of Science	120
Bachelor of Science	1	Master of Science	8
Bachelor of Arts Certificate for Academic Record and National Service	0	Certificate in Secretarial Studies	11
	<u>316</u>		<u>139</u>
BARNARD COLLEGE:		SCHOOL OF DENTISTRY:	
Bachelor of Arts	151	Bachelor of Science	1
Bachelor of Science	1	Doctor of Dental Surgery	1
	<u>152</u>		<u>2</u>
FACULTY OF LAW:		UNIVERSITY COUNCIL:	
Bachelor of Laws	174	Bachelor of Science	9
Master of Laws	1		<u>9</u>
	<u>175</u>	UNIVERSITY EXTENSION:	
FACULTY OF MEDICINE:		Certificate in Secretarial Studies	
Doctor of Medicine	68	Certificate in Optometry	
Bachelor of Science	25		<u>32</u>
	<u>93</u>		<u>79</u>
FACULTY OF APPLIED SCIENCE:		COLLEGE OF PHARMACY:	
Engineer of Mines	4	Pharmaceutical Chemist	9
Metallurgical Engineer	3	Bachelor of Science	2
Civil Engineer	2		<u>11</u>
Electrical Engineer	9	FACULTIES OF POLITICAL SCI- ENCE, PHILOSOPHY AND PURE SCIENCE:	
Mechanical Engineer	11	Master of Arts	448
Chemical Engineer	21	Doctor of Philosophy	81
Chemist (not now given)	0		<u>529</u>
Master of Science	15	FACULTIES OF TEACHERS COLLEGE:	
	<u>65</u>	Master of Arts	535
SCHOOL OF ARCHITECTURE:		Bachelor of Science	428
Bachelor of Architecture	13	Master of Science	10
Master of Science	2	Bachelor's Diploma	256
Certificate of Proficiency in Architecture	2	Master's Diploma	307
	<u>17</u>	Doctor's Diploma	5
SCHOOL OF JOURNALISM:			<u>1,541</u>
Bachelor of Literature	55	<i>Total Degrees, Certificates and Diplomas granted</i> 3,186	
Master of Science in Jour- nalism	2	<i>Number of individuals re- ceiving them</i> 2,621	
Certificate of Proficiency in Journalism	1	COLLEGE OF PHARMACY:	
	<u>58</u>	Graduate in Pharmacy	
		209	
		HONORARY DEGREES	
		13	

NICHOLAS MURRAY BUTLER

President

COLUMBIA COLLEGE

REPORT OF THE DEAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1922

To the President of the University

SIR:

As Dean of Columbia College, I have the honor to present the following report for the academic year 1921-1922.

To the casual observer the year has been one of unusual calm. The Faculty has not been agitated by debate or controversy. The students have pursued their studies and extra-curricular activities with zeal and intelligence. "Peace like a river" with a strong steady current, punctuated here and there with eddies, to be sure, but moving forward clearly and powerfully, affords an accurate image of the state of Columbia College.

It is gradually becoming clear that certain fundamental principles of collegiate education are particularly adapted to the genius of Columbia College. One of these principles is the proposition that the student is the focus of the undergraduate college. Columbia College does not exist primarily for the advancement of scholarship through the publications of her faculty, nor for the support of a body of scholars. To be sure no teacher can in the long run be effective as a college instructor unless he keeps his scholarship alive and active either through research and publication, wide reading and reflection, or the direction of advanced students. But all of this scholarship is useful for the College only as it is brought to bear on the students through lectures, conferences and personal example. For the University as a whole, the question is much more complex, and in a college not connected with a University the situation is quite different. But for Columbia College every problem should be approached from the point of view of the thorough and broad education of young men. As one passes to

graduate study the whole emphasis changes. In the one, the student occupies the central position, in the other the subject is paramount.

A college student is more than a learner. At any rate, he learns in more than one way. The assumption that learning from books is or should be the sole activity of college youth almost unfits one for the position of college teacher. The college man is not merely a book-learning animal. He is also a playing animal, a social animal, an artistic animal, a spiritual animal. The college that would do its whole duty by its students must not only recognize these facts and their interrelations, but must present a scheme of education which keeps each in its place, but all contributing to a complete development of the mind and the spirit. The year 1921-1922 has contributed much and has made preparation for more than is yet to come in the direction of welding into a single educational instrument the various units that are all too often allowed to exist independently or in competition.

The acquisition of Baker Field enables Columbia College to develop one of the secondary elements of a college education to an extent which would have been considered impossible a few years ago. The gradual transfer of athletic contests to this field, will free South Field for the use of the department of Physical Education. Not only will loyalty to Columbia College on the part of students and alumni be strengthened by the development of Baker Field, but the opportunity for the entire College to play will be greatly increased.

During the past year the Administrative Board of Social and Religious Work, through its committees, has attempted to define in terms of present day conditions the responsibility for the organization and supervision of social events in the University. They recognize that the initiative for such activities must come from the students themselves, but that without a certain continuity of personnel and policy, it is difficult for the students to learn wisdom either from the successes or the failures of their predecessors. The result of this study is summed up in the appointment and the definition of duties of a University officer known as Director of Earl Hall.

At the suggestion of the Executive Committee of the Y. M. C. A. the administration of Earl Hall is to be assumed by the University, and will be in the charge of the new Director. The work that has been effectively carried on by the C. U. C. A. will be under the jurisdiction of the Chaplain, in accordance with the statutory provisions defining his duties in connection with religious affairs. It is certain that the support of the students and the interest of faculty and alumni in the various social and religious activities will be transferred to the new form of administration without loss of effectiveness.

It is expected that all of the purely social events, such as dances, parties and entertainments which have been almost entirely without coordinating, directing or supervising influence will be subject to the Director's approval. The mere requirement that all such affairs be authorized from one office will result in the elimination of many unfortunate conflicts in dates, and numerous irregularities.

The most important single social influence in a man's college career is his dormitory life. Those who do not recognize the opportunity of the University for effective social education through the tactful and unobtrusive organization and refinement of our dormitory life, fail to understand what manner of institution Columbia College really is. It is not enough that students turn up promptly at recitations and pay their fees. Those formalities mark the beginning rather than the end of the process of college education. If there were nothing but formal instruction and fees, Columbia College would be entitled to something of the same warmth of loyalty towards her from her graduates that is felt by those who have shared the same boarding house. Shelter and the necessities have been provided, but nothing more. The Director of Earl Hall will have charge of the social life of the Residence Halls, including supervision of the placement of students in their rooms, and all of the personal adjustments that lend so much to the feeling of content and happiness. He will also work in cooperation with the Hall Committees of students in the arrangements for dances and parties which are often held in the lobbies of the dormitories.

It is also hoped that the Director in collaboration with the Chaplain and the Dean will be of personal service to students in regard to religious and spiritual questions. It is commonly believed that college tends to upset the religious faith. Just how far this is true it is impossible to say. Statistics on such questions are almost valueless since they are usually based upon terms which are not, and often cannot be defined. In this connection "atheist," "agnostic," "infidel" are used freely, often meaning little more than a divergence in opinion on matters of doctrine from the critic. But after all, any one who has come in close contact with many students realizes that the college experience almost inevitably causes or, at any rate, accompanies a readjustment of feeling toward religious matters. In many cases the roots of religious faith are intimately intertwined about alleged facts of science, history or philosophy which modern scholarship finds to be without foundation. It is natural that as the student feels the disturbance around the roots of his faith he should mistake the sensation for an injury to the faith itself. In the course of time, frequently after graduation from a college, the matter is readjusted on a firmer and finer basis than the old one, but often not without serious agitation and distress. It can hardly be expected that the various college instructors, who have replaced the erroneous dogmas of science by something better, should themselves always be able to pause to adjust any religious feeling that may have been disturbed. Often no one but the person himself knows of the disturbance. It is, however, a part of the responsibility of the College to afford abundant opportunity for wise and reverent advice, consistent with modern scholarship, to students who feel that the learning experience has interfered with the life of the spirit. The new Director of Earl Hall ought to be a central figure in this important and difficult work.

The policy just described of bringing together in one office the supervision of the social activities of the College is in line with the appointment in September, 1921, of a permanent Treasurer of Kings Crown. This officer has general advisory supervision over the non-athletic student activities. He is not directly concerned with the academic work. Study never

seems to be included in the category of "student activities." The business managers of the various literary and dramatic enterprises are required to make budgets and to live by them. The Treasurer does not relieve the students of responsibility, or assume their initiative. He is rather the governor of the engine; he does not furnish steam but is always ready to open the safety valve before the explosion takes place. By means of his help the students learn with much less pain and humiliation than formerly the art of give and take which contributes at once to the charm and the effectiveness of the gentleman in business.

No doubt the Director of Earl Hall, the Treasurer of Kings Crown, and the Graduate Manager of Athletics, each of whom in his own field aims to make the conditions the best possible for the development of student initiative, will establish relations with each other, constituting something like an informal department for the stimulation and guidance of student leadership.

Largely due to the efforts of the Secretary of the University an organization known as the Interfraternity Council has been formed. The Secretary is Chairman of the Council and the Dean is Vice Chairman. It consists of delegates from each of the thirty-five fraternities now admitting members from the College. An agreement regulating the rushing for fraternities and specifying certain residence and scholarship conditions of eligibility for pledging and initiation has been adopted, and machinery for the administration of the rules has been put in operation. The scholarship ratings of the fraternities have been prepared, reported back to them, and published widely, to the marked improvement of scholarship in many of the individual fraternities and an improvement in the level of scholarship in the fraternities as a whole. The average scholarship of the members of the fraternities is still distinctly below the average for the College. It should be remembered, however, that most of the time-consuming extra-curricular activities are performed by fraternity men. On the other hand, they constitute a carefully selected group, and ought to carry this additional burden and simultaneously maintain an academic record at least equal to the average of the College. Owing to the existence of the Council, affording as it does natural means

of communication between the fraternities and the Dean's office, a wholesome influence is certain to permeate the entire group. It ought to be added that in spite of occasional exhibitions of petty interfraternity rivalry, the fraternities constitute the backbone of the best that is in our undergraduate life. On the whole they are helpful to their members, and most cooperative with the officers of the College. When a fraternity man is in any kind of trouble, the usual procedure is a conference between the Dean and one or two of his fraternity brothers, usually resulting in a more intelligent decision than would be possible in the case of men without mature and level headed undergraduate intimates.

Turning now from the secondary to the primary business of the College, I have to report progress along the general directions indicated in my previous reports.

The only formal legislation of importance passed by the Faculty is the abolition of English B as one of the courses required for the degree of Bachelor of Arts. This action does not imply that the Faculty regards English as an unnecessary study for undergraduates. It merely means that the department of English feels that the only students for whom English B was of significance would continue to elect the subject. A year's required work in English remains. The department will be justified in holding the Freshmen in English A to a more rigid standard of accomplishment in the elementary technique of writing than has been the case in the past. It is, therefore, not anticipated that we shall find less literate candidates presenting themselves for the degree in the future than has been the case during the existence of English B.

The Freshman course in Contemporary Civilization is gradually exerting in several important directions the influence upon the work of the College that was anticipated when it was organized. The course is not primarily a channel through which a department may present an introduction to the learning which it regards as its own. It is based upon the belief that students should be instructed regarding the world of men, of nature and of peoples which constitutes their present-day environment. This atmosphere of breadth and cooperation is

now bearing its natural fruit. In the department of History, for example, the courses have been reorganized so as to conform both to the content and the spirit of the work in Contemporary Civilization. Formerly, in most colleges, the courses in History were arranged chronologically. For example, American History was likely to be covered by three courses, one from 1492 to 1788, the next from 1789 to 1847, and the last from 1848 perhaps to 1900. This arrangement certainly covered the ground from the point of view of the department, but not at all from the point of view of the student who could elect only one year of American History. In the new arrangement of courses the chronological sequence is only secondary in its significance. The courses are primarily concerned with the development of ideas and with movements, and hence cannot be bound to stop short when a certain date is reached. The following partial list of titles of courses in the Announcement of the College for 1922-1923 amply illustrates the change of emphasis: "Institutional history of the United States from 1788 to the present;" "Anglo-American constitutional history;" "Social and industrial history of the western world;" "World politics and imperialism in the nineteenth and twentieth centuries;" "The foundations of modern Europe."

Instruction in the development of the arts of painting, sculpture and architecture, referred to in my report of last year, has taken an important place in the curriculum with surprising promptness. The students recognized the value of the work instantaneously. Under the present able and enthusiastic direction it seems certain that a serious gap in our college offering has at last been adequately filled. Due to the cooperation of the School of Practical Arts and the School of Architecture in making certain of their courses available for properly qualified College students, and the opportunities at the Metropolitan Museum, Columbia College presents unusual facilities for scholarly and useful work in this field.

For several years attempts have been made to organize one or more courses in science which aim to acquaint the student with the development of scientific ideas, and the more significant results of modern inquiry. Serious but unavailing effort

was made to include material of this nature in the course in Contemporary Civilization for Freshmen. The scientific departments, however, rightly felt that nothing but shoddy and superficial work could be done by students who were entirely ignorant of laboratory method. As well attempt to teach surgery to a blind man.

Early last fall representatives of various of the scientific departments expressed their conviction that a broader course in science than any in our curriculum would serve a useful purpose. Our students in chemistry, for example, acquire much information about reactions, but very little regarding the origin of the science of chemistry and its place in the world of ideas. As a result of these conferences a committee from the departments of Chemistry, Mathematics, Physics and Zoology was appointed to consider the problem, and if practicable to prepare an outline and syllabus for a course in science. It was realized at the start that a "vaudeville" course in which a professor from each department presented the material which particularly concerned his field could not be a permanent success. Both instructor and student soon lose interest in a course which is left to the unorganized initiative of members of departments as remote from each other as Chemistry, Zoology and Mathematics. It was also clear that the course should be open only to students who have taken enough laboratory science to have a first hand familiarity with scientific method. The Committee found it impracticable actually to prepare a syllabus and finally decided to secure the cooperation of a scholar of the broadest horizon who should work in cooperation with them and under their advice during the year 1922-1923 in the study of the whole question. The results of this study ought to be an outline and syllabus of a course which will be offered in Columbia College in the year 1923-1924. It is hoped that such a course may avoid the dangerous rocks of scientific rigor which stand like Scylla on one side, and the Charybdis-like whirlpool of words on the other. This method of approach to the baffling problem of instruction in general science is, so far as I know, unique, and gives excellent promise of results of importance not only for Columbia but for collegiate instruction in general.

The studies referred to in my report for the year 1920-1921 regarding a new type of examination have been carried forward steadily. Perhaps it ought to be remarked that although these examinations were first studied by psychologists, and are often referred to as "psychological" they are in fact no more psychological than any other good examination. Any examination which gives the examiner the information that he desires must be based, either consciously or unconsciously, upon sound psychological principles.

Among the departments that have used the new type of examination in one or more courses may be mentioned Economics, History, Government, Physics, Psychology, Zoology, Philosophy, and Contemporary Civilization. In each case the final examination has consisted of two parts, one of which is of the newer type and consists of many "true-false" questions, "completion tests" and "recognition tests." This portion of the examination particularly tests the ability of the student to use simple judgments on the subject matter of the course, and on the more factual aspects of the work. The other portion of the examination consists of questions that test more directly powers of exposition, the more complicated and sustained exercise of judgment, and knowledge of more extensive relations than can be tested directly in the short questions of the new type. For example, in the department of Physics the new type questions are sufficiently numerous to cover the subject matter of the course rather thoroughly, and to determine without any doubt what portions of the work the student has failed to master. These questions show up weak spots in a most embarrassing manner. This part of the examination is supplemented by a few carefully selected problems which determine whether the student can apply his knowledge in a clear and sustained manner. Very careful studies are made of the correlation between the results of the two parts of the examination. As yet we have not gathered a sufficient body of data from enough departments to warrant a final conclusion. It is certain, however, that the correlation is high.

If it should turn out that the correlation between the new type of questions and the ability to work problems is higher than

the correlation between the ability to work two sets of problems of equal difficulty, it would be proper to omit the problem portion of the examination entirely. For in that case an estimate of the ability of the student to work problems would be more accurately indicated by the new type examinations than by the actual working of any one set of problems. We are not yet ready to make such a statement. It does appear, however, that the portion of the test used for admission to college which is devoted to language predicts the ability of the Freshmen to carry the work of the Spring Session in English more accurately than the work of the Winter Session in English predicts that ability. This may be due to the fact that the English course of the Winter Session deals with composition while that of the Spring Session has more to do with literature.

It is clear from our experience with these examinations that the preparation and scoring of the new type of examinations cannot be accurately performed without expert guidance. For this reason experiments of the isolated instructor who goes ahead without advice are likely to prove disastrous to the students, and valueless to the instructor. Not until there are enough teachers trained for this kind of work will it be possible for our schools and colleges to adopt the new type of examination with confidence. In the mean time, it is the duty and the privilege of the few institutions that are able to do so to carry forward this interesting and important experiment.

Some idea of the state of scholarship in the College may be gathered from a study of the list of students on probation, and of men who have merited commendation for their excellent academic work. During the year 254 individuals, or about 12 per cent. of the entire student body, have been on probation for one or more half-sessions. Probation indicates a standing so low that a continuation of work of similar grade would mean withdrawal from College. The length of time that students remain on probation is indicated as follows:

On probation for only one half-session	160
On probation for only two half-sessions	63
On probation for three half-sessions	29
On probation for four half-sessions	<u>2</u>
	254

The fate of the members of this group is indicated as follows:

Withdrawn from College before June, 1922	115
Removed from probation	95
Continued on probation, June, 1922	<u>44</u>
	254

On comparing the grades obtained on the Intelligence Test used for admission to College by the men on probation with those obtained by the entire student body, it appears that median grade for the probation students is 73, as against 79 for the whole College. Almost exactly one-fourth of the probation men have grades on the Intelligence Test above the median of the College. A few men with very high Intelligence Tests have been on probation. In every case the reason for poor academic work is clear, and in no case do the instructors of such students report that lack of ability is the reason for the low standing. In fact, experience with the Intelligence Test indicates that it is the most reliable instrument that we possess for giving the information that it purports to present.

At the end of each Session it is customary to write a note of appreciation to each student in the College who has done his academic work with distinction. A grade which if maintained for the entire course would entitle a student to consideration for Phi Beta Kappa usually warrants such recognition. During the past year 415 students have received such letters. Of these men only 16 per cent. are below the median of the College on the Intelligence Test.

The next step for the development of Columbia College can best be accomplished, it is felt, by the erection on South Field of a building which shall contain a dining room, a grill or Commons, ample space for student organizations, the University Gymnasium, and rooms which will relieve the pressure on Hamilton Hall. This building would not imply any expansion in the size of the College, but would provide adequately for our present registration.

Such a building furnishes the keystone of our arch. The two approaches afforded by our academic work on one side, and the facilities of Baker Field on the other cannot be more

than a temporary structure until this connecting unit is in position. Until the place in our Columbia education which this building would take is adequately occupied, we are not equipped to bear the burden that we ought to carry.

With an attractive dining room, grill, Commons, and small rooms where special dinners can be served, a serious objection on the part of parents to sending their sons to Columbia would be removed, and at the same time a constructive social force in the college would be created. At present we are under the humiliating necessity of admitting to parents and prospective students that apart from the overcrowded and uncollegiate Commons, the small restaurants on Amsterdam Avenue are the usual boarding places. The opportunity of eating with friends in an attractive college dining hall conducted by able and careful dietitians presents a very different picture.

The advantage of having a hall where student dances and social events may take place would also be very great. To hold these activities on college ground rather than in the city hotels would do a great deal to bind our students to Columbia.

At the present time the permanent student activities on which we count very heavily for the maintenance of morale among our student body and contact with our Alumni, are quite inadequately and inconveniently housed. Some of our most important student organizations like the Philolexian Society and various of our musical clubs, literally have no place to meet or carry on their affairs. The resources of Earl Hall, although they will be greatly improved under the new administration, are utterly inadequate to furnish meeting rooms for men who are interested in our extra-curricular activities. The gain in morale that would follow the furnishing of offices for our college papers and other organizations, all on the same floor of a building, can hardly be overestimated.

Hamilton Hall contains recitation rooms, offices, and the College Study which occupies two large rooms on the second floor. If it seems wise at some later time to allow the college to expand, another building for similar purposes will be called for. In order to care properly for our present registration it would be very desirable as a temporary measure to provide a

few recitation rooms and a larger number of offices in the new building.

It is my desire that the entire second floor of Hamilton Hall should be given over to library and seminar room purposes. If this were done it would be possible to accommodate our Honors students, who constitute one of the most important and promising groups of students in College at the present time, with excellent opportunities for study and conference. There are also various courses in Economics, Government, and History that would gain greatly by meeting in a room where books are available. This change would involve transferring the offices and recitation rooms on that floor elsewhere.

In order that the plans for the completion of University Hall may be carried out, the University Gymnasium must be moved from that building. To place it on South Field is ideal for the department of Physical Education. Adequate provisions for locker rooms, lavatories and bathing facilities could be made in the new building. If there were rooms for the minor sports it would be possible to carry on these sports much more effectively. In some cases actual danger to the health of our students would be removed.

The construction of this building is the one great desideratum in order that the policy of educating the whole man may be carried out. It is believed that with the existing spirit of cooperation between faculty and student, the danger which is very genuine in many institutions, of allowing secondary elements of education to assume primary positions will be avoided. If this can be accomplished, the product of Columbia College in well balanced and well trained young manhood is bound to become a power in the community and the country.

Respectfully submitted,

HERBERT E. HAWKES,

Dean

June 30, 1922

SCHOOL OF LAW

REPORT OF THE DEAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1922

To the President of the University

SIR:

I have the honor to submit the report for the School of Law for the academic year ending June 30, 1922.

The registration of the School was as follows:

Graduate Students	2
Third Year—Class of 1922	164
Second Year—Class of 1923	166
First Year—Class of 1924	312
Non-Matriculated Students	48
	<hr/>
Total	692
Summer Session	257
	<hr/>
Less Duplications	949
	<hr/>
<i>Net Total</i>	777

Noteworthy features of the registration are the increase in numbers despite a more rigorous application of our rules of admission and the establishment of more exacting standards of scholarship, and the number of approved colleges and universities, 109 in all, whose graduates were represented in our student body.

During the year the degree of Bachelor of Law was awarded to 174 candidates and the degree of Master of Law was awarded to one candidate. Twenty-five candidates failed to receive the degree because of deficiencies in final examinations.

As foreshadowed in my report for last year earnest consideration has been given, during the past year, to the problem

of selecting in a more discriminating way than has hitherto been our practice, those on whom the University is to confer its degree, as evidence of their fitness, by reason of their liberal and technical training, to become members of the legal profession.

In the course of its deliberations the Faculty of Law has had the benefit of the active public discussion of the educational requirements for admission to the bar precipitated by the action of the American Bar Association, taken at its 1921 meeting recommending a uniform minimum standard for admission to the bar. The standard recommended included, among other requirements, two years of college training, three years of law school training and recognition that the period of training in part-time law schools must be prolonged in order that it may be approximately equivalent to that of full-time schools.

The discussion which followed these proposals developed wide spread interest, not only in the profession but among the laity, and revealed how far we are from any unanimity of opinion with respect to the right and duty of the state to apply the selective process to those who aspire to be clothed with the privilege of performing the lawyer's function in administering our laws. This discussion has served a useful purpose in reminding us that legal education in the United States is still only a step removed from the era of the proprietary school and that it is still influenced by the "trade guild" tradition of our profession. The discussion has given occasion also for the revival in modified form of the political theory that in this country no burdensome restrictions should be placed on admission to the bar. It was even gravely urged by one of the great educational foundations that the public nature of the lawyer's function in a democracy makes it essential that access to the bar should be kept open to the great bulk of the people and from this it was argued that a type of law school admittedly inferior in scholarship and superficial in its training should be fostered to the end that our bar may be a truly democratic institution.

The lawyer, in any community requiring a bar examination be it noted, is a representative of his social or economic class,

chosen for professional preferment on the basis of a selective process. It is, I believe, obvious that in the application of this selective process the profession of law, because of its public and political character, must not be allowed to become the monopoly of any social or economic class, but it is, I believe, equally obvious that it is unnecessary to make of democracy a cult of ignorance and incompetency in order to avoid any such improbable eventuality.

The problem of securing the adequate performance of the functions in law administration assigned to the bar through the processes of legal education will never be solved in this country by the preservation of a superficial system of training for the bar or by our exhibiting any particular solicitude for the young men who are seeking to enter the bar as an easy substitute for trade or business or for the earning of a livelihood by manual labor, whatever their wealth or social position. It does involve the adoption of standards of admission to the bar applicable uniformly to all those seeking admission to it, which will insure the selection of the competent representatives of all classes of society and exact of them something more than a superficial training.

It involves the raising of standards, the improvement or abolition of superficial schools, not their recognition and preservation as one of the necessary evils of democracy. Especially does it require the strengthening of our system of liberal and professional education, and its adaptation to the needs and situation of the youth of the country of slender financial resources, from which our bar has traditionally been recruited. A democracy worthy of preservation will seek and find such a solution in preference to the weak acceptance of the dictum that it must be perpetually condemned to suffer from the inadequate training and incompetence of lawyers who shape and administer its laws.

The action of the American Bar Association already referred to, its endorsement by the Conference of Bar Association Delegates at a special meeting held in Washington last February, which was probably the most representative gathering of lawyers ever held in the United States, and the similar action

of several State Bar Associations leave no doubt which solution the organized bar is to seek and indicates clearly that the legal profession will not be content much longer to lag behind other professions in its educational standards.

Whatever view may be held of the public control of admission to the bar, there can be, I think, no well founded difference of opinion as to the right and duty of an institution situated as is Columbia, to make a serious effort to reserve the benefits of its training for those competent to profit by it. Its trusteeship of the funds entrusted to its care demands that it should make the most effective use of those funds practicable. The crowding of its class rooms and libraries with eager students, beyond its present capacity and the detrimental influence of the presence there of students who are unwilling or unable to profit by their opportunities, indicate unmistakably that our duty is to place increasing emphasis on the advantages to be derived from a discriminating selection of our student body.

In the past no great stress has been placed on the exclusion from the school of those whose records indicated their unfitness for our degree provided they satisfied our entrance requirements. In many instances it was possible under our rules for such a student to remain in the school two or even three years, although there was no probability that he would ever succeed in winning his degree. But the steady growth of the school has compelled us to take measures to eliminate this class of students from the school altogether. During the past year a new system of recording and averaging the students' grades has been adopted with the special object of gauging more accurately the general sufficiency of each student's attainment. By these rules students falling below a certain minimum grade are automatically excluded from the school. During the past year seventy-eight students were excluded under this rule and our experience indicates that the standards adopted will prove to be an effective means of eliminating from our student body those who are unable or unwilling to do the work necessary to acquire proficiency in legal studies.

When the college degree was made the basis of admission to the law school it was assumed that the first degree in liberal

arts or science of the better American colleges was a certificate of fitness to do successfully the work of the law school, but experience has demonstrated that this assumption was a false one and that the college degree is at most only presumptive evidence of such fitness. Liberal college training is in general of the highest importance to the lawyer and much can be said in support of the view that in the long run it is more important to him than the purely technical training of the professional school, but it is becoming increasingly evident that with the steady progress in the popularization of higher education American colleges are turning out too large a number of graduates whose "education" is of the most superficial character. The social experiences of college life, the not too strenuous contact with art, literature and science which may be gained by skimming lightly the college curriculum with its liberal sprinkling of electives, it may be urged, have a certain cultural value, but they fall far short of fitting one to do the intensive intellectual work necessary for the mastery of the intricacies of the law and for gaining some insight into its relations to our social structure. Too often the college graduate begins law study with mind undisciplined, with the critical faculty undeveloped, without the habit of logical thought, and with little or none of those powers of discrimination and analysis which should be the first fruits of a liberal education. Far too much time during the first year of law school is devoted to supplying these deficiencies. If the law school is to do its best and most effective work, its time and energy should not be directed toward doing the work of the college and a way must be found to select at the outset those candidates for admission to it who in point of intellectual training are qualified to begin law study.

With this object in view the university has authorized the application of a specially devised psychological test to all first year law students for several years to come for the purpose of enabling us to develop, through a process of experimentation and comparison, a satisfactory method for the selection of students entering the law school.

The psychological intelligence test has been effectively em-

ployed as a method of testing mental capacity and development under varying conditions, but its precise object and what can be accomplished by it are not generally understood. The psychological test is no magic method of revealing qualities of mind which cannot be discovered by the ordinary educational processes of college and professional school. It is no absolute measure of mentality, for obviously there can be no absolute standard of measurement. It is not true, as has been sometimes stated of it, that by its adoption an educational institution may avoid the application of the educational process to students whose unfitness for it would not otherwise have been discovered. What is claimed for it by the psychologists and what appears to be demonstrated by its use in Columbia College, is that it affords a speedy and trustworthy method of ascertaining in advance the general mental fitness of the student to profit by college training, without waiting for one or two years of college experience to demonstrate his capacity to do acceptably the work of the college.

Until the past year, no psychological examination had been devised for testing the intellectual development of college graduates or especially those qualities of mind which are necessary to the student if he is to pursue the study of law successfully. It was therefore deemed advisable to invite the assistance of the psychologists of the University under the leadership of Professor E. L. Thorndike in preparing such a test for the members of the entering class for three successive years, the results of the test to form the basis of study and comparison with the law school records of the students examined, both by the examiners and the law faculty. It will thus be possible to gather a body of data of great importance in perfecting a method of selecting the members of the law school student body and in verifying and comparing the value and trustworthiness of the method adopted. Although during this period the careers and standing of students will not be affected as a result of the psychological test, it is entirely within the limits of conservative statement to say that the results of the first test indicate clearly that it will be possible at least to adopt a psychological test by the intelligent application of which it

will be possible to eliminate from entering classes those who are not qualified by natural aptitude and previous training to take up law study and whose presence in the school will tend to lessen the effectiveness of its work.

During the year the joint Committee of the Faculty of Law and the Faculty of Political Science, appointed to consider and report on the advisability of adopting a course of law study leading to an advanced degree, has completed its deliberations and submitted its report. The report has been approved by the University Council and now awaits action by the Trustees of the University. Without attempting to set forth the substance of the report in detail, it suffices to say that it recommends the adoption of such a course of study for graduate students in law for a period of at least one year of residence leading to a doctorate in law. The degree is to be administered by an administrative board appointed by the President of which the Dean of the Law School is to be chairman. The program and method of study recommended is of especial interest. The candidate, in advance of matriculation, is to submit a complete record of his educational experience, and to outline the investigation which he proposes to make. His program of study is then to be determined with reference to his special aptitude and needs. While attendance upon courses may be required, special emphasis is to be placed on research carried on by the candidate, independently of regular courses, under the guidance of the members of the faculty whose subjects are most closely related to the subject of investigation and with special reference to its relation to economics and the social sciences, and finally the results of his research must be embodied in a dissertation showing originality and making a substantial contribution to legal science. The recommendation that the degree to be awarded for this work be a doctorate in law, the exact form of the degree to be determined after conference with the representatives of the four universities now awarding a doctorate in law for advanced study in law, was based on two considerations, the one historical, the other practical. The doctorate in law as the suitable means of recognition of advanced study in legal science has back of it some cen-

turies of tradition. It was deemed to be the appropriate degree to be awarded for advanced law study long before the establishment of the doctorate in philosophy, which has now come, through long usage, to be regarded as the appropriate degree to be awarded for advanced study in the liberal arts and sciences, and to have a definite non-professional connotation. That the question of the appropriate degree to be awarded for advanced law study has not sooner arisen is due to the fact that only in comparatively recent times has English law as distinguished from the Civil law become in any proper sense a subject of university study. That time has now arrived and we shall do well not to disregard the advantages which experience and tradition have given to us in making adequate provision for it now.

The practical consideration favoring the award of the doctorate in law is the fact already noted that it is now being awarded by four universities for advanced law study, and the further fact that the award of a suitable and attractive degree is a strong inducement to students to carry on graduate studies. The experience at Columbia and elsewhere demonstrates that the doctorate in philosophy is not such an inducement to law students, whereas the experience at those institutions awarding the doctorate in law and the extensive correspondence of my own office during the past two years with students contemplating advanced law study leave no doubt that the doctorate in law is regarded as appropriate and desirable by the graduates of American law schools desiring to prosecute their studies beyond the mere professional training leading to the degree of Bachelor of Laws and that the Doctorate in Philosophy is not so regarded. During the past year we have been obliged to decline to receive a number of candidates for the doctorate in law because of the uncertainty whether the report of the Committee would be adopted. It is to be hoped that this uncertainty may be removed during the coming year and that we shall be in a position to take the next essential step if the science of law is to become in the largest and most complete sense a university study at Columbia.

The curriculum of the American law school is in some

respects a makeshift, the resultant of forces many of which bear little logical relation to each other. The exigencies of the personnel of the teaching staff, the form and scope of particular text or case books, the constant tendency manifest in most educational enterprises to multiply courses, the undue overlapping of courses and the failure of any school in recent years to make a systematic revision of its curriculum are some of the elements contributing to the failure of law school curricula to realize to the fullest extent the needs and tendencies of present day legal education. A revision of the present law school curriculum with sole reference to the content of the course and its orderly and effective presentation would undoubtedly result in a saving of time and energy. It ought to result in a more scientific distribution and arrangement of the program of studies.

More than a year ago our faculty took up the consideration of this question with the purpose of making a thorough study of it, but more pressing matters required its postponement. It will be one of the first and most important matters to be taken up during the coming year.

A point of serious difficulty in curriculum building is the number and character of elective courses. With the pressure of the demand for a full college course before beginning law school and the practical necessity of beginning practice at the age of twenty-five or six, can the three-year law course available to most professional students be made to supply both technical training and the liberalizing influence of courses such as Legal History, Roman Law, Jurisprudence and the like? Must the curriculum leading to the first degree in law be narrowly technical or may there be a judicious admixture of those courses which tend to give to the lawyer a wider outlook and more balanced judgment of the nature and function of law? It will have to be confessed that until such time as students of law in professional schools are in a position to pursue a unified course of six years or more in which both technical and liberal training are interwoven and pursued with the same thoroughness with which they now carry on the work of the professional school, there can be no ideal solution of this problem. When it is remembered, however,

that no curriculum has ever been devised, or probably ever will be, which will cover the whole field of technical law and that the purpose of the law course is not so much the accumulation of knowledge of the technical details of law as acquaintance with its nature and its fundamental doctrines, the development of capacity on the part of the lawyer to use them, it becomes apparent that there is room for a liberal offering of elective courses in the three-year law school course.

The fear which has been expressed that the presence of elective courses in the three-year curriculum would destroy the unity of aim and coherence of the law course essential to professional training leaves out of account two important restraining influences. It is doubtful whether in any educational enterprise the courses of students are planned with greater care or with a more distinct purpose of giving them unity of aim and coherence than in a modern law school. An important part of the work of the dean of a university law school is the consultation with his students for the purpose of aiding them in the selection and arrangement of a progression of studies adapted to their needs. His advice is eagerly sought and usually followed.

Moreover, candidates for the bar are examined on Bills and Notes, on Suretyship and generally on those subjects which constitute the more fundamental parts of a lawyer's technical knowledge. They are not examined in Roman law, in International Law, or other subjects which are of value to the student desiring a broad training in law, but are not of immediate practical importance in the daily practice of law. There is therefore little danger that the average student's course will not be reasonably coherent so far as his technical training is concerned. On the other hand, the student who, for example, wishes to specialize in admiralty or in international law so as to enter the foreign service of the State Department or in Roman law or modern Civil Law so as to become qualified to represent an American law firm abroad, might well substitute one of these subjects for courses such, for example, as an advanced course in Future Interests or Public Service Companies or for that part of Constitutional Law dealing with the relation between the

Federal and state governments which the student may have studied in college; or for Bankruptcy or Code Pleading, not to mention other subjects. Furthermore the rule in force at Columbia that a student failing in one course may not substitute another course for it, but must complete such course satisfactorily is a safeguard against abuse.

After all the merit of a liberal system of electives in a law curriculum cannot be weighed and measured by *a priori* generalization, it can only be judged in the light of experience of its actual working. So judged there is no warrant for saying that with proper organization it may not give the best results attainable so long as the period of strictly professional training is limited to three years.

For some years past we have been endeavoring to work out a systematic and well-balanced course of instruction in Pleading and Practice of a type which could be satisfactorily given in law school and which in course of time ought to result in some scholarly contributions to the solution of the vexed problem of improving our system of procedure. A fundamental difficulty in approaching this ideal has been the difficulty of securing competent teachers who have in addition to the requisite practical experience a vital and abiding interest in the subject.

We are now for the first time in some years in a position to offer courses in Pleading and Practice arranged in logical sequence and given by instructors who fully meet these requirements. In the first year there is offered a course in Common Law Pleading which all students are required to take not only because of its value as training in the art of pleading but because of the light it throws on the origin and development of the doctrines of substantive law. In the second year two courses are offered. The first, Trial Practice, deals with the subject of the jurisdiction of courts and the procedure in trials, including the function and powers of judge and jury and the method of trying issues of fact and of law. The second course, Code Pleading, deals with the subject of reformed pleading under the codes and the simplified practice acts now in force in most states.

During the third year two courses are offered, one, Federal Jurisdiction and Procedure, and the other, New York Code Practice, their content being indicated by their titles. It will be observed that none of these courses except the course in New York Code Practice is limited in its application to any particular local jurisdiction and that they are available and of value to students intending to practice in practically any part of the United States.

I believe that this disposition of the subject of pleading and procedure will afford an adequate and satisfactory solution of our problem and that distinct progress should now be made in the direction not only of adequately training our students in this difficult branch of the law but toward the scientific development of the art of pleading and practice.

During the past year provision has been made for two new courses—one, Illegal Contracts and Combinations dealing generally with illegality and its consequences in business transactions relating to both capital and labor under the common law and current statutory regulations of commerce and industry, is given by Professor Oliphant. The other, Industrial Relations, will be given by Professor Dowling. This course will deal with the legal problems raised by the relations of labor organizations to employers, and the legal solutions of these problems which are gradually being worked out by the courts. The past thirty years have seen the great combinations of capital brought under the sway of legal rules partly enacted by legislation and partly worked out by the courts and by administrative boards and commissions. The time is now ripe for a similar extension of both the benefits and the restraints of law to labor combinations and to controversies between labor and capital. The present extra-legal methods of settlement of such controversies which in effect is the waging of private war, wasteful to the parties concerned and injurious to the public cannot permanently endure in a society committed to a system of social order organized on a basis of law and justice. It is for the courts aided by legislatures to work out a system of law which shall ultimately com-

pose such controversies by judicial methods and which shall recognize that both labor and capital like private individuals have rights to be protected as well as duties and responsibilities which may be exacted, in the social interest, by the processes of the law. It is for the law schools an important task to systematize this body of legal doctrine as it develops and there already exists a mass of material in the form of judicial decisions requiring study and analysis by modern law school methods as an important step in the development of this new body of law.

To build up the scholarly morale and achievement of a professional school as well as any other type of educational institution, it is necessary to show respect for and emphasize the worth of scholarship. That there might be no misplaced emphasis in student life of the Law School the trustees of the University have created fifteen honorary Kent Scholarships to be awarded each year as a means of honoring the fifteen men in the school who have won the highest distinction in scholarship. To be selected a member of this group will be an honor equal to any that the University can bestow and will be tangible evidence of the estimate which the School of Law places on the worth of scholarly achievement in law study.

The past year has brought important changes in the personnel of the law faculty by the retirement of Professors Abbott and Terry from law teaching and the retirement of Professor Cook, after three years of service at Columbia to become a member of the Yale Law School Faculty. Professor Abbott came to Columbia fifteen years ago from Stanford University Law School, of which institution he was then dean. A lawyer of great learning, particularly in the law of real property, in which subject he had specialized for many years, and a man of unusual and engaging personality and a teacher of exceptional gifts, he at once won for himself a unique place in the affectionate regard of our students and his colleagues in the Faculty. The students of all his classes share the regret of his associates in the Faculty at his going. He possesses an unusual knowledge of legal literature and the debt of gratitude the University owes to him for his years of distinguished service

as a teacher is enhanced by the continuous assistance he has rendered in building up the Law Library.

Professor Terry began his service as a teacher in Columbia Law School thirty years ago, a service which was continuous except for three years' absence from 1895 to 1897. He possesses rare talent as a teacher which in his long period of service have made his course in Contracts known wherever the case method of law teaching is known. He was especially effective with first year men, many of whom, under his vigorous and searching interrogation, came to appreciate for the first time that the mind is capable of use as an instrument for solving the difficult problems of life and that the capacity for forming logical judgments, the power of analysis, and discrimination, are of the first importance in the daily life and work of the lawyer.

One of the interesting events of the year was the impromptu gathering in the Library of students and Faculty to bid Professors Abbott and Terry an affectionate farewell. Brief speeches were made by them and by representatives of the student body and Faculty which were notable for their fineness of feeling and for the insight they revealed into the true significance of the lives of these men and their service to the University. The Class of 1921 presented to the University Professor Abbott's portrait in oil, executed by Mr. Leo Mielziner, and the class of 1924, Professor Terry's last class in Contracts, presented his portrait, painted by Mr. Orlando Rouland.

It would be difficult to find two men differing more widely in many respects than Professors Abbott and Terry, yet each in his own way has made an invaluable contribution to the life and growth of Columbia Law School and each richly merits the sentiment of gratitude and affection which a whole generation of our graduates feels for them. There could be no better illustration if one were needed of the truth that the members of a law faculty need not, and indeed should not, all be cast in one mould to render the highest and most distinguished service. We shall not see their like again and it would be a mistake to attempt in any literal sense to "fill their

places." We must rather bring to our faculty young men of promise because of their intellectual power, their scholarship, their ability as teachers, and their personality, and give to them the opportunity each in his own way to make his own place in the life and work of the University.

It was with this purpose that Professor Noel T. Dowling, professor of law in the University of Minnesota, and Professor Edwin M. Patterson, professor of law in the University of Iowa, were appointed to associate professorships in the Faculty of Law beginning with the academic year 1922-3.

Professor Dowling is a graduate of Vanderbilt University. He received his A.M. from Columbia for work in Public Law and Political Science in 1911, and graduated from Columbia Law School in 1912. He became professor of law in the University of Minnesota in 1919. Professor Patterson, A.B. and LL.B., of the University of Missouri, carried on special studies in law in the University of Chicago and Harvard and received the degree of S.J.D., from Harvard in 1920. He taught law successfully at the University of Texas and the University of Colorado before his appointment to the Faculty of Law at Iowa in 1900. Both are members of the bar and have had experience in practice.

We are fortunate also in having associated with our Faculty as visiting professor for the coming year Professor Orrin K. McMurray, of the University of California Law School. Professor McMurray's long and notable service as a lawyer and a law teacher and writer in our State and University makes him a welcome addition to our Faculty.

These changes in the membership of our Faculty have necessitated some changes in the arrangement of courses, the more important of which will here be noted.

The course in Contracts will be given by Professor Oliphant.

The course in Property III will be given by Professor McMurray, the other property courses being given by Professor Richard Powell. Professor McMurray will also give the course in Conflict of Laws and Sales (Professor Underhill Moore being absent on sabbatical leave part of next year), and a special course in English Legal History. Professor Dowling is to give the courses in Bankruptcy, Industrial

Relations, Carrier's and Suretyship. Professor Patterson is to give the courses in Common Law Pleading, Equity I, and Equity III, Professor Y. B. Smith is to give the course in Code Pleading and Mr. Medina is to give the new course in Federal Jurisdiction and Procedure.

Professor John Bassett Moore has received leave of absence during the next academic year to enable him to attend as a judge of the new Permanent Court of International Justice at The Hague. During his absence, his work in International Law will be carried on by Professor Edwin M. Borchard of Yale.

The steady growth in number of students and in influence of the Summer Session in law is demonstrating its usefulness as a part of our organization for the training of lawyers. It is well attended by students from other schools and it is also attended by our own students, not only for the purpose of shortening the total period of law study, as was anticipated, but for the purpose of supplementing the study which can be pursued during the usual three-year course. During recent years there has been a growing tendency on the part of our graduates to acquire credits substantially in excess of the required seventy-six points. These additional credits have been secured in the Summer Session courses in law, and the significance of this practice is that many of our students, through the opportunity it affords are extending their knowledge of law beyond our degree requirements, without, however, prolonging their period of study. The Summer Session also affords opportunity for the occasional offering of instruction which cannot be regularly offered as a permanent part of our educational work. During the summer of 1922, provision has been made for a series of conferences in Jurisprudence under the guidance of Professor W. W. Cook, Professor John Dewey and Dean Pound.

It is hoped that these conferences will bring together a group of advanced students and teachers of law from this and other Universities for study and conference in a way that would not be possible during the regular sessions of the University. There are already indications that this experiment will be an educational success, and that conferences of this type dealing

with various phases of legal philosophy and history may become an established feature of our Summer Session and, in conjunction with our system of elective courses in law, become a practicable method of liberalizing law training and legal thought.

Excellent business management and a fine spirit of cooperation on the part of the Board of Editors, with the liberal support of the University, are solving the financial problems of the Columbia Law Review, with respect to which I have had too often to appeal to the University and to our own Alumni. This result so earnestly to be desired, however, cannot become an accomplished fact or remain a permanent condition without more adequate support of our Alumni as subscribers. The Review only asks the support which it merits as a scholarly and scientific journal of high character, actually worth to the practicing lawyer and to the student of the law far more than its subscription price.

The work of building up the law library is progressing satisfactorily. A change of policy whereby appropriations are to be made more regularly and evenly, as to the amounts appropriated, gives great advantages in planning the development of the library systematically with respect to current legal literature and in the more economical expenditure of the amounts appropriated. We shall doubtless never reach that fortunate state where we shall be in a position to purchase all the books which we desire and indeed feel that we ought to have, but we are going steadily forward with the work of making our library a more complete and effective instrumentality for carrying on the educational work of the school, not only in this generation, but in those that are to come. We will not, however, carry out the policy which has been adopted of making our library a satisfactory laboratory for carrying on the work of legal scholarship unless substantial sums may from time to time be secured for filling gaps in our collections.

The restoration of Furnald Hall as a dormitory for graduate students has ameliorated a condition which was seriously affecting our ability to provide suitable living quarters for students coming to us from a distance and hence tending to

impair our growth and influence as a national law school. This condition will not be completely remedied until we have attractive dormitory accommodations permanently set apart for our students. I earnestly invite the attention of the President and Trustees to the importance of dealing with this problem in an adequate and permanent way as soon as the resources of the University will permit.

We look forward to the time when the crowded condition in Kent Hall and the lack of suitable lecture-rooms will be remedied by giving to the Law School the use of the whole building and by making certain minor physical changes in the building better adapting it to our use. We need two additional lecture rooms, one to seat about 150 students, and the other about half that number. We need a room for the use of moot courts and student organizations whose activities are of educational value. The seats in our larger lecture rooms should be placed on an inclined plane, so that class-room discussion can be carried on more easily, and we need an additional library reading room for the use of advanced students and for the shelving of our international law, public law and foreign law collections.

During the past year, our student body has shown a commendable disposition to take an active and helpful interest in matters pertaining to the general welfare and progress of the school. This has resulted in the adoption of a student constitution and the creation of a Student Council for the purpose of cooperating with the Faculty in promoting the best interests of the school. The spirit thus exhibited is one which ought to be predominant in a professional school. Properly stimulated and developed, it should strengthen the influence of the school and add substantially to its educational advantages.

I am happy to report the gift to the University by the graduating class of 1922 of a substantial sum of money to be expended under the direction of the Dean for the benefit of the Law School and several gifts of books for the library. Of especial interest is the gift by Gustavus L. Kirby, Esq., '98L, of several rare volumes of early statutes. The spirit of loyalty and devotion to the ideals of the

Law School which prompted this and many similar gifts and which brought about the remarkable gathering of our students and graduates at the Law School dinner last winter is an unusual but valuable asset to any professional school. Rightly encouraged and directed, it should strengthen the influence of our school and of the educational ideals which it represents, and should be a vital force in the future development of our school and in carrying on the work of enlightening the bar as to the need and utility of better educational standards.

On the whole, the year has been one of encouraging progress not alone in achievement but in the promise which it holds out for larger and better accomplishment and in the hope for steady and more rapid progress toward the realization of the ideals of legal education for which the school has been striving.

Respectfully submitted,

HARLAN F. STONE,

Dean

June 30, 1922

COLLEGE OF PHYSICIANS AND SURGEONS

REPORT OF THE DEAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1922

To the President of the University

SIR:

I have the honor to submit the following report of the work at the College of Physicians and Surgeons for the year ending June 30th, 1922.

Following the completion of the affiliation between the University and the Presbyterian Hospital and the assurance that the land and funds for new buildings would be supplied, the next problem was the study of the details of the plans for the new organization. Before architectural plans themselves could be made, it was important to work out what the functions of the new center were to be, in order that the laboratories, class-rooms, dispensary and wards might be so co-ordinated as to function as a single unit. The architect, Mr. James Gamble Rogers, was insistent that his structural problem could best be solved if the functional demands were first clearly established.

Through the generosity of a friend of the two institutions, the dean was able to make an extended inspection of many of the medical schools and hospitals abroad. Although this trip was hurried and made in vacation time, it proved of great value in providing a background for better visualizing the problem. Paris, Lyons, Lille, Strasbourg, Brussels, Vienna, Zürich, Berlin, Hamburg, Cologne, Heidelberg, Tübingen, Frankfurt, Freiburg, Leipzig, Copenhagen, London, Newcastle, Edinburgh, Glasgow, Oxford and Cambridge were visited and many valuable ideas obtained from some of the leaders in medical education in these places.

The collection and compilation of much statistical and other material was one of the first functions of the Joint Administrative Board. The Joint Administrative Board has

been fortunate in obtaining as its Executive Officer, Dr. C. C. Burlingame. After eight years in administrative work in psychiatric hospitals he became associated with one of the large silk manufacturers where he had valuable experience in working out many organization problems of health, sanitation, housing, feeding and other labor questions. Following this came two years abroad as Executive Officer of the American Red Cross in Paris with their many hospitals and large supply service. In this latter work his efforts were rewarded by several foreign decorations.

The early conception of the problem was to plan and erect buildings for a general hospital with its out-patient department and a school for teaching undergraduate medicine. Actually the present mission is more complex than this. From the educational standpoint the University is already doing more in medicine than offering courses leading to the M.D. degree. There are the so-called University courses given under the Faculty of Pure Science in the departments of Anatomy, Bacteriology, Biological Chemistry, Physiology, etc., leading to A.M. and Ph.D. degrees. Courses for graduates in Medicine are now being offered and only await further development on a broader basis. The Institute of Public Health has been founded and its organization has been begun. The School of Dentistry has been carried on in connection with the medical school for a number of years. The teaching of nurses should also be on a university basis and if hospitals are to make proper use of social service workers, their training should also be a university function.

If each one of these schools is to be independent, each with its own separate organization, its own plant and its own separate departments, there will be great and unnecessary reduplication and waste of money and effort. They are all dealing with the medical subjects as represented by the different departments but in varying degrees and amounts. It seems wiser that the different schools should have separate administration but that the departments should be truly university departments, each serving the different schools according to their varying needs.

On the hospital side there is further complexity. In addition to the general hospital, there is need and should be opportunity for various special hospitals of which the Sloane Maternity is the first example. But if each hospital has its own power plant, laundry, purchasing department, etc., there will again be much waste. Centralization of common utilities, not only between the different hospitals but also for the whole group, seems the wiser policy. This seems especially true of the out-patient department with its various functions of diagnosis, treatment of ambulatory cases, admission to wards of cases requiring beds, further care of such cases when they again become able to walk, and follow-up work, as well as teaching and research. These are some of the problems which have been studied during this past year and on whose solution will depend so much the character of the buildings to be erected.

Beginning July 1st, 1921, the departments of Medicine and Surgery were put on the vocational basis. This has proved on the whole a success. This type of organization is not completely satisfactory and some details will undoubtedly have to be modified as time goes on. One feature proved to be a distinct failure and has already been amended. The members of these departments who were on the vocational basis were expected to have as much private practice within the hospital as they felt they could handle without interfering with their academic duties, but *no fees* were charged for such work. Instead of making it easier for these men to regulate the amount and character of their private work, this method proved a handicap to them. It was most distasteful to the very patients whom the departments wished to attract and made it more difficult to turn over to others the cases in which the members of the staff had no especial scientific or other interest. On June 1st, therefore, a change was made and private patients are now charged for professional services by the hospital. The fees collected by the Hospital are turned over to the University to be used for additional salaries for all the members of the professional group who are working in the hospital, and so contributing to the care of the patient, whether this work

be done in the ward, operating room or laboratory. It is hoped and expected that this will also provide resources for the laboratory and research work.

Considerable advance has been made in the last few years toward the solution of this difficult problem of the organization of the clinical departments. Varying forms are being tried out in the different schools and each is profiting from the experience of the others. Two ideas have been pretty widely accepted; first, that the more important group in the department be so protected from the demands of private practice that they may devote their main time and efforts to their academic work; second, that the department should include men who are on a part-time basis. The best method of obtaining this protection for the vocational group is still a mooted question. Many believe that this can best be obtained if these men are allowed a limited amount of private practice within the hospital for which they are paid directly by the patient, and this view is shared by many within the University. There seem, however, valid arguments against it. As long as there is a direct relation between an individual's income and the amount of private practice he does there will always be some difficulty in adjusting the amount of the latter. The functions of a clinical department are manifold and include care of the sick in the wards, out-patient department and private pavilion, as well as teaching and research. In order to fulfil all of these functions each department should be so organized as to include individuals of varied abilities. It will be far simpler to build up such a group and to assign the work if the financial return to the individual does not depend on the relative amount of time and effort he spends on the care of the private patients. This same factor bears upon the relation between the laboratory and clinical departments. The care of the private patient should be a group responsibility as much as the teaching and research or care of the ward patient, and the individual whose main efforts are in the laboratory or who is bearing the brunt of the teaching work should not be unduly handicapped financially because of the character of his duties.

In the surgical department the care of the ward service at the Presbyterian Hospital has been entirely carried on by men on the vocational basis. On the medical side the part-time men have shared in this work with very satisfactory results. It is planned to introduce the part-time men more into the ward service on the surgical side. Because of limited operating room facilities this has been rather difficult to work out.

It seems wiser to adjust the admixture of part and full-time men according to the character and abilities of the men available rather than by any set rule. It should be possible for men to change from the vocational form to the avocational or vice versa. Such change should be a gradual one if necessary. Otherwise it will require both courage and capital for a man to suddenly shift from the vocational to the avocational. It takes time to establish a private practice of supporting size, even if intensive training has made the individual especially skilled. Unless this change can be made naturally and without undue disturbance, the departments will tend to become "frozen" and the paths for promotion be blocked.

The reports of the Committee on Medical Education of the American Medical Association seem to show that the medical schools of the country are graduating enough doctors to supply the needs of the country at large. There is a very real lack in the rural districts but this is more than equalized by the overcrowding in the cities. Until the opportunities in the rural districts are such as to attract the younger graduates this problem will not be solved by enlarging the schools. The number of students who desire to study medicine has increased markedly in recent years. Most of the schools have been compelled to limit their classes. This has brought to the schools the new and difficult problem of selecting from the sometimes long list of applicants those best fitted for the study and practice of medicine. Academic standing alone cannot be relied upon and other qualifications must be taken into consideration. One of the most valuable aids in proper selection is the personal opinion of those with whom the students have come into intimate contact during their collegiate work. The group of men in Columbia College have been untiring in their

efforts in furnishing us with data in this regard and their estimates have been proved correct by the records of these men in the school in a very high percentage of instances. Our sincere appreciation of this work is acknowledged to Dean Hawkes and his associates. Similar contacts have been established in some of the other colleges from which our students come and it is hoped to develop this still further. Aid is expected also from some studies by the department of Neurology and Psychiatry. The overcrowded curriculum has been amended in the first and second year. That of the third year is at present under consideration. It is well realized that but a small portion of the field of medicine with its fundamental sciences can be covered in four or even five or six years. Our object is to confine the instruction as far as possible to fundamentals, to train the students in powers of observation and deductive reasoning so that they may go ahead with their own education after leaving the school. This cannot be accomplished if the student's time and energy is so largely used up by the demands of a full and fixed curriculum, such as has existed in most of our schools in the recent past. The finer details of the specialties must be left to later years, but the fundamental training should be such that it will give them a broad conception of the field of medicine as a whole, whether they later decide to enter the field of general practice or one of the special fields. They should appreciate their duties toward the health of the community as well as toward the cure of the individual patient. No general plan of Public Health work can succeed unless the practicing physician realizes that he is the "first aid post" of the entire structure. No physician can do his duty to his patient unless he realizes that individual's relationship to the health of the community as well as the existing organizations for maintaining that condition.

Two new appointments have been made during the year to full professorships. Dr. Horatio B. Williams has been made Dalton Professor of Physiology to succeed Professor Frederic S. Lee who became Research Professor last year.

Professor Williams graduated from the University of Syracuse, receiving his A.B. in 1900 and his M.D. in 1905.

He has done extensive work in the realm of physics, especially in the development of the electrocardiograph.

Dr. Haven Emerson has been promoted from Lecturer in Public Health to Professor of Public Health Administration. This change has been made not only to widen the scope of the instruction to the undergraduate body but also for two other reasons: to carry out one of the specific requests of the DeLamar Will regarding public instruction in matters of health and to develop a department which can, together with the departments of Bacteriology, Biological Chemistry, Physiology and Medicine, supply instruction needed for Public Health workers. In this way the Institute of Public Health can be developed intrinsically rather than as a separate extrinsic institution.

Dr. Emerson received the degree of A.B. from Harvard in 1896 and the degrees of A.M. and M.D. from Columbia in 1899. He served in the departments of Physiology and Medicine 1902-1914, following which he was Commissioner of Health of New York City. He obtained the rank of Colonel in the Medical Corps, serving with the American Expeditionary Forces, in charge of epidemiology. After his return from overseas, he became director of the Cleveland Hospital Survey and was Professor of Preventive Medicine and Hygiene at Cornell University. For the year 1920-21 he was medical director of the Veterans' Bureau, and has been associated with many public health organizations and interests. He was made Lecturer on Public Health at Columbia in 1921.

The year just ending has been extremely satisfactory in the work of all the branches of the Department of Anatomy. The scope of the central course 107-110, Vertebrate Morphology, combining a presentation of organogeny and adult visceral anatomy, has been considerably extended by the additions to the teaching equipment which have resulted from the research work of the department during the year. The accessions consist chiefly of important reptilian and mammalian increments in the comparative series of the thoracic viscera, embryological reconstructions of the heart and lungs, and the corresponding accessions to the microphotographic slide equipment

for demonstration of the serial sections on which these are based.

Professor Elwyn has added a very valuable set of reconstructions demonstrating the development of the coelomic cavity and its subdivisions in the mammalian embryo, elucidating the ontogenetic interrelations of the pericardial, pleural and peritoneal cavities.

A number of students in the First Year have taken elective work in the Research Laboratory, and have increased the demonstration-series by very excellent reconstructions of special cardiac and pulmonary problems and of the Marsupial embryonic shoulder-girdle. These will, when completed, round out the teaching collections to an admirable and long desired degree. This group of students have also become responsible for the comparative myological work desired by the department in some of its recent accessions of fresh material.

Course 107-110 has this year included a summary of the History of Medicine, in direct connection with the morphological consideration of the organs of circulation and respiration. The introduction of this topic into the medical curriculum, made desirable by its general cultural bearing on medical education, and now required by the recent action of the State legislature, is properly taken over by the Department of Anatomy because the history of medicine is fundamentally the history of the gradual extension of morphological knowledge and of the functional interpretations based thereon. The main facts of this evolution and the historical personages and publications therewith associated can best and most profitably be brought to the attention of the medical student in direct conjunction with a concrete example furnished by an important anatomical topic in the intensive study of which he is at the time engaged. An admirable opportunity for such a combination is offered in the consideration of the thorax and its visceral contents, the organs of circulation and respiration.

The historical part of the departmental library has been developed very fully, and with this object constantly kept in view. It was therefore in a position to furnish in a very satis-

factory manner the documentary historical illustrations required for this addition to the educational tender of the Department. The collection of the teaching slides has accordingly been very materially extended in this direction during the year, and is now nearly complete, rendering a satisfactory historical presentation of the field selected possible within a relatively short period of time by the projection of the more important figures and related passages of the text photographed from the original sources.

The chief investigations of the department during the year have been directed towards the satisfactory completion of a research into the phylogeny and ontogeny of the vertebrate respiratory organs, a problem which has long engaged their closest attention.

The present year has been most notable in this respect as their relations to the New York Zoological Society furnished them with certain long desired links in the pulmonary evolutionary chain. Accessions, both from the reptilian phylum and from mammalian types, exceedingly rare and difficult to obtain in a condition suitable for the work, have reached them from the collections of the Society. These include, in addition to the foetal specimen of the Cetacean *Kogia* and *Choeropsis*, the Pigmy Hippopotamus secured from the same source at the close of last year, examples of the Gorilla and the rare Rodents *Pedetes* and *Dinomys* whose affinities with the fundamental group of the Hystricomorphs, make them of the utmost importance and significance to their interpretation of the pulmonary organization of the mammalia.

The Wistar Institute of Anatomy and Biology of Philadelphia has placed its recently acquired extensive and unique series of Didelphys embryos at the service of this department, thus enabling them to deal comprehensively with the pulmonary problem presented by the ontogeny of this native Marsupial in its relation to the embryo of the placental mammal. So, while the department confidently looks forward to further confirmation, through continued accessions of pertinent material, the ground has been sufficiently cultivated and has produced results which warrant them in proceeding with the

early publication of the Memoir, as soon as the necessary arrangements for adequate illustration can be completed.

During the year the rearrangements in the curriculum in the fundamental years were completed, very largely through the able and unremitting efforts of Professor Elwyn, who assumed the entire labor of putting the proposed plan into shape for discussion and deliberation by the Medical Faculty, which has tentatively adopted the proposal suggested, to be carried out as an experiment, during the next academic year.

From the standpoint of anatomical teaching at this school it is confidently expected that the new organization of the morphological instruction will produce the most beneficial results, enabling the department to offer a well-balanced and complete course including, in addition to its intrinsic morphological details, the associated topics of evolution, heredity and variation and the above outlined consideration of the history of medicine, all of which have hitherto suffered from lack of the time necessary for their adequate treatment.

During the past year no extensive changes, either in personnel or in equipment of the Department of Bacteriology, have been made.

The only change in the teaching plan has been an alteration of the so-called advanced course in Bacteriology 201. This course was formerly so given that it presupposed no knowledge of bacteriology, but started from the very beginning of bacteriological technique, carrying students through lines similar to those followed in the undergraduate course, but very much more extensive and thorough. During the past year this has been modified in order to make the course more valuable for students of public health and graduate students in general. No one has been admitted to the course without preliminary training equivalent to the undergraduate course in bacteriology given to medical students, and it has, therefore, been possible to conduct the work along more specifically technical lines, such as detailed training in the preparation of special media and extensive carrier work with stools and nasopharyngeal secretions. Towards the middle and end of the course individual groups of students were allowed to

specialize on some particular problem in epidemiological bacteriology, and because of the small number taking the course, a more intensive practical laboratory treatment of individual subjects has been possible. Other courses have been conducted in a general way along the lines outlined in previous reports. Professor Zinsser believes that the additional lecture granted for bacteriology during the first half of the year, namely, the course listed as 205 in the catalogue, has justified itself during the year, in that it has made possible a correlation of immunology, bacteriology and public health problems to the students. This weekly lecture has made it possible to get the entire group studying bacteriology and immunology together once a week for a general correlation of the many necessarily disjointed facts the two other courses have dealt with.

The teaching has been very much facilitated during the year by the fact that the present staff has now been together for three years, and a more extensive use of the specific training of individuals could be made in connection with the courses. Thus, the chemical training of Professor Mueller, the pathological training of Dr. Frederic Parker, Jr., and the more particularly technical bacteriological training of Miss Kuttner have made it possible to give the students from time to time detailed treatment of special subjects from various points of view. In addition to this, Mr. Petroff has been utilized for certain phases of tuberculosis, and Mrs. Parker has assisted in the work on the hemophile bacteria which she has been studying for a great many years.

In addition to the graduate courses listed, special work has been going on as follows:

Professor Mueller has continued his studies on products of hydrolysis of casein, which grew out of his special studies on bacterial nutrition. Although this problem took a turn which made it almost purely a chemical problem, it was necessary to follow up this observation completely before he could revert to his nutritional studies, and this investigation has now yielded one and possibly two new protein cleavage products which may be a new amino acid and is obviously of very great interest. He is planning to spend his vacation in Cambridge, England,

obtaining advice and further training along these lines with Professor Gowland Hopkins. It is hoped that during the summer the purely chemical observations on this problem can be completed and he will return in the fall to continue the problem of bacterial nutrition, of which this was a byproduct.

Dr. Frederic Parker continued his studies on a poison forming diphtheroid isolated from scarlet fever ears, results of which are being at the present appraised for possible publication. With Mrs. J. T. Parker, he made studies on the fluctuation of virulence of a strain of influenza bacillus, results of which are now being prepared for publication, and he assisted Professor Zinsser in preliminary studies on a filtrable virus from herpetic vesicles and saliva. He is going for the summer to the School of Tropical Medicine in London.

Miss Kuttner has continued the study of the bacteriophage problem, the details of which are too extensive to be here reported. She is now writing up her results for presentation in partial fulfillment of her Doctor of Philosophy degree.

Miss Callow has worked with the staphylococcus bacteriophage, with which she has made a number of very important observations, one of which is now in press. Her recent success in washing the bacteriophage principle away from staphylococcus cultures and the fact that they have been able to precipitate this material with alcohol, retaining its activity, are results which promise perhaps to clear up some of the theoretical aspects of this subject.

Mr. Petroff has been continuing the lines of work begun by Professor Zinsser last year, on the study of specific hypersensitiveness in tuberculosis, more particularly the study of the antigenic properties of the non-protein constituents of the tubercle bacillus, and the production of skin hypersensitiveness without infection, problems which at the present time are beginning to show results which may be of considerable importance.

Mr. John Rice has spent the entire winter making a very careful study of hemolytic streptococci with the primary purpose of working out problems of toxicity and virulence. He has now collected almost two hundred hemolytic organisms

obtained from scarlet fever throats by special arrangement made with the Willard Parker during the winter, and has completed the first step which consists in a more careful study of toxin formation by the streptococcus than Professor Zinsser thinks has ever been made before. His work, too, will have to be continued, and when his leave of absence as Professor of Bacteriology at Bucknell University has expired, he will return with all his cultures and continue the work under their supervision by frequent contact. The work will eventually be presented as a dissertation for a Ph.D. at Columbia.

Dr. Hopkins has continued the study of the Ringworm fungi and has begun the study of the effects of the bismuth compounds in syphilitic rabbits. In this work he has been very effectively assisted by Mr. Iwamoto, a Japanese part-time student, who has developed into an unusually good technician and faithful worker.

Dr. Chu has put in a considerable amount of time assisting Dr. Frederic Parker and Mr. Rice.

Dr. Ornstein and Miss Stone have been working in Mr. Petroff's room, Dr. Ornstein particularly on the Wilboltz reaction in tuberculosis, but this work, owing to the irregular and limited time at Dr. Ornstein's disposal, has not made very satisfactory progress.

Professor Zinsser has continued his studies on the proteose-like constituents of bacteria and their antigenic significance, and has made preliminary studies on filtrable virus from herpetic lesions and the common cold. In the former work he has been assisted from time to time by Mrs. J. T. Parker, and in the latter by Dr. Frederic Parker.

Instruction has been given during the year in the Department of Biological Chemistry to the following types of students, in the numbers indicated (nearly all for one full year): Medical—100, Dental—6, Pharmacal—2, Graduate—29, Special—7, totaling 144. Of the graduate students (29), eleven were candidates for the Ph.D., and six for the A.M., degree, with biological chemistry as their subject of major interest; whereas twelve took other "major" subjects, with biological

chemistry as one of their "minor" subjects. The seven special students were advanced workers who were not candidates for a degree. The two pharmcal students were candidates for the degree of B.S. in pharmacy.

All of the rooms in the annex have been equipped during the year and are now in active use in the work of instruction and research.

Effective plans have been made to coöperate hereafter with the Departments of Pharmacology and Pathology in giving an advanced course in toxicology. A chemical section of the course in pharmacology, required of second-year students of medicine, has been given in their laboratory in coöperation with the Department of Pharmacology. Research under the auspices of the Department of Dermatology and Syphilology has been conducted actively in their laboratory, in various chemical phases, by officers of that department.

Their department has continued to perform effective service for the various departments by supplying distilled water and absolute alcohol at cost prices. Their breeding stock of albino rats, kept under careful control and supervision, has enabled them to supply a large number of animals to other departments.

Research has been conducted successfully along many lines, including the following: various aspects of the vitamine problem; histochemistry of tissues; various problems in the biochemistry of dentition, and of dental pathology and therapy; the quantitative determination of salivary mucin; effects of arsenic medication; constitution of liver lecithins; biochemical properties of bacteria and yeasts; biochemistry of endocrins.

A generous gift from Mr. Herman A. Metz has been devoted to the promotion of research on vitamines by Dr. Casimir Funk assisted by Dr. Julia B. Paton. This research has involved a considerable increase in the department's equipment for experimental studies on animals. Some of the rooms in the annex (opened last year) are now in use in this relation.

During the year Drs. Harrow and Funk have issued books on vitamines, and Dr. Berman one on internal secretions. The Professor of Biochemistry has had editorial charge, for the

Journal of Dental Research, of the preparation of Gregory's volume on the evolution of human dentition, the proceeds of the sale of which accrue to the endowment fund of that journal.

The Biochemical Association, with the approval of the Trustees of the University, has been incorporated and is about to resume publication of the *Biochemical Bulletin*. The Association has also been given charge of the management of the *Journal of Dental Research*.

The International Association for Dental Research, which was organized a year ago at the suggestion of the department, is now actively developing, with effective sections in this country and Canada. The New York section recently held a public meeting in the lecture hall of the New York Academy of Medicine. This association promises to be a very effective factor in the development of dental research.

During the year, a study of dental education has been conducted for the Carnegie Foundation.

The Department of Obstetrics and Gynecology has continued the efforts to improve its methods of instruction during the past year. The physical alterations in the Sloane Hospital for Women being completed, the new post-partum, cardiac and toxic and gynecological follow-up and reorganized antepartum clinics have, for the first time, been available for instruction of students during the whole year. A suitable manikin and lecture room have been provided and a working library opened for study and conference. The cooperation and harmony of the entire staff in working for the improvement of the department has been noteworthy; and the addition of Dr. James Corscaden and Dr. Everett Bunzel to the department has increased its efficiency.

The instruction given in the Third Year by lectures and quizzes has not been entirely satisfactory. Plans are being worked out to better this by giving more practical work during the year. The limited space in the Hospital makes it a difficult problem. There has been marked improvement in the instruction given during the Fourth Year, especially in obstetrics. In addition to the former plan of having the student see and deliver cases, quizzes, lectures and manikin exercises

have been given. Besides working on the wards, students have been assigned to the post-partum and follow-up clinic.

Students have also attended the bimonthly Staff conferences, at which the work of the Hospital is reviewed and some topic on obstetrics or gynecology discussed.

The discussion at the Staff conferences of combined problems that arise has been of great benefit both to instructors and students.

The instruction in gynecology can be improved. The use of the Vanderbilt Clinic for clinical instruction has not been worked out satisfactorily, partly owing to physical conditions. The number of beds available for gynecological cases in Sloane Hospital is not sufficient for all of the patients attending the Clinic who need hospital care. This leads to confusion and overcrowding of the Clinic and lessens the interest of the clinical attendants as no hospital facilities can be given them. This problem is also being worked out to meet present conditions and better instruction in gynecology will be given during the coming year. In planning for the future, however, more beds should be added to the gynecological service as no reduction can be made on the present obstetrical service.

The cooperation of other departments, both clinical and laboratory, in the work at Sloane Hospital becomes more and more satisfactory and encouraging. The departments of Pathology, Bacteriology, Medicine, Surgery, Diseases of Children, Dermatology and Ophthalmology have all taken an active part in the service and their help and advice have been greatly appreciated.

All autopsy work is carried on by a member of the staff under the direction of Professor Johnson of the Department of Pathology. The bacteriological technicians are acting under the direction and supervision of the Professor of Bacteriology. The Department of Medicine is cooperating extensively in the care of patients with respiratory cardiovascular and renal conditions, the blood chemistry of these cases being handled in the Metabolic Division of this department. Tissue diagnosis work is carried on in the surgical laboratories and the Surgical Consultant is active in the gynecological service. The Depart-

ment of Diseases of Children takes charge of the feeding of all the babies, both during their hospital stay and the follow-up work. The most satisfactory work is being carried on among the expectant mothers with syphilis, as well as with the treatment of the syphilitic new-born, by the Department of Dermatology and Syphilology.

Many demands are being made on the department for opportunities for post-graduate work. With this in mind the length of the interne service in Sloane Hospital has been increased from 4 months to a year and additional internship provided. A number of research students could be obtained if rooms and funds were available.

The development of the Social Service Department of the Hospital has been another great asset. Its methods are being studied and copied by other institutions and requests for resident and post-graduate work in this branch of the service are increasing. One student from Smith College has given a post-graduate year in the department and her analysis of a year's obstetric cases from a social service standpoint form the basis of her thesis for graduation. Another student from Smith College will work in the department during the coming year. This department of the Hospital can be developed into an important teaching branch as the results of its work have a great bearing on the medical care of many cases.

A number of combined research problems are now under way, namely: "Immunology of the Newborn" in cooperation with the Department of Bacteriology, funds to start the work being given by Mr. W. B. Osgood Field; "Metabolism of the Newborn" in cooperation with the Department of Pathology; "Syphilis of the Newborn" in cooperation with the Department of Syphilology and Dermatology.

During the year the staff of the department have published or read before various societies twelve papers on subjects connected with obstetrics and gynecology. Two of these: "The Blood Chemistry in the Toxemia of Pregnancy" by Professor W. E. Caldwell and "The Complications of Cardiac Disease in Pregnancy" by Dr. W. W. Herrick are worthy of special mention.

The following changes in the personnel of the Department of Pathology have been made for the coming year: Dr. G. F. McCann has resigned to take an appointment in the Department of Pathology at Johns Hopkins; Dr. Henry K. Blake has accepted an internship at the New Haven Hospital, and will be succeeded by Dr. Helen M. Scoville, now a member of the Department of Pathology at Yale University Medical School. Dr. Frederick B. Jennings will be appointed Instructor in Pathology.

During the past year, voluntary research has been carried on in the department by Professor Naosuke Hayashi of the Aichi Medical College, Nagayo, Japan, who completed a study of spirochaetes in the tissues in cases of acute yellow atrophy of the liver; Dr. B. S. Oppenheimer has continued his studies on the pathology of the conduction system; Drs. Alfred F. Hess and Lester J. Unger have been connected with the members of the department in the investigation of rickets; Mr. H. A. Abramson and Mr. S. H. Gray completed an experimental study of diffusion through "lecithin"—collodion membranes. During the summer, Mr. Laurence A. Kohn, a student at Johns Hopkins, worked under the direction of Dr. Zucker in the chemical laboratory. The following students collaborated with the members of the department in the work on rickets: Mrs. V. Kneeland Frantz, the Misses M. Stanley-Brown, M. Strauss, B. B. Stimson, J. V. Lichtenstein, Mrs. Silverberg, and Messrs. E. Klein and S. M. Seidlin.

In research, the Director of the department has continued his work on pellagra. Professor Johnson has taken over and developed the work in gynecological and obstetrical pathology of the Sloane Hospital. Associated with him have been Drs. R. N. Pierson and J. S. Wagner. They have been particularly interested in the bone changes in congenital syphilis. Dr. M. J. Sittenfield has been engaged in the study of the effects of radium and X-ray on experimental tumors. Dr. von Glahn has continued his work on experimental tuberculosis in dogs, with reference to the effect of iodides on the nature of the lesions.

The work on experimental rickets under the grant from the

Commonwealth Fund has been actively prosecuted. Dr. Zucker has made definite progress in his investigation in the nature of the active principles contained in cod liver oil. Studies on the effect of light and other forms of radiant energy have been carried on by Drs. Hess and Unger. Dr. McCann and Miss Gutman have investigated the chemical problems in connection with the work.

In addition to the usual courses in the Department of Pharmacology, two student groups have been doing research on diffusion and on muscle extracts. An important piece of work on the involuntary nervous system and the endocrine glands is nearing completion; some studies on cocaine sensitization have been made, and the action of various benzole derivatives on isolated tissues is now being studied.

The staff of the Department of Physiology for the year 1921-1922 has consisted of Professor F. S. Lee as Research Professor, Associate Professors Burton-Opitz and Pike, Assistant Professors Williams and Scott, Drs. Coombs, Bender, Dinegar, Swift and Hahn. Dr. A. B. Hastings resigned to become a member of the staff of the Rockefeller Institute for Medical Research. Professor Pike has acted as executive officer for the year.

The method of teaching in the medical course has been essentially the same as last year. The lectures have been given by different members of the staff. Professor Burton-Opitz has had general charge of the laboratory work and the demonstrations have been given by Professor Williams.

A noticeable feature of the teaching work of the year was the increase in the number of medical students who enrolled in the optional courses offered by the members of the staff. This was especially noticeable in the courses on "The Physics of X-Rays" and "Clinical Electrocardiography," given by Professor Williams. The course on "The Physics of X-Rays" had not been given since the entry of the United States into the war, but was attended by about 140 students, necessitating its division into two sections. There were about forty students from the third year class in the course on "Clinical Electrocardiography."

The members of the staff have some outside relations of general university interest. Professor Lee, who last year was elected as one of the three American members of the International Association of the Institut Marey of Paris, has been elected Vice-President of the Association. He is also a member of the subcommittee on the relation of the atmosphere to industrial efficiency of the National Research Council. Professor Pike is a member of the executive committee of the general committee on vestibular research of the National Research Council. Professor Williams is chairman of the committee on research methods in Physics. Professor Scott has been appointed consulting physiologist to the United States Public Health Service.

The research of the various members of the staff has been along the lines of the particular interest of each member.

Professor Lee and Dr. J. D. Van Buskirk have continued the work begun by Professor Lee on the changes in certain cardiovascular, respiratory and strength phenomena in rest and during work.

Professor Pike and his collaborators, Drs. Coombs, Glogan, Hahn, Schwenberg and Messrs. Tulgan and Bowen have continued or begun work along various lines.

In collaboration with Professor J. Gordon Wilson and Professor Raymond Dodge, under the auspices of the National Research Council, Professor Pike has been engaged in an investigation of the threshold of stimulation of the semi-circular canals and other portions of the vestibule of the internal ear, and the mechanism of habituation of the animal to continued stimulation. He has also contributed a paper on "Adaptation considered as a special case under the theorem of le Chatelier."

Professor Williams has taken on no new research problems during 1921-1922, but has tried to complete, so far as possible, work already under way on the string galvanometer. A new high-period string galvanometer has been designed and is now under construction. This new galvanometer is designed to have a natural period of $1/10,000$ second and should be serviceable in studies of consonant frequencies in speech and doubtless also in nerve electrophysiology.

The new galvanometer which was designed a year ago for clinical electrocardiography has been perfected and careful tests which have been carried out on the final model show a gratifying correspondence between calculation and actual performance. This instrument, which is smaller and easier to operate than the large ones hitherto in use, is fully equivalent to the large ones in performance in most respects and superior in some.

The work by Professor Scott and his collaborators has concerned mainly physiology of the blood and of fatigue.

At the beginning of the year, the problem which presented itself was the organization of the Department of Practice of Medicine to provide at least for the care of the sick, teaching and research, in a manner comparable in quality to that of preceding years, with a staff composed partly of men receiving no income except from their salaries. Eventually, it was expected that the work of the department would be of a higher order, because some of the men were devoting their entire time to the hospital. To accomplish this, \$25,000 was added to the previously existing department budget, and liberal additions to the laboratory space and facilities were provided at the Presbyterian Hospital, now closely affiliated with the School in the development of a medical teaching center. Certain changes in previous policies appeared to be wise. Up to July 1921, teaching in medicine was conducted in several clinics,—Presbyterian Hospital, Vanderbilt Clinic, Bellevue Hospital, City Hospital, New York Hospital, Roosevelt Hospital, Saint Luke's Hospital, and Montefiore Home, with a rather loosely knit staff and from widely varying points of view. The first alteration, then, was to confine the teaching to the three clinics which were directly under the supervision of the School, i.e., Presbyterian Hospital, Vanderbilt Clinic, and Bellevue Hospital (First Division). This necessitated placing several men identified with the other clinics in the department on the inactive list. By this arrangement, the organization of the clinical teaching was much simplified.

For very definite and obvious reasons, it was decided to

concentrate the research in medicine at the Presbyterian Hospital, and to collect the full time men at this clinic. Considerable readjustment of the Presbyterian Hospital staff was necessary to bring this about. While Dr. Whipple, Director of the Surgical Service, was able to staff the ward service entirely with full time men, it did not seem wise to attempt this on the Medical Service. Consequently, there have been full time and part time men utilized in the organization of both in and out patient services, in which the effort has been made to assign the several men duties for which they are respectively best fitted. Besides the director, there have been eight full time men in the department on duty at the hospital, all of whom have been engaged in research as well as teaching and routine hospital service. Besides these men, there has been one Belgian Fellow, Miss Benedict (an Assistant in Medicine), six part time men, and three residents conducting research in the department laboratories, making in all twenty research workers. Dr. Draper and Dr. Geyelin have special funds with which to prosecute their work. In spite of the confusion and difficulties, in building new and rearranging old laboratories, Professor Palmer feels that very creditable progress has been made in the several fields of investigation which have been undertaken.

All of the full time men have definite routine clinical and teaching duties. Many of the younger full time men have clinical and teaching responsibilities in both the wards and out patient department of the hospital.

Little change has been made in the conduct of the Vanderbilt Clinic and Bellevue Hospital service, the heads remaining the same as in past years.

Professor Palmer is of the opinion that it may be fairly said of the activities at the Presbyterian Hospital, that:—

- (1) The patients have been well cared for.
- (2) The teaching has been of a high order. Considerable individual instruction has been possible.
- (3) The research work is reasonably satisfactory.

Any success that has been achieved has been due to the type of organization that has been instituted. It would have been

impossible to carry on the work of the clinic with anywhere near the efficiency necessary, had it not been for the wide variety of abilities now associated on the staff. Had they been restricted to full time men for their staff, from the standpoint of availability and financial practicability, they would have been greatly handicapped. Furthermore, limited to a strictly full time service, there would have been so little time for research and self-improvement, that from any standpoint, the positions would not be particularly desirable.

Dr. Palmer, with Dr. Atchley and Dr. Loeb, has been studying the general subject of Edema. The first work was the continuation of work that was started at the Rockefeller Hospital, and carried on at Baltimore, a systematic physico-chemical and analytical study of the blood in normal and pathological conditions. From this study, several important leads for further study have come to light. In the first place, they discovered that the concentration of protein had a distinct effect on the conductivity of serum. The magnitude of this effect in gelatin and egg albumin solutions, at varying hydrogen ion concentrations, has been determined. In the blood serum of cases with chronic parenchymatous nephritis, they find an increased conductivity that cannot be explained by any of the known analytical factors. Owing to the importance of the type of edema occurring in these cases, they are investigating further these phenomena. In certain of the cases studied, there appears to be some ion in the blood for which they cannot account. One of the most interesting facts that has come to light is that when edema fluids from any condition (heart disease, nephritis, pleurisy with effusion, cirrhosis, etc.), are compared with blood serum of the respective cases, there are certain features in common. The osmotic pressure of the two fluids is the same, but the albumin content is lower, the salt content in edema fluid is *higher* than that in the serum, while the potassium is lower in the edema fluid than in the serum. When the two fluids (serum and edema fluid) are dialyzed against one another, there is no exchange of ions. They believe this is important evidence in favor of a simple membrane effect and explodes in a fairly simple way some of the time-worn

ideas about edema. Dr. Loeb and Dr. Atchley are also studying the metabolism in nephritis. The necessary nitrogen level at which nitrogen equilibrium can be obtained in these cases is the object of this research.

Together with Dr. Jackson, during the past year, a much improved method for the determination of uric acid has been developed. The method has been simplified since starting work at the Presbyterian Hospital. Dr. Jackson has recently devoted much time to a study of the unidentified non-protein nitrogen in the blood. By very clever technique, working with small amounts of material, even fractions of milligrams, it would seem that a large part of this nitrogen is in the form of adenine nucleotide. Dr. Jackson goes to Boston next year to work in Dr. Peabody's clinic at the Boston City Hospital.

Professor Palmer and Dr. Ladd have for the past three years been studying the antiketogenic power of carbohydrates, in the hopes of enhancing the dietary possibilities in severe diabetes. This problem is being carried on by Dr. Ladd, and considerable practical information has come to light. It appears that if the carbohydrates are computed as grams glucose, and the ketogenic substance, as fatty acids in grams, when the ratio Fatty acids : Glucose exceeds 3.00, the ketone bodies appear in the urine.

Dr. Felty has been working with Professor Palmer on the distribution of chlorides in the serum and red blood corpuscles. While they are not ready to make any definite statement regarding this, it appears that in those diseases where there is a disturbance in chloride metabolism, there are variations in the relative amounts of chloride in the two media. Dr. Felty is to be Assistant Resident at Johns Hopkins next year.

Dr. Bauman has been perfecting several of the materials used as antigens in the testing for anaphylaxis. This has been carried out in connection with Dr. Mackenzie.

Dr. Bigwood, the Belgian Fellow, has been working with Dr. Geyelin on metabolism in epilepsy. There seems to be some indication that convulsions may be predicted through changes in hydrogen ion concentration of the blood. Dr. Geyelin has continued his metabolism work in epilepsy.

Dr. Harrop made some most interesting observations on the Peru expedition. He is continuing this work through the courtesy of the Cero de Pasco Company. It was found that those individuals with the greatest diffusion constant (determined by Krogh's method), were least likely to have mountain sickness. Dr. Harrop, with Miss Benedict's assistance, is developing work in gas analysis, and also working on a new method for the determination of formic acid in blood and urine.

In Dr. Draper's work, the Constitution Clinic has been organized this year at the Hospital. The present personnel consists of Dr. Draper, Mr. Seegal and Mrs. Rothenbaum. The subjects being studied are: (a) Development of a method for the application of physical anthropology to clinical medicine. (b) Methods for correlating information from physiological and bacteriological sources with this anthropological material. (c) Accumulation of data concerning known endocrinopathic states. (d) Accumulation of similar data from cases of pernicious anemia, chronic nephritis with edema, chronic arthritis and ulcer of the stomach. (e) Investigation of the genetics of certain selected diseases. (f) Investigation of the effect of the commercial endocrine extracts upon certain of the lower amphibians, frogs and salamanders. The work of this department has concerned itself this year chiefly with organization and the development of methods. It is hoped that next year some more productive work may be achieved. There have been no publications as yet.

Dr. Dochez reports that for a number of years he and his associates have been interested in the study of acute infections of the respiratory tract. The work has been developed principally along two lines. An effort has been made to treat lobar pneumonia by the use of specific therapeutic sera. In addition, certain studies have been made of the epidemiology of this disease. In the carrying out of both of these efforts, it has been necessary to make a systematic study of the bacteriology of the pneumonias. With the exception of the study of prophylactic inoculation against lobar pneumonia, these lines of work seem temporarily to have reached the limit of

development and of applicability. In order that the study may progress, it has been necessary to seek new modes of attack. As we consider the epidemiology of acute respiratory infections, there seems possibly to be an interdependent relationship between all types of acute respiratory disease. The significance of the common cold and congeners to this relationship has hitherto been largely underestimated. At present, therefore, studies are being conducted concerning the etiology and epidemiology of these types of infections, and an effort is being made to differentiate them clinically. In order to throw some light on the periodicity and the character of the reaction of the community to the successive waves of incidence of the catarrhal fevers, an experimental disease in animals, mouse typhoid, is being studied. The principal object of this study is to determine whether or not individuals in any given community who do not show active manifestations of disease become actively immune during the course of an epidemic. Such an occurrence would be of particular importance in diseases of the respiratory tract, the spread of which is promoted by social contact, and which do not lend themselves readily to the ordinary public health methods of prevention. It would seem that, in order to lessen the incidence of acute respiratory disease, some method of prophylactic immunization must be developed.

During the past year, Dr. Mackenzie has been occupied with (1) studies on the relation of antigen and antibody *in vivo*; (2) the relation of alterations in the serum protein in serum disease to antibody formation and symptoms; (3) the role of allergy in the susceptibility of the Guinea pig to pneumococcus infection.

Dr. Sanger has been working with Dr. Parsons on the treatment of hyperthyroidism. Dr. McAlpin has been studying Hodgkin's disease and the leukaemias, particularly the effect of radiotherapy on the blood pictures and course of the disease.

The course in Second Year Surgery, in which the fundamental principles are taught, was left undisturbed except for a reduction in hours to comply with the effort to reduce the

hours in all departments. Professor Whipple believes the course as conceived and developed by Dr. William C. Clarke is unique in the medical schools of this country. He has failed to find its equal in any surgical department here or abroad. To his mind, it is by far the most valuable part of the Surgical Curriculum.

The Third Year course was continued along the same lines as the previous two years, but, under Dr. van Beuren's careful supervision, fewer hours were wasted by the students in carrying out the schedule. This is the year of surgery which is the most problematical, and is still the subject of experiment. With the reduction in required hours, it would be possible to offer elective work in experimental pathology, and to have the students electing such a course do the experiments in producing abdominal and thoracic lesions for demonstration to the entire class in their required course. This would simplify, to a great extent, their present problem of teaching too much detail and technique to some students whose bent is in no way surgical, and not enough to those thoroughly interested in the subject.

The Fourth Year is open to criticism at present, but with a return to the quarter instead of the trimester, one of the chief obstacles to successful teaching in the surgical clerkships will be removed. The students have had too many interruptions in their clerkship to secure any consecutive or orderly instruction. Not enough time was given them to do ward work or have their cases reviewed. The readjustment of the schedule will help to eliminate the fault.

In connection with the Fourth Year work, a suggestion is made which seems to offer a great opportunity for teaching the student the relation of disease to home and economic conditions, and would be of great value in their follow-up work and social service department in the contemplated expansion. It would be possible and practical to send the clinical clerks, medical and surgical, out to the homes of patients recently discharged to make notes on their condition, do simple dressings and report on the therapeutic results in cases where patients could not return to the Follow-up Clinic. These visits could

be assigned to the clerks in the Discharge Clinic, and could be made after the regular school hours. This would correspond to the out-patient work that the medical student does in Edinburgh as part of his training in medicine, or as is done in the obstetrical work in this city. It would teach the student the problems of practice, and the practical difficulties that theory is faced with in every-day living.

A very distinct advance has been made, however, this year in the introduction of the joint conference between the Presbyterian and Bellevue groups of students and instructors during the last three weeks of each trimester when the analyses of groups of cases from the two hospitals were reported by pairs of students working in the two hospitals. Such lesions as gastric and duodenal ulcer, hernia, goiter and sarcoma of the long bones were assigned for study. The keen interest and genuine rivalry of the two groups were very striking, and it may be stated that perhaps the men most benefited by those conferences were the attending surgeons from the two hospitals. The chagrin at finding defects in their methods of recording clinical data and in the work up of cases is perhaps the most effective stimulus that the two groups could have had. It has resulted in their making several very real and valuable changes in their record systems.

Another advance has been in the use of the Unit Records of the hospital as texts for the students. There has been an amazing absence of checker playing and loafing in the Clerks' Room as compared to former years. The students voluntarily spend the time at the long bench in the Record Room studying case records which they can have for the asking at the Diagnosis File.

The opportunity that is offered the Medical School in planning the new Museum in close proximity to the Record Room and Library is so unique as to bear emphasis here in this report. The Unit Record System has demonstrated beyond a doubt that a hospital case record can be the most useful of all texts. But for the student to get the maximum benefit from the case histories as texts, it is essential that he be saved the time and disadvantage of reviewing too many incomplete or

atypical cases. Thus twenty cases of carefully worked up and thoroughly studied case histories with long follow-up notes on patients with varicose veins or cancer of the stomach or femoral hernia are worth more than a hundred not so carefully studied. This applies especially to the neoplasms. There are unavoidably many cases in every hospital, no matter how well run, where patients come in with tumors, and either refuse operation, or are merely explored, or are lost track of. Such case histories are bad texts because they leave vague impressions with the student. On the other hand, some cases are followed from near the beginning of tumor growth, through operation, subsequent follow-up periods, and come to autopsy in later months or years, or remain well. It is these case records that should be edited and copies or abstracts made for the specimen tables in the teaching museum. It is these case records that should be available for teaching and installation in the Museum Library. This requires time and the effort of an intelligent editor. Now is the time to begin such a library. Such an editor is now available. The Library will prove of untold value in another five years, and can be moved into the teaching museum when the school moves north.

It was in the Surgical Staff reorganization that the most difficult problems were faced. To choose an entire Attending Staff on a basis of full time, hitherto untried in New York, required faith. The choice of the men for the active inside service has been justified by the character of their work, the service they have rendered the patients, their willingness to give, and their daily giving of more time and effort than was expected of them, even on a full time schedule, and finally by their loyalty to the school and hospital in the honest effort to give the strictest full time experiment a thorough trial.

The endeavor has been made to develop careful diagnosis, as far as possible, with the Medical Service, to apply operative measures only when indicated, to eliminate errors in operative and post-operative technique, to analyze the mistakes in diagnosis as shown by operative and pathological findings, and to study more carefully the follow-up results. The weekly staff conferences, which are attended by both surgical and

nursing staff, have done much to accomplish their aims. Minutes of these meetings are kept, changes in technique are discussed, errors in diagnosis, death analyses and follow-up results are read. Dr. Stout or Dr. Clarke discuss the pathological material of the week. Cases of preoperative or post-operative interest are then seen in the Surgical wards. The surgical staff takes part in the weekly clinical-pathological conferences of the entire hospital staff on Thursday mornings.

There has been a beginning made in investigative work by the surgical staff of the Hospital. Dr. St. John is studying experimentally the clinical entity of so-called "massive collapse" of the lung. In cooperation with Dr. Joseph Steiner he is fluoroscoping dogs under various measures which may reproduce the picture seen in clinical cases. Dr. Penfield is working on the experimental pathology of hydrocephalus. Dr. Auchincloss is studying the details of autopsy findings of advanced mammary carcinoma from the standpoint of routes of extension and metastasis. Professor Whipple, with Drs. Bauman and Ingwaldson of the Chemical Laboratory, is investigating the poison or toxic agent responsible for the symptoms in intestinal obstruction. Some thirty animals have been used, and in addition to the chemical studies, the relation of dehydration of blood and tissues to nitrogen retention in the blood and the bacteriology of the portal blood in intestinal obstruction have been studied and these are being prepared for publication. With Dr. Openchowsky, a Russian graduate of the University of Kiev, he has been studying the problem of the fate of normal endothelium in the repair of ligated veins and in the repair of bone injury. Dr. Greenough, the Resident Surgeon, has been studying the blood chemistry of various anesthetics, especially with magnesium sulphate given subcutaneously.

The teaching of Diseases of Children to the Third and Fourth Year classes is now being carried on at Bellevue Hospital where ward and dispensary case teaching is given in small groups and Hospital clinics are held to the entire section four days weekly;

At the Babies Hospital, where a weekly clinic is given to the entire section;

At the Presbyterian Hospital, St. Luke's Hospital and St. Mary's Hospital, where ward and dispensary group teaching is done;

At the Vanderbilt Clinic, where dispensary instruction, chiefly in Infant Feeding, is carried on;

And at Willard Parker Hospital, where instruction in Acute Contagious Diseases is given throughout the year.

In order that the various Hospital Attendings, offering these courses, may hold appropriate College appointments, the departmental personnel has been increased to include

Professor of Diseases of Children,
Three Clinical Professors,
Seven Associates,
Twelve Instructors,
Ten Assistants,
And a clerical staff, all of whom are under salary.

It is felt that the most important development of the year has been the establishment of a Research Laboratory, which has been much needed by the service at Bellevue Hospital, the members of the teaching staff and the students alike.

The Laboratory has been in operation now for eleven months, its influence being already apparent on the character of the ward work, the stimulus offered to the teaching staff through the opportunity for original work and the broadening of the instruction given the students.

Through the generosity of the Department of Laboratories at Bellevue, excellent laboratory space and equipment have been provided and adequate appropriation from the College has made possible the research staff, consisting of a director, an assistant to the director, a technician and nurses.

There is at present being carried out a series of observations on kidney functions in children, blood chemistry in acute diseases, chemistry of the spinal fluid and, jointly with the Department of Pathology, a study of methods of prevention and treatment of rickets.

The Third Year course consists in a weekly didactic or clinical lecture given by Professors and Associates, and a weekly

quiz and recitation on the subject of the lecture throughout the year.

For the first time Hospital Clinics are provided for the Third Year class in sections in which the student is offered an opportunity to apply practically the theory learned in lecture and recitation. This opportunity for practical work has been much needed by the Third Year men.

The Fourth Year, in sections of one quarter of the class, are spending each afternoon in the study of Diseases of Children: four afternoons weekly in small sections on case teaching in the wards and out-patient department; two afternoons weekly in Hospital Clinics.

An additional stimulus to work in this subject is now provided through the establishment of a Fund, the interest of which is allotted as a prize to the student making the best progress during his or her two years, course.

Respectfully submitted,

WILLIAM DARRACH,

Dean

June 30, 1922

INSTITUTE OF CANCER RESEARCH

ENDOWED BY GEORGE CROCKER REPORT OF THE DIRECTOR

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1922

To the President of the University

SIR:

I have the honor to submit the ninth annual report of the Institute of Cancer Research.

There have been no changes in the staff during the past year with the exception of the resignation of Mr. Roy Kegerreis, E.E., who has completed his work on the large experimental x-ray apparatus and is leaving to take a position elsewhere. His place has been taken by a member of the staff of the Physics Department, Mr. H. M. Terrill, M.A.

The customary activities of the staff of the Institute of Cancer Research in instruction of graduate and undergraduate students, not only in the Summer Session but as part of the regular second year course in pathology at the College of Physicians and Surgeons, were carried on as in past years by Professors Wood and Woglom.

Tumors have been supplied to the following individuals and laboratories: Dr. Gyoeri Feldon, Habana, Cuba; Division of Laboratories, Department of Health, Philadelphia; Battle Creek Sanatorium; University of Chicago Medical School; Louisiana State Board Medical Examiners; Toronto General Hospital; Sivertsen Clinic, Minneapolis; Dermatological Research Laboratory, Philadelphia; Washington University Medical School, Saint Louis; Dr. Sanderson, Detroit, Mich.; Western Pennsylvania Hospital; Parke, Davis & Company, Laboratory Division; Dr. Kocher, San Diego, California; Dr. M. Sittenfield, New York; Dr. A. Carrel, Rockefeller Institute.

A list of the more important publications of the members of the laboratory staff during the year follows:

- Digestive activity of the mesenchyme. Vera Danchakoff. *American Journal of Anatomy*, 1921, xxix, 431.
- Massage and metastasis. L. C. Knox. *Annals of Surgery*, 1922, lxxv, 129.
- The relation of the endocrine system to the glycemie reaction following the injection of homologous protein. O. F. Krehbiel and G. L. Rohdenburg. *American Journal of the Medical Sciences*, 1921, clxii, 28.
- Pregnancy and tumor growth. I. Kross. *Journal of Cancer Research*, 1921, vi, 245.
- Parabiosis and tumor growth. I. Kross. *Journal of Cancer Research*, 1921, vi, 121.
- An experimental study of the effects of protein injections upon infections. I. Kross. *Journal of Medical Research*, 1922, xliii, 29.
- Effect of injection of anterior lobe of pituitary gland upon the organs of generation. I. Kross. *American Journal of Obstetrics and Gynecology*, 1922, iv, 19.
- Further investigations of disturbances of blood sugar equilibrium in their relation to neoplasia. G. L. Rohdenburg, O. F. Krehbiel, and A. Bernhard. *Journal of Cancer Research*, 1921, vi, 223.
- Concerning a lytic agent isolated from transplantable animal tumors. G. L. Rohdenburg. *Proceedings of the New York Pathological Society*, January-May, 1921, xxi, 38.
- Experimental tar cancer in mice. Wm. H. Woglom (with Dr. J. A. Murray). *Seventh Scientific Report, Imperial Cancer Research Fund*, London, 1921.
- Cancer—its relation to chronic irritation. Wm. H. Woglom. *The Trained Nurse and Hospital Review*, 1922, lxxviii, 27.
- Cancer. F. C. Wood. *Health News*, 1921, n.s. xxxvi, 170.
- The campaign against cancer. F. C. Wood. *Nebraska State Medical Journal*, September, 1921, vi, 261-266.
- A reply to Dr. Johannes Fibiger on the subject of irritation tumors. F. C. Wood. *Proceedings of the New York Pathological Society*, 1921, n.s. xxi, 122.
- The biological dosage of x-ray. F. C. Wood. *Medical Record*, 1922, ci, 399.
- Cancer: Surgery versus radiation. F. C. Wood. *Long Island Medical Journal*, 1922.
- Research institutes and their value. F. C. Wood. *Science*, 1922, lv, 657.
- Biological determination of radiation dosage. F. C. Wood. *Journal of Radiology*, 1922, iii, 37.

The publication of the *Journal of Cancer Research* which was undertaken last year at the request of the American Association for Cancer Research has been continued under the editorship of Professors Woglom and Prime, and some headway has been made in getting out the back numbers of the *Journal* which had been practically suspended owing to lack of funds.

A number of public addresses were made by the staff of the institution. An unusually pleasant opportunity was offered by the opening of the new physical laboratory of the Huntington Memorial Hospital on May 15, 1922, where Professor Wood, who had been asked to make the address, spoke on Research Institutes and Their Value. No laboratory in this country has been closer to the Institute of Cancer Research in attitude and aspiration than this admirably conducted cancer research institution of Harvard University.

Another phase of extramural activity has developed in our collaboration with the publicity campaign of the American Society for the Control of Cancer, culminating in the so-called Cancer Week of 1921. During this week several members of the staff gave a series of informal talks in New York and the vicinity. Short addresses were given at the University Assembly, to the Barnard and Journalism students, and to the classes of the College of Pharmacy, on the personal application and public health aspects of the effort of physicians to spread a knowledge of the frequency of the occurrence and the importance to the individual of the early recognition of cancer.

The year has been unusually fruitful in important experimental accomplishments.

Professor Woglom has continued his researches on the biology of the cancer cell in an attempt to discover some constant difference between it and the homologous normal cell of the same growth rate.

It is manifestly improper to compare the chemistry of a rapidly growing cancer arising in an organ of the body with that of the quiescent or atrophic cells of this same organ when it is no longer functioning actively, and yet much of the chemical work which has been done on the cancer cell suffers from the lack of this strict control. The more the subject is studied and the more accurately the methods employed are controlled, the less difference is found between the normal and the cancer cells. It is very probable that in the end it will be found that, except for the fact that the cancer cell is usually in a state of rapid growth and in virtue of this dynamic condition is more easily damaged by physical agents, there are no

fundamental differences between it and the healthy cell. Nor would a thoughtful survey of the situation lead to any other conclusion, for unfortunately the cancer cell is well adapted for its life in the body though not a portion of the latter's organization. Nevertheless it may elaborate quite complicated substances normal to the corresponding healthy cell though existing under conditions which are not especially favorable for such activities.

Unless distinct and constant differences can be found it is difficult to see how an effective serum or drug can be devised which would attack the cancer cell and leave unharmed the corresponding normal cell. However, that bridge can only be crossed when much more is known of the vital processes of the normal cell; in the meantime all possible facts must be learned about the life cycle of the cancer cell by studying its growth under experimental conditions in the lower animals.

Professors Wood and Prime have continued their work on the study of the quantity of x-ray required to kill the cells of a great variety of animal tumors. Fortunately the Institute of Cancer Research is in possession of a considerable number of the standard tumors which were first propagated by some of the early investigators of cancer, notably Professor Jensen of Copenhagen. The Jensen rat sarcoma still grows as well as when it was first transplanted some twenty years ago and there is no evidence that the grafting of this tumor cannot continue indefinitely, showing that cancer cells are quite as immortal as the protozoa or as those cells of the embryo chick heart which have just passed their tenth year of life since they were removed from the egg and planted in a test tube. Thus the death of the body is evidently due to the breakdown in the cellular organization as a whole rather than to a lack of growth capacity of the individual cells.

In the course of their studies, Professors Wood and Prime have found that tumors of different types vary greatly in the quantity of x-ray required to kill them, some of the more resistant requiring at least five times that of the most sensitive. They have also been able to demonstrate that these tumors keep their proportionate sensitiveness to x-ray for a period of

observation now amounting to some five years. It has thus been possible to keep alive, by transplanting from one animal to another, a standard biological material by means of which the output of effective x-ray energy from a machine can be studied and accurately determined. One of the recent observations in this connection is that the large continuous current experimental apparatus just completed is much more effective in the destruction of cancer cells than the ordinary type of commercial machine though the amount of current flowing through the x-ray tube and the electrical pressure at which it functions are identical in both instances. Many interesting studies of various phases of this problem are now actively under way and will probably occupy the next two or three years for their solution. Among these are the effect of various metals used as filters of the rays, the loss of energy on the passage of the rays through the structures of the body, and similar problems, all of which have a practical application in the treatment of human cancer.

The great expansion of the general experimental work and the necessary occupation of all available space in the Institute building made it impossible to care for the large number of patients who were applying for x-ray therapy. As the facilities for x-ray treatment for those suffering from cancer are still insufficient in the City, the managers of St. Luke's Hospital decided to open a radiotherapeutic department and place the Director of the Institute of Cancer Research in charge. This enabled us to care for such patients as had been coming to us and also to enlarge greatly the scope of the work. The opportunity thus to apply the results of our experimental researches in the destruction of cancer cells directly to human beings has been of great value to the members of the staff, for it must always be remembered that the interest in the cancer problem focusses upon the disease in man and that its widespread occurrence in the animal kingdom is unimportant except as permitting the study by artificial propagation on a vast scale of growths which are comparable to those growing in human beings. Thus a few months work with animals will supply information which could only be obtained by a half century of clinical observation on human beings.

Dr. Bullock and Miss Curtis have continued their extremely interesting and suggestive experiments, mentioned in last year's report, on the artificial production of cancer in rats. They have added to their original observations there mentioned the extraordinary fact that the offspring of the rats which have developed cancer under irritation show a much greater susceptibility to such irritation than their parents, as far as one strain is concerned. In another strain of animals which are outwardly exactly similar to the susceptible ones, few tumors ever appear though the irritation applied is quantitatively exactly the same, and stranger still, if no irritation is applied, neither strain ever develops cancer. Thus cancer is probably not hereditary, as has often been assumed, but rather there may be transmitted under suitable conditions a sensibility of the tissues to irritation. If sufficient irritation is then given cancer will be produced, if the tissues are not irritated the animal remains in health. These experiments, however, should not be considered as suggesting the probability that such extreme sensibility of tissues occurs in human beings. For this highly sensitized condition in animals is only obtained by most intense concentration of susceptible strains, a thing which never could occur in man. Neither can the results of such experiments on animals be considered as absolutely transferable to human beings. They are valid in regard to one race of mammalia only until it can be shown that the same phenomena occurs in other animals as well. We certainly have no basis for the dogmatic assumption that they apply equally well to man. If, on the other hand, it can be shown that in man certain irritations of a specific nature produce cancer in a large proportion of those exposed to risk, the analogy assumes a greater logical value. There are in fact in man a number of examples of such irritative production of cancer but they are never seen on a large scale. Nor has family liability to cancer yet been demonstrated in a statistically satisfactory manner though it is well known that more cancer occurs in certain families than others. But the number of such families is small and the alternative that they have been more exposed to irritation cannot as yet be denied, and therefore no special sensitiveness can be assumed.

During the year an extremely important and practical paper was published by Dr. L. C. Knox, sometime a member of the Institute staff. The article sums up a long series of difficult and time consuming experiments made to study the effect of rubbing or massage on tumors. It was found that a very small amount of gentle massage to a mouse tumor, not more than a few minutes, would in many instances distribute the tumor all over the body of the little animal. This effect was studied in a large series of different types of tumors and the evidence thus obtained together with the records of some human patients whose tumors had been massaged and distributed, have excited widespread interest among members of the surgical profession. This is another illustration of the great value of animal experiments because those unfortunate persons who have permitted some ignorant member of one of the numerous physico-therapeutic cults to attempt to rub the tumor away have paid the penalty in no uncertain fashion, the tumor being disseminated throughout the body in the course of a few months.

Drs. Rohdenburg and Krehbiel have continued their researches on the relationship of some novel glyceemic reactions to the occurrence of cancer both in man and animals and have about completed a study of the fluctuations in the distribution of certain of the mineral constituents of the body cells as a tumor grows or recedes.

Space does not permit of the discussion of many other interesting phases of research now in progress in the laboratory of the Institute.

Respectfully submitted,
FRANCIS CARTER WOOD,
Director

June 30, 1922

SCHOOLS OF MINES, ENGINEERING AND CHEMISTRY

REPORT OF THE DEAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1922

To the President of the University

SIR:

I have the honor to present to you the following report on the work of the Schools of Mines, Engineering and Chemistry in the academic year just closed.

The number of students registered this year was in the third year 49, second year 56, first year 61, naval officers 14, non-matriculantes 26, total 206. The corresponding total in the previous year was 191. The number of men graduated with engineering degrees was 50, with degree of master of science 14.

There have been very few changes in the staff. The appointment of Mr. Lincoln T. Work, Chem.E., as instructor in chemical engineering, Mr. Thomas P. Clendenin, E.M., as instructor in mineralogy, Mr. Robert T. Livingston, M.E., as instructor in mechanical engineering vice Mr. Ross Taylor, made available through the year the services of three able young teachers. A notable appointment for the coming year is that of Mr. Colin G. Fink, Ph.D., secretary of the American Electro-Chemical Society, as associate in electro-chemistry in the Department of Chemical Engineering. Mr. Fink takes up the development of this branch of applied chemistry with the qualification of notable achievement in research in this field and a broad outlook on electro-chemistry.

On March 15th, after an illness of eight days, George Vincent Wendell, professor of physics, died. Only those who as colleagues or students of his worked with him and drew courage and high ambition from his example of devotion to the highest ideals are able properly to comprehend the magnitude

of the loss to the University through his death. As a teacher of physics he stood in a class by himself, yet not through any freak of genius, but by the steady and unswerving application of the highest intellectual standards combined with the deepest human interest and a fundamental belief in the power of education to develop men. His methods were standard methods, open to adoption by any one, deriving their success no less from his utter devotion to his work than from the clarity of his intellect and the charm of his personality

Coming to Columbia as professor of physics in 1910 with a record of remarkable success as a teacher in the Stevens Institute of Technology and in the Massachusetts Institute of Technology, Professor Wendell's first task was the reorganization of the instruction in physics for engineering students. With this most successfully accomplished, as a member of the Committee on Instruction of this faculty he applied himself with great diligence to the problem of the development of the Schools of Mines, Engineering and Chemistry as university schools of applied science. After the adoption in 1912 of the advanced courses of study in engineering he gave himself on the one hand to the working out of the best relationship between the pre-engineering courses in Columbia College and the professional schools of engineering, and on the other hand to the strengthening of instruction in physics in the engineering school, especially through the development of an unexcelled laboratory for pyrometry and of instruction in this subject. His interest in the coordination of college work with professional engineering instruction led to his being consulted by teachers in many other colleges for assistance in the development of their own courses of instruction. In this field his latest undertaking was as chairman of the Educational Committee of the American Physical Society, which committee has just published a report, prepared under his leadership, on the teaching of physics with special reference to engineering students.

The loss through his untimely death is felt not only throughout the University, but also widely among those interested in engineering education, particularly the teaching of physics. Fortunate are all those who had the privilege of being

associated with him as students or as fellow workers.

There are transmitted herewith copies of the annual reports of the departments which reflect the work of a busy year, reviews more full than the compass of this report will allow of the matters that are engaging the interests of the respective departments.

In the Department of Chemical Engineering changes have been introduced in the curriculum in the direction of greater flexibility with respect to the choice by the students of courses in special fields. For example, students interested in the chemistry of dyes are now able to take as an option an advanced course in dyes given by Professor Bogert. The department has been giving special attention to the preparation of syllabi for all its courses with a view to economizing as far as possible the time of student and teacher. The crowded condition of the laboratories has continued, particularly since in this department there are not only the students who are candidates for the chemical engineering degree, but 12 men working toward the degree of doctor of philosophy and others studying for the master of arts degree. Much work has been done on plans for the proposed new chemical engineering building which is being planned not only to relieve the present crowding, but also to provide space and equipment for undertakings that in the present quarters are quite out of the question. The dominant feature of the new building will be the provision for research through a large number of small research rooms on the one hand and through particularly well equipped laboratories for semi-factory scale experimental work on the other hand. Despite the present limitation of space important additions have been made to the equipment of the chemical engineering laboratories. The department has long desired to have electro-chemistry a strong feature at Columbia and has now the satisfaction of putting this branch of the work in charge of a distinguished electro-chemist and a Columbia College alumnus, Dr. Colin G. Fink. The success of the course given by Professor McKee on Paper Manufacture in the Summer Session of 1921 has resulted in the continuance of the series of Summer Session courses on special industrial subjects. This summer

there will be offered a course on Gas Manufacture by Professor J. J. Morgan who has, through the offices of the American Gas Association, been brought closely in touch with the problems of the large gas plants in New York City. Instruction in the course will be supplemented by lectures given by prominent manufacturers of gas.

The Department of Chemistry submits a very interesting report the main features of which are the account on the one hand of the extensive research activities of the department, twenty-eight published research papers being listed for the year, and on the other hand of the efficient way in which the department is attempting to meet the problem of inadequate laboratory space for undergraduate and graduate students numbering several times as many as Havemeyer Hall was planned to accommodate.

The Department of Civil Engineering reports no essential changes in instruction. It makes a comprehensive report on the operation of the Testing Laboratories of the Civil Engineering Department. These laboratories are operated under a committee of the department in such a way as to make the receipts for tests of various kinds made for outside firms and individuals contribute to the support of research and the purchase of new laboratory equipment. This commercial testing work is classified under three headings, (1) routine testing, (2) testing of new materials and new forms of construction, (3) investigation of the cause of failure of engineering materials and structures. The amount of this work has shown a steady increase since the present method of operation of the testing laboratory went into effect in 1917-18, and appears to be limited only by the lack of space in the laboratories. This laboratory does not so much compete with the ordinary commercial laboratories as supplement them and in fact a considerable portion of the work which comes in here comes through private testing laboratories which desire tests checked up or work undertaken for which those laboratories are not equipped. The Interborough Rapid Transit Company, the New York State Railways, the Building Departments of the Boroughs of the City of New York, the New York Lumber

Trade Association, the Commissioners of the Port of New Orleans, and the U. S. Shipping Board, are among the clients of the Testing Laboratories in the year.

Under the William Richmond Peters Jr. Fund for Engineering Research an exhaustive investigation on the relative strength of masonry work constructed of clay bricks and concrete bricks has been carried out, the results of which will be published in the fall. The addition of an Ansler pendulum type torsion machine to the laboratory equipment is worthy of note. It will be used primarily in an investigation of the manner in which ductile ferrous materials fail.

The Department of Electrical Engineering reports on the use of its new laboratory equipment for alternating currents. Note is made of the publication by Professor Morecroft with the collaboration of Mr. W. A. Curry and Mr. A. Pinto, Columbia 1916, of a large and authoritative book on "The Principles of Radio Communication," and of other publications by Professors Hehre and Slichter. Professor Slichter has just been honored by election to the vice-presidency of the American Institute of Electrical Engineers. It is of interest to note that at this time, when many engineering graduates are finding it difficult to obtain positions, the demand for electrical engineers has held up very well and all the 1922 graduates were well placed before the end of the session.

The Department of Geology and Mineralogy reports a year of exceptional activity and accomplishment. Professor Berkey has been on leave of absence on account of his going in November as geologist of the Roy Chapman Andrews Expedition of the American Museum of Natural History to Mongolia. Already couriers from the expedition have brought back word of important new discoveries. Professor Kemp retired as President of the Geological Society of America in December and on that occasion delivered an address which embodies the results of a life-time study of igneous rocks, intrusions and deposits of ores and minerals. Professor Kemp also published as a bulletin of the State Geological Survey his exhaustive study of the Mt. Marcy quadrangle, which contains almost all the higher peaks of the Adirondacks. This publication

brings to fruition many years of study and difficult survey work in that region. The American Geographical Society has brought out a book by Professor D. W. Johnson on "Battlefields of the World War," a contribution which has attracted exceptional commendation, and gained the award of the Elisha Kent Kane Gold Medal of the Philadelphia Geographical Society. Professor Johnson has been in much demand as a lecturer on geographical and topographical questions and continues as special lecturer at the General Staff College, U. S. Navy, at Newport. The response to the instruction offered in the geology of oil fields by Professor Galloway has been especially gratifying. The administration of the work in geology and mineralogy as a single department has gone on through the year with smoothness, and all the instruction has been well cared for. The department looks forward next to the development of productive scientific work in mineralogy.

The Department of Industrial Engineering will next year be carrying for the first time instruction in the full curriculum of three years. The Trustees have approved changing the title of Professor Rautenstrauch from professor of mechanical engineering to professor of industrial engineering, and have constituted a Department of Industrial Engineering. This action marks the maturity of a plan adopted three years ago making provision for an appropriate type of engineering training the young man who expects to devote himself more immediately to the problems of business organization and management of manufacturing and other industrial undertakings than to technical design, operation, or research. A new associate professorship of industrial engineering is provided. Recommendation for appointment to this position will be made in time for the appointee to take up his work in September.

The report of the Department of Mechanical Engineering, besides discussing general educational questions, outlines the expectation of the department gradually to develop a classification of the subjects of the mechanical engineering curriculum into groups with an offering of optional courses in special fields. This change will result in the requirement that every student shall take a certain number of hours in a given type

of subject, but will have choice as to the actual subjects under each type. It is quite possible that some of these optional courses might be offered in the evening and it is also possible that similar courses might be offered in day or evening hours by specialists from outside the University.

The department has prepared a remarkably complete and detailed set of specifications for each course of instruction to relieve the student of much useless drudgery of note taking and enable him to devote his time directly to the study of the subject in hand. The specifications include not only the topics by days but also text assignments, reading references, commercial literature references and list of problems arranged by topics. It would be of much advantage to students and instructors in mechanical engineering in many institutions throughout the country if some plan could be devised whereby these specifications for courses could be published and made available for general use.

The course in steam turbines for the United States Navy officer students was this year offered by the Westinghouse Electric and Manufacturing Company, one of the two largest manufacturers of steam turbines. The Westinghouse Company spared no effort or expense in making a thorough presentation of the subject of steam turbines and auxiliaries to the classes here. The course was laid out by the Westinghouse engineers in collaboration and the several topics were discussed in each case by that engineer of the company best qualified to do so. The result was highly satisfactory and it is a pleasure to record our appreciation of this example of the best type of cooperation between industries and universities.

The department calls attention, as in former reports, to the great need of further laboratory equipment and of proper space in which to place and use it. In particular a strong case is again made for an adequate machine shop equipment for the instruction of students.

The Department of Mining and Metallurgy reports an increase in the number of students taking courses in these subjects, the twelve researches conducted by students in the ferrous and non-ferrous metallurgical laboratories, the

completion of the program of remodelling the ore dressing laboratories, the acquisition through gift of several valuable mine and metallurgical plant models, and the activities of the staff in research publication and engineering society work. Professor Campbell continues the connection as Advisory Metallurgist in the New York Navy Yard and has been re-appointed chairman of the committee on Non-Ferrous Metals and Alloys of the American Society for Testing Materials. Professor Taggart has completed and published his book on flotation, entitled "Manual of Flotation Processes." Professor Walker has been appointed to the Engineering Foundation as one of the two representatives of the American Society of Mining and Metallurgical Engineers, and has also been made a member of the division of engineering of the National Research Council.

In a student body as mature as ours, of the graduate rather than the undergraduate type, it is to be expected that the students will have a keen and constructively critical interest in the general policies of the School and in the detailed execution of the policies. This has been manifested by several actions taken by student organizations in the past year. For example, the engineering honor society, Tau Beta Pi, has submitted proposals for a rating by the faculty of students on general personal qualities, such rating to be used as a basis of recommendation of the student to an employer upon graduation but more especially to be used in the guidance of every student in the proper development of character.

Further, the Engineering Society, composed of nearly all of the students, has presented recommendations on several subjects and at the close of the year put out a questionnaire and tabulated the returns from it, which reflects the main features of the students' reaction to every course of instruction under the faculty. The questions were: (1) Were you interested in the subject? (2) Did you enjoy the course as given? (3) Did the course do justice to the subject? (4) Do you believe that the benefits derived from the course warranted the time spent on it both in and out of class? (5) What duplication of previous courses did you find? The results were submitted by the

Engineering Society with no illusions as to the finality of this student judgment, but for what they may be worth. A previous questionnaire from the dean's office had secured full information as to the students' estimate of time spent in study in each course of the curriculum, and so the Committee on Instruction is now supplied with a pretty full survey of the work of the Schools from the standpoint of those who are being instructed.

The General Committee of trustees, faculty and alumni, appointed in December 1920 for the purpose of spreading information concerning the undertaking of these schools to raise the standards of engineering education as worked out in the present program of study, and to assist in this undertaking, has continued its work during the past year, mainly through its sub-committees. A definite effort has been made to acquaint those who throughout the country stand as advisers to students of engineering with the ideals and advantages of the engineering schools of Columbia University. This has been done through much correspondence with college officials, through the sending out of circulars of information, the distribution of the copies of the series of Engineering and Scientific Papers, through representatives at educational meetings, and through visits of the dean and members of the faculty to undergraduate colleges. It is highly desirable that this work continue until every dean and professor of mathematics, physics and chemistry, and indeed every student in an undergraduate college looking forward to the study of engineering shall understand just what the Schools of Mines, Engineering and Chemistry of Columbia University stand for in engineering education.

From the first it was part of the program of this committee to try to bring about a more direct cooperation of the alumni in the current affairs of the schools. Through the efforts of the president of the Alumni Association of the Schools of Mines, Engineering and Chemistry, who is a member of the General Committee, a plan is now under way for an advisory committee or group of committees of the alumni to bring alumni interest and opinion more directly to bear upon those

many problems of the schools, general and particular, through consideration of which the alumni can be of service to education and engineering.

The enormous expansion of some industries, the realignment of others, and the many entirely new undertakings made necessary by the war, as well as the rearrangements necessary immediately after the war, caused an abnormal and unprecedented demand for engineers. The enrollment of students in engineering schools reflected this demand with the result that in the past two years of business depression the supply of men with engineering training has exceeded the demand for their services. For several reasons the recent graduates of Columbia have fared very well in the competition for opportunity to work in the profession for which they have been educated, but the situation as a whole is one to cause concern to all who are interested in engineering and engineering education. An approximate answer to the question "How many engineering school graduates are needed annually?" would have a most important effect on engineering education. The education of the engineer is a great deal discussed from the qualitative standpoint, but very little has been done on the quantitative side. Are too many young men taking up the study of engineering, too few, or is the number about right? The question is certainly not to be answered so definitely as in the case of medical education, for the number of physicians that are necessary to serve the community is in pretty definite ratio to the population, and the medical schools of the country have realized the wastefulness of providing an expensive medical education at the cost of the general public for every young man who thinks he would like to be a doctor. Fairly close selection of students to whom a medical education is given is now being made on the basis of pre-medical college records. Furthermore, the question as to engineers cannot be answered without taking full account, qualitatively and quantitatively, of the various types and amounts of engineering training that may be of highest economic and social value, and arriving at some notion of the number of men who might profitably study to qualify themselves in the several grades.

The ground is sometimes taken that the usual undergraduate engineering education is a good preparation for almost any occupation and that therefore as many students as possible should be brought into engineering schools with the expectation that those among them who are best adapted for engineering careers will find it out, and go forward as engineers, while the others will do very well at something else. In the main this is true, but the movement towards a broader education for engineers, which is steadily gaining ground and in which Columbia has taken the highest position, combined with the fact that engineering education is pretty expensive to the institution and in some cases to the student, gives emphasis to the importance of an adequate survey of the quantitative needs of the country in engineering graduates. This would be by no means a small undertaking and probably could not be completed at the first effort, but might well be begun through the educational committees of the great engineering societies.

The time seems to be passing when professional engineering schools are expected to furnish an undergraduate education of a type sharply contrasted with what was formerly the normal undergraduate arts college course. On the contrary, scientific study is now fully recognized in all colleges, and engineering schools are rapidly coming to attach more importance to the value of the humanities and fundamental scientific studies and the disadvantages of too narrowly technical a training. This is nowhere better illustrated than in the action of the deans of fourteen of the largest midwest engineering schools who, meeting in Chicago in May, put themselves unanimously on record as favoring a five-year course for engineering students, the increased time to be given to humanistic and fundamental scientific subjects rather than to advanced engineering work. This and many other actions of educational and engineering societies indicate an inevitable change in the program for the education of engineers in the direction in which Columbia has led with its professional training following a general college course.

At the time of the adoption of the advanced program of engineering instruction at Columbia it was determined not

only to raise the admission requirements, but generally to elevate and strengthen the course of engineering and technical study. Since that time the University has passed through the war period and the financial situation has made it impossible to carry out the developments on the material side which will be concomitants of the proper enlargement of the opportunities for study and research in engineering and applied science in such a university as Columbia. In these years the engineering schools have received only very minor gifts from alumni and others. Out of the general income good provision has been made for salaries of the teaching staff and ordinary operating expenses, but there has not been that expansion of activities that was in the mind of the faculty and trustees. The Harris bequest of approximately half a million dollars will be the nucleus of the first expansion of this kind, namely the provision of a wing to Havemeyer Hall northward along Broadway and a separate building north of Havemeyer for chemical engineering to relieve our two most crowded departments. On the point of being crowded for space the Department of Physics is a close second to Chemistry and Chemical Engineering. While the whole of Fayerweather Hall is occupied, the building is entirely too small for the housing of work in such a subject as physics. Few of the opportunities for development that lie at hand in that field can be used until the plan already announced of turning over the large Schermerhorn Hall to physics can be executed. Another very acute need for space is that of the Testing Laboratories of the Civil Engineering Department, which have become widely known for their excellent work in testing and the researches which have been carried out in them. The laboratory could at once make use of 7000 square feet of floor space which should be easily accessible from the street. In Mechanical Engineering a program was laid down in 1919 for the equipment of the laboratories. Aside from the provision of shops this program called for an expenditure of \$75,000. The program was initiated by an appropriation of \$25,000 which was all expended in two years with a corresponding advantage to the work in mechanical engineering. The completion of this

program by the expenditure of \$50,000 is a definite need of the engineering schools, not only for purposes of instruction but as an equipment that properly housed will make it possible to undertake researches now quite out of the question.

The present location of the mechanical engineering laboratory in the vault between Havemeyer and Engineering Buildings is far from ideal and no adequate vision of the development of this part of the university can picture the laboratory as remaining there. Furthermore, it is certain that we shall not have satisfactory conditions in the matter of instruction in shop machinery and manufacturing in general until the University has its own shop machinery, which may be used not only for instruction but also in connection with the maintenance of the material plant of the University.

The question inevitably arises as to how soon it may be practicable to house the mechanical engineering laboratories and shop in a well-lighted, dry, well-ventilated and accessible building, and the further question is inevitable, should not these laboratories be located at some place on the water front, in buildings of suitable yet comparatively inexpensive construction? For both steam engineering and hydraulic experimentation a greater supply of water is desirable than can reasonably be obtained on Morningside Heights and access to water transportation would in itself be an item of considerable importance. Into such a building might go also the Civil Engineering Testing Laboratories. The proposal is indeed not a new one, for just before the war a committee of the faculty prepared and presented a full report on a plan for a large waterside laboratory plant for research and instruction.

To meet the needs of the next decade or more it would not be necessary to consider now whether the erection of such a laboratory building would mean the beginning of an engineering school on a separate site, but the experience gained from the operation of such a laboratory to take care of immediate needs would be of the greatest value in laying large plans for the future.

Respectfully submitted,

GEORGE B. PEGRAM,

June 30, 1922

Dean

FACULTIES OF POLITICAL SCIENCE, PHILOSOPHY AND PURE SCIENCE

REPORT OF THE DEAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1922

To the President of the University

SIR:

As Dean of the Faculties of Political Science, Philosophy and Pure Science, I have the honor to submit the following report for the academic year ending June 30, 1922:

The total registration under these faculties, including the Summer Session of 1921 and students registered primarily under other faculties, was 2,124, as against 1,858 for the preceding year. The registration for the Winter and Spring Sessions alone was 1,520, as against 1,303. The number of new students was 477, as against 467. The number of degrees was as follows: Master of Arts 448, as against 381; Doctor of Philosophy 81, as against 82. These figures, especially when the number of degrees is compared with the total registration, suggest again the comment I have repeatedly made in former reports, namely that the students, as a class, constitute a body of college graduates interested primarily in extending their education, and that very few of them have a serious interest in research. In view of the opportunities afforded by University Extension and the Summer Session, this fact, I still believe, has not received the attention it deserves. I dealt with it at length in my report for last year.

During the year two proposals have been made which indicate that a reconsideration of the university status of the degree of Doctor of Philosophy is advisable. The first was made by the Union Theological Seminary and the second by the Faculty of Law. Both had the same object, namely, university recognition in the form of a doctor's degree for research

work in subjects not now comprised among those which may be offered by candidates for the degree of Doctor of Philosophy. They differed, however, in the method proposed for securing this recognition. The Faculty of the Seminary asked the University to consider the advisability of conferring the degree of Doctor of Philosophy for researches in religion and related subjects, and the Faculty of Law asked for the establishment of a doctorate in law to be administered under its jurisdiction. The first proposal is still under consideration. The second was approved by the University Council, but with so much difference of opinion that the Committee on Education postponed action on the subject. The question of policy raised by these proposals may be stated as follows: Should there be a number of doctorates for research work administered under the jurisdiction of the several schools and faculties of the University, or should there be a single doctorate administered as a university degree irrespective of the schools and faculties of which the University is composed? In terms of research, the question is: Should the research work of the University be under the control of its several schools and faculties, or should it be free from such control and organized, so far as possible, as a university enterprise independent of particular schools and faculties?

Although this question is definitely raised by the proposals referred to, it is not new. Research work in subjects which, so far as instruction is concerned, are assigned to the Schools of Medicine and Engineering and to the Faculty of Education, has been organized independently under the Faculties of Political Science, Philosophy and Pure Science. Provision has been made by the University Council for two special cases of research in Architecture independent of the School of Architecture. It is thus clear that, hitherto, the University has moved in the direction of recognizing research as something to be organized in its own interests. The action of the University Council on the proposal of the Faculty of Law, however, indicates that this policy has not received general acceptance. Moreover, the Director of the School of Business, conscious of the importance of research in subjects taught in that School, is asking that provision be made whereby students

may go forward to a doctor's degree. Similar requests are likely to be made by others similarly interested. So that it is evident that the whole policy of the University in this matter is now a more urgent question than ever before.

So far as a research degree is concerned, I see no good reason why it should not be the same in all cases, no matter under what control it is administered. If the degree of Doctor of Philosophy may be awarded not only in Philosophy, but also in English, Chemistry, Civil Engineering, Education and Pathology, there seems to be no good reason why it should not be awarded for successful research in Architecture, Business or Law. It has come to be recognized as the one university degree which distinguishes scientific attainments solely. In this respect a special degree in Business, Law or Medicine has no more justification than a special degree in Chemical Engineering or Zoology. The only justification arises from considerations quite different, namely from academic precedent and historical tradition. These are entitled to respect, but I think it will be admitted that wisdom in following them should be guided by conditions which prevail in the present and not by conditions which prevailed in the past. Since the degree of Doctor of Philosophy has come to be generally regarded as the university degree which is awarded for successful research, it should be, in my opinion, the one degree which is awarded no matter in what field the research may lie.

Obviously, however, the particular words which make up the degree's name are not vitally significant. It is only what the words imply that raises questions of important policy. Here, perhaps, rather than in academic precedent or historical tradition, lies the present motive for different doctorates. If the School of Business and the School of Engineering each offers a doctorate, it is humanly natural that each school should desire some recognition of the fact in the title conferred. And the motives for this are all the stronger if the degree of Doctor of Philosophy itself is offered by some other university body which may control that degree in an exclusive manner. It is in this respect that the question what the doc-

torate shall be becomes important, for the name then readily leads to a consideration of the university status of the degree itself. Is it a university degree for scientific attainments in research or is it one of the degrees offered by the various schools and faculties of the University in recognition of intensive study? Should research in a university be encouraged as a matter of individual enterprise or as a matter of school or faculty organization? Ideally, one may say, it makes no difference, so long as research is encouraged. Practically, however, experience is pretty positive in indicating that it makes considerable difference.

I may cite the experience of this office, since it is neither unique nor individual. The prominence of research in this University, so far as it depends, not on individual effort, but on administration and organization, is due fundamentally to the fact that these faculties constitute a body of scholars whose needs and aspirations receive recognition on their own merits and not by virtue of their connection with some school of the University. On the other hand, the difficulties which these faculties encounter in the promotion of research arise almost exclusively from these sources: in the first place, their members are members also of other faculties or of some school, the demands of which they have to recognize no matter how much they interfere with their own researches; in the second place, each of these faculties is in a sense a school engaged in giving instruction in various branches of knowledge; and in the third place, these are three faculties instead of one, with the consequence that the research work of the University is not supported and backed by a completely unified organization. In other words, experience shows that these faculties are successful in promoting research just in proportion as they constitute an independent body of scholars working for that end, and that they are hindered, just in proportion as they have some other allegiance. And passing beyond our own experience here, it would not be difficult to prove that the school is the hindrance and not the support of research just because its interests in instruction are primary and controlling. The university organization which hinders research is an organization in

which the scholar is controlled by the demands for instruction. That which promotes research is one which, as far as possible, aims to give the scholar freedom to do his work.

This experience does not warrant, in my judgment, the conclusion that we, therefore, should set apart in the University a number of scholars whose sole responsibility is that of research. Research professors, although the desirability of them is often advocated, are rarely a success, and exclusively research foundations are rarely capable of sustained achievement. The conclusion which experience sustains is rather that the rivalry, if I may so call it, which obtains between the interests of special schools on the one hand, and, on the other, a body of scholars organized independently, is in all respects sound and healthy. It affords the irritation which keeps us sensible of our needs and obligations. It keeps the university from being either simply a collection of special schools or an institution deaf to the insistent call for public instruction. It is the great enemy to the solidification of prejudice and routine. Like the war of old Heraclitus, it is the father of much that is good. So I am quite convinced that, in general, the type of university organization which we have been slowly developing for many years, a type which provides both for the free development of special schools and faculties and for the independent development of research, is the best type. Research is a function of the university as a whole and should be conceived and organized as such. It should not be conceived and organized as a special function of those schools and faculties which exist primarily for quite a different purpose.

It is evident, however, that our own organization has not yet reached the position to which its history points. As I have already indicated, these faculties, although they constitute the recognized research organization of the University, are also in some respects schools devoted to special types of instruction with the demands and restrictions which such instruction involves. This is perhaps unavoidable under conditions which prevail at present. The great majority of students under these faculties are here for instruction and not for research. This is to be regretted. It could be stopped to-morrow, if it were

not for academic inertia. The University now provides in the Department of University Extension and the Summer Session abundant opportunity for every student whose need is primarily for extended education. However, even if these faculties are not yet prepared to take the apparently radical step which these remarks imply, it is clear that the increasing demand for a doctorate in subjects other than those now assigned to them, is a matter requiring immediate consideration and action. If a student desires to go forward to the degree of doctor for scientific research in a subject to which he has been led through the study of Business, Law, Architecture or Theology, it ought not to be necessary either to establish separate doctorates in the various schools of the University or to take the time of the Council and its Executive Committee to make special provision for him. Or if university professors in any school or faculty desire to associate students with them in their researches, it ought not to be necessary to seek special legislation to that end. We ought now, if possible, to make whatever alterations in our organization and secure whatever legislation may be necessary, to provide, once for all, for such demands. It is my hope that this may be done. The Joint Committee on Graduate Instruction is the body competent to deal with the problems. Fundamental to its solution is the recognition that the degree of Doctor of Philosophy is distinctively a university degree and not the degree of any special school or faculty. The requirements for it and the administration of it should be so worked out that they will accommodate themselves to all genuine research in any part of the University.

In concluding this section of my report, I should like to affirm again that the best type of organization for promoting research, appears to me to be one which, as far as possible, frees those conducting the research from control by others. In this respect the traditional notions of "school," "faculty" and "department" are embarrassing. Under what school or faculty or department should a student interested in the philosophical bearings of the theory of relativity do his work? Shall it be Physics or Philosophy? Or shall he go to those scholars in the University who know something about the subject

no matter where they are to be found? It seems childish to discuss the alternatives. Yet, unhappily, the opinion too largely controls administration that the student should go to Philosophy if he is a philosopher and to Physics if he is a scientist! Surely it is worth while to attempt to free our administration from all such unhappy implications. Scholarship is not promoted by erecting administrative barriers between scholars.

Fellowships and scholarships under these faculties are competitive. We have long since ceased to regard them as forms of student aid and have come to regard them as university positions to be filled by students of proved ability and promise. Unless restricted by deed of gift, they are open on equal terms to competitors anywhere who have the academic qualifications. I call attention to our attitude in this matter because we are frequently asked to enter into an agreement with other appointing bodies which involves a departure from it. There are several foundations interested in the promotion of an exchange of students between this and other countries. The University is glad to cooperate with them to the extent of its ability, but it seems unwise to use its scholarship funds for this purpose. Such a use would restrict the scope of the competition we desire to maintain and be obviously unfair to competitors. Furthermore, since all our students, including Fellows and Scholars, pay the regular university and tuition fees, it is inadvisable to grant exceptions in other cases. The Advisory Committee on Educational Policy has considered this whole matter and their decision has been communicated to interested inquirers who, I believe, fully appreciate and understand our attitude.

The William Bayard Cutting Travelling Fellowship Fund provided for only one appointment for the academic year 1922-23. In making the recommendation for this position, the Advisory Committee on Research departed from the practice of former years and recommended, instead of a candidate for a degree, one of our instructors, Dr. Victor Kuhn LaMer, of the Department of Chemistry. It is my hope that the Committee has thereby established a precedent which will be followed from time to time in coming years. There is, perhaps, no period in a scholar's life when foreign travel and study are more

profitable than those first years in which he has proved his scholarship by attaining the degree of Doctor of Philosophy and his teaching ability by two or three years as an able instructor. Furthermore, this is often the critical period in his career, for he stands in great danger of becoming so absorbed in the routine of teaching that he neglects productive scholarship. Many a promising scholar, especially in our universities and colleges where teaching has become so extravagant and exacting, have suffered that fate. An instructor who is still alive with ambition and enthusiasm, and who has already won from his associates, old and young, the prized recognition of distinct ability, needs and deserves the opportunity to make the personal acquaintance of the best minds in that subject to which he has devoted his life. To no better purpose, in my judgment, can a travelling fellowship be put. Dr. LaMer will spend the greater part of his year at Cambridge and Copenhagen. He goes attended by the hearty wishes of many confident friends.

Among the fellowships restricted by deed of gift are the Lydia C. Roberts Fellowships for students from the state of Iowa. The award was made for the first time this year to take effect in the academic year 1922-23. There were 135 applicants, 69 men and 66 women, representing 17 colleges and universities of the state. There were 38 Fellows appointed, 21 men and 17 women, each with an annual stipend of \$750, plus the cost of transportation once from Iowa to New York City and return. The appointments covered a wide range of subjects, involving 22 departments of the University. The competition was exceptionally close. Rarely has the University at one time received so many applications of distinct merit. These new Fellows will form a most acceptable addition to the number of our graduate students. Their careers will be watched with interest, in the confident expectation that they will prove the wisdom of the munificent foundation by which they have benefited.

In accordance with the expectation expressed in my report for last year, Professor Lucius C. Porter of Peking University will spend the academic year 1922-23 at Columbia. He will

offer courses in literature and civilization of China, and give us his advice and assistance in planning for the future of this important subject. It is hoped that courses in the language, in addition to those already given in University Extension for several years, will be organized under his direction. The principal object, however, will be the working out of a plan for the proper development of Oriental studies. This is a project for which we have waited long. It is therefore with much satisfaction that I report this step taken toward its realization. Professor Porter will have quarters in Philosophy Hall where he will be accessible to inquirers and to those students who wish to undertake special researches in subjects related to Chinese civilization.

It has become increasingly difficult for our professors to secure the publication of important works without providing a large part of the expense involved. The difficulties attending the publishing business have made publishers reluctant to tie up their own funds in books the sale of which is necessarily slow and restricted. It is the text-book rather than the scholarly treatise which can be readily put on the market. As an illustration, I may cite the history of the American colonies by the late Professor Osgood. Three volumes of this important work were published several years ago, but the four remaining volumes, although ready for some time for the press, could not be published without a subsidy. Through the generosity of Mr. Dwight W. Morrow, who has a profound interest in historical studies, the publication of the remaining volumes has now been assured. I wish to express here, on behalf of the Faculty of Political Science, our appreciation of this timely recognition of American historical scholarship.

It seems a little strange that the situation which this illustration reveals has not received the attention of other thoughtful Americans interested in the scholarly output of their country. Since important books do appear, it is natural to presume that they are accepted for publication solely on the basis of their merit. This, however, is becoming increasingly less frequent. The paucity just now in this country in the production of scholarly works is not due to a paucity of

scholars to produce them. It is due rather to the fact that, when produced, they can so rarely find a publisher unless they bring with them a guarantee of their cost. What we need is a generous contribution to the University Press to enable it to finance publications of this kind. It seems needless to point out either the importance or the far reaching consequences of such a gift. It would encourage research fully as much as the foundation of a laboratory or a professorship, indeed more, for it is the publication of researches which quickens the spirit of learning. It would be a contribution to that greater university whose buildings are the books of scholars.

Respectfully submitted,

FREDERICK J. E. WOODBRIDGE,

Dean

June 30, 1922

SCHOOL OF ARCHITECTURE

REPORT OF THE DIRECTOR

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1922

To the President of the University

SIR:

As Director of the School of Architecture I have the honor to submit the following report for the academic year ending June 30, 1922.

The School year has been one of conspicuous success in its results. The character of design has advanced in quality, as revealed by the graduating class which went out this year, showing higher average attainments than the School has been able to achieve before. This advance in design appears to be both from the quality of men which the School attracted and from our methods of instruction and work. Men who have been started at other schools have come to Columbia to continue the study of design and we have thus been able to concentrate on this subject, rather than teach them the elementary branches which they must know before they can properly design. The character of the work has been more scholarly and represents more truly architecture as it is built. The methods we use accord in a large measure with those of the most eminent architects in practice in which the designs are intended to represent constructive buildings rather than beautiful drawings. Students are taught to observe the architecture about them, and to apply the rule of reason to their study and maintain an enthusiastic search for beauty.

The American Academy in Rome Fellowship which gives \$3,000 and residence in Rome for three years was won this year by Henri Gabriel Marceau, B. Arch., 1921 (the fourth time by the School; the maximum number of victories in this contest by any school). This honor was achieved in compe-

tion with the other schools of architecture throughout the country.

Interest in the competition for the Paris Prize, awarded by the Beaux-Arts Institute of Design, is shown by the fact that five Columbia men entered the first preliminary. Two Columbia students and 15 others were chosen out of 118 competitors throughout the country for the second preliminary. There are now five competitors working on the final competition, two of these five being Columbia students.

In the general competitions judged by the Beaux-Arts Institute of Design the School submitted 71 designs of which 75% received awards, eleven received medals and three were commended.

The annual competition for the traveling fellowship (Perkins) had for its subject this year, "The Approach and Anchorage for the North River Bridge Projected at 59th Street." This program was arranged through the courtesy of Mr. Gustave Lindenthal who delivered before the School a lecture on the subject of the project during the Winter, and arranged to give the technical information which delimited the program. He also contributed two prizes, one of \$100 and one of \$50 for the second and third best projects. This vast problem was grasped in such a manner by the School as to demonstrate the soundness of a training which our students receive. There were ten competitors and every one of them was of sufficient merit to justify the award of the fellowship, but those who received the awards were of superior excellence. Through the generosity of a friend the sum available for the fellowship was more than doubled which provides a substantial fund sufficient for travel and study abroad for more than a year, and it is interesting to announce that this friend of the University has endowed a fellowship similar to the Perkins Fellowship which rounds out the cycle of traveling fellowships so that each year one can be awarded in a sum between \$1,500 and \$2,000.

In the practice of architecture and all of the arts it is well known to practitioners that in order to design well one must design constantly through a number of years, and that only practice in design will make a designer. This might be exem-

plified by an allusion to literature; however well a person may be fitted by a knowledge of literature to write he can only write well after a long apprenticeship with the pen.

Formerly design was taught during three years—the first year being a preparation for design, occupied in the study of the orders and making carefully rendered drawings of the elements. This year, however, a change has been made by which three and a half years instead of three are given to design by using only one-half year for the study formerly occupying one year. The study of the elements and their combinations continues parallel with the actual design throughout the entire course. At the beginning of the second term the class which had but one term of preparation was placed under the sole direction of Mr. Flanagan who planned their work, on the same basis as that established for and pursued by the more advanced classes, with projects and sketches. The result obtained shows that the experiment is successful. The student commencing in Elementary Design in the next semester will be almost one-half year ahead of the ordinary course in facility of design, and this, of course, will raise the grade of their work throughout the school term.

While the courses in History have not been reduced in content, the same ground being covered as heretofore, Professor Hamlin has limited the required collateral work so as to liberate enough time to apply to other necessary things, among others the course in Architectural Rendering.

This year the course in Architectural Rendering was established. It is well known that when the expression of Architecture is taught entirely by one man the personality of the teacher is too strongly emphasized in the class. It was therefore considered wise in establishing this course in Architectural Rendering to have all of the instructors take part in the work so that the student would get everyone's method and everyone's touch. This course was handled by Mr. Allen and Mr. Walsh who brought into the course at the proper time the other instructors for their part of two or more lectures and exercises each. This introduced into the School a systematic way of training the student in expressing his ideas in drawings

and its influence was reflected in the improved sketches produced in the Saturday competitions.

A beautiful token of the deep interest of the Alumni of the School of Architecture is the memorial to William Robert Ware in the form of a handsome bas-relief in the vestibule of Avery Hall, which presents a portrait and appropriate inscriptions.

A system of monthly reports has been inaugurated to keep the Committee of Visitors and the Alumni Association in active touch with the work of the School. This is in the form of a news-letter which carries to the men away from the School the items of interest which we wish to present.

The number of candidates for the Master of Science degree increased again this year, reflecting the conviction of the student body that more training than that required for the degree of Bachelor of Architecture is desirable and profitable. This expression of esteem stimulates the Staff of the School to an ever-increasing effort to maintain the highest standard of art and scholarship.

A schedule of the registration in the School during the year 1921-1922 is shown below:

	Winter	Spring
School of Architecture (Degree)	51	52
Combined Course (College and Architecture)	11	16
Master of Science in Architecture	2	4
University Extension (single registrations)	198	195
(Approximately 50 of the Extension students are working for the Certificate of Proficiency)		
	—	—
	262	267

The total number of graduates of the School at Commencement was as follows:

Bachelor of Architecture	9
Master of Science	2
	—
	11

The following fellowships and medals were awarded at the close of the year:

Perkins Fellowship S. Y. Ohta

There were ten competitors: S. M. Clement was placed second, receiving an award of \$100, and A. Muller was placed third, receiving \$50.

American Institute of Architects' Metal S. M. Clement

(Awarded to the student maintaining the highest scholarship throughout the course in Architecture.)

Alumni Medal M. L. Colean

(Awarded to the student maintaining the highest standard in Design throughout the course in Architecture.)

The record in Architectural Design was as follows

	<i>Submitted</i>	<i>Passed</i>	<i>Com- mended</i>
<i>School of Architecture</i>			
<i>Advanced, Intermediate and Elementary</i>			
Major problems	156	81	53
Minor problems	103	40	6
<i>Pre-elementary</i>			
Major problems	69	50	18
Minor problems	65	22	1
<i>University Extension</i>			
Major problems	142	87	34
Minor problems	41	9	1

The final report blanks contain records as follows:

<i>School of Architecture</i>	
Passing grades	246
Failures	1
Debarred from examination	0
Absent from examination	7

The following Tuesday Afternoon Lectures were given during the year:

Julian Clarence Levi—American Architecture at the Spring Exhibition at Paris, 1921.

Arthur Kingsley Porter—Romanesque Architecture.

George C. Hannam—Acoustics.

Harvey Wiley Corbett—New York Zoning Laws.

Nils Hammarstrand—Paris, Past and Present.

Alfred D. F. Hamlin—Professor W. R. Ware and the Founding of the School.

Ferruccio Vitali—Theory of Architecture.

Lansing Holden—Practice of Architecture.

The Fourth Annual Tea of the School of Architecture to the Alumni was given on February 13th, and was attended by a large number of our former students. These functions seem to be a welcome occasion for bringing together the School, the Staff and the old students.

The Avery Library gave valuable assistance to the School of Architecture in arranging for us exhibits of interest in Architecture. In December of 1921 there was a notable exhibit of water colors made by Mr. Harry Sternberg who just returned from the American Academy in Rome. In June and during Commencement there were exhibited the ten fellowship problems which made an imposing Exhibition viewed during Commencement week by the Alumni and visitors on the Campus.

Certain changes have been necessary to arrange in the staff because of the retirement of Mr. Prevot who has been Associate in Design for many years and whose work and influence has done so much for the School of Architecture.

Mr. Marceau who has been an assistant is going to be at the American Academy in Rome for three years. The positions in design will be capably filled by Mr. Frederick Hiron, a practicing architect of brilliant attainments, who will criticize Advanced Design, and Mr. Edgar I. Williams, of the American Academy in Rome and formerly Professor of Design at Massachusetts Institute of Technology, will criticize in Intermediate Design. With these additions to our Staff excellent progress is promised for the coming year.

The Association of Collegiate Schools of Architecture held its convention in Chicago the first week in June where the School of Architecture of Columbia was represented by Mr. Harold V. Walsh. This association usually meets one or two days before the convention of the American Institute of Architects with which it has conferences on the subject of architectural education, a subject in which the Institute is actively interested.

On the fifth floor of Avery Hall changes have been made to arrange for a drafting room which can be used for certain day school students in University Extension and to accommodate

the growing needs of the classes in drawing and graphics. This arrangement will greatly facilitate the handling of these subjects which have been hampered for lack of room.

It is a distinct advantage to both the College and the School of Architecture that the Department of Fine Arts of Columbia College is established in Avery Hall. The Departmental Library is the depository of the newly acquired library on art subjects, and it is available to the students of both the College and the School for study and research.

The great proportion of students in the School of Architecture who need assistance, many of whom are forced to drop out from time to time because of lack of funds, suggests the idea of establishing undergraduate scholarships, to stimulate sound training in the fundamentals of architectural education, instead of more advanced scholarships as rewards for higher attainment at graduation and afterwards. We find that the number of traveling fellowships in Architecture is so large that it is difficult to find at times strong enough men to make proper use of them. This condition would be improved if the stronger young men, who are often on their own resources, could have assistance in their earlier years in the School so that they would get a sound preparation in the fundamentals. Every year we lose excellent students who are forced to leave to begin work as assistants before they have reached the best part of their education. If a number of scholarships of from \$250 to \$500 could be established the value to the art of Architecture would be greater than to offer larger sums as prizes to students who may have completed the curriculum.

All the other important schools issue each year a publication to show the work of the School. The School of Architecture of Columbia should have this means of expression. It is a distinct disadvantage to have no record of the best work of the students which they can distribute to their friends and to the public. Formerly we had a handsome volume each year, but since the war we have been denied this valuable aid because of the cost. The time has come when expression should be made by the School in a handsome publication.

At present there is prospect of active interest in City Plan-

ning being developed in the city of New York and other great centers. A course on this subject has been laid out. All the preparatory studies are now taught in the School. One or two specialists would have to be employed to lecture and supervise the designing. Such eminent assistants are available when a sufficient sum can be devoted to this purpose. I recommend that the founding of a course in City Planning be given early consideration.

Improvements in the court between Fayerweather and Avery Hall were projected in 1914 and a rough sketch has been published showing an excellent design. On the walls of Avery are shown architectural relics which would enable the student to observe and study the orders and other bits of detail of full size from the great masters. The example of handsome planning of this court would be a lesson to the students and an object of beauty in a prominent part of the Campus. It is a splendid opportunity for a memorial. At a cost of from \$10,000 to \$20,000 a beautiful object can be made of this part of the University.

Respectfully submitted,

WILLIAM A. BORING,

Director

June 30, 1922

SCHOOL OF JOURNALISM

REPORT OF THE DIRECTOR

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1922

To the President of the University

SIR:

I have the honor to submit the tenth annual report of the School of Journalism.

The registration at the beginning of the academic year 1921-22 was as follows:

1921-22	Matriculated		Non-Matriculated		Total
	Men	Women	Men	Women	
First Professional Year . . .	44	30	6	—	80
Second Professional Year . . .	33	26	2	—	61
Graduate Students	4	1	—	—	5
Totals	81	57	8	0	146

At the beginning of the Spring Session there were the following additional registrations: First Professional Year, 1 man; 5 women. Second Professional Year, 0 men; 0 women. Non-Matriculated, 1 man.

During the year 16 men and 7 women withdrew or were transferred to other parts of the University. The number of withdrawals on the score of health, while not in itself alarming, was large enough to call the attention of the Administrative Board to the importance of a sound physical constitution for the profession of Journalism. The School curriculum demands constant and concentrated effort, but it is not more severe than actual work in a newspaper office. The Board accordingly invited the co-operation of the University Medical Officer and the Director of Admissions with the view of assuring the physical fitness of candidates admitted to the School, and Dr. McCastline has made suggestions to this end which will doubtless be adopted by the Board during the coming year.

This year completes the first decade of the School's history,

and it is interesting to record that it has been one of continued progress except for the inevitable break caused by the War. Beginning with nine students graduated at the end of the first year (1912-13), we had 15 graduates in 1914, 22 in 1915, 24 in 1916, 26 in 1917. The two war years 1918 and 1919 showed a drop to 19 and 20 graduates respectively, but, with the removal of war conditions, the number rose in 1920 to 35 and in 1921 to 52. This year 55 students have taken the B.Lit. degree; in addition, a certificate of proficiency has been awarded, and two students have taken the M. S. in Journalism for the first time in the history of the School.

The First Professional Year in 1921-22 included 50 men and 30 women as against 43 men and 35 women of the previous year. Of these 13 men entered from Columbia College, 2 women from Barnard College, and 5 women from University Extension, in all 20 from within the University; the remaining 60 had received their college training in various institutions scattered all over the country, including the Academy of Sacred Heart, Acadia University, Adelphi College, American University of Beirut, Bryn Mawr College, Butler College, College of the City of New York, Colby College, Cornell University, Dalhousie University, Dartmouth College, Drake University, Drury College (2), Elmira College, Grinnell College, Hope College, Hunter College, Kern Co. Junior College, Massachusetts Institute of Technology (2), Mercer University, Miami University, Oberlin College, Peddie Institute, Queens University, Roanoke College, St. John's College, University of Soochow, China, Southern Methodist University (2), Trinity College, University of California (2), University of Chicago (2), University of Cincinnati, University of Colorado, University of Georgia, University of Kansas, University of Michigan, University of North Carolina, University of Pennsylvania (2), University of Texas, University of Utah, University of Wisconsin, U. S. Naval Academy, Vassar College (2), Virginia Military Institute (2), Wake Forest College, Washington University (2), Washburn College, Washington & Lee University, Wellesley College, Wilmington College, and Winchester College, England.

Of these 146 students registered during the year, 39 reported their home residence as in New York City and 10 in other parts of New York State. The remaining 97 came from the following parts: Alabama (2), Arizona, Arkansas, California (2), Colorado (2), Connecticut (3), Florida, Georgia (2), Illinois (3), Indiana (6), Iowa (3), Kansas (2), Kentucky (3), Louisiana, Maine, Massachusetts (6), Minnesota, Missouri (6), Nevada, New Jersey (8), North Carolina (3), Ohio (3), Pennsylvania (13), South Carolina, South Dakota, Texas (5), Utah, Virginia (2), Washington, D. C. (2), Canada (6), China, England, Japan, the Philippines, and the West Indies.

It will be seen that the School continues to attract students from a distance and that only a minority come from New York City or its immediate neighborhood. At the same time, and perhaps owing to the same reason, the character of the School has undergone a change. In an article on present conditions in the School as compared with those of his own day, one of the alumni recently deplored the decline in the spirit of "sophomoric revolt." This may be due in part to the limitation of the School to the two years of professional work and in part to a changed state of feeling in the country generally, but, whatever may be its causes, the change seems to be beyond question, whether it should be regarded as a reason for lamentation or for congratulation. On the other hand, there has been a distinct growth in the professional spirit of the School. The majority of the students now regard Journalism not as a means of propaganda, but as a public service to be conducted in the professional spirit which also prevails in Law and Medicine. Probably this, too, is part of a general change of feeling all over the country. It is noteworthy that in various quarters attempts are being made to draw up a code of professional ethics in Journalism, and the formation of the American Society of Newspaper Editors at the recent meeting of the Associated Press in this city is noteworthy in this connection.

It is satisfactory to note also that the recognition of the School by those engaged in the newspaper profession becomes every year more general and more emphatic. The requests for the services of graduates of the School increase year by year

both in and out of New York City. This year's graduates obtained places on the following newspapers and press associations: New York Tribune, New York Call, Christian Science Monitor, United Press, International News, The Fourth Estate, New Bedford (Mass.) Standard, Manchester (Conn.) Herald.

The New York Herald showed its interest in the School by offering one prize of \$150 to the second year and two prizes of \$100 each to the first year, for special articles to be published in the New York Herald Sunday Magazine, and the Christian Science Monitor offered two places open to graduating students on the nomination of the Faculty at a generous salary.

An interesting benefaction available for the first time during the year was the graduate scholarship offered by Mr. Henry Woodward Sackett, who has given an extremely valuable course on the Law of Libel. We are hoping for a continuation of this scholarship, and the addition of similar encouragements to graduate study in future years. Dr. Talcott Williams in his Director's report for 1918 expressed the opinion that three years of college work and two years of professional work would at no long distance be required for the degree of B.Lit. in Journalism, and there can be no question of the value of a longer term of preparation than the two years of college work and two years of professional training at present in force, but the pecuniary rewards of the profession of Journalism are hardly such at present as to encourage a student to undertake more than two years of professional work in addition to the two, three or four years of collegiate study he has had before he enters the School. Many students have an inclination to undertake further training, but the temptation and the need to earn money by the practice of their profession interfere seriously with their desire for study. Moderate encouragement by the provision of graduate scholarships would, I am sure, produce good results. It is significant that, during the past year, of the five students who entered as candidates for the M. S., the only two who succeeded in completing the requirements were two students from other schools of Journalism who came provided with resources to enable them to spend a year

in New York City. The candidates from our own School were certainly not inferior to them in ability, but the distraction of professional employment proved to be an insuperable obstacle. They had the desire for further study and the realization of its importance, but at the stage of their professional career at which they had arrived, they could not afford to take it to the extent required for the Master's degree.

The value and necessity of training for the profession of Journalism have been recognized by the establishment of journalistic courses in more than two hundred of the colleges and universities of this country. In many cases the instruction given is limited in range and demands only part of the time of an instructor, who is usually a member of the Department of English. This cannot be regarded as a satisfactory solution of the problem, but it must be remembered that there are small weekly newspapers in this country as well as great dailies, and that the smaller papers discharge a real social service for which a training at once more general and in its professional aspect more restricted may be better fitted than the highly specialized training given in the regularly organized schools or departments of Journalism. Of the latter there are 12 of the B class, offering 16 units of professional work, and 29 of the A class, offering from 10 to 30 courses in Journalism. All this instruction naturally creates a demand for instructors, not merely for specialists, but for those who may be able to combine instruction, say, in one course of Journalism with instruction in English or in some other subject. These appointments are not easy ones to fill, and it is natural that there should come to the School from all parts of the country requests for nominations of candidates to such positions. The qualifications of a teacher of Journalism may be analyzed as follows:

- (a) A good general education and the possession of a college or university degree guaranteeing that education;
- (b) Professional training in a School of Journalism;
- (c) Experience in the practice of the profession;
- (d) Experience in teaching, and, if possible, in teaching Journalism.

At the present stage of the organization of the teaching of Journalism it is obviously exceedingly difficult to meet all of these requirements, especially for a school or department situated in the more remote parts of the country. In New York we have access to the services of a large number of qualified and experienced journalists, many of whom have had a college education and some of whom have had professional training outside newspaper offices. Our main difficulty in the Columbia School of Journalism has been to secure teaching ability, and we have been successful in overcoming it owing to the special circumstances just suggested. We have also, by the appointment of our own graduates to junior positions, succeeded in training a number of young men who add to what they have learned in the School the advantages of experience in the actual work of the profession, as it is now practised. For schools not situated in a great city, and for weaker departments, the difficulties are much more serious, and it is not surprising that they should be obliged to content themselves with the appointment of a man who has had professional experience but has no college or professional training, or of a man who has had professional training but little or no practical experience. The latter alternative seems to be the less desirable horn of the dilemma, but the very fact that Journalism is a new part of the curriculum makes it a difficult subject to teach, and it is no wonder that, in the smaller departments, regard is paid rather to teaching qualifications than to professional experience. This School has no doubt a duty to perform in the training of qualified teachers of Journalism, and, as its staff is entirely composed of experienced journalists, it is not likely to overlook the importance of practical work. The ideal solution would be for a graduate of the School who intended to devote himself to teaching to take a year or two of newspaper work before returning to the School to take his M. S. degree in Journalism, and, in connection with the M. S., it might be advisable for us to provide opportunities for the study of methods of teaching Journalism, so as to meet a need which is already clearly indicated, and is likely to grow considerably in the future.

Three of our graduates were last year engaged in teaching, Walter Wilgus at the University of the Philippines at Manila, R. Gordon Wasson, instructor in the Department of English at Columbia College, and Katherine E. MacMahon, instructor in English and Journalism at Mount Holyoke College. In addition to these were the graduates of the School on its staff; Carl Dickey, David S. Levy, Merryle S. Rukeyser, M. Lincoln Schuster and Alan H. Temple. Miss MacMahon is returning to the School as instructor in Journalism, and her place at Mount Holyoke will be taken by one of our graduates of this year, Clara Maud Lyles. Miss MacMahon will also undertake the duties of Adviser to Women in Journalism, which has hitherto been discharged by Professor Clare M. Howard of Barnard. Miss Howard has done her School work with devotion, intelligence, and ability, but it has been felt by the authorities, both of the University and the School, that the division of her interests between Barnard College and the School of Journalism was undesirable, and the appointment of a woman instructor who could give her whole time and attention to the School of Journalism has been in contemplation for some years.

Other changes in the staff during the past year have been few. Mr. Kenneth Lord, having terminated his active connection with Journalism, felt obliged to resign his position as Associate in Journalism, to the universal regret of both staff and students. Mr. Ralph H. Graves, Sunday Editor of the New York Times, was appointed Associate in Journalism at the beginning of the year on account of the increased number of students in the course in advanced Feature Writing. The introductory course in Feature Writing is being reorganized by Professor Pitkin with the assistance of Mr. M. Lincoln Schuster on the basis of a study of the psychology of news interest, from which interesting developments are expected.

The organization and equipment of the technical instruction under Professor Cooper have been further improved through the generosity of Mr. Frederick Roy Martin, General Manager of the Associated Press, who during the Winter Session supplied us with the Associated Press service for the

current day instead of the previous night's service. Next year we shall have the advantage of the supply of the day service direct to the City Room by means of a printer machine which is to be installed during the vacation.

Altogether the year's record is one of a steady and quiet progress and achievement. The School has made its way mainly by the quality of its product, and it is its settled policy to maintain and improve that quality rather than seek for rapid expansion in numbers. The Faculty feel that in maintaining a high standard of excellence both for admission to and graduation from the School, they are carrying out the general policy of the University and the expressed intentions of the late Joseph Pulitzer in its foundation.

Respectfully submitted,

J. W. CUNLIFFE,

Director

June 30th, 1922

BARNARD COLLEGE

REPORT OF THE PROVOST

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1922

To the President of the University

SIR:

In the absence of Dean Gildersleeve I have the honor to submit the following report on the progress and condition of Barnard College during the academic year 1921-1922.

The enrollment in our four regular classes has been as follows:

	1920-1921	1921-1922
Seniors	103	71
Juniors	187	203
Sophomores	174	173
Freshmen	<u>222</u>	<u>220</u>
	686	667

In addition to these regular students, we have also had 41 matriculated special students, as compared with 40 last year, and 26 non-matriculated specials against 22 last year. The total number of registrations has thus been 734, a decrease of 14 from 1920-1921. By and large, attendance in Barnard has been at a standstill during the last five or six years. Of this the causes offer more opportunities for speculation and conjecture than can be considered here, but later remarks in this report may have some bearing on the subject.

The analysis of the residence of students shows that 35 out of the 48 states in the Union have representatives. These are distributed as follows:

North Atlantic Division	638
South Atlantic Division	20
South Central Division	30
North Central Division	30
Western Division	9

Of the total registration, 375—about 51%—are residents of New York City. There are also six foreign students and one from the Hawaiian Islands. This is substantially the same proportion both of students from the vicinity of New York and students from a distance that Barnard enrolled last year.

Further analysis of the figures shows that out of 734 students enrolled in Barnard College no less than 296 or something more than 40% are studying at Barnard College for the first time. In other words, in addition to the entering freshmen, there is a large percentage of transfers from other institutions. Clearly the College has been relatively losing in the city and gaining in the country.

There were given at Commencement this year 152 degrees of which 151 were Bachelor of Arts and one Bachelor of Science. In 1921, there were given 170 degrees, of which 168 were Bachelor of Arts and two Bachelor of Science.

During the year, the following members of the Faculty have been absent: Professor Hutchinson has been on leave for the entire year; Professors Hubbard, Richards and Mrs. Richards for the Winter Session; and Professors Loiseaux and Kasner and Miss Doty for the Spring Session. It is especially pleasant to record the return of Professor Hubbard after nearly two years of absence. Owing to illness, Professor Jacoby has been unable to give his courses in Astronomy in Barnard during the Spring Session.

Since the first of January, Dean Gildersleeve has been absent on leave as the result of serious illness. She will resume her duties at the opening of the Winter Session. During her absence, the President of the University assumed the responsibilities of the Dean's office, giving his attention to matters of general policy and the preparation of the Budget. The Provost acted as his representative at the College.

For the coming year there are a few changes, happily none of a permanent sort, in the personnel of the College. Leave of absence for the entire year has been granted to Mrs. Coutant and Professor Larson; for the Winter Session to Professor Braun and for the Spring Session to Professor Reimer and

Mrs. Putnam. Professor Hutchinson, whose position during her leave of absence has been ably filled by Professor Alzada Comstock of Mt. Holyoke College, will resume her duties at Barnard.

The College is also especially fortunate in being able to record the promotion of Associate Professor Hollingworth to be Professor of Psychology. Professor Hollingworth has been since 1909 in charge of the Department of Psychology in Barnard College. He was made Assistant Professor in 1914 and Associate Professor in 1916. As one of the most distinguished experimental psychologists in the country, his promotion is thoroughly merited and he will continue greatly to add to the scientific reputation of Barnard College. Dr. Hugh Wiley Puckett, formerly Lecturer in German, has been made Assistant Professor of German, and the College is also fortunate in having secured the services of Mr. Arnold Whitridge as Instructor in English.

Attention was called in the annual report of last year to certain new and important matters of Faculty legislation which had been put into operation during the course of the year, to wit:—the new provision for transfer students, the honors course, and the plan for University Undergraduates, in which Barnard College cooperates to the extent of supervising the work of women candidates for the degree of Bachelor of Science in General Studies instituted by the University Council. All of these plans have now been in successful operation for over a year. The effect of the establishment of the Committee on Transfers has been to give more attention and more sympathetic guidance to students coming from other institutions; it has been of great service to them. The Honors Course, which makes special provision for singularly gifted students, is now well established, and Barnard College may take considerable credit to itself for the institution of a plan which will tend to give greater opportunity to real scholars. There have been altogether in the course thirteen students of pronounced quality and the number will be somewhat larger next year. In the category of University Undergraduates there have been six students, all of unusual ability. Barnard is responsible for their

instruction but they are not properly classified as students in Barnard College.

The report of the Librarian shows that during the year about 1,600 books have been added, making the total number of volumes in the reading room about 16,700. In spite of the fact that there are fewer students in Barnard College this year than last year, the readers have increased from 53,282 to 56,877 and the library circulation from 97,269 to 104,310. This increase in number of readers is partly due to the fact that during the Spring Session, in response to requests made by the girls themselves and also because the New York Public Library was obliged to discourage college students from using its reading rooms, the Barnard reading rooms have been open on Saturday afternoons and Sunday afternoons. In order to insure proper conditions for students, the Library Committee has put into operation a system of warnings and penalties which has maintained admirable conditions in the Library. The Library is being administered under Miss Rockwell and her assistants in a way which daily increases its usefulness, and the excellent administration of it is a matter in which everyone connected with the College may take very just pride.

The reports of the College Physician, Dr. Alsop, and of the Head of the Department of Physical Education, Professor Wayman, deal with the matter of students' health from different points of view. The College Physician is naturally concerned chiefly with students who for one reason or another are physically below par. The endeavor of this department is to prevent disease, to cure it, and to see that students conform to sound sanitary principles. In the interests of curative and preventive work, the College Physician and her two assistants have, during the course of the year, treated some sixty-five hundred cases of various kinds. During the year, there were ten cases of scarlet fever concentrated in two periods. Otherwise there has been no case of serious illness among students and there have been no deaths.

The Department of Physical Education approaches the matter rather from the point of view of efficiency, the desire

being to develop in the students positive physical values and to foster in them not only a sane regard but also the taste for exercise. A considerable part of the work of the department has to do with corrective gymnastics but in a larger way the effort is to inculcate a sound and temperate concern for physical welfare. The record of the department with regard to the improvement in the health and in the number of students playing various games is very gratifying, in spite of the restricted grounds of Barnard College. Both the College Physician and the Department of Physical Education act upon the principle that it is the duty of the college not only to maintain students in as sound health as possible during the years of college residence but also to supply them with sound knowledge and to imbue them with a desire for physical welfare that shall carry on during their lives. The problem, as it presents itself to the department is more than simply keeping students in good physical condition in order that they may do their college work better—it is rather a serious enterprise of life-long significance.

Both the College Physician and the Professor of Physical Education unite in wishing that the playgrounds for outdoor exercise at Barnard College were more extensive and in some degree commensurate with the gymnasium facilities.

During the year, several changes of unusual importance have been made in the organization of the College. These will go into operation at the beginning of the year 1922-1923. They may be divided into two classes: first, those which concern the internal organization of Barnard and, second, those which affect its relations with the University. Certain of these matters in reorganization, affecting the internal arrangements of the College, were suggested by financial necessity but are not unjustified on educational grounds.

Of the matters of internal organization, the most important is the consolidation of the separate dining rooms for resident students in Brooks Hall and in John Jay Hall, into one dining room in Students Hall; it will be possible therefore to use the present Brooks Hall dining rooms for the general social needs of all resident students and thereby to consolidate these inter-

ests. Ample provision has been made for rendering the new plan attractive and for avoiding the disagreeable features of too much concentration of students in one place at one time. The arrangement, however, must be regarded as temporary. As soon as it is possible to build the much needed wing of Brooks Hall, all resident students in Barnard College will be accommodated within the campus, John Jay Hall reverting to the University. Arrangements more attractive than any heretofore known at Barnard College for the care of resident students will then be possible. The present consolidation must be regarded as a step towards this very desirable end. As soon as the plan is completed, Barnard College can develop a finer life and spirit among its resident students than it has heretofore enjoyed.

This change in the dining room arrangements has made possible another step of considerable importance in the social organization. In the future, all of the accommodations for resident students of Barnard College will be consolidated under one head, and students not resident in the college buildings will be under the supervision of a separate officer. Heretofore, these various duties have devolved upon several more or less independent assistants to the Dean. The new arrangement is of such interest that in dealing with this matter it may be well to quote from the President's Report to the Trustees, dated May 2, 1922:

The problem of the Social guidance and counsel of the College students presents itself in a double aspect. There is, first, the large and by no means easy problem of guiding the life and activities of the students in what may be called their external relations, their contacts with the public, and their hundred and one activities and organizations which come and go year by year. There is, second, the problem of acting as counselor and companion to the students who reside in Brooks Hall, in John Jay Hall, and in the Broadview Apartments. Many of these students come from a distance, and their parents look to the College quite justly not merely for instruction but for such guidance and oversight as shall protect these young women residing in a strange city and bring to bear upon them those educational influences other than instruction, which play so large a part in a sound and wise preparation for life. These influences and those who represent them cannot be too strong and too intimately related to the life of the resident undergraduates.

The carrying out of this plan is described by the President in the same report, as follows:

1. The Assistant to the Dean in Charge of Social Affairs will have the following duties:

To have general supervision, subject to the Dean and the Faculty Committee on Students Affairs, of all student organization, extra-curricular activities and the social life of the students outside of the College dormitories.

To have charge of the approval of residence of all students living off campus and not with their own families, and also to be charged with the general supervision of the welfare of these students.

To have the management of the College teas and other social functions given by the Dean and the Faculty or by the Faculty and the students jointly.

To supervise plans for student entertainments and administer the eligibility rules for plays, teams, and other activities.

To supervise the placement bureau for students desiring to do volunteer philanthropic and social work.

To arrange to have distinguished and interesting visitors from abroad and also from New York and other parts of our own country visit the College, and to help the Dean extend the hospitality of the institution to official educational missions and other groups of this sort.

To make every effort to bring the students in contact with the interesting and valuable institutions and activities of New York.

To be in general charge of the social interests of all students not in residence in the College dormitories.

This officer will have a seat in the Faculty, and the privilege of offering instruction should she so desire.

2. An Assistant to the Dean in Charge of Residence Halls, who will unite under one social organization Brooks Hall, John Jay Hall, and the apartments in Broadview, and be responsible for the welfare of all Barnard students resident in these dormitories.

The present Brooks Hall dining room will be used for social purposes for all students resident in all dormitories. The Assistant to the Dean in Charge of Residence Halls should live in Brooks Hall and should preside over the dining room in Students Hall at dinner. She will have a representative or assistant both in John Jay and in the Broadview Apartments.

From three to five of the women members of the staff, to be chosen with the consent of this Assistant to the Dean, will be given an opportunity to take rooms in Brooks Hall, and an equal number in John Jay Hall, and one or two members in the Broadview Apartments. These teachers will have no administrative function in connection with the dormitories, and are not to be regarded as responsible for the conduct of the social organization of the dormitories. This Assistant to the Dean will also have a seat in the Faculty.

The Assistant to the Dean in Charge of Residence Halls will be Miss Helen P. Abbott, formerly Director of John Jay Hall. The Assistant to the Dean in Charge of Social Affairs will be Miss Mabel F. Weeks, formerly Mistress of Brooks Hall.

Another matter of importance has been the change in tuition fees from \$250 a year to \$8 a point, except for students in the Honors Course, whose tuition remains as at present. This change in the Statutes of Barnard College was approved by the Trustees at their May meeting and makes the practice of Barnard uniform with the rest of the University. Although the amount of fees collected would in one case be theoretically almost the same as in the other, it is not unlikely that the College may profit somewhat from students who elect more work than is strictly necessary to obtain the degree. There is no reason why Barnard College, especially in its present financial condition, should make a free gift of such instruction. Had the plan been in operation this year, the amount of fees collected would have totalled some \$15,000 or \$20,000 more than were collected. On the other hand, the system has an educational value in that it tends to discourage students from taking more work than they should take, and it also has the positive merit of requiring them to think and to plan their work somewhat more carefully.

With regard to the relation of Barnard College to the University, the changes in prospect are probably the most important that have been made since the establishment of the Faculty in 1900. It will be recalled by persons familiar with the history of Barnard that up to 1900, three important schemes were put into operation, which gave the College the position in the educational world that it enjoys today. The first of these was, of course, the system in vogue from the outset, whereby Barnard College employed the services of Columbia instructors. The plan was similar to that now in operation in Radcliffe College. The second was the appointment in 1895 of Professors Clark, Robinson and Cole on the Barnard Foundation to give instruction at Barnard and in Columbia University in order that courses in the University might be open to women. The third step, taken in January, 1900, was

the establishment of the Barnard Faculty, which consisted not only of a number of scholars on the Barnard Foundation but also of distinguished scholars from the University assigned to the Barnard Faculty by Columbia.

The net result of these various steps was to make Barnard College a closely united part of the University, to insure the quality of its Faculty, and at the same time to maintain in Barnard College a body of trained teachers responsible to it. From this general arrangement a system of exchanges developed, whereby the service of an instructor in Columbia at Barnard College was paid in kind by the service of an instructor in Barnard College at Columbia. Under this arrangement, Barnard has continued during two decades. There have been many additions to its faculty and a large increase in its resources but its relation to the University remained practically the same. It is only in the present year that legislation of equal importance with the three steps just described has been adopted by the Board of Trustees.

Under the new system, which is to go into effect from the first of July, the old system of exchanges is done away with. In place thereof, it is proposed that the fees in courses given by Columbia instructors at Barnard College or open to Barnard students in other parts of the University shall revert to the University. On the other hand, the fees collected by the University in courses given there by teachers on the Barnard Foundation will be returned to Barnard College. The system of part payments has, except in the department of Religion supported by the Talcott Fund, been abolished. It will be possible in the future for Barnard College to obtain the service of distinguished Columbia teachers without having to appoint them or contribute a fixed sum to their salaries and without having to offer service of its own staff in exchange on a more or less inexact basis. As a matter of fact, it is interesting to note that, as planned for next year, the exchanges of fees will very nearly balance each other.

This would seem, at first glance, to be a reversion toward the earlier system. Barnard, however, is to make its contribution to University scholarship. In order, also, that the operation of

a plan of this kind may not be left to caprice and that a too parochial interpretation should not develop in any department of Barnard College, it is enacted that this matter of intercorporate services shall be the concern of the University departments and of the various committees on instruction concerned, in order that the matter may be looked upon in the broadest University spirit. To carry out this arrangement, the Trustees of Barnard College adopted the following resolution at their meeting on May 12, 1922:

RESOLVED, That the Trustees of Barnard College approve the recommendation of the President and the Committee on Education providing that all appointments of men and women to the grade of Associate Professor or Professor in Barnard College shall be approved by the University Departments concerned and by the Joint Committee on Graduate Instruction; and that men and women holding such appointments shall be qualified and eligible to give instruction in the Graduate Faculties and shall from time to time give such instruction.

The advantages of this arrangement are manifest. In the first place the curriculum of Barnard becomes in the future a matter of University concern to be determined by the University departments as well as by local departments and also by the Advisory Committee on Educational Policy, of which the Dean of Barnard would be a member, as well as by the Barnard Committee on Instruction. When the matter has been determined educationally, the proper allocation of instruction to Barnard would then become a charge upon the Barnard Budget.

It is quite evident also that though no change would take place in certain departments in Barnard College, there can, in certain departments, be effected a considerable financial saving to Barnard College through the avoidance, throughout the University, of unnecessary duplication of work. Furthermore, a far greater opportunity for the use in a wide way of the ablest Barnard teachers would be insured.

In an even more important way, the resolution means that in the future the appointment to the grade of associate professor or professor of men and women of University quality permanently insures the high standards of Barnard instruction.

There is, perhaps, too great an expectation among teachers to be promoted from grade to grade rather on the length of service than upon ability. A large part of the instruction of Barnard College would, of course, continue to be given by instructors and assistant professors, but the resolution makes provision for first-rate sources of instruction and of information in every department of Barnard, a privilege which is too seldom enjoyed by women's colleges, particularly those of an isolated character. It is fortunate also that this resolution in no wise discriminates against women—rather it improves their position as teachers, for it recognizes their value solely on the grounds of scholarly worth and suggests opportunities which they have heretofore rarely enjoyed.

Not only for women who are teachers but for students also this closer union with the University is an advantage. It would be pretentious to speak of it as opening a new era in women's education, especially in an age where new eras spring up overnight like garden weeds in June. It does represent, however, the best arrangement for the higher education of women on equal terms with men that has yet been devised in circles not strictly co-educational. A reasonable and common sense view of the higher education of women consists simply in giving them every opportunity to come in contact with first-rate sources of knowledge and instruction, and where can those be found so freely as in a great city university? Naturally there are physical and personal problems peculiar to women, but so far as education may still be thought of in terms of the mind, what holds for one sex holds also for the other. If for no other reason than that there is in these new plans no trace of the disjunctive, separatist, militant ideas that still exist as a semi-ludicrous anachronism in certain places, they would merit attention. One must not think of Barnard College as conquering for women a position in the world, but as a college so happily situated that it can take the fullest advantage of its connection with Columbia University and with New York City. All this is quite in line with the ideas of the great educator for whom the College is named.

Closer and closer union with the University, then, is the first

and constant concern in the educational system of Barnard. A greater and greater use of the resources which the University so generously offers would seem to be a common sense policy. Barnard is now in a position to use more widely and more wisely than ever before courses in other parts of the University and thereby to add to the opportunities for women. Lest these remarks should savor too strongly of parasitism, let it be borne in mind that the new arrangements are designed also to enable Barnard to make more and more valuable contributions to the general life of the University.

The other great asset in the situation of Barnard, its location in New York City, is by no means used to its full value. One is not justly to be accused of cynicism if he remark that New York City is perhaps the chief reason why many transfer students come to Barnard and why natives go more and more elsewhere. The great, vague, irresistible pull of so-called "college life" draws away city girls who can go to the country, and, though even a city college develops a college life of its own, there is no wisdom in attempting to model that life on the totally different conditions that exist in country colleges. Academic attractions apart, there can be no question of the intellectual advantages of a city like New York. A city college might be called successful almost in proportion as it succeeds in shaking off a merely conventional and academic routine and using in a systematic and organized way, as well as in a casual and informal manner, the civilized intellect that lies outside itself. In this respect Barnard has been far behind the rest of the University. Other parts of the University, notably the Schools of Law, Medicine, Journalism, and Business and the Department of University Extension have dug deeply into this mine, but Barnard has merely scratched the surface. Not only in introducing students to what the city has to offer, but in employing city talent at the college itself, much might be done. Any city college, while maintaining for those who wish it the traditional four year course, might wisely, to a greater extent than is anywhere now the case, take measures to break the rigid academic bloc.

These remarks suggest an interesting consideration with

regard to the organization of Barnard, in the interest of that greater flexibility toward which much progress has already been made. The college, from the income of its invested funds, might properly maintain a body of scholars of the highest university quality, in those various subjects which are the recognized staple in academic tradition and practice. A college would therefore exist even if there were no students, and such students as there were would be sure of access to first hand sources of information. In practice, also, certain instructors, the chief part of whose time belonged to the college, would be necessary for stability and for that constant oversight and interest that a sound college must have in its students. But it would be not unwise if Barnard used a larger part of its tuition fees than at present for instruction by outside experts who are to be found in a city and do not exist elsewhere, for instruction in a larger variety of subjects than is usually thought suitable to a college. Such an arrangement could hardly fail to be stimulating and valuable. It would do for Barnard in its relation to New York City merely what the recent legislation already spoken of will do for Barnard in its relation to the University.

Such matters call for early and grave consideration by the Faculty, the Administration and the Trustees. Another matter that will occupy some time of the Faculty during the coming year will be some reduction in the number of prescribed courses. The group system, with provision for some dispersion, to ensure a student's knowing something about some one subject, together with a reasonable number of contacts with other intellectual concerns, is similar to the best practice in other colleges and has had good results. But during the revision of the curriculum four or five years ago, a number of specifically prescribed subjects were retained, or crept in by way of fresh experiment, for which the call is by no means clear. The number is certainly excessive, and there are some signs of interference with a student's pursuit of one subject till she really begins to know something about it. It was a step quite in the right direction when students in the honors course were excused from all obligations to the specifically prescribed courses.

Specific courses should be prescribed only for positive, definite reasons. Reasons of general culture can hardly be urged; for a sagacious student may quite properly and quite truthfully say that scores of elective courses are quite as good for the purposes of general culture as those specifically prescribed. As a matter of fact, an instructor, in this respect, counts for very much more than any particular course; it would be wiser to prescribe instructors. The general culture argument can be even better satisfied by allowing a student a more general choice among several courses in a field.

What may be called the "stop, look, and listen" (or as students would say, "listen in") argument is also fallacious. The practice is a commendable one, is to be encouraged, is encouraged by wise educators, but is not a sound basis for the prescription of a specific course. Far less than a rigid ninety, sixty or even thirty hour course should suffice, even if time were unlimited and the argument sound. Stimulus, which the "look in" position presupposes, is in any event likely to result from imaginative moments rather than from encyclopedic acquaintance with many things.

The argument that, having had the subject in the preparatory school, the student should therefore learn more about it, and from the college point of view,—whatever the phrase may mean!—would seem to be as preposterous as requiring all men to continue the interests of youth; we have the authority of St. Paul to the contrary. Equally fallacious, though not so absurd, is the counter position that students must be required to take certain subjects not offered for entrance. Yet all these arguments and many more are seriously advanced, often with fatal results, whenever a college curriculum is in the making. In one aspect of the matter, the concentration-dispersion system, now much in vogue and well established, is a general compromise answer to such arguments.

Specifically prescribed courses should be limited to two classes. Certain courses may train students in the handling of instruments which are indispensable not only in many college activities but also in the more prolonged and less protected activities of subsequent life. Subjects that here suggest

themselves as obvious examples are the English language, oral and written, competence in at least one foreign language, and enough physical education and hygiene for a student to acquire sound habits. To these might be added some training in the accurate ways of modern science; but any other courses would, in this aspect of the case, be open to question.

The second class comprises such courses as are deemed necessary to all students because their content is an indispensable foundation for all cultivation whatsoever. The classics and mathematics once held the premier position in this class, as they were also held indispensable for general discipline of the mind; but today they tend to be supplanted by history, economics, philosophy, ancient culture, and contemporary civilization, and quite a number of other minima for all students. For any one of these a plausible case may be made out; like an over-zealous doctor, a faculty is tempted to prescribe and prescribe, up to the limit of four years. The present glut of prescribed courses in Barnard resulted from the Faculty's yielding too readily to the claims of indispensable knowledge, forgetting that life is usually prolonged after the A. B. and that a serious student is likely in after years to acquire such knowledge as she deems indispensable. As a matter of fact, the courses that can unmistakably be put in this class are very few indeed, nor is there complete agreement on them. It is very difficult indeed to see just why all students should be obliged to take Mathematics A after three years in preparatory school, or History A, even if they have studied but little history, or Economics A, though the subject is quite new to them, or Philosophy A or Psychology A, or Zoology C, except on such grounds as would relegate the last named to the former category of instrument courses. A better plan, because a more flexible one, would be to give students a choice of courses in one subject or in a group of allied subjects. This is really done in the group system, which tends to make the specifically prescribed course unnecessary and somewhat illogical. Such courses as are basic from the point of view of a group or are necessary to the successful prosecution of the student's major interest, she will naturally take, and she may wisely be advised to take others, especially

if the instructor is stimulating. That is perhaps as far as it is reasonable to go in the matter of indispensable knowledge courses.

Whatever courses are specifically prescribed should evidently, to a greater extent than is at present the case, be a concern of the Faculty. All such courses should be regarded as Faculty courses, in the sense that their aims should be the concern of the Faculty as much as of the department that gives them. The carrying out of the object is in the hands of departmental experts, who are obviously in command of the material or are chosen because competent to give the training called for. In a subject matter course, there can be little occasion for difference of opinion; granted that the Faculty prescribed a course in the history of philosophy, it could hardly prescribe the brand of philosophy to be taught. In a training course, on the contrary, the Faculty might properly rule that certain matters are more important than others, that the substitution, for example, of general culture for specific training, does not meet the demands of a general prescription. A training course is obviously a course in practical results, and if these are not obtained, the Faculty should see that the course is changed or that it is withdrawn for the list of prescriptions.

These remarks will doubtless be regarded as implying an indifference to standards. Such is not the case. But it may be proper to urge that some reconsideration of just what we mean by college standards is necessary. Standards in education have always depended, and even after the war depend, principally on two things,—sound instruction in whatever subjects are deemed desirable to offer, and the quality of the students to be taught. Too often, however, educators in all departments of their profession are likely to confuse standards with restrictions and regulations. Since many teachers hold such views and announcements advertise them, it is not unnatural that students sometimes gain the impression that a college course is a race of four or more laps, each of a year's duration, each obstructed by a variety of difficult hurdles and other unnecessary obstructions, not only quite unhelpful but often detrimental to a happy intellectual progress. There are enough

natural difficulties in the serious study of any subject to make artificial restrictions unnecessary. Such restrictions come not only in general faculty regulations but also in the injudicious use of prescribed and prerequisite courses conforming to no natural or discoverable necessity. Barnard probably sins less than other colleges in this respect, but some of its rules and regulations could be obliterated without damaging a single intellectual standard of value. Happily, group systems, the honors course, and the greater union with the university that has been described above mark progress in the direction of more reasonable standards as in the way of greater opportunity.

During the year the College has received money to the extent of \$207,272.06 from various bequests for the following trust funds:

Anderson Fund	\$40,000.00
Carpentier Fund	1,970.22
General Endowment	4,101.84
Sage Fund	150,000.00
Sanders Fund	10,000.00
Prince Fund	1,200.00

This last item was the gift of Mr. Julius Prince to found the Helen Prince Memorial Prize for excellence in English Composition.

There have also been gifts of \$4,434.34 of which \$3,137.50 was for salaries; \$1,234.34 for Scholarships and Fellowships. Mr. Arthur Ryle presented to the College a marble bust replica of Michael Angelo's Homer and this has been placed in the Ella Weed Library. The Class of 1912, in celebration of the tenth anniversary of its graduation has given a clock to the College.

As was forecast in the last annual report, the expenses of the College ran considerably beyond its income. Since this deficit has to be added to considerable deficits of preceding years, made good out of capital funds, the Finance Committee directed the administration to keep the Budget for 1922-23 within the probable income of the corporation. So this has been done in forecast, and unless unforeseen emergencies arise, the College should close its books on June 30, 1923, with a

small surplus. The Finance Committee, at its last meeting, held on June 8, laid down for the future a continuation of the principle, that the College should live within its income and should forego expenditures, however desirable, that could not be paid for out of the likely income of the corporation. Such a policy, far from being a cause for lamentation, should be an active and beneficent stimulus for making the best of the income at the disposal of the College.

The College records with profound sorrow the death on December 14, 1921, of Mrs. James Talcott, a charter member of the Board of Trustees. In commemoration of her long service the Trustees adopted the following minute on February 10, 1920:

Whereas, in the death of Mrs. James Talcott, we have lost one of the original members of the Board of Trustees of Barnard College, and one of the most loyal and faithful in her attendance at our meetings,

Now, therefore, be it

RESOLVED, That we express our appreciation of her generous assistance in coming to the aid of the college during its early days of struggle when support and encouragement were doubly precious, providing the fund whereby the first home of the college was furnished and equipped, and subsequently with her husband establishing the Talcott Foundation for Religious Instruction;

And be it further

RESOLVED, That we record our admiration for the sturdy zeal with which she ever upheld her principles, and especially the conviction that women's education should not concern itself solely with the problems of the mind, and that an educated woman connoted a rounded woman, trained in her physical body, her emotions, and her religious beliefs, thus at all times encouraging by individual interest in the students, by wise advice, as well as by financial aid, all the many sides of college life which lie outside the mere study of the curriculum;

And be it further

RESOLVED, That we express our heartfelt sorrow at the loss sustained not only by her family and by her own Board but by the cause of the higher education of women;

Be it finally

RESOLVED, That these resolutions be spread upon the minutes, and that a copy be sent to the family of Mrs. Talcott.

Vacancies in the Board have been during the year filled by the election of Mr. Gano Dunn and Mrs. Alice Duer Miller, a

graduate of Barnard in the Class of 1899. Mrs. George Vincent Mullan, of the Class of 1898, was elected for a term of four years as the second Alumnae Trustee in accordance with the amendments to the Charter referred to in the last annual report.

Respectfully submitted

WILLIAM T. BREWSTER

Provost

June 30, 1922

TEACHERS COLLEGE

REPORT OF THE DEAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1922

*To the President of the University and
the Trustees of Teachers College,*

SIRS:

I have the honor to transmit herewith the annual reports for the year ended June 30, 1922, of the Directors of the School of Education and the School of Practical Arts.

The progress of Teachers College during the year under review has been exceptionally satisfactory. There has been no disturbance in the work of any department, and our new undertakings have more than met expectations. The extra-mural courses given under the direction of Professor Hoscic have been well received. The total enrollment in courses given in seventeen centers was 2,323. The Institute of Educational Research has more than justified its establishment. The Division of Educational Psychology has conducted two studies under subsidies from The Commonwealth Fund, one study for the American Classical League, and one for the College Entrance Examination Board. The Division of School Experimentation has had the direction of a study in the physical training of children provided for by a gift from Mr. and Mrs. Harmon August, and of the rural experimental school near the village of Allamuchy, Warren County, N. J., made possible by a gift from Mr. Felix M. Warburg. The Lincoln School, under Dr. Caldwell's guidance, is a veritable laboratory in educational experimentation, surpassing in scope of work and financial resources all other divisions of the Institute. The Division of Field Studies has conducted a school survey of the City of Atlanta and of a township in New Jersey. Dr. Strayer has also had a leading part in an intensive investigation of public school finance. Altogether, the Institute has received during the year in gifts and grants for special studies the sum of \$47,725, besides some \$9,900

expended upon the finance investigation for work done at the College, and \$130,000 received from the General Education Board for the support of The Lincoln School.

It becomes increasingly apparent with each year's experience that the chief duty of Teachers College is the professional training of leaders. To this end, as I pointed out in my report a year ago, investigation and research are necessary prerequisites. These prerequisites provided, there remains the obligation to use the results of such inquiry in professional service. The number of mature students is steadily growing. Our resources in staff, buildings, and equipment remain relatively stationary. To keep our registration within bounds, we have tried from time to time to limit attendance by raising standards. Twenty-five years ago, when the College was essentially a normal school offering a two-year curriculum, we lengthened the undergraduate course to four years and offered in addition postgraduate work. The immediate effect was a decided increase in student enrollment. Repeatedly during the intervening period standards both for admission and for graduation have been raised, and always with the result that more students have come to us. It appears that the better the offering, the more students there are who wish to avail themselves of it. But there are limits, of course, to such procedure. A professional school is bound to meet public needs. It cannot cut itself off from its base of supply on the one hand, nor, on the other hand, dare it go, in requirements for graduation, beyond the ability of the public to absorb its output. Our base of supply is found in the normal schools, the colleges, the technical schools, and the universities of the country. Standards of admission, therefore, must be adjusted to what these institutions can meet. The professional capital that may properly be expected of a student on graduation is determined largely by the economic return that he can get from his professional service. It is idle to suppose that either limit can be disregarded with impunity.

The requirements for admission to the School of Education are as high as can safely be set and still retain our connections with the institutions from which our students come.

The School of Practical Arts, however, has upward of 300 students who have entered direct from a high school. This standard was a fair measure ten years ago when the School was established. There was then no dependable supply of students from institutions equipped to give the technical instruction required for admission to advanced courses in domestic art and science, in the fine and industrial arts, in school music and physical education. Meanwhile, courses have been introduced into most normal schools and state universities and into many women's colleges that either parallel our work in practical arts, or that prepare students adequately for admission to our advanced courses. It seems to me, therefore, that the most direct way for us to reduce our numbers, or at least temporarily to check our growth, will be to drop out the two lower classes in the School of Practical Arts. More than half of the enrollment in the upper classes is now made up of students who have entered with advanced standing, and the number of graduate students in Practical Arts has grown from 37 in 1913-14 to 262 in 1921-22. It is clear, therefore, that the greatest demand is for advanced courses, and that the most rapid growth is in the group consisting of mature students.

I realize that in exchanging young students for students both more mature and better trained, we are confronted with a serious financial problem. Our first and second year students pursue mainly academic courses which make no heavy drain upon room or equipment. Students entering with advanced standing may not be easily classified, and in the field of practical arts the need for studios and laboratories will quickly exceed our resources. It is, indeed, doubtful if we can by any rearrangement of rooms or addition to our present equipment, care for as many advanced students as we now have undergraduates in the two lower classes. This fact, coupled with the greater cost of instruction given to advanced students, means a considerable financial loss, an outcome that is as unpleasant as it is unavoidable.

After ten years of anxious waiting, we have the promise of a library building and a new power plant. Work was begun

early in May, and it is expected that construction will be completed and the building ready for occupancy at the opening of the winter session in 1923. The library building, 200'-0" by 78'-10", and six stories in height, will be connected on all floors with the Main Building of Teachers College. Besides ample library facilities, the new building will free for class and laboratory use nineteen rooms now occupied by the Bryson Library and departmental collections. The cost of construction and equipment is estimated at \$1,500,000.

When our campaign for funds with which to secure a library building was renewed at the end of the war, the estimated cost was two millions of dollars. On that basis, the General Education Board offered to give one million of dollars for endowment, provided two millions were secured for the building. When it was found that the building could be had for \$1,500,000, the General Education Board generously agreed to free us from the limit originally fixed, and to make their gift on a pro-rata basis of 50 per cent of the total amount received from other sources. Unless the fund can be increased before December 31, 1922, the endowment for the library will not exceed \$750,000. The General Education Board stands ready, however, to increase its gift proportionally up to the limit of a million dollars. I need not emphasize our great need of this further support.

The amount already given or pledged, as of June 30, 1922, was \$1,523,561.92. Trustees of the College have given \$1,075,375.00. Two subscriptions in amounts of \$100,000 each have been received from Mr. E. S. Harkness and Mr. G. F. Baker, and one of securities from Mr. John D. Rockefeller, Jr., valued at the date of gift at \$157,500. Students, alumni and officers and patrons of the College have contributed \$90,686.92.

It is not easy for me to speak moderately of the service rendered in our campaign by our students, alumni and faculty. The amount credited above represents real sacrifice on the part of some 3,200 persons who know Teachers College from personal contact and have given with a full heart in appreciation of what the College means to them.

In closing this report I wish to pay tribute to the memory of two officers of the College whose services have been invaluable and whose influence will remain a permanent contribution to our life:

Mr. Peter B. Olney died on February 9, 1922. He had been a Trustee since 1892. At the first meeting which he attended it was resolved to purchase the site upon which the Main Building now stands. From that transaction, thirty years ago, to within a week of his death, he was the legal adviser of the Board in every important matter. No undertaking was too arduous, no request too trivial, to command his undivided attention. He not only gave to the College his professional services without fee, but as a regular attendant upon Board meetings, he contributed freely from his vast store of wisdom to the formulation of the policy of the institution. His judgment, founded upon the bed-rock of right and justice, was ever a potent influence, and the example of his life—honest, rugged, straightforward, and true—will always be an inspiration to those fortunate enough to have been associated with him. Teachers College owes much to Peter B. Olney. The debt can be paid only in kind: by unswerving loyalty to those principles of life and conduct which actuated him, and by passing on to others his example of unselfish service.

In the death of Miss Romiett Stevens, who passed away on August 7, 1922, the College suffers an irreparable loss. She was not only a great teacher, thoroughly trained in the field of secondary education, but she was a noble woman who in the daily routine of living exercised a profound influence upon all who came in contact with her. It is not mere accident that she became our leader in establishing the course of training for advisers of girls. In this field she had the opportunity to make effective her ideals of womanhood, and the satisfaction of seeing those ideals realized through the work of hundreds of her students who are now advisers of girls and deans of women in institutions all over the world.

Respectfully submitted,

JAMES E. RUSSELL

Dean

SCHOOL OF EDUCATION

REPORT OF THE DIRECTOR

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1922

To the Dean of Teachers College,

SIR:

I herewith submit my report for the School of Education for the academic year 1921-1922.

The total number of students enrolled in the School of Education has been 1,976 (not including graduate students with majors in Practical Arts), as compared with 1,711 for the preceding year. In Practical Arts there were 262 graduate students as against 236 in 1920-21. The matriculated students of both schools in the Summer Session of 1921, not in attendance during the regular year, numbered 3,505. Of the total number of graduate students in the School of Education during the academic year, 30 were enrolled as unclassified students, 1,033* indicated their desire to become candidates for the Master's or Doctor's degree, and 913 were matriculated unclassified students. Of the last named, 403 were enrolled as candidates for the degree of Bachelor of Science. In the preceding year there were 852 candidates for the degree of Master of Arts and 20 unclassified graduate students.

During the year the degree of Doctor of Philosophy was conferred upon 19 students, 11 of whom had taken the Master's degree at Columbia. In the preceding year 7 doctorates were awarded; in 1919-20, 23; 1918-19, 9; 1917-18, 19; 1916-17, 9. For the academic year 1921-22, 535 students in Teachers College received the degree of Master of Arts, 10 the degree of Master of Science, and 428 the degree of Bachelor of Science.

The total number of Teachers College professional diplomas granted during the regular academic year was 568. These diplomas are granted only in connection with a degree.

* 1,295 including graduate students with Practical Arts majors.

Of the 1,325 graduate students, 161 held the Master of Arts degree from Columbia University; 201 students held the degree of Bachelor of Science from Teachers College. Other colleges and universities were represented as follows: Hunter College, 90; College of the City of New York, 51; University of Chicago, 44; Smith College, 35; Wellesley College, 29; New York University, 28; University of California, 25; Vassar College, 25; Cornell University, N. Y., 23; Harvard University, 22; Syracuse University, 22; University of Missouri, 20; Mount Holyoke College, 19; University of Wisconsin, 18; Oberlin College, 17; University of Michigan, 16; University of Illinois, 14; University of South Carolina, 13; University of Toronto, 12; University of Kansas, 12; Colgate University, 12; Bryn Mawr College, 12; University of Texas, 11; University of Indiana, 11; Ohio Wesleyan University, 10; New York State Teachers College, Albany, 10; Yale University, 9; Dartmouth College, 8; Dickinson College, 8; Franklin and Marshall College, 8; Goucher College, 8; Northwestern University, 8; Radcliffe College, 8; Wilson College, 8.

The total number of institutions represented was 256.

In the choice of subjects other than Education pursued by Teachers College students in other parts of the University, the following departments proved most attractive: English, 449; History, 212; Sociology, 133; Psychology, 120; French, 104; Spanish, 101; Philosophy, 71; Business, 61; Comparative Literature, 60; Mathematics, 54; Architecture, 51; Economics, 39; Chemistry, 35; Fine Arts, 33; Zoology, 28; Music, 26; Astronomy, 25; Neurology, 17; Italian, 16; Latin, 16; Botany, 14; Government, 13; Physics, 13; Journalism, 11; Physiology, 11; Physical Education, 9; Greek, 8; Geology, 8; 23 other subjects were chosen by a smaller number of students. A total of 1,783 class registrations represents the interest of Teachers College students in other phases of University work.

Nothing so well indicates the extent of the influence of Teachers College as the number and distribution of students from foreign lands. During the year 1918-19 they numbered 126; in 1919-20, 203; in 1920-21, 214; in 1921-22, 245. For the Summer Session of 1922 the record is even more remarkable.

During the academic year four meetings of the Executive Committee have been held. Forty-four new courses have been approved. Most of these were to provide for the offerings in the extramural department and for our increased attendance during the Summer Session.

The following new diplomas were authorized on recommendation of the respective departments: Examiner with Mental and Educational Tests; Teacher in Kindergarten—First Grade; Instructor in Hygiene and Physical Education; Instructor in Household Arts; Critic Teacher in Primary Schools (first four grades); Critic Teacher in Elementary Schools (grades one to eight inclusive); Critic Teacher in Upper Elementary Schools (grades four to eight inclusive); Supervisor in Upper Elementary Schools (grades four to eight inclusive); Supervisor of Kindergarten—First Grade; Supervisor of Kindergarten and Primary Grades; Teacher and Supervisor of Public Health Nursing.

One new regulation of importance in the conduct of the School was adopted and received the approval of the Committee on Instruction of the Graduate Faculty of the University. This regulation makes it possible for a student who has attended one Summer Session and the following Winter Session to complete the requirements for the Master's degree in a foreign university, provided this work is done under the direction of a member of the staff of Teachers College. A most interesting educational development in the training of teachers of modern languages is thus inaugurated. Professor Méras, head of the French department, is during the current year an exchange professor in the School of Modern Languages of the University of Paris. With this oldest of our universities an arrangement is made by which our students of the teaching of French may spend one semester in the Sorbonne and the following summer in a student's tour through France, under the direction of Professor Méras or of some other instructor of the Sorbonne School of Modern Languages. In this way our students are given the unusual advantages of what may become a most significant innovation in the training of modern language teachers. For the authorities of the Sorbonne offer

this as a continuous arrangement, and Professor Méras is desirous of dividing his time between the two institutions. Since the great difficulty in the training of language teachers in America is to give them this actual contact with the culture and the spoken word of the language which they are teaching, the arrangement which we have entered into is one of great importance.

For several years attention has been called to the need of systematic and permanent provision for the study of civic education and for the training of workers among the foreign born population. This work has been carried on for years through courses given by various instructors on our staff whose major interest was in other fields, or by lecturers having no permanent relations with the College. During the past year a gift by Mr. Felix M. Warburg, long a Trustee of the College, has made possible the support of a specialist to deal with this subject. Dr. Albert Shiels, formerly one of the associate superintendents of the city and later superintendent of the Los Angeles schools, has been appointed Associate Director in the Division of Field Studies of the Institute of Educational Research, to have charge of investigation in this field, and to give instruction in the School of Education.

While the public interest in the consideration of these problems has decreased, the educational problems are just as real and constant. Dr. Shiels' long contact with these problems promises much for the development of our work in this line.

The newly created administrative organs of the College, the Institute of Educational Research, the division of Extramural work, the Committee on Higher Degrees, have much simplified and expedited the work of the School. By the regulations recently adopted, the oral examination of candidates for the Doctor's degree has greatly increased the obligations of the instructing staff, but has greatly improved our procedure in handling the many candidates for the higher degrees.

It is with pleasure that I acknowledge the generous approval of the work of the School of Education by the Trustees and the Dean, in the following promotions:

Patty S. Hill, from Associate Professor to Professor of Education.

Mabel Carney, from Assistant Professor of Rural Education to Associate Professor of Education.

Edward S. Evenden, from Assistant Professor to Associate Professor of Education.

Arthur I. Gates, from Assistant Professor to Associate Professor of Education.

Leta S. Hollingworth, from Assistant Professor to Associate Professor of Education.

Romiett Stevens,* from Assistant Professor of Secondary Education to Associate Professor of Education.

Fannie Wyche Dunn, from Instructor in Rural Education to Assistant Professor of Education.

Respectfully submitted,

PAUL MONROE

Director

June 30, 1922

* Deceased August 7, 1922.

SCHOOL OF PRACTICAL ARTS

REPORT OF THE DIRECTOR

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1922

To the Dean of Teachers College,

SIR:

I submit herewith my annual report as Director of the School of Practical Arts for the academic year ending June 30, 1922.

The total registration of regular students in the School of Practical Arts from September, 1921, to June, 1922, was 1,691 undergraduate and 262 graduate; total, 1,953, an increase of 253 over last year. In addition, 784 Extension students were admitted to special sections of technical courses for which their preparation was equivalent to that of matriculated students in the same courses. The great majority of Extension students in Practical Arts were, as in former years, teachers and others who were eligible to matriculation for the Bachelor's degree, but able to attend only as part-time students. Cards of admission were issued to 790 auditors who attended extension special courses of popular lectures conducted by the departments of the School in coöperation with the Institute of Arts and Sciences.

For convenience in comparison, I include in the following table the attendance in 1913-1914, the first year in which undergraduate professional students in practical arts education were registered under the Faculty of Practical Arts.

STUDENTS IN PRACTICAL ARTS, 1913-1922

	Undergraduates in Practical Arts	Graduates in Practical Arts	Total in Practical Arts	Total in Teachers College
1913-1914	793	37	830	1,803
1920-1921	1,464	236	1,700	3,411
1921-1922	1,691	262	1,953	3,929

The increase in numbers of professional students referred to in my report last year has continued. Of the 1,691 undergraduates this year, 1,346 were professional students (Juniors, Seniors and unclassified), a total of 345 being Freshmen and Sophomores. This is a gain of 265 professional students and a decrease of 38 in the Freshman-Sophomore group. The 262 graduate students were all professional. Moreover, there were about 200 professional students registered through University Extension.

The departmental distribution of graduate students in Practical Arts is shown in the following table:

GRADUATE STUDENTS IN PRACTICAL ARTS

	1919-1920	1920-1921	1921-1922
Household Arts	90	112	91
Fine Arts	36	39	53
Industrial Arts Education	10	14	13
Music Education	6	10	14
Nursing Education	19	24	17
Physical Education	24	26	33
Practical Science . . . . .	..	11	41

The apparent loss in Household Arts is due to the fact that many graduate students interested in nutrition and bacteriology were formerly classified under Household Arts, but now under Practical Science.

In October, February and June, 1921-1922, the Bachelor's and Master's degrees were conferred by the University on 399 students whose majors were in Practical Arts. Of 301 who received the Bachelor's degree, 291 were women and 10 were men. The Master of Arts degree was conferred on 78 women and on 10 men. The Master of Science degree was conferred on 10 women.

The number of Teachers College diplomas in Practical Arts conferred in 1921-1922 was 218, 167 to holders of the Bachelor's degree and 51 to holders of the Master's degree. One hundred ninety-seven of the diplomas were educational (for teaching or supervision) and 6 were for technical prepara-

tion in nursing and dietetics. The distribution of the educational diplomas by departments was as follows, the figures in parentheses being those of 1920-1921: Household Arts—95 (103), Fine Arts—28 (22), Industrial Arts—9 (13), Music—13 (9), Nursing—30 (12), Physical Education—31 (38).

An interdepartmental grouping of courses related to health has been approved as a requirement for a new diploma in Teaching of Health Education. This group includes courses in biology, bacteriology, sanitary science, nursing, household arts, social science, and physical education.

Several members of the Teachers College faculties and a number of advanced students attended the important health education conference held during June at Lake Mohonk, N. Y., under the joint auspices of the United States Bureau of Education and the Child Health Organization.

The Faculty of Practical Arts has acted on the recommendation of the Executive Committee, representing the two faculties of Teachers College, and has approved two new diplomas which will require a year or four summer sessions beyond a Master's degree. The diplomas are "Instructor in Hygiene and Physical Education" and "Instructor in Household Arts." Both relate to teaching in institutions of college rank.

Dr. Hattie L. Heft has been promoted from the rank of Instructor to that of Assistant Professor of Physiological Chemistry. Miss Mary Henley Peacock, who for eleven years was a prominent instructor in the department of Foods and Cookery, died during the Spring Session. Twenty-three of the regular instructors in the departments of Practical Arts, who formerly held annual appointments by vote of the Faculty, have been appointed by the Trustees to serve "during the pleasure of the Trustees."

Respectfully submitted,

M. A. BIGELOW

Director

June 30, 1922

COLLEGE OF PHARMACY

REPORT OF THE DEAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1922

To the President of the University

SIR:

I have the honor of submitting the following report for the academic year 1921-22.

This will always be remembered as an exceptionally eventful year in the history of the College.

For the first time in our history, we find ourselves free from debt and with a substantial balance in the treasury, providing for important contemplated extensions of our work. At a public meeting held on the evening of March 21, the mortgage on the College property was burned, with impressive ceremonies and interesting historic addresses.

Shortly after this event, our Treasurer reported the purchase of the vacant lot adjoining our property on the east, and the trustees at once appointed a committee to proceed with the erection of an addition to our building. By a fortunate circumstance, we are enabled to use our present entrance and stairways for access to both buildings, so that the whole of the new building can be utilized for additional floor space.

Coincident with these developments, a committee has been appointed to devise plans for providing pensions for retiring members of the faculty and office force.

These financial developments have been made possible by a phenomenal increase in our registration of students. During the session of 1920-21, our accommodations for students were fully employed. In the fall of the latter year, although in the meantime some additional accommodations had been provided, the number of applicants far exceeded our capacity for admission, and long before the close of that session, we had matriculated a full class for the following year, and had been

obliged to turn away almost as many applicants as we had been able to accept.

In view of this situation, we took into serious consideration a plan for renting a building and matriculating a second first-year class. After careful study, it was concluded that it would be extremely difficult to maintain educational standards under the adverse conditions of such an arrangement and the plan was not carried out.

During the period of and following the late war, it was my unpleasant duty to report a deterioration in the character and work of our student body. It is now very pleasant to report a complete reversal of this condition. Not only was our last graduation list the largest in our history, but it represented an exceptionally large percentage of the class membership, and the average scholarship rating was the highest ever recorded in this school.

More important than any of the events above recorded, is the fact that, beginning with the session of 1923-24, high school graduation or its equivalent will be required of all our matriculants. This advance is made in accordance with a pledge given by four of the five pharmacy schools of this State, and originating with them, to the American Conference of Pharmaceutical Faculties. It is a matter of great regret that ours is the only one of these four schools that is willing to redeem this pledge.

After the close of the session of 1920-1921, our faculty determined on a reorganization of its course of instruction in commercial pharmacy and jurisprudence, involving its transfer from the freshman to the sophomore year. There has therefore been no instruction in these subjects during the past year. Hereafter, beginning with the coming session, this work will be performed by Professor Kester and his staff of instructors. The instruction in pharmaceutical jurisprudence will be comprised in a series of lectures by Judge Jeremiah Steiner.

Through the retirement of Dr. Bastedo from the Faculty of the Medical School, he ceases to represent the University on our Faculty, and a successor must be appointed.

The increased attendance of students above recorded has

necessitated the employment of an additional instructor in each of the three departments of chemistry, pharmacy and materia medica. This addition to our teaching staff will also afford more opportunity for original research by the professors, an object that we have long earnestly sought to attain.

It having been reported to the trustees that a demand exists among the employees of commercial houses in this city for some special instruction in pharmaceutical subjects, we have arranged a special course for the benefit of such persons, this instruction to occupy the late hours of the afternoon on two days of the week.

The American Conference of Pharmaceutical Faculties having prepared a revised edition of the National Pharmaceutical Syllabus, to serve as a general guide to the schools in meeting the requirements of licensing boards, some slight changes have accordingly been made in our curriculum.

Of considerable interest to us has been the award to our Professor of Chemistry, Dr. Henry V. Arny, of the Remington Medal for having made the most important contributions of the past year to the progress of pharmacy.

Not without interest also has been the representation of our Faculty, through its Dean as director of the Mulford Biological Exploration of the Amazon Valley, a year having been very successfully devoted to exploration, collecting, and motion picture illustration in botany, entomology, ichthyology and herpetology. The extensive collections made will furnish the basis of study and experimentation for years to come and will result in important contributions to knowledge in these directions.

Respectfully submitted,

H. H. RUSBY,

Dean

June 30, 1922

SUMMER SESSION
REPORT OF THE DIRECTOR
FOR THE SUMMER SESSION OF 1922

To the President of the University

SIR:

As Director of the Summer Session I have the honor to submit the following report of the twenty-third Summer Session of the University which opened July 10 and closed August 18, 1922.

The report of the Registrar includes the statistical record of the Session. (See pages 320-6.) Outstanding figures are: (1) the enrollment of 12,567 students, which is the largest in the history of the Summer Session (against 11,809 for the attendance of 1921) in spite of the unsettled financial condition of the country; (2) the percentage of men and women, 33.99 and 66.01 respectively; (3) the wide territorial distribution with 8,644 students from outside of New York State, and with 1,725 (13.72 per cent) from the South Atlantic Division (Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia) and 312 students from foreign countries. Of the students in attendance 43.47 per cent had taken work at the University previously. Studies of the distribution of previous years indicate clearly that the percentage of students from outside New York State is constantly increasing.

Other interesting figures are: 470 instructors—329 men and 141 women, with the addition of 94 assistants—46 men and 48 women; in the Demonstration School there were 12 High School teachers and 22 Elementary teachers. A total of 792 courses was offered. In addition to the regular courses there were 112 lectures given as recorded in the Weekly Bulletins of the Summer Session. A total of 18 public conferences on subjects in mathematics, history, and psychology

were given; and a series of four conferences on "The Education of the Adult Immigrant" in which the University of the State of New York participated; and a series of four lectures on "Rehabilitation" under the direction of the Federal Board for Vocational Education. The Goldman Concert Band gave fifteen concerts on the Green during the Session, and three concerts were given in the Gymnasium under the direction of Professor Walter Henry Hall, and three organ recitals in the Chapel. As a Molière celebration four performances of "The Imaginary Invalid" were given in the Gymnasium by the Coburn Players. Excursions were conducted in and about New York City with a total of 12,670 participants. The West Point excursion included 1,979 students and 904 were taken to Atlantic City.

The growth of the Summer Session and the blasting for the foundation of the Teachers College Library which made it difficult to use some of the rooms in the Macy building necessitated a more complete use of the Barnard buildings than heretofore. Most of the class rooms were needed and, as heretofore, the gymnasium and pool in Student Hall. The pool was given daily to the general use of women students with an average daily attendance of 125.

The composition of the instructing staff showed no marked change from that of previous years. There were 135 instructors from outside the University staff and two instructors from a foreign country.

Two features of the Summer Session of 1922 require special attention because they are indicative of the educational development of the University and because they illustrate the fashion in which the Summer Session may start or forward a new feature of University effort. A group of three conference series in jurisprudence was offered for members of the bar, teachers of law, and other advanced students of law. Professor Roscoe Pound, Dean of the Harvard Law School, lectured on "Sociological Jurisprudence;" Professor John Dewey, on "Some Problems in the Logic and Ethics of Law;" and Professor Walter W. Cook, on "Some Problems in Legal Analysis." The ability of the students attending the conferences

was gratifying and the numbers, rather larger than was anticipated. The development of further summer courses in the theory of the law may well be undertaken as a part of the policy of offering opportunity for advanced work in law.

The second feature of particular interest was a series of lectures on "The Educational Interpretation of Modern Science." This series illustrated for teachers in scientific, economic, and historical fields the great part which applied science plays in contemporary life. The following persons participated in these conferences: Dr. Otis W. Caldwell; Dr. Simon Flexner, Director of the Rockefeller Institute for Medical Research; Dr. Harold L. Amoss, Johns Hopkins Medical School; Dr. Frederick L. Gates, Rockefeller Institute for Medical Research; Dr. Matthias Nicoll, Jr., Deputy Commissioner, Department of Health, State of New York; Professor H. C. Sherman; Dr. W. W. Atwood, President, Clark University; Dr. F. B. Jewett, President of the American Institute of Electrical Engineers and Vice-President of the Western Electric Company; Mr. John Mills of the Personnel Department of the Western Electric Company; Dr. E. E. Slosson, Editor of Science Service; Dr. L. O. Howard, Chief of the United States Bureau of Entomology; Dr. George T. Moore, Director of the Missouri Botanical Gardens at St. Louis; Dr. George E. Vincent, President of the Rockefeller Foundation; Dr. John M. Coulter, Head of the Department of Botany, University of Chicago; Mr. R. S. Kellogg, Editor of News Print Service; Dr. Milton W. Whitney, Chief of the U. S. Bureau of Soils; Dr. Raphael Zon, Forest Economist, U. S. Forest Service; Dr. C. O. Appleman, Professor of Plant Physiology and Biochemistry, University of Maryland; and Dr. Walter H. Eddy.

A similar series of lectures, each on a different phase of recent educational administration, provided a survey course for a large number of students interested in informing themselves on recent developments and to hear the authorities in the various phases of education.

The Department of Household Economics, in cooperation with the National Association of Mutual Savings Banks,

Women's Division, offered new work in budget making and thrift with a view to training specialists in the presentation of savings plans.

The Department of Physical Education showed a growth which is indicative of the important place which it holds in the training of teachers of physical education and of coaches.

The work in library economy offered in the Summer Session is not supplemented by work in this field given during the year. The University program for instruction in library economy should be studied during the coming year and an effort made to reach some plan whereby Home Study, the work of the academic year, and the work of the summer should all be correlated.

Similar planning for unity and future growth should be undertaken in the field of commercial education. The Department of Economics, the School of Business, Teachers College, and University Extension, and the Summer Session are all interested in this problem which can scarcely be solved well unless all these divisions of the University participate in the discussion and the formulation of a program. The number of teachers requiring training in the teaching of commercial subjects is increasing yearly and the consideration of the training afforded by the University and of its academic recognition is a matter of importance.

The action of the Trustees in the matter of caring more adequately for the housing of women in University dormitories is greatly appreciated by the Summer Session. A continued building program would be justified so far as summer rentals are concerned. A survey of the housing situation in tabular form is included as an indication of the housing conditions during the past Summer Session:

HOUSING—DORMITORY ACCOMMODATIONS

SUMMER SESSION

MEN'S DORMITORIES

	Number of Students Accommodated		Room Rent per Week on Six Weeks' Basis:	
	1921	1922	1921	1922
Hartley	307	314	\$6.00	\$6.00
Livingston	290	308	6.00	6.00
Morris	80	....	6.00	....
Tompkins . . . . .	....	115	....	6.00
<i>Total men</i>	677	737		

WOMEN'S DORMITORIES

*Bancroft	186	239	....	\$7.70
*Seth Low	270	292	....	7.12
Emerson	89	89	} Board and Room	14.33
Lowell	28	28		
Whittier	<u>345</u>	<u>347</u>		
	918	995		
Brooks	102	109	7.50	8.18
John Jay . . . . .	...	117	<u>7.50</u>	<u>8.18</u>
	102	226		
Furnald	278	278	6.00	6.00
Tompkins	88	...	6.00	....
Morris . . . . .	...	102	....	<u>6.00</u>
	366	380		
<i>Total women</i>	1,386	1,601		
Total men and women in dormitories	2,063	2,338		

OFF-CAMPUS ROOMS

Women . . . . .	...	...	8.60	8.60
Men . . . . .	...	...	8.60	7.60
			1921	1922
Total Summer Session enrollment			11,809	12,567
Number students from outside New York City			9,366	9,817
Percentage of students from outside New York City accommodated in dormitories			22.03	23.8

* Six weeks' rental at this figure entitles to 8 weeks' occupancy.

From this table certain inequalities in the price of University accommodations for women should be noted. Even the highest figures are, however, below the rates for rooms outside the dormitories.

The entire staff of the University worked together with a fine spirit of cooperation in an endeavor to carry on with the utmost efficiency the work of the Session. Many students remarked upon the unexpected consideration which they had received in a University which they had feared was too large to consider the individual. This cooperation within the Institution I count as one of the important causes for the success of the Summer Session of 1922.

Respectfully submitted,

JOHN J. COSS,
Director

October 23, 1922

UNIVERSITY EXTENSION REPORT OF THE DIRECTOR

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1922

To the President of the University

SIR:

I have the honor to present herewith the report of University Extension for the academic year 1921-1922.

At a meeting of the Trustees of the University held on February 6, 1922, the following persons were appointed members of the Administrative Board for three years from July 1, 1922:

James Chidester Egbert, Ph. D., Director of University Extension and the School of Business

Frederick J. E. Woodbridge, LL. D., Johnsonian Professor of Philosophy, Dean of the Faculties of Political Science, Philosophy and Pure Science

Herbert E. Hawkes, Ph. D., Dean of Columbia College

Virginia C. Gildersleeve, Ph. D., LL. D., Dean of Barnard College

Carlton J. H. Hayes, Ph. D., Professor of History

Robert Murray Haig, Ph. D., Professor of Business Organization

Maurice A. Bigelow, Ph. D., Professor of Biology and Director of the School of Practical Arts

Students and attendants on the exercises furnished by University Extension may be classified in certain groups: first, those who appear regularly in the class room either at Morningside Heights or in some extramural center; second, those who engage in study at home, and do not attend classes and third, those who attend the lectures and recitals of the Institute of Arts and Sciences.

The first group numbered in 1921-1922, 11,535 attending at Morningside Heights in the rooms of the University and 1,931 at extramural centers; the second group numbered 232 and the third 2,450. Thus 16,148 persons were in some way more or less closely associated with the work of the University and under its influence through University Extension.

In reviewing these remarkable numbers we are at once led to consider the further development of this side of the University's activities. I am using the word "development" purposely as at times we hear opinions expressed that the University has reached its limit in numbers, and that it must be content with those whom at present it endeavors to instruct. This comment might have been made twenty years ago and the doors then closed. The growth of the past double decade with all it has meant to students desiring contact with higher institutions of learning would not have taken place. Fortunately the record is different. An institution which endeavors to check a natural growth following lines evidently appropriate will ultimately lose the reason for its existence and fulfil a function of far less importance than that which its manifest destiny indicates. The most numerous of the groups referred to above is now crowding the halls at Morningside Heights and additional accommodations are an imperative necessity. The early erection of the building of the School of Business will give timely relief. There is, of course, abundant opportunity for growth on the extramural side and attendance in the classes in different centers may in general be increased in number without any difficulty. The extramural courses appeal particularly to teachers and hence the courses falling under the purview of Teachers College are popular. There is a demand also for instruction in such subjects as History and Economics. This work is being cared for wherever an earnest request is made. The extramural courses, as for example those conducted by the American Institute of Banking, do not tax the equipment of the University. The pre-medical courses of Columbia University held in The Long Island College Hospital are at present, however, interfering to some extent with the classes of this Medical School, especially those engaged in laboratory work. It may be necessary for Columbia University to rent some building in the neighborhood of the Hospital for use as a laboratory. Certain classes have been transferred to Morningside Heights because of the over-crowding of the buildings in Brooklyn.

Accommodations for the Home Study branch of University

Extension must soon be provided. At present one floor of Columbia House, a residence on 117th Street, is assigned to Home Study but these rooms are greatly overcrowded. Space for the clerical staff and appropriate quarters for those who act as consultants and who examine papers and reply to questions must be supplied or the usefulness of this rapidly growing branch of University Extension will be interrupted. Home Study will in time demand its own building which must take on the form of an office structure. This might also accommodate the University Press and its Book Store with which Home Study would be closely allied.

The last group is that interested in the Institute of Arts and Sciences. This branch of University Extension has for several years been compelled to restrict its numbers. The auditorium which is planned for the lower floor of the building of the School of Business will be of great help in the conduct of the Institute. Nevertheless, a much larger auditorium is needed if the Institute is to fulfil its purpose in fullest degree and admit to its membership all those who are requesting this privilege. If the present gymnasium, as has been suggested, should be remodeled so as to admit of the installation of an organ and of a direct view of the stage from all parts of the audience room, the Institute could enlarge its membership without restriction and the usefulness of the University to the community would be greatly increased.

I desire to take up in detail the reports of these various branches of the work of University Extension.

The classes at Morningside Heights as indicated above form by reason of numbers the most important part of our work. We are called upon to care for the student who is desirous of enjoying even in a very limited way some of the advantages of attendance on lectures at a university. They wish to attend classes over which men of academic distinction preside. These students are so sincere and earnest in their desire for further education that every professor welcomes them to his class room. Another class of students has had irregular careers and aims to correct this irregularity and ultimately to obtain academic recognition. These are as a rule students of high

quality. Again we are called upon to take on our rolls temporarily those whose attainment is hardly convincing as justifying admission to the University as regular students. These require careful attention and watchfulness. They are those from whose number we may save the excellent student of the future. Nevertheless they often affect unfavorably the record of a class especially in such subjects as History and Government which those who desire to enter the college are often required to elect.

Again we must care for the students who, busy with remunerative employment during the day, are eager for an opportunity in higher education even though this means great sacrifice of time and strength in attendance on evening classes. These students are generally of sturdy calibre and ability. Those who cannot stand the strain withdraw as soon as their inability is discovered.

Among our students we must mention those who have some special and definite object in view for the attainment of which this Department alone provides. Such are those who are preparing for positions as private secretaries, or again are looking forward to entrance into the professional schools and cannot use for this purpose the courses offered in the colleges. University Extension also offers courses in practical optics for optometrists and courses for practitioners in Dentistry, and for those who desire training in Oral Hygiene. All of these have a definite object in view and are worthy of the help the University can give. They carry full programs and are among the busiest students at Columbia, not at all drawn away from their study by extracurricular activities.

I desire at this point to speak in particular of the women students who form a numerous body in all branches of University Extension. The following statistics supplied by the Registrar for the Winter Session of 1921-1922 are instructive:

WOMEN IN UNIVERSITY EXTENSION

Number of students under 21 years	855
Number of students—21 to 24	647
Number of students over 24	<u>1756</u>
<i>Total</i>	3258

WOMEN IN SPECIAL COURSES LEADING TO CERTIFICATES

Optometry	7
Secretarial	185
Oral Hygiene	51
Architecture	3
Business	<u>15</u>
<i>Total</i>	261

WOMEN DEFINITELY PREPARING FOR ADMISSION TO

School of Business	8
School of Journalism	17
School of Architecture	1
School of Medicine	11
School of Engineering	1
School of Practical Arts	21
School of Optometry	7
School of Pharmacy	<u>3</u>
<i>Total</i>	63

It is very evident from these figures that University Extension is serving the education of adult women primarily. Of 3,258 women registered in the Winter Session, 2,403 had passed the college age. Many hope to enter the professional schools, a large number have in view the Secretarial Certificate.

The statistics showing the number of women students living in or about the University are of interest.

Furnald Hall	49
Lodgings near the University:	
Students over 24 years	366
Students under 24 years (part time)	117
Students under 24 years (full time)	71
At home of relatives or friends	36
At lodgings approved by the University	35

In placing in lodgings resident students University Extension has had the very valuable help of the Residence Bureau. Beyond this, the Assistants to the Director, Professor Katharine C. Reiley and Professor Meta Glass, have given personal oversight, calling upon the young women in their lodgings and in various ways giving their personal attention to this problem. Even with these precautions conditions

will not be satisfactory until adequate dormitory provisions are made. The conditions are aggravated for the coming year by the loss of Furnald Hall as a residence for women. Tompkins Hall is assigned to the women of the Schools of Journalism, Business, Architecture, Pharmacy, to University Undergraduates and University Extension. There are only ninety-two rooms in Tompkins Hall so that a grave emergency for our Extension students is at hand. We must not place these students in lodgings outside of the University with any carelessness and yet we hope that we shall not be compelled to turn away students who are requesting suitable residence near the University.

I must call your attention also to the lack of gymnasium privileges for our women students in University Extension. All of our men students taking six points of work are accorded the use of the University Gymnasium. To women students of University Extension, no matter what their program or status, no gymnasium privileges are granted. These are some of the difficulties which we face in endeavoring to care for women students.

One serious hindrance in our work is the theory held so commonly in the University that these students are irregular. The fact is that those for whom we desire these University privileges are admitted through the Office of Admissions and yet they receive for the payment of the usual fees only the privilege of the Library beyond the class instruction. I have purposely given considerable space to the consideration of the interests of the women students who form an unusually intelligent group of those who attend in University Extension.

It is impossible for me to mention within the scope of this report all the activities of the great body of students of University Extension. I shall refer, however, to certain parts of our work which have not hitherto received due consideration.

In association with the School of Dentistry, we are maintaining classes for oral hygienists. These young ladies are being trained under the supervision of the Department of Education of the State of New York in this phase of preventive dentistry. Their special habitat is the portion of the buildings

of the School of Medicine set aside for the Infirmary Clinic of the School of Dentistry. As these rooms are small and restricted in various ways the students are sent at times to Morningside Heights and for clinical work to various public schools where they are doing excellent service. One clinic is located at School 168, another in Mott Street at the Association for Improving the Condition of the Poor, and the third at the Infirmary for Adult Patients. These students have treated 11,065 patients. The hindrances to their work are many, the accommodations are entirely inappropriate and limited almost beyond endurance, nevertheless, instructors of these students are devoting themselves faithfully to this work looking forward to greatly improved facilities at the new site of the School of Medicine.

The New York Chapter of the American Institute of Banking continues to conduct its courses under the auspices of the University. Since writing my last report the Chapter has obtained larger quarters at 15 West Thirty-seventh Street. This is a most significant development in the educational work of this Chapter as these class rooms are much larger and better equipped and space is furnished for a much needed library. At this center there were in the Winter Session thirty-two instructors teaching seventy-two different classes and in the Spring Session thirty-seven instructors teaching sixty-six classes. Eleven officers of Columbia University are members of the Staff. In 1921-1922 there were 2,834 individual enrolments and 4,968 class enrolments. The officers of the Chapter are men with progressive ideas who are determined to place at the disposal of these instructors and students every facility for effective teaching. The University finds great satisfaction in the part which it is taking in this important phase of its extramural activities.

Home Study is the youngest of the various branches of University Extension, and each year is gathering the experience which is so essential. Columbia University desires to offer opportunities for home study but insists upon a plan consistent with the traditions of the University. It is certainly incumbent

upon us not to abandon those who cannot attend class exercises and whose only hope is in home study. Many are turning to institutions which are organized on a purely business basis and which make fabulous sums of money because of the eagerness of American youth for higher education. Institutions whose first purpose is education and not mercenary gain should meet the eager desires of these young people with programs suitable for such students and with prices determined by the cost and not by the profit to be obtained. Experience has shown that in general the desire does not exist on the part of these students for cultural subjects. They want that which can be made immediately useful. To encourage a healthy demand from an educational point of view we are building up a background of cultural studies and parallel with this courses of immediate practical value. Without exception the commercial correspondence schools have been organized to meet only the latter need,—the utilitarian demand.

Even educational institutions of standing that are offering correspondence courses focus their efforts toward the goal of receiving credit for an academic degree. In other words, there appears to be very little of home study work which has for its object simply adding to general knowledge. The purpose of such study seems generally to be the immediate capitalization of what is learned either in the form of financial revenue or academic credits. Degrees in Columbia stand for academic residence and actual class instruction. Hence it would be inappropriate and inconsistent to suggest credit for degrees for these courses of Home Study. Nevertheless it would be well for us to consider whether the completion of a series of courses in Home Study and the passing of examinations might not be recognized by a certificate issued with academic authority.

The Home Study section of University Extension has been busy during the past year with an attempt so to broaden the offering that classification might be possible. For example, a series of courses in business, training students for the examinations for the certificate of Certified Accountant is just being completed. Another series aims to give preparatory courses

for entrance to college. As the curriculum expands this grouping of subjects becomes more generally possible. Wherever, in University Extension, examinations are offered and class attendance not necessarily called for, Home Study will be increasingly useful.

The payment of fees is often a serious hindrance to the ambition of these students. Some think that Home Study is an inexpensive method of instruction but this view is entirely erroneous. Individual attention and interest on the part of the instructor is absolutely essential, for he cannot address his students as a class, but must approach them as individuals. This in itself adds to the expense.

State universities giving correspondence courses are subsidized by appropriations from state legislatures, financial aid which is apparently not available for Columbia University. A liberal endowment of this part of University Extension would be of great help to students who are prevented from attending class exercises. It is possible, also, by a system of partial payments, adjusted to the progress of the students, to distribute and thus lighten the burden.

I turn now to the Institute of Arts and Sciences. For the third successive year the Institute reached its maximum membership at the beginning of the season and thereafter discontinued the enrolment, owing to the limitations of the University auditoriums at present available. The program of lectures, concerts, dramatic recitals, and other exercises had an attendance of 99,474. Altogether 254 meetings were held. In addition to its own program of 201 meetings the Institute held the following co-operative meetings: with the Archaeological Institute of America, New York Society, a series of lectures on art and architecture; with the Department of Slavonic Languages, a series of lectures and concerts descriptive of the political, industrial, and cultural life of Poland, Czechoslovakia, and Jugoslavia; with the Debate Council, a series of debates with other universities; with the Department of English, an evening of readings by Columbia University poets and the Curtis Oratorical Contest; with the Instituto de las Españas, a series of lectures in Spanish; with the Department

of Romance Languages, a series of lectures in French. A number of such additional meetings were held also with fourteen other Departments of the University and with outside organizations, such as the American Geographical Society, the Oriental Club of New York, the Port of New York Authority, etc.

Among the noteworthy musical events were three concerts free to Columbia University officers, students, and Institute members. Two were held in St. Paul's Chapel and were given by the Chapel choir, augmented. The first was a Program of Christmas Music and the second, a Lenten Oratorio (Gilchrist) given immediately before Easter. The third concert was held in the Columbia University Gymnasium and was given by the Columbia University Chorus and the University Glee Club, assisted by a soloist and an orchestra. All three concerts were under the direction of Walter Henry Hall, Professor of Choral Music. Almost 100,000 adults were brought to the campus this past year through the Institute, and the extension of the University's influence in this way has become far-reaching.

Of the many special branches to which University Extension is giving its attention, I would mention two in particular. I refer to Advertising and Motion Picture Production. These have been rapidly assuming an important position in the field of education and their development in University Extension is particularly appropriate.

Advertising is acquiring the characteristics of a profession with all the responsibilities to the public which a profession implies. Our courses are intended to qualify persons to enter the vocation of advertising and for the training of specialists in this subject. Certain of these courses are intended also for the training of business executives. We require a background of English, Psychology and Marketing followed by Principles of Advertising, and the Psychology of Advertising. Those, who desire to specialize may elect courses in advertisement writing, illustration, art work and the mechanical structure of advertisements. Professor Albert T. Poffenberger of the Department of Psychology, who is interested particularly in applied psychology, is in charge of Advertising both for University Extension and the School of Business.

Motion pictures have assumed so important a part in the educational, industrial and dramatic world that they deserve consideration and recognition in institutions of learning. University Extension has for several years offered courses in photoplay composition. In the past two years attention has been given to the study of the operation or execution of pictures. The position of general director or that of technical or art director calls for the broadest kind of training. It is our purpose as rapidly as possible to develop both of these branches of instruction as motion pictures are destined to play an important part as a civilizing influence in the modern social world.

As indicated in the report of last year, University Extension is giving special study to the best method of making the University useful to the Labor Unions. We are meeting the needs of the individual worker of whom there are many among the thousands who attend our courses, nevertheless, it is our desire to solve this problem of furnishing the education which Labor Unions feel that they need for their members. It is a pity that they do not have greater confidence in universities such as Columbia. I can only report progress in this important field of endeavor. We enjoyed during the year a visit from Mr. Albert Mansbridge, the mainspring of the Workers' Education Movement in England, and have become members of the World Association for Adult Education. The Director spoke on this important subject before the National Extension Association at Lexington, Kentucky. Wide-spread comment has been aroused by this interest on the part of Columbia in the educational welfare of the Labor Unions. We now propose a conference of those representing the Unions with the Administrative Board of University Extension in the hope that some step may be taken in bringing the University and the Unions in closer contact for the accomplishment of the purpose for which the Extension courses exist.

At your suggestion, Mr. President, we have given special thought to the question of medical education in New York especially on the side of the more general influence which Columbia may have in providing for practitioners who de-

sire advanced courses of instruction for short periods and terms. Under your direction I have for the past five years been the President of The Long Island College Hospital. The purpose of this action has clearly been to indicate the interest which Columbia takes in an institution which evidently must form one unit in the general system of medical schools which will center in the university school which has been so elaborately planned for the immediate care of Columbia. As I understand it you desire the home medical school to associate itself intimately with other schools which it may aid in various ways although they may not become actually a part of the Columbia corporation.

It is impossible to believe that philanthropists and educators who have studied this question accept the theory that the ideal will be attained when any one school and its associate hospital are constructed and equipped.

Other hospitals are needed in various parts of the city and certainly medical schools will be attached to some of them. The remarkable medical center which the University is establishing should radiate inspiration, help and cooperation to these units of medical education which already exist or may be organized as the city expands and develops. On account of its flexibility in organization and action University Extension can be particularly helpful in bringing about this cooperation, particularly in the so-called short term graduate courses for practitioners.

Our attention has recently been called to the possibility of organizing under University Extension a series of courses which might ultimately develop into an Institute of Dramatic Art. At the present time we offer desultory courses in elocution, play writing, stage work and play production. Opportunity of doing extraordinary service for the community is within the immediate grasp of the University and through its help the training of those who are to make the stage their sphere in life could be placed on a basis of sound educational principles. The results would be far-reaching. Thus the University with the help of those who are desirous of seeing actors not merely trained for the stage, but thoroughly educated, could aid

young people who have talent qualifying them to enter upon such a career. The influence of the University could also extend to the communities in which plays are given and could further the production of suitable plays and aid materially in improving the method of presentation and the diction of those who take part. University Extension can inaugurate an effort of this character which would develop into an institute of national influence.

I would finally mention a subject which I purposely place last in my report so that it may receive the emphasis which such a position affords. I refer to the necessity of furnishing a loan fund of at least ten thousand dollars for the students in University Extension. It would be unwise to offer scholarships, nevertheless, we should furnish help for those who have not means immediately at hand especially in view of the University's rigid insistence upon the payment of fees at the time of registration. I continually remind those in my office who deal with students that we are part of an educational institution and while we must be business-like, we are not members of the staff of a store or factory. I believe this is vital in the conduct of our work.

I desire at this time to testify to the extraordinary devotion of my assistants and of the clerical staff of the various branches of University Extension.

Respectfully submitted,

JAMES C. EGBERT,

Director

June 30, 1922

SCHOOL OF BUSINESS

REPORT OF THE DIRECTOR

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1922

To the President of the University

SIR:

I desire to present herewith the annual report of the School of Business for the academic year 1921-1922:

On February 1, 1922, the term of service of the Administrative Board of the School of Business expired. The following resolution was passed by the Trustees of the University at their meeting held on February 6:

RESOLVED, That, pursuant to the provisions of the Statutes, Section 176, the following officers of the University, nominated by the President, be and hereby are appointed to serve as members of the Administrative Board of the School of Business from February 1, 1922, to June 30, 1924, provided the persons named continue in the service of the University:

Director James C. Egbert
Professors Roswell C. McCrea
Robert Murray Haig
H. Parker Willis
Robert H. Montgomery
Roy B. Kester
Thurman W. Van Metre.

In this resolution there is involved much more than may appear from the mere enumeration of the names of those appointed. The administration of the School of Business, organized in 1916, was placed under the control of an Administrative Board of seven members. The Trustees thus turned aside from the usual custom of establishing a faculty in control of a School and followed the more recent form of organization involving an Administrative Board selected by the President of the University and approved by the Trustees. No organization was provided for the general staff of the School; nevertheless, the members of the staff were so deeply interested in the

educational development of the School that they established an informal organization which met regularly each month during the academic year. The Administrative Board whose term of service expired, as was appropriate for a School which was entering upon its first year, had been selected from various parts of the University. Among its members were the Dean of the Graduate Faculties, the Dean of Columbia College, the Dean of Barnard College and the Treasurer of the University, whose experience and knowledge of University affairs at once gave strength to the new School. This Administrative Board was largely influenced, however, in the development of the School by the action of the Staff in its informal organization. Nevertheless, as the School grew in importance and the problems of its educational development increased in number, members of the teaching staff felt that the School would advance more satisfactorily if the Administrative Board were selected from those who were actually engaged in the educational work of the School. The Director has at various times in his reports called the attention of the President to the desire of the Staff in this regard. This feeling was indorsed by the members of the Administrative Board who requested the President in making appointments to this Board hereafter to select members of the Staff of the School. This action, marks the close of the preliminary epoch in the development of the School. It is, therefore, worthy of special mention as it is one of the significant events of this academic year.

The new Administrative Board in its early meetings indicated very clearly that while it recognized the advantage of a small board caring for the administration of the School, nevertheless, it desired to have the advice and interest of the members of the Staff. The Board, therefore, determined that matters of educational policy should be regularly referred to the Staff for discussion, that joint meetings of the Staff and Administrative Board should be regularly held, and that the President should be requested to follow a system of rotation in making appointments to this Board from the Staff.

Schools of business, or, as they are termed elsewhere, schools of commerce and schools of business administration, are a

recent addition to the educational organization of a university or a college. As we should expect, there exists considerable uncertainty as to the subjects which belong to the sphere of such schools and also as to the relationship which each subject bears to the other, the scope of the various subjects, and the line of delimitation between them. In other words, professional schools of business are still in the formative stage and are finding in their experience an indication as to their appropriate development.

The School of Business at Columbia University was organized as a course of two years leading to the undergraduate professional degree. The preparation for the School was assigned to two years of college work with no specific direction as to the subjects to be called for in that period of study except economics and economic geography. The clear purpose of those who planned the work of the School was to enable the student to elect in the two-year collegiate course as many of the cultural subjects as possible. In other words, those who are interested in the School of Business did not wish to invade the two-year curriculum of the College. In general, this theory has been satisfactory, nevertheless, in respect to one subject, Business Organization, it was found that for the proper adjustment of the studies of the two-year professional course for which this subject was fundamental, it should be placed in the preliminary collegiate preparation. After consultation with the Dean of the College the subject of Business Organization and Administration was placed among the courses offered in Columbia College. Hereafter, therefore, those who enter the School of Business will be required to present this subject or to elect it as part of the preparatory program which otherwise would be incomplete. By this change it is hoped that courses in the School of Business, which should be built upon a foundation of Business Organization, will be given their proper position and sequence in the School. This is a most important change in the curriculum of the School and led to the modification in the courses assigned to the first year. Candidates for the degree of Bachelor of Science must take in the first year as required subjects, accounting, economic history of the United States

and public aspects of business, banking and business, business law and a modern language,—either French, German or Spanish. The second year will still retain its elective character. This was an important modification in the curriculum for the undergraduate students of the School implying the placing of another fundamental subject in the preparatory collegiate training.

The School of Business has also furnished one year of graduate work leading to the degree of Master of Science. Candidacy for this degree has hitherto only been open to those who have received the Bachelor of Science degree in the School of Business or who have had a training similar to that of the two undergraduate years of the School. By recent action of the Administrative Board the candidacy for the degree of Master of Science has been opened to students who are college graduates holding the degree of Bachelor of Arts and who have therefore had the cultural courses leading to that degree. These students will be required to supplement the graduate year, of not less than thirty points hitherto required of those who have had the undergraduate courses in the School of Business, by the addition of fundamental courses in the field of economics, corporation finance, banking, marketing, accounting, statistics and certain other subjects as the adviser of the students may consider desirable. Thus it will be possible for those who have received the undergraduate degree of Bachelor of Arts to obtain the degree of Master of Science in the School of Business on the satisfactory completion of a course of two years.

Candidates for the degree of Doctor of Philosophy in the field of business at the present time enrol in the School of Political Science and elect courses in the School of Business which serve their purpose.

The desire of students to carry on their work under the supervision of the School which offers the subjects of study upon which they are primarily interested is readily understood. There exists today a very great interest in research in business and students are eager for guidance in special investigation in subjects which belong to the province of this School. It therefore appears that opportunity to follow in the School of Business courses of study leading to the degree of Doctor of Philos-

ophy, and to enjoy primary enrolment in that School should be afforded. The close association with the School of Political Science makes such a plan entirely feasible as the degree offered by the non-professional faculties is entirely acceptable as the advanced degree of this School.

The importance of preparing those who would make business teaching their chosen career adds force to that which has just been stated. The man or woman who desires to teach should certainly have a training similar to that required for the degree of Doctor of Philosophy and all that this implies of research work and practical association with business and business problems in this great commercial city. All this means elaboration and extension of the advanced courses and research work of the School. I am confident that the Staff is ready and will gladly assume the responsibility for this development.

It is my part to report as usual the very faithful and devoted attention of the members of the instructing force to the duties to which they were assigned. Beyond this, however, I desire to refer to the rather unusual interest shown in the educational development of the School. I may mention in particular the special consideration given to the subject of business research and the form it should assume in the School,—also the desirability of establishing a Bureau of Business Research. On invitation the Dean of the Graduate Faculties was present at a meeting of the Staff when the subject was discussed. A committee of five was appointed to confer with a similar committee from the Faculty of Political Science with reference to the organization of an Institute of Research. Action in this matter is eagerly anticipated.

I desire to report the promotion of Roy B. Kester from the position of Associate Professor of Accounting to Professor of Accounting, of Robert Murray Haig from the position of Associate Professor of Business Administration to Professor of Business Administration, and the promotion of Thurman W. Van Metre from the position of Associate Professor of Railroad Transportation to the position of Professor of Transportation. All of these promotions were earnestly recommended by the

Administrative Board as thoroughly deserved by these gentlemen who have been connected with the School of Business since its organization. These promotions represent the final act in the operation of the plan which has been followed in organizing and developing a teaching staff in the School of Business whereby young men of promise have been appointed to subordinate positions and an opportunity afforded them to show that they deserved promotion in the School. The success of this plan is indicated by the general approval which has been given to the promotion of those who have received recognition this year.

As an indication of what the School is able to accomplish in advanced and research work, I desire to mention the investigations which have been undertaken in connection with the work of the School. Under the supervision of Professor Asher Hobson, Associate Professor of Economic Agriculture, a series of researches in marketing have been carried on from the period of July 1, 1921, to the present time. These were conducted by Professor Hobson in cooperation with the United States Bureau of Markets. They were as follows:

1. Waste, breakage and deterioration as an element in food marketing costs. This project begun in February, 1921, will continue until October 1, 1922.
2. Sales methods and policies of a growers' national marketing agency. This is an analysis of the history and methods of the cooperative marketing association known as the American Cranberry Exchange.
3. The marketing of live poultry in New York City.
4. Terminal costs in the marketing of fruits and vegetables. This study is still incomplete. It is hoped, however, that it may be carried on during the coming year.
5. Per capita consumption of food in the port of New York district. This study was undertaken at the suggestion of the Port Authority so as to obtain reliable data on the amount of food required to supply the port district, for use in case of emergency.
6. The marketing of Minnesota butter in the City of New York. The question of the marketing of Minnesota Butter in the City of New York as a large supply comes from that section is important to the State of Minnesota as well as to the consumers of this city.

These studies will be interrupted to some extent during the coming year by reason of the absence of Professor Hobson. Their value to New York City is very great and it is most ap-

propriate that they should be carried on in connection with the other research work in the School of Business.

The Department of Banking has also assigned a number of studies and problems to their advanced students. I may mention the stabilizing of the foreign exchanges, the discount policy of the Federal Reserve System, foreign branch banking, financing foreign trade, cooperative banking and credit unions and financial aspects of our trade with South America.

This brief enumeration will indicate somewhat the character of the work which is undertaken in the various subjects in the School of Business.

It would exceed the limits of a report of this character if I should enumerate in full the publications which are the result of the special study of members of the Staff. I may mention the publications on the Income Tax by Professor Robert H. Montgomery, and also the scientific investigation which was carried on by Professor Robert Murray Haig, chief of the Research Staff, and Professor Frederick C. Mills, chief statistician, as set forth in the "Report of the Special Joint Committee on Taxation and Retrenchment" established by the Legislature of the State of New York. Professor Kester's books on Accounting, Professor Smith's textbooks on Economic Geography Professor Van Metre's book on Economic History and Mr. Stocker's Business Organization are all finding a well-deserved popularity.

The following statistics deserve consideration as indicating the growth of the School. For 1921-1922, the Registrar reports an enrolment of 420 as compared with 361 in 1920-1921. Of candidates for the degree of Master of Science, numbering 14, only 8 received this academic reward, indicating that the standards are very carefully maintained. Secretarial certificates which are awarded to candidates who enter as graduates of college and who take one year of study in the School, numbered 11.

At the Commencement exercises in June of this year, 116 students received the degree of Bachelor of Science. It is interesting to note the extraordinary increase over those receiving the degree in 1917, who were three in number and who formed the first class of the School of Business.

I can speak with much pride of the general spirit of the students who hold the highest ideals as to the moral standards of the School. In fact, the character and standing of the student body can be described as somewhat unusual. An association of the students under their own control has been organized, the objects of which are not only social in character but also the building up and maintenance of the right spirit among their fellow-students, both as to their work and in regard to the best interests of the School. Early in the year this Association presented to the Staff a well-arranged plan for an Honor System. This plan was immediately accepted by the Staff and adopted by the students and has been in operation during the Spring Session of the year just closing. It is the general belief of the officers of the School that this was a most important and salutary step especially as the rules of the Honor System have been strictly observed notwithstanding the unpleasant necessity which the students experienced of condemning some of their own number because of laxness in the recognition of the standards of honor in examinations.

As we consider the courses of study with the view to finding if any important subject is lacking, we are immediately impressed with the fact that the field of marketing has only partially been cared for. Professor Hobson has offered the marketing of food products but the other phases of this subject have been presented in a temporary and partial manner.

Thus for advertising it has been necessary to rely upon courses given in University Extension. We have found that this branch of marketing, however, can be cared for through the instruction offered in the Department of Psychology along the lines of the psychology of advertising and applied psychology. We have been able to claim the help of Professor Albert T. Poffenberger who intends in the future to devote himself to this side of psychological investigation and study. Professor Poffenberger has been requested to study this whole question so that advertising may be given due attention and placed on the right basis.

It is our earnest hope that some progress may be made in the

general subject of marketing and in marketing of manufactured products during the coming year. It is also desired that steps be taken in the satisfactory development of an Institute of Research in cooperation with the School of Political Science to which we have referred above. We desire to strengthen by cooperation the efforts of the teaching staff in guiding their graduate students as they engage with them in experimental investigation so that the advanced student may have laboratory work in research methods and be surrounded by this atmosphere of investigation. This would lead to results which would form distinct contributions in the various fields which belong to the province of the School of Business. Some may question the advisability of employing graduate students in important investigations of this character; nevertheless, when they are conducted primarily by experienced men in any field there should be no hesitation in associating graduate students with such work,—experience of this character will be of extraordinary value for their future development as investigators.

It is with this in mind that I have urged the extending of the graduate work so as to encourage students coming from cultural collegiate courses to spend two years as candidates for the degree of Master of Science. For a similar reason I am suggesting that candidates for the degree of Doctor of Philosophy be permitted to enroll in the School of Business, as this degree represents research and also the training necessary for those who intend to attach themselves to educational institutions as teachers and as investigators.

We have all been encouraged within the past few weeks by the statement that the erection of the building for the School of Business will be undertaken in the early fall. Promise of this building, when the School is growing so rapidly, gives a sense of relief and a feeling of encouragement to those who have so earnestly and so devotedly given themselves to the building up of educational work in the field of business.

Respectfully submitted

JAMES C. EGBERT,

June 30, 1922.

Director

SCHOOL OF DENTISTRY

REPORT OF THE DIRECTOR

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1922

To the President of the University

SIR:

I have the honor to present the following report on the work of the School of Dentistry.

By an act of the Trustees, the School of Dentistry was authorized as of September, 1916. The purpose was to establish a course in dentistry parallel to that of the School of Medicine, i. e., a pre-requisite of two years' college work, the same as required for medicine, and four years in Medical and Dental Science. The first year was to be devoted exclusively to the basic biologic subjects of the first year medical course under the supervision of the medical faculty and in unison with the medical students. The second year was to be divided as the subjects demanded between the Medical and Dental Schools. The third and fourth were reserved to complete instruction in Dental Science.

On this basis two students were admitted in September, 1916. The State requirements for the degree of Doctor of Dental Surgery at that time were four years of High School or its *equivalent* and a three year course in Dental Science. Thus it would seem that Columbia was well within her rights, but on March 1st, 1917, the Regents advanced the dental course to four years and notified us that it would be necessary for our two students to receive 150 hours instruction in Dental Operative Technic, and 340 hours in Prosthetic Technic, a total of 490 hours of dental subjects if they were to be accredited with the year's work. It did not seem possible to comply with this demand, as the schedule for the Medical School was a very full one and more than half of the academic year had passed. Dr. Augustus S. Downing, Assistant Commissioner, was called in conference with the Administrative Board, but could offer

no assistance other than granting the privilege of extending our instruction into the summer months. We took advantage of this until August 1st, by which time we had made up the major part of the deficiency and felt that it would be safe to add the balance to the succeeding year's schedule.

At a regular meeting of the Administrative Board in October, 1917, this was voted as impractical and a five year course was adopted to which the students readily subscribed.

In the meantime the United States had entered the conflict of the World's War and the Federal Government decreed that for immunity from the draft law, all students then in course of training would require registration in a school or college whose student body was not less than 25. It thus became necessary for our two students either to continue their course as medical students or join the forces on the battlefields of France. The loyalty of these students should be made a matter of record. They placed the matter in our hands with the assurance that they would abide by our decision. The matter was presented to Dean Lambert who informed us that they had no status as dental students but were registered as medical. This was naturally a very great surprise, but simplified matters, as the Government was sorely in need of medical men and ruled that all students registered prior to 1917 should complete their courses, which relieved us of the responsibility of a decision. (These students graduated from the Medical School in the class of 1920.) This left us without students and brought us to the most crucial period of the School's short history. A large majority of the staff were in favor of closing the School of Dentistry indefinitely or at least until the end of the war and had it not been for our loyal friend and counselor, Professor J. C. Egbert, I am sure the School would have become inoperative for a number of years. The temporary absence of students proved in fact of material benefit rather than a detriment, since it gave us a chance to reorganize our courses to better co-ordinate with those of the School of Medicine, and made it practical to revert to a four year course in medical and dental science, which was authorized by the Administrative Board at a regular meeting in February, 1919.

In 1919, we registered four students, one of whom was obliged to withdraw after his father's death. Another failed on account of a physical breakdown. The other two have just completed their junior year and we expect to present them for graduation in June, 1923.

In 1920, there were four freshmen, three sophomores, and one junior.

In 1921, there were six freshmen, four sophomores, three juniors, and one senior, the latter being Dr. Joseph Schroff, one of the two first students to enter in 1916. He completed his course and received the degree of Doctor of Dental Surgery at your hand in June, 1922, the first to be honored with this degree by Columbia. The staff feels that his graduation consummates a program that was considered impossible by the other schools and establishes the School of Dentistry as an integral part the University system.

The conditions under which the work has been conducted are as follows: The first instructions in purely dental subjects were given in the small rooms of Advanced Courses in Dentistry at 35 West 39th St., which were found inadequate, and Dean Lambert realizing our needs secured an appropriation of \$7,500 from the trustees of the Vanderbilt Clinic. This added to the interest of the Jarvie Fletcher endowment, gave us sufficient funds to build a three story wing on the School of Medicine. This also proved insufficient and through you, the Trustees of Columbia University furnished funds to add a fourth floor. This addition gave us space for a clinic of eighteen units, each unit consisting of operating chair, electric engine, fountain cuspidor, instrument cabinet and accessories, also on this floor is a complete radiographic outfit. All the foregoing items are of the most modern type. This has been named the Wm. Jarvie Clinic by permission of the Trustees.

The third floor is divided into a stock room, an office for the Oral Hygiene Administrator, and advanced prosthetic laboratory fully equipped to accommodate 8 to 10 students; an operative clinic of five units, instrument cabinet, locker space for the 3rd and 4th floors, a technic demonstrating room fully equipped, one operating unit, electrical devices, blackboard,

reflecting screen, automatic projecting lantern, reflecting mirror, technic benches, which will accommodate ten to twelve students and two instructors.

The second floor is occupied by the administrative offices, and a small lecture room. In the hall on this floor are 60 steel lockers.

The first, or ground floor is equipped for prosthetic instruction, but is small, accommodating but 10 or 12 students. It is possible with space and equipment now available to accommodate as a maximum 20 students to a class, or a total of 80 by proper grouping.

Many of the men on the professorial staff are of national and international reputation, and their object is the establishment of a school which will place dentistry on a plane with medicine, and feel that Columbia University is the logical home of such a school. Some of these men have had previous pedagogic experience but not recently, so that the entire staff has had to be educated to the more modern methods of teaching, for which reason it has been impossible to accept students for advanced standing beyond an established course. The case of Dr. Joseph Schroff was the one exception. He had had about 500 hours of dental instruction in the School and was perfectly familiar with conditions, which made it practical to admit him one year earlier than would have been possible under other circumstances. We are confident that there will be nothing to regret in his case.

The Regents have advanced the entrance requirements to one year of college work applicable to this year's matriculants and will maintain that standard to and including the academic year of 1924-1925, after which our standard of two years becomes a State requisite for all schools registered in New York State. This carries with it the elimination of all proprietary schools. As a result, the university schools will be taxed to their capacity and Columbia should prepare to assume her share of the burden.

The high standard of our entrance requirements that has been maintained through the School's short history, is no doubt the cause of our having so few students, particularly as all the

other (including university) schools were accepting students on a high school certificate.

We have between 250 and 300 prospects on our file at present, every one of whom has received an announcement, together with a letter advising them of the necessary procedure for securing and presenting their credentials. So we hope for a full class this year, in which case we will be able to prove the righteousness of our cause and inspire a confidence that should be productive of adequate endowment.

Respectfully submitted,

FRANK T. VAN WOERT,

June 30, 1922.

Director

UNIVERSITY ADMISSIONS

REPORT OF THE DIRECTOR

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1922

To the President of the University

SIR:

I have the honor to submit the following report for the year ending June 30, 1922:

The number of applicants for admission to most of the schools of the University was very large, as was the case in the preceding year. This was particularly true of Columbia College. As the College was already crowded, it was necessary to select with especial care among the applicants for admission. The new method of admission, employing the psychological examination, again proved an admirable means of selection. In adopting it the Faculty of Columbia College made it alternative to the older methods of admission. It is still possible for a candidate to gain admission by passing entrance examinations in the requisite fifteen entrance units, supplemented by satisfactory school records and acceptable recommendation regarding character and promise; and it is still possible for a candidate to substitute certain of the Regents examinations, passed with a grade of 75% or higher, for the entrance examinations. However, an increasing number of candidates select the new method and it is most fortunate that the results of the use of that method are so satisfactory. The increasing number of applicants has made it easily possible to be more exacting regarding the character of the school record and to insist upon a higher minimum score in the psychological examination. Excellence in both counts is essential. The bright youth who has not done well in school through lack of effort or distraction of attention seldom does really good work in college and the industrious plodder of mediocre ability likewise fails, as a rule, to justify fully his admission to college.

There is a good proportion of students of really first-rate ability and with good habits of study, and the consensus of opinion in the Faculty of the College seems to be that the quality of the student body has greatly improved. It is, moreover, a representative student body geographically and otherwise. Practically one-half are from the metropolitan district and one-half from outside that district.

The satisfactory results of the use of the new method in Columbia College have led the Faculty of Barnard College to adopt it also. It will be used for the first time for the class entering in September, 1922.

Applicants for admission are required to supply on their application blanks a large amount of information regarding their activities and interests, in addition to the information more usually required regarding their personal and family histories. Time has not permitted a complete study of the information thus supplied but the results of an incomplete study of new students entering in September, 1921 are available for preliminary report. The first three hundred cases, taken alphabetically, have been studied. These show that the age of students entering last autumn was considerably greater than that of those entering a few years earlier. Both the mode and the median were at 19 years. Of these three hundred, only one had not reached his sixteenth year, while fifty-six had passed their twenty-first year. Twenty had reached the age of twenty-five or more. It seems probable that this is a temporary situation, owing to the war, which interrupted the educational career of a considerable proportion of the students now in college, including some of those in even the earlier years of the secondary school course.

The places of birth of the three hundred were distributed among twenty-eight states, Hawaii, Porto Rico, the Philippine Islands and seventeen foreign countries. One hundred and forty-one were born in places different from that of either father or mother, seventy in the same place as both father and mother, sixty-six in the same place as the mother alone and twenty-three only in the same place as the father alone.

The fathers of sixty-six of the three hundred had had training

in sixty-five colleges or professional schools. The mothers of thirty-three had been trained in twenty-six colleges or normal schools. Both parents of thirteen had had higher education. The candidate receiving the highest score in the psychological examination was the son of a college trained father and of a mother who was a member of Phi Beta Kappa.

Nineteen and six-tenths per cent. expect to study medicine, 16.6 per cent. law, 13.6 per cent. engineering, 10 per cent. business, 7.6 per cent. journalism, 1.6 per cent. in graduate schools, 1.3 per cent. dentistry, 1 per cent. architecture and .6 per cent. theology.

Seventy-eight and three-tenths per cent. were prepared in public schools, 21.6 per cent. only in private schools. Of those prepared in public schools little more than one-half were from schools in large cities; the remainder were almost equally divided between schools in small cities and schools in towns and villages, though a slightly greater number came from the last named group.

Information regarding school activities is supplied under the following heads: school publications, musical and other organizations, athletics, offices, prizes and honors.

One hundred and seven had been active in connection with school publications; 188 in musical and other organizations, 169 in athletics, 142 had held school offices and 135 had been the recipients of prizes and honors. Almost without exception the candidates had been active in two or more of these groups.

One hundred and thirteen had been active in religious organizations outside of school.

One hundred and sixty-eight had had outside employment or had worked for parents without a wage. Their occupations covered a wide range, from playing in an orchestra and giving violin lessons, to working in foundries and blast furnaces; from acting as chauffeur to making toy soldiers; from singing as choir boy to serving as time keeper for a railroad. Altogether, forty-two different occupations were represented. The occupations of their fathers were still more widely distributed, eighty-nine in all being noted. All of the nine groups employed by the census bureau were represented. Of these the professional group

was greatest in number, trade second, manufacturing and mechanical industries third, with agriculture, clerical, transportation, personal and domestic, public service, and extraction of minerals, in the order named. More specifically, merchant fathers were most numerous, physicians and manufacturers next, salesmen next, followed by those engaged in real estate business, managers and lawyers.

Candidates are requested to report regarding their outside reading. The reports showed that almost all had read more than one would have supposed, while many had read very widely. Their reading had usually included good literature, both books and periodicals. Some had read a surprising amount in special fields, such as scientific books and periodicals, and in history and allied subjects.

Each candidate is required to write a letter telling why he is going to college, why he selected Columbia and what he expects to make of himself. The first and last of these topics would repay a much more careful study than has so far been possible. I shall not attempt to discuss them in this report. The second, the reason why they selected Columbia, is of great interest since it shows what features of the institution attract boys to it, so far as their reports may be taken to represent the actual reasons for their choice. In many cases they are doubtless not fully aware of all the reasons or they fail to recall all of them. These reasons are, of course, numerous, several of them usually operating on each candidate. More than forty different reasons are mentioned. Of these, the prestige of the University is mentioned most frequently—in nearly one third of the cases. The prestige of one or another of the professional schools is mentioned nearly as often. The nearness of the College to their homes is likewise very often mentioned. The location of the College in a great city is a frequent reason; the influence of friends, relatives, teachers or alumni, is very often mentioned. The excellence of the Faculty and the reputation of alumni play an important part. The close relation of the College to the professional school, the unusual educational advantages, the high standards of the College, its democratic, cosmopolitan character, the excellence of its curriculum, are all

frequently mentioned. Motives of economy and opportunities for employment are often influential; even the beauty of the campus, the psychological examination and the course in Contemporary Civilization play their part. In general, it may be said that educational advantages are most influential.

Altogether a study of these applications is most encouraging. The student body is evidently intelligent, representative, ambitious and self-reliant. The things they value are worth while and their emphasis upon these things should enhance our respect both for them and for the college which attracts them.

Aside from the adoption of the new method by Barnard College, no changes have been made in the entrance requirements of any of the other schools since my report of a year ago and no changes of importance have been made in the administration of their entrance requirements.

The provision for University Undergraduates, described in several of the annual reports of 1921, have proved to be satisfactory. The number of students entering under this plan is not yet large but it is increasing.

Respectfully submitted,

ADAM LEROY JONES,

Director

June 30, 1922

REPORT OF THE UNIVERSITY MEDICAL OFFICER

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1922

To the President of the University

SIR:

As University Medical Officer, I have the honor to submit the following report for the academic year ending June 30, 1922.

Throughout the college year each day approximately 109 individuals have received medical counsel or treatment. The sum total of medical treatments for the year is 24,226. Of these 18,544 were given through the University office and 5,682 in the medical office of Barnard College.

CONSULTATIONS

<i>At the University Office</i>	<i>Men</i>	<i>Women</i>	<i>Total</i>
Summer Session, 1921	1,175	2,105	3,280
September	230	60	290
October	1,401	458	1,859
November	1,199	482	1,681
December	1,012	385	1,397
January	1,324	507	1,831
February	1,320	668	1,988
March	1,657	819	2,476
April	1,116	546	1,662
May	1,264	666	1,930
June	84	66	150
Total	11,782	6,762	18,544
<i>At Barnard College</i>			
Winter Session		2,980	
Spring Session		2,702	
Total		5,682	5,682
<i>Grand Total</i>			24,226

The demand for medical service has increased markedly during the past year, so much so that hardly a day has passed without a record of more patients than the staff could treat. We are stimulated to increase our individual efficiency and capacity by the appreciation of the value of the medical service as measured by the expression of satisfaction of those that we have treated; but we are also stimulated to find ways and means to develop our plans for a wider and more complete health service. Each year we have been enabled to strengthen the organization and to add new branches to the service that have brought us nearer to the complete plan we sought to develop when the Health Service was initiated a decade ago. This past year has witnessed additions to the staff. Through the good offices of the President of the University and the Trustees an additional appropriation was granted that enabled us to secure the services of a Recorder or office assistant and the part time services of a physician. The new Medical Assistant will make it possible for us to increase the medical consultations by 15 or more daily. The appointment of the Recorder will give the nurses their full time to care for the medical and surgical needs of the patients, under supervision.

The Recorder has charge of the case files, laboratory records and follow-up files. It is her duty to get the record cards of all patients visiting the office and to see that patients reach their proper stations for conferences, examinations or treatments. At the close of the day the cards of all patients treated in the University medical office are reviewed by the University Physician. Cards indicating the need of nursing treatment at home, follow-up conferences or treatments in the office, reports to deans or other officers of the University or to physicians or hospitals are appropriately flagged and returned to the desk of the Recorder. The Recorder makes a record of the number of cases treated for the day and returns all flagged cards to the several members of the staff who are responsible for the various types of follow-up work. If there is a case for the Visiting Nurse, it is referred to her and after each visit to the patient she records his condition upon the card until

the case is dismissed. Cards requiring special reports to deans, hospitals, private physicians, etc., are passed over to the Department Secretary by the Recorder. The Secretary is then held responsible for securing these reports from the University Physician and for seeing that they are promptly mailed. Cases that require follow-up treatment or supervision by the physicians are recorded and placed in a special file under the date upon which the patient is to return to the office. Should the case fail to report on the given day, his failure to report is noted and he is sent for or the Visiting Nurse is asked to ascertain why he has not reported. Written daily records of all cases under treatment in the infirmaries, hospitals or under the supervision of the Visiting Nurse, are also filed in the office. The large number of cases treated in the University office makes it imperative to have such a check-up on the work of the staff as a whole in order to exclude error and not to neglect important cases through oversight. It also stimulates each member of the staff to stand up against the responsibilities placed upon him, since a weak link in the chain is readily detected in the working of such a thorough check-up system.

The reorganization of our dormitories for the coming academic year has necessitated a change in our infirmaries. The women's infirmaries have been in Furnald and Brooks Halls. Furnald Hall will be turned back to the college men this autumn and the women will be transferred to the Claremont Avenue buildings. It has therefore been planned to use one of the eight-room apartments in Tompkins Hall for the University Infirmary for women students including Barnard College. The present infirmary for men will be continued in Tompkins Hall so that both infirmaries may be served with food from a common kitchen and with supplies from a common storeroom. This will reduce the cost of maintenance and will greatly increase the efficiency of the nursing service. With our present staff of resident nurses it will be possible to have twenty-four hour service in this central infirmary without additional help. The arrangement of the rooms in the apartment is such that we can plan for an isolation chamber for the treatment of communicable diseases occurring among the women students.

From the standpoint of health we feel that the transfer of the women's dormitory from Furnald Hall to the Claremont Avenue buildings is a desirable move. This readjustment will solve many problems. It will make it far easier for the women students to take advantage of the excellent cafeteria service provided in Students Hall. The social activities at Students Hall will also be near at hand. The men will be greatly benefitted by getting back on South Field where they can enjoy the field activities and the full use of the athletic headquarters in Furnald Hall.

We cannot express ourselves too enthusiastically over the efficient and excellent service rendered by the Commons and the cafeteria in Students Hall. Each year they have improved their usefulness and have demonstrated effectively that clean wholesome food can be served quickly and at the same time attractively to large numbers. The success of the Commons and the Students Hall dining room has not come without hard work, and we wish to take this opportunity to express our appreciation to those who have given hours of time and their best effort to develop a cafeteria service that is in keeping with the educational standards and social ideals of the University. The number of gastro-intestinal disturbances has greatly decreased since the University took over the responsibility of feeding its students and we are enthusiastic in our praise of what has been accomplished along these lines. In the building of new dormitory units, however, we would urge that the dining room facilities be carefully studied so that our resident dining rooms in their setting and equipment may be as satisfactory as have been our cafeterias. The metropolitan college and university must have this dining room service for its resident students if it is to give them social recreation as well as health through good food served in a room so furnished that it will call forth the social response and dignity that should mark the college-bred man. The cafeteria is a necessity for the thousands of students who attend the University for classes and who live at home nearby and in the suburbs, but as the dormitory buildings increase we must develop the dining hall as a place quite as essential to health and happiness

as the sleeping room, the study hall, the recreation hall or the gymnasium. The dormitory dining room affords the opportunity for physical relaxation and mental pleasure that is so essential to good digestion and good health. Quite apart from the other desirable factors it permits of good fellowship and the fostering of certain group interests that we include in "college spirit." Past experience makes one feel confident that a big step toward the improvement of the health of our resident group will come with the completion of the Students Building on South Field where our men students may be given a comfortable and adequate dining room service.

During the morning of December 14, six Barnard students reported to the office of the College Physician complaining of sore throats. Examination of these patients revealed the early symptoms of scarlet fever. The cases were placed in quarantine until a positive diagnosis was made twenty-four hours later. A careful physical examination was made of everyone living in the Halls where the six patients resided; and all those showing signs of inflamed throats, temperatures of 99 degrees or over, or other suspicious symptoms were isolated and kept under careful observation until it was proved that no contagious condition was present. By immediate isolation of the scarlet fever cases and segregation of all residents showing signs of deviation from normal health we were fortunate in preventing the development of what might have proved a serious epidemic. We had no secondary cases, although the scarlet fever patients were isolated and treated in our Brooks Hall Infirmary. Every effort was made to discover the source of the infection, but without definite success. The patients were not chums, they did not eat at the same table, they did not attend the same classes. Their rooms were in separate apartments and on different floors; five resided in John Jay Hall and one in the cooperative apartment on 116th Street. Three of the patients drank milk and three did not. They were not accustomed to drink soda or eat ice cream in public places. The only place where these patients had been thrown together in a common group was at a John Jay reception one week prior to their illness. At this reception they may have

been exposed to scarlet fever through a carrier or by someone who was in the contagious period of the disease, but a careful investigation of all those who attended the reception did not reveal one case of scarlet fever among those present or in their respective families. No record of illness could be found in the families of the help, including the hall boys and elevator runners. Through the City Board of Health a careful search was made of the milk supply, etc., without finding a clue to the source of infection. We made a thorough investigation of our Students Hall cafeteria and found everything in satisfactory condition. We regret the fact that through a student reporter, wrongly informed, the New York papers placed the responsibility for the epidemic on the Students Hall cafeteria. The results of a rigid examination, in an earnest desire to locate the origin of the scarlet fever, justified the value of our effort to make our cafeterias as sanitary as possible in order to protect our students from all communicable diseases. All dishes are sterilized. The help are examined by our own medical staff in order to make sure that they are free from diseases that would make them dangerous as food handlers. Illness among the help is reported immediately and the patient is required to report to this office or to the Barnard office before beginning work again. Thus every effort is made to keep our dining halls safe for our patrons. We therefore feel reasonably certain that these cases of scarlet fever did not have their origin in food served on the Campus. All property of the patients was fumigated by the Board of Health before it was returned to the owners upon their discharge from quarantine. The infirmary rooms were thoroughly fumigated and renovated upon the termination of the cases. The patients all recovered without developing any complications and all have continued with their college work. This experience showed the wisdom of our health service in giving the student an opportunity to report early for diagnosis and treatment. If these six women had been permitted to spend the day at the College with their slight sore throats they would have exposed hundreds of students to the disease during the most active period of contagion. The patients themselves might have suffered far more serious

consequences had they not been placed under early treatment. This outbreak of a dreaded disease brings to our attention the value of maintaining adequate infirmary beds where all cases of doubtful illness may be under supervision. The early segregation of the sick is the only safe and scientific way to protect the students from loss of time and perhaps the loss of health and efficiency in later life through preventable contact with communicable diseases.

The fraternity houses present a problem in the care of bedside cases that has not as yet been adequately met. The war period put considerable strain on the finances of the fraternity houses. During this period it was impossible to do more than to keep the buildings open. The alumni support dropped to a low level and many of the chapters have not yet recovered from this period of financial depression. An effort has never been made by the individual chapters to meet the problem of illness in the fraternity houses. In fact with the city type of house it is practically impossible for adequate quarters to be set aside for infirmary use. There seems to be but one way to solve this problem and that is to place the fraternity houses under the same health supervision as our dormitories and to have bedside cases transferred to our infirmary. To assume this added responsibility we would have to increase the number of infirmary beds. We trust that such a plan may soon be found feasible. If we could secure an eight-room apartment in Tompkins Hall for men in place of the present four-room apartment we could increase our capacity to accommodate the fraternity house group. Considering the great need for this service the expense would be nominal.

While we never could hope to have sufficient beds to care for the thousands of students who reside with private families and in boarding houses in the neighborhood of the University, we feel that we should have a capacity in our infirmaries that would enable us to bring under our care the cases that cannot be properly nursed in a room where no assistance can be secured for the patient. The medical service at the University is dealing with three classes of patients: first, the ambulatory cases covered very well by the office service; second, the critically

ill most effectively treated in our hospitals; third, the patients who suffer from acute illnesses that are not severe enough for hospitalization but nevertheless may be in bed from three to ten days and require the services of a doctor and possibly a nurse. The majority of these cases can be cared for in their rooms, but frequently a case is met with where the patient finds it difficult to get food, especially a suitable diet, and adequate nursing care. We lack infirmary capacity to care for this type of case. We have an efficient infirmary service now. The problem is not to organize such a service, but to extend the organization we are now maintaining to cover more adequately the numerical demand upon the department.

So important is this whole question of infirmary care in our great resident community that serious consideration should be given the problem with the idea of securing an endowment to maintain this expensive yet valuable and indispensable service.

During the past year we have had 209 patients under treatment in the women's infirmaries, with a total of 778 days of illness making an average of 3.72 days illness per patient. The nurses made 718 room calls to treat students suffering from mild types of illness lasting from a few hours to a day or two. These illnesses were not considered serious enough to necessitate moving the patient to the infirmary. There were 896 calls made by the students to the offices of the nurses in the infirmaries for advice or the treatment of injuries or mild disturbances that did not confine the student to her room.

The number of cases treated in the infirmary for men was 78 with a total of 336 days of illness making an average of 4.31 days per patient.

The general health of the students residing in our dormitories has been exceptionally good this year. The fact that most of our students have individual rooms in which to sleep and study plays a large part in the freedom we enjoy from communicable diseases and in the general good health of our students. In the building of large dormitories where 250 to 300 persons are to be accommodated there is doubtless much to be gained from the standpoint of health in planning single rather than double rooms.

The Visiting Nurse made 663 calls on patients living within a reasonable distance of the Campus. Patients who lived too far from the Campus were kept in touch with by telephone. There were 579 such calls. No records have been kept of the number of incoming telephone calls in the nature of reports or request for treatment and advice from cases under supervision.

The medical office has been the headquarters for the sick call of the United States Veterans Bureau students, not only for those attending the University but also for Miller's Business School, American Institute of Optometry, Eastman-Gaines School, Institute of Musical Arts, Rhodes Preparatory School and the Placement Training Schools. A record of 1,879 sick calls is shown for the year; 1,213 were men and women registered at the University, the remaining 666 were distributed among the other schools. One hundred forty-one students were sent to the United States Hospitals for treatment, 50 from Columbia and 91 from the other schools. The majority of the government students attending Columbia University reporting ill were treated by the staff of the University Medical Officer.

There were 906 medical examination forms, A and B, filed by men who desired to enter Columbia College. These forms were filled in by almost as many different medical men who made the examinations of the candidates. Except in three cases the examining physician pronounced the candidate in good health. As in past years all freshmen suffering from remediable physical defects were placed under supervision and treatment for the correction of these conditions. It is interesting that no candidate was reported as suffering from any pulmonary disease.

The following is a summary of the physical conditions found and the history of past illnesses that might affect the candidates' present health.

Eyestrain	55
Trachoma	1
Ear diseases	36
Defective hearing	5
Nose and throat diseases and abnormalities	36
Dental defects	98
Enlarged cervical glands	8

Cardiac diseases	41
Nervous diseases	16
Skin diseases	62
Orthopedic diseases and defects	49
Hernia	1
Chronic appendicitis	4
Abnormalities due to injuries	26
Subject to coughs and colds	115
headache	25
gastro-intestinal disturbances	39
History of measles	525
whooping cough	183
chicken pox	165
mumps	143
scarlet fever	124
diphtheria	77
rheumatism	54
fainting spells	4
malaria	47
typhoid fever	33
surgical operations	328
previous physical, mental or nervous disability	48
an illness of more than one week's duration within the past	
two years	51
discontinuance of study for a period owing to illness	70
limitations placed upon amount and character of physical	
exercise	222
Typhoid immunizations	146
Successful vaccinations	746

In closing this report I wish once more to express my appreciation to the members of my staff for their loyal support and for the spirit of determination they have shown to make our University Health Service one of the most efficient and useful organizations of its kind.

Respectfully submitted,

WILLIAM H. McCASTLINE,

University Medical Officer

June 30, 1922

REPORT OF THE SECRETARY

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1922

To the President of the University

SIR:

There have been no happenings of an unusual nature in connection with the Office of the Secretary during the year 1921-1922. The routine of the office has been carried on by the staff with industry and intelligence and I trust to the satisfaction of the University community. We recognize our responsibility as a general office and if at any time we fail in courtesy or are unsuccessful in our attempts to assist students, officers, and visitors, it is for reasons other than a failure to realize the opportunity.

The following matters of general interest deserve recording:

As the University has grown in size, a very considerable problem has arisen in connection with the annual Commencement. The Gymnasium can accommodate little more than the faculty and the candidates for degrees, and although during recent years we have issued to each of the candidates one card of admission for a guest, it has not been possible for more than two or three hundred of these guests to gain admission to the auditorium. The University has been placed in a defenseless position by this method of procedure, but no practical way out of the situation was found until *Spectator* in its issue of March 9, 1922, suggested in its editorial columns a change of plan whereby the parents of the recipients of undergraduate degrees would be given preference in the distribution of guest tickets. This suggestion appealed very strongly to the Committee on Public Ceremonies, and was discussed by the committee with different members of the University community, with the result that it was put into effect at Commencement, 1922.

Such a course meant using for the parents of the recipients of first degrees all of the space formerly occupied by faculty families and by those few parents who were able to gain access to the Gymnasium. Personal invitations were sent to the parents of the candidates from Columbia College, Barnard College, and the Schools of Business, Journalism, and Practical Arts. All candidates received two tickets to the Green. Chairs were placed in the Green about the north entrance to the Gymnasium, some of which were reserved for faculty families. Amplifiers were installed in the grove so that those outside of the Gymnasium might have every opportunity to listen to the exercises.

This change of plan was made in an effort to render an occasion which in the past has been satisfactory to almost nobody, satisfactory at least to those who are having their first commencement. While of course some features of the plan carry bitter disappointment to certain members of the University community, it was recognized that some change in procedure was necessary and that the course adopted had in it a reasonableness evident even to those to whom it carried disappointment.

Of course, many improvements can be made in the plan, but until some better suggestion is forthcoming, the Committee on Public Ceremonies is likely to continue the procedure adopted for 1922.

It is a great pleasure to be able to report the unanimous adoption of an interfraternity agreement.

At the end of the year 1920-1921, an agreement acceptable to all of the fraternities was drafted, but it was too late in the year to secure a satisfactory vote. As soon as the excitement incident to the opening of the academic year 1921-1922 was over, a meeting of representatives of the several fraternities was called and the discussion of the proposed agreement resumed, with the result that in January, 1922 the following agreement was approved and signed by all the national fraternities then having chapters in Columbia University.

INTER-FRATERNITY AGREEMENT

We, the undersigned fraternities, holding firmly to the opinion that it would be to the best interests of Columbia University, of the individual students, and of the several fraternities, to restrict the issuing of fraternity pledges to matriculants in the University and to place an educational requirement on initiation, hereby agree and bind ourselves and our individual members to the following provisions:

1. There shall be an Inter-fraternity Council composed of delegates of each of the fraternities signatory hereto. Each fraternity shall appoint two delegates, one to be known as the senior delegate and the other as the junior delegate. Each fraternity shall have one vote in the Council and such vote may be cast either by the senior or by the junior delegate. The Council shall meet regularly to discuss and regulate inter-fraternity affairs.
2. Only matriculants in Columbia University and special students in the graduate and the professional schools shall be eligible to accept bids. On registering in Columbia College either from University Extension, from the University Undergraduate group, or from secondary school, each registrant shall pledge on his word of honor that he has not entered upon any previous agreement or understanding with any fraternity of Columbia College. Registration is hereby defined as complete registration or in other words the receiving of a Bursar's receipt. If at that time any agreement is found to exist, it shall be broken and the man remain unpledged for one full college year. It shall be understood that men pledged at and transferring from another college or university shall be exempt from the above provisions, provided they have been in attendance at the first institution for one session.
3. The educational requirements for initiation of matriculants in Columbia College shall be the passing at mid-term or mid-year of twelve hours of work. This shall not be construed to mean that a man may not be pledged before that time.
4. This agreement shall become effective upon the opening of the Spring Session, 1922.
5. A fraternity signatory to this agreement may withdraw by giving written notice to each of the other signatory fraternities, in case such notice is given not later than the first day of the session prior to that of intended withdrawal.
6. This agreement may be amended by three-fourths vote of the fraternities signatory hereto. Any proposed amendment must be submitted at one meeting and all signatory fraternities notified of the proposed change, the proposal to be voted on at the next regular meeting following its submission.

ALPHA CHI RHO	PHI KAPPA PSI
By E. John Long	By Thos. F. Herbert
ALPHA DELTA PHI	PHI KAPPA SIGMA
By J. H. Bradshaw, Jr.	By Ridley M. Enslow
ALPHA PHI DELTA	PHI SIGMA DELTA
By John Bart Lauricella	By Jules B. Sheftel
ALPHA SIGMA PHI	PHI SIGMA KAPPA
By F. Kessler Scovil	By G. Booss, Jr.
BETA SIGMA RHO	PI LAMBDA PHI
By Emanuel Goodman	By Joseph Lyon Andrews
BETA THETA PI	PSI UPSILON
By Julian Olney	By Ewen C. Anderson
DELTA KAPPA EPSILON	SIGMA ALPHA MU
By Sydney C. Waldecker	By Edgar M. Bick
DELTA PHI	SIGMA ALPHA EPSILON
By Evan W. Smith	By W. L. Blanchet
DELTA PSI	SIGMA CHI
By Lea S. Luquer	By Newton Beach Schott
DELTA TAU DELTA	SIGMA NU
By Lee M. Merriman	By Frederick E. Schuler
DELTA UPSILON	TAU DELTA PHI
By Donald L. Harbaugh	By Bernard S. Kahn
KAPPA NU	TAU EPSILON PHI
By Maurice L. Albert	By Max J. Leibowitz
OMICRON ALPHA TAU	THETA DELTA CHI
By Rob. Cortel	By Raymond W. Keenan
PHI BETA DELTA	THETA XI
By Ralph M. Freyberg	By Harry E. Bierschenk
PHI DELTA THETA	ZETA BETA TAU
By Richard L. Hanson	By Ralph A. Freed
PHI EPSILON PI	ZETA PSI
By Milton Linchitz	By Aaron Polk
PHI GAMMA DELTA	
By Whitney N. Seymour	

The agreement was put into operation with the beginning of the Spring Session and worked extremely well. The fraternities all entered into the spirit of the understanding and frank and friendly discussion of different matters was had at the monthly meetings of the Council and decisions arrived at that were satisfactory to all concerned.

The Council is looking forward to a useful existence and hopes to accomplish much for the undergraduate life of Columbia College.

Undergraduate activities and their relation to scholastic standing are much discussed just now. The following schedules show the academic grades of students taking sufficiently active part in undergraduate affairs to win insignia awards as compared with a normal rating found by using the grades of 100 men taken at random.

These schedules contain elements of reassurance as well as material for further study. Freshman football is, for instance, too obviously a weak spot.

Varsity Athletics

Team	No. of Students	A's		B's		C's		D's		F's	
			%		%		%		%		%
Track	30	18	6.38	104	36.97	139	49.14	9	3.19	12	4.25
Football	30	14	4.82	85	29.31	155	53.44	22	7.58	14	4.82
Swimming	11	10	8.69	46	40.0	49	42.6	4	3.47	6	5.3
Water Polo	9	11	10.78	41	40.19	46	45.09	3	2.94	1	0.98
Fencing	7	6	8.57	27	38.57	28	40.0	5	7.14	4	5.71
Hockey	9	10	10.31	30	30.92	47	48.45	6	6.18	4	4.13
Wrestling	9	13	14.6	28	31.46	42	47.19	2	2.24	4	4.48
Basketball	8			16	19.51	57	69.51	6	7.31	3	3.65
Crew	24	36	13.09	90	32.72	126	45.81	7	2.54	16	5.81
Baseball	14	6	4.08	26	17.68	85	57.82	15	10.2	15	10.2
Tennis	7	6	8.69	25	36.23	33	47.82	3	4.34	2	2.89
Golf	6	1	1.75	19	33.33	32	56.14	4	7.01	1	1.75
<i>Total</i>	<i>164</i>	<i>131</i>	<i>7.82</i>	<i>537</i>	<i>32.05</i>	<i>839</i>	<i>50.09</i>	<i>86</i>	<i>5.13</i>	<i>82</i>	<i>4.89</i>
Normal	100	79	7.72	341	33.36	497	48.63	50	4.89	55	5.38

Freshman Athletics

Team	No. of Students	A's	%	B's	%	C's	%	D's	%	F's	%
Football	17	1	0.82	20	16.52	61	50.41	16	13.22	23	19.0
Fencing	4	5	10.20	23	46.93	20	40.81			1	2.04
Wrestling	8	15	16.48	41	45.05	28	30.76	6	6.59	1	1.09
Basketball	9	7	8.13	21	24.41	47	54.65	4	4.65	7	8.13
Crew	13	8	6.34	54	42.85	50	39.68	7	5.55	7	5.55
<i>Total</i>	<i>51</i>	<i>36</i>	<i>7.61</i>	<i>159</i>	<i>33.61</i>	<i>206</i>	<i>43.55</i>	<i>33</i>	<i>6.97</i>	<i>39</i>	<i>8.24</i>
Normal	50	74	12.54	192	32.54	255	43.22	32	5.42	37	6.27

Literary Activities

Activity	No. of Students	A's	%	B's	%	C's	%	D's	%	F's	%
Spectator	29	32	9.72	115	34.95	153	46.5	15	4.56	14	4.25
Jester	19	22	11.45	84	43.75	76	39.58	3	1.56	7	3.64
Columbian	20	43	18.37	77	32.95	100	42.73	9	3.84	5	2.13
Varsity Magazine	16	33	18.53	79	44.38	63	35.39	1	0.56	2	1.12
Morningside	4	8	20.0	20	50.0	11	27.5			1	2.5
Debating Team	8	15	22.72	24	36.36	21	31.81	6	9.09		
<i>Total</i>	<i>96</i>	<i>153</i>	<i>14.72</i>	<i>399</i>	<i>38.4</i>	<i>424</i>	<i>40.8</i>	<i>34</i>	<i>3.25</i>	<i>29</i>	<i>2.79</i>
Normal	100	101	10.02	359	35.65	460	45.68	57	5.66	30	2.97

Dramatic and Musical Activities

Activity	No. of Students	A's	%	B's	%	C's	%	D's	%	F's	%
Varsity Show	29	20	7.11	89	31.67	135	48.04	16	5.69	21	7.43
Musical Clubs	31	33	9.79	114	33.82	164	48.66	11	3.26	15	4.45
Band	14	32	18.07	67	37.85	58	32.76	6	3.38	14	7.9
<i>Total</i>	<i>74</i>	<i>85</i>	<i>10.69</i>	<i>270</i>	<i>33.96</i>	<i>357</i>	<i>44.90</i>	<i>33</i>	<i>4.15</i>	<i>50</i>	<i>6.28</i>
Normal	100	101	10.02	359	35.65	460	45.68	57	5.66	30	2.97

Through the generosity of the Association of the Alumni of Columbia College it was possible for the University to hold during the past year two very interesting contests.

The first was a speaking contest for the school boys of New York State outside of the Metropolitan District, and the second was an essay contest for school boys in schools having students in Columbia College.

Preliminary speaking contests were held in ten centers throughout the state, each center being in charge of a resident alumnus. The winning speaker in each case represented his district in the final contest in New York on January 13, 1922. The prizes were \$100, \$50, and \$25 respectively, and were won by

John Cranford Adams, of Syracuse, N. Y.
Christopher Loughlin, of Saranac Lake, N. Y.
Chester Eckstein, of Hudson, N. Y.

The essay contest was country-wide, and aroused much interest though naturally not so much as the speaking contest with its attendant social activity. The prizes were \$100, \$50, and \$25, and were won by

Laurence Dormer Jordan, of Morristown, N. J.
Clarence Hugo Mowen, of Plainfield, N. J.
H. B. Criswell, Jr., of Dallas, Texas

Respectfully submitted,
FRANK D. FACKENTHAL,
Secretary of the University

June 30, 1922

APPENDIX I
STATISTICS REGARDING THE TEACHING AND
ADMINISTRATIVE STAFF FOR THE
ACADEMIC YEAR 1921-1922

SUMMARY OF OFFICERS

[See p. 50]

VACANCIES

By Death, Resignation, Retirement, or Expiration of Term of Appointment, occurring, unless otherwise indicated, on June 30, 1922

- NATHAN ABBOTT, LL.B., Nash Professor of Law
PAUL S. ACHILLES, A.M., Lecturer in Psychology
REV. JOHN DOUGLAS ADAM, D.D., Associate in Religion (Barnard College)
ALEXANDER M. ARNETT, A.M., Instructor in History
ALBERT W. ATWOOD, A.M., Associate in Journalism
JOHN BAUER, PH.D., Lecturer in Economics
[February 1, 1922]
H. EVERETT BEISER, D.D.S., Instructor in Operative Dentistry
WILLIAM F. BENDER, M.D., Instructor in Physiology
RHODA W. BENHAM, A.M., Assistant in Botany (Barnard College)
CHARLES E. BERGER, B.S., Assistant in Physics
LOUIS BERMAN, M.D., Associate in Biological Chemistry
EDWARD J. BIGWOOD, M.D., Assistant in Medicine
RUTH BUCK, A.B., Assistant in Zoology (Barnard College)
CHARLES T. BUTLER, M.D., Instructor in Surgery
[October 1, 1922]
HAROLD N. CAMERON, A.M., Instructor in Economics
[February 1, 1922]
HARRY BRUA CAMPBELL, LL.B., Lecturer in Finance and Business Law
JACQUES CAVALIER, D. ès S., Visiting Professor in Engineering
HENRI CHAMARD, D. ès L., Professor of French Literature
PETER F. CHAMBERS, M.D., Professor of Clinical Gynecology
[Died March 26, 1922]
THOMAS H. CHILTON, Assistant in Mechanics
STANLEY Z. CHYLINSKI, B.S., Assistant in Electrical Engineering
JAMES L. COBB, M.D., Instructor in Anatomy
HENRY L. COLES, M.S., Lecturer in Chemical Engineering

- ALZADA COMSTOCK, A.M., Associate in Economics (Barnard College)
WALTER WHEELER COOK, LL.M., Professor of Law
LAILA A. COSTON, M.D., Instructor in Surgery
HAROLD W. CRAVER, B.S., Assistant in Physics
HENRY K. DICK, A.M., Lecturer in English
FREDERICK H. DIETERICH, M.D., Instructor in Surgery
[October 1, 1921]
ROBERT H. F. DINEGAR, M.D., Instructor in Physiology
MATHURIN M. DONDO, Ph.D., Instructor in French
WILLIAM C. DOUB-KERR, A.B., Lecturer in French
WILLIAM A. DUNNING, LL.D., LITT.D., Lieber Professor of History and
Political Philosophy
[Died August 25, 1922]
HERBERT A. DURHAM, M.D., Instructor in Orthopedic Surgery
ELLSWORTH ELIOT, JR., M.D., Professor of Clinical Surgery
[January 31, 1922]
HOXIE N. FAIRCHILD, A.B., Instructor in English
AUGUSTUS R. FELTY, M.D., Assistant in Medicine
HENRY J. FRY, A.M., Assistant in Zoology
BERNARD GLUECK, M.D., Associate in Neurology
ABRAHAM L. GOODMAN, M.D., Instructor in Diseases of Children
FRANK A. GOUGH, D.D.S., Instructor in Orthodontia
JULIUS C. GRAY, A.B., Assistant in Zoology
WILLARD F. GREENWALD, B.S., Assistant in Chemistry
SIMON C. GRUDBERG, M.D., Instructor in Urology
HAROLD S. GULLIVER, A.M., Lecturer in English
ANDREW H. GUNN, D.D.S., Instructor in Prosthetic Dentistry
WILLIAM D. GUTHRIE, LL.D., Ruggles Professor of Constitutional Law
WALDEMAR C. HANSEN, B.S., Assistant in Chemistry
RALPH D. HARBY, D.D.S., Instructor in Prosthetic Dentistry
CLARENCE H. HARING, Ph.D., B.LITT., Visiting Lecturer in History
FRANCIS S. HASEROT, A.M., Lecturer in Contemporary Civilization
AUBREY L. HAWKINS, A.M., Assistant in English
LUTHER G. HECTOR, A.B., Assistant in Physics
ARTHUR H. HEUSINKVELD, A.B., Assistant in English
RAYMOND R. HITCHCOCK, A.M., Assistant in Mathematics
[February 1, 1922]
FRANKLIN HOLLANDER, B.S., Assistant in Chemistry
AUSTIN W. HOLLIS, M.D., Professor of Clinical Medicine
[Died November 6, 1921]
HENRY M. HOWE, LL.D., Sc.D., Emeritus Professor of Metallurgy
[Died May 14, 1922]
HENRY JACKSON, JR., M.D., Instructor in Medicine
ELIZABETH C. JAGLE, M.D., Instructor in Neurology
ERIC R. JETTE, A.M., Assistant in Chemistry
ALBERT M. JOHANSON, A.M., Assistant in Psychology

FREDERICK P. KEPPEL, LITT.D.

[June 6, 1922]

WENCEL J. KOSTIR, A.M., Instructor in Zoology

ROBERT D. LEIGH, A.M., Lecturer in Government

JEROME S. LEOPOLD, M.D., Assistant in Diseases of Children

HERBERT G. LORD, A.M., Professor of Philosophy

[February 1, 1922]

KENNETH LORD, A.B., Associate in Journalism

[February 1, 1922]

GERTRUDE F. McCANN, M.D., Instructor in Pathology

T. CLYDE MCCARROLL, A.B., Lecturer in Economic Geography

JAMES O. MCKINSEY, Lecturer in Accounting

CAPT. FELIX R. McLEAN, U.S.A., Assistant Professor of Military Science
and Tactics

[September 12, 1922]

SAMUEL J. MANN, A.M., Lecturer in History

ALEXANDER S. MANNE, M.D., Assistant in Medicine

[January 1, 1922]

ALBERT D. B. MENUT, A.B., Instructor in French

CHARLES C. MOOK, PH.D., Lecturer in Geology (Barnard College)

FRED P. NABENHAUER, B.S., Assistant in Chemistry

MARTIN A. NORDGAARD, A.M., Lecturer in Mathematics

ANDERS ORBECK, A.M., Instructor in English

REUBEN OTTENBERG, M.D., Instructor in Bacteriology

JULIA PATON, PH.D., Associate in Biological Chemistry

HARLOW S. PERSON, PH.D., Lecturer in Business Organization

STRASHIMIR A. PETROFF, Instructor in Bacteriology

MAURICE PICARD, PH.D., Lecturer in Philosophy

REV. RALPH B. POMEROY, A.M., Associate in Religion (Barnard College)

MAURICE PRÉVÔT, Associate in Architecture

EDWIN PYLE, M.D., Instructor in Surgery

GLADYS A. REICHARD, A.M., Assistant in Anthropology (Barnard College)

HAROLD E. ROBERTSON, A.B., Assistant in Chemistry

[February 1, 1922]

RAY H. RULISON, M.D., Assistant in Medicine

JAMES P. RUYL, D.D.S., Professor of Prosthetic Dentistry

HELEN M. SCOVILLE, M.D., Instructor in Pathology

[September 1, 1922]

ALICE E. SHEPPARD, A.B., Research Assistant in Zoology

EDWARD M. SLOCUM, A.B., Assistant in Chemistry

[February 1, 1922]

LUCIA H. SMITH, A.B., Assistant in Chemistry (Barnard College)

RUFUS H. SNYDER, B.S., Assistant in Physics

ADELAIDE SPOHN, M.S., Research Assistant in Food Chemistry

PHILIP E. STAMATIADIS, M.D., Instructor in Surgery

ADOLPH STERN, M.D., Instructor in Neurology

ROMIETT STEVENS, PH.D., Associate Professor of Education (Teachers College)

[Died August 7, 1922]

GEORGE R. STEWART, JR., A.M., Lecturer in English

[February 1, 1922]

DUANE R. STUART, PH.D., Lecturer in Latin

OSCAR TEAGUE, M.D., Instructor in Neurology

ALEXANDER M. TELFER, D.D.S., Lecturer in Prosthetic Dentistry

CHARLES THADDEUS TERRY, LL.B., Dwight Professor of Law

JOHN S. THACHER, M.D., Professor of Clinical Medicine

MARION REX TRABUE, PH.D., Assistant Professor of Education (Teachers College)

JACOB S. WAGNER, M.D., Instructor in Obstetrics and Gynecology [November 1, 1922]

HERBERT S. WARREN, A.M., Assistant in Zoology

ROBERT G. WASSON, B.LITT., Instructor in English

GEORGE V. WENDELL, PH.D., Professor of Physics

[Died March 15, 1922]

HARRY W. WIRKLICH, M.D., Assistant in Medicine

SHUTAI T. WOO, M.D., Assistant in Medicine

JOHN F. WOODHULL, PH.D., Professor of Physical Science (Teachers College)

MRS. MARY H. WRIGHT, A.M., Lecturer in English (Barnard College)

J. LOWE YOUNG, D.D.S., Professor of Orthodontia

PROMOTIONS

To take effect, unless otherwise indicated, July 1, 1922

<i>Name</i>	<i>From</i>	<i>To</i>	<i>Subject</i>
WALTER P. ANDERTON, M.D.	Instructor	Associate	Medicine
JACOB J. BEAVER, Ph.D.	Lecturer	Instructor	Chemistry
SAMUEL D. BELL, M.D.	Assistant	Instructor	Diseases of Children
SETH D. BINGHAM, Mus.Bac.	Instructor	Assistant Professor	Music
ROBERT H. BOWEN, Ph.D.	Instructor	Assistant Professor	Zoology
PAUL F. BRISSENDEN, Ph.D.	Lecturer	Assistant Professor	Business Organization
EDWIN A. BURTT, B.D.	Lecturer	Instructor	Philosophy
FRANK CALLCOTT, A.M.	Lecturer	Instructor	Spanish
MABEL CARNEY, A.M.	Assistant Professor	Associate Professor	Education (Teachers College)
ROBERT E. CHADDOCK, Ph.D.	Associate Professor	Professor	Statistics

<i>Name</i>	<i>From</i>	<i>To</i>	<i>Subject</i>
HUGH CHAPLIN, M.D.	Assistant	Instructor	Diseases of Children
OSCAR J. CHASE, JR., D.D.S.	Assistant Professor	Associate Professor	Operative Dentistry
ROY J. COLONY, B.Chem.	Instructor	Assistant Professor	Geology
DONALD H. COOK, B.S.	Lecturer	Instructor	Chemistry
JOHN J. COSS, B.D.	Assistant Professor	Associate Professor	Philosophy
JOHN W. DICKINSON, D.M.D.	Instructor	Professor	Prosthetic Dentistry
H. LAURENCE DOWD, M.D.	Assistant	Instructor	Diseases of Children
HAVEN EMERSON, M.D.	Lecturer	Professor	Public Health Administration
EDWARD S. EVENDEN, Ph.D.	Assistant Professor	Associate Professor	Education (Teachers College)
HUGH FINDLAY, B.S.A.	Lecturer	Assistant Professor	Agriculture
DIXON R. FOX, Ph.D.	Assistant Professor	Associate Professor	History
WILLIAM M. GAFAFER, A.M.	Assistant	Lecturer	Mathematics (Barnard College)
HENRY E. GARRETT, A.M.	Assistant	Lecturer	Psychology
ARTHUR I. GATES, Ph.D.	Assistant Professor	Associate Professor	Education (Teachers College)
META GLASS, Ph.D.	Lecturer	Assistant Professor	Greek and Latin
S. PHILIP GOODHART, Ph.B.	Assistant Professor	Professor	Clinical Neurology
ROBERT M. HAIG, Ph.D.	Associate Professor	Professor	Business Organization
PATTY S. HILL	Associate Professor	Professor	Education (Teachers College)
HARRY L. HOLLINGWORTH, Ph.D.	Associate Professor	Professor	Psychology (Barnard College)
MRS. LETA S. HOLLINGWORTH, Ph.D.	Assistant Professor	Associate Professor	Education (Teachers College)

<i>Name</i>	<i>From</i>	<i>To</i>	<i>Subject</i>
JAMES KENDALL, Sc.D.	Associate Professor	Professor	Chemistry
ROY B. KESTER, Ph.D.	Associate Professor	Professor	Accounting
ALFRED G. LANGMANN, M.D.	Assistant	Instructor	Diseases of Children
ROY F. LAYTON, B.Sc. [January 1, 1922]	Assistant	Instructor	Physics
ROBERT F. LOEB, M.D.	Assistant	Instructor	Medicine
JOHN D. LYTTLE, M.D.	Assistant	Instructor	Diseases of Children
WILLIAM A. MCCALL, Ph.D.	Assistant Professor	Associate Professor	Education (Teachers College)
GEORGE M. MACKENZIE, M.D.	Associate	Assistant Professor	Practice of Medicine
CHARLES M. MCKINLAY, M.D.	Assistant	Instructor	Diseases of Children
RALPH E. MAYER, C.E.	Associate Professor	Professor	Engineering Drafting
ANDRÉ MESNARD, A.M.	Lecturer	Instructor	French
VETHAKE E. MITCHELL, D.D.S.	Instructor	Assistant Professor	Prosthetic Dentistry
J. HOWARD MUELLER, Ph.D.	Assistant Professor	Associate Professor	Bacteriology
JOHN M. NELSON, Ph.D.	Associate Professor	Professor	Organic Chemistry
JOHN A. NORTHCOTT, M.A.	Associate	Assistant Professor	Mathematics
FREDERIC PARKER, JR., M.D.	Associate	Assistant Professor	Bacteriology
ALBERT T. POFFENBERGER, Ph.D.	Assistant Professor	Associate Professor	Psychology
NEIL Y. PRIESSMAN, S.B.	Assistant	Instructor	Physics
HUGH W. PUCKETT, Ph.D.	Lecturer	Assistant Professor	German (Barnard College)
JOSEPH SCHROFF, M.D., D.D.S.	Assistant	Lecturer	Operative Dentistry
CHARLES H. SCHUMANN, JR., C.E.	Associate	Assistant Professor	Drawing
ERNEST L. SCOTT, Ph.D.	Assistant Professor	Associate Professor	Physiology
FRANCIS G. SLACK, B.S.	Assistant	Lecturer	Physics

<i>Name</i>	<i>From</i>	<i>To</i>	<i>Subject</i>
ALAN DeF. SMITH, M.D.	Instructor	Associate	Orthopedic Surgery
JAMES P. C. SOUTHALL, M.A.	Associate Professor	Professor	Physics
JOHN STORCK	Assistant	Lecturer	Philosophy
REXFORD G. TUGWELL, A.M.	Instructor	Assistant Professor	Economics
THURMAN W. VAN METRE, Ph.D.	Associate Professor	Professor	Transportation
S. WELLING VAN SAUN, D.D.S.	Assistant Professor	Associate Professor	Operative Dentistry
HENRY W. WELLS, A.B.	Assistant	Lecturer	English
ARNOLD WHITRIDGE, B.A.	Lecturer	Instructor	English (Barnard College)
HORATIO B. WILLIAMS, M.D.	Assistant Professor	Dalton Professor	Physiology

CHANGES OF TITLE

HUGH B. BLACKWELL, M.D.	Instructor in Laryngology and Otology	Instructor in Clinical Laryngology and Otology
WESLEY C. BOWERS, M.D.	Instructor in Laryngology and Otology	Instructor in Clinical Laryngology and Otology
J. FLOYD BOWMAN, M.D.	Instructor in Laryngology and Otology	Instructor in Clinical Laryngology and Otology
GEORGE F. CANFIELD, LL.B.	Professor of Law	Dwight Professor of Law
THOMAS F. CLONEY, D.M.D.	Instructor in Operative Dentistry	Lecturer in Operative Dentistry
HARVEY W. CORBETT, B.S.	Associate in Architecture	Associate in Design
KATHARINE S. DOTY, A.M.	Secretary of Barnard College	Assistant to Dean of Barnard College in Charge of Employment
WILLIAM FERGUSON, M.D.	Instructor in Laryngology and Otology	Instructor in Clinical Laryngology and Otology

<i>Name</i>	<i>From</i>	<i>To</i>
RALPH W. GIFFORD, LL.D.	Professor of Law	Nash Professor of Law
ANNIE W. GOODRICH	Assistant Professor of Nursing and Health	Assistant Professor of Nursing (Teachers College)
LOUIS GREENBERG, M.D.	Instructor in Laryngology and Otology	Instructor in Clinical Laryngology and Otology
ROBERT L. HALE, Ph.D.	Instructor in Economics	Lecturer in Legal Economics
CLINTON R. HASKELL, D.D.S.	Instructor in Prosthetic Dentistry	Lecturer in Prosthetic Dentistry
CHARLES C. HATLEY, A.M.	Instructor in Physics	Lecturer in Physics
WILLIAM W. HERRICK, M.D.	Assistant Professor of Medicine	Assistant Clinical Professor of Medicine
HANNES HOVING, D.D.S.	Assistant in Operative Dentistry	Assistant in Oral Surgery
ROSWELL C. MCCREA, Ph.D.	Professor of Economics	Hepburn Professor of Economics
WALTER RAUTENSTRAUCH, M.S.	Professor of Mechanical Engineering	Professor of Industrial Engineering
JAMES P. RUYL, JR., D.D.S.	Instructor in Prosthodontia	Lecturer in Prosthetic Dentistry
MUNROE SMITH, LL.D., J. U. D.	Professor of Roman Law and Comparative Jurisprudence	Bryce Professor of European Legal History
ISABEL M. STEWART, A.M.	Assistant Professor of Nursing and Health	Assistant Professor of Nursing (Teachers College)
RICHARD H. STUCKLEN, D.M.D.	Instructor in Prosthetic Dentistry	Lecturer in Prosthetic Dentistry
HAROLD M. TERRILL, A.M.	Research Assistant in Physics	Assistant in Physics

<i>Name</i>	<i>From</i>	<i>To</i>
CLARENCE T. VANWOERT, D.D.S.	Instructor in Dentistry	Lecturer in Prosthetic Den- tistry
LEUMAN M. WAUGH, D.D.S.	Professor of Pathology	Professor of Or- thodontia

APPOINTMENTS

To take effect, unless otherwise indicated, July 1, 1922

<i>Name</i>	<i>Office</i>
HELEN PAGE ABBOTT, A.B.	Assistant to the Dean of Barnard Col- lege in Charge of Residence Halls
RALPH S. ALEXANDER, Ph.B.	Lecturer in Business
HOWARD T. APPLGATE, D.D.S. [January 1, 1922]	Assistant in Radiology
RAYMOND C. ATKINSON	Lecturer in Government
WILLIAM STEWART AYARS, M.E.	Associate Professor of Industrial En- gineering
ADAMS BAILEY, D.D.S.	Lecturer in Operative Dentistry
ALVAN L. BARACH, M.D.	Assistant in Medicine
THEODORE BAUMEISTER, JR., M.E. [From August 1, 1922 to February 1, 1923]	Assistant in Mechanical Engineering
MRS. RUTH F. BENEDICT, Ph.D.	Assistant in Anthropology (Barnard College)
CHARLES E. BERGER, B.S. [From January 1, 1922]	Assistant in Physics
EDWARD J. BIGWOOD, M.D. [From November 1, 1921]	Assistant in Medicine
HUGH BLACK, D.D., D.Litt. [To February 1, 1923]	Lecturer in Religion (Barnard College)
CHARLES F. BOOTS, A.B.	Assistant in Legislation
EDWIN M. BORCHARD, Ph.D.	Lecturer in International Law
FRANKLIN BRACKEN, M.D.	Instructor in Ophthalmology
ABRAHAM BRAUNSTEIN, M.D.	Assistant in Medicine
HARRIET G. BRAY, A.B.	Research Assistant in Geology
SAMUEL BROCK, M.D. [From October 1, 1922]	Instructor in Neurology
ALLAN G. BRODIE, D.D.S. [From January 1, 1922]	Assistant in Operative Dentistry
HOWARD W. BROWN, M.D.	Assistant to University Medical Officer
WILLIAM M. BROWN, A.M.	Assistant in Psychology
WALTER R. BRYAN, Ph.D.	Lecturer in Greek and Latin
DAVID C. BULL, M.D.	Instructor in Surgery

<i>Name</i>	<i>Office</i>
E. EVERETT BUNZEL, M.D. [From January 1, 1922]	Instructor in Obstetrics and Gynecology
CHARLES K. CABEEN, M.S.	Assistant in Mineralogy
MARY L. CALDWELL, Ph.D.	Instructor in Chemistry
ABERNETHY B. CANNON, M.D.	Instructor in Dermatology and Syphilology
CORNELIA L. CAREY, A.M.	Lecturer in Botany (Barnard College)
JEAN-MARIE CARRÉ, D. ès. L.	Professor of French Literature
THOMAS H. CHILTON [From January 1, 1922]	Assistant in Mechanics
MARTHA CLARK	Research Assistant in Zoology
GEORGE A. COE, Ph.D.	Professor of Education (Teachers College) and Lecturer in Religion (Barnard College)
ARNOLD M. COLLINS, A.M.	Assistant in Chemistry
STEPHEN A. COLVIN, Ph.D. [From February 1, 1923]	Professor of Education (Teachers College)
J. H. COULLIETTE, A.M.	Assistant in Physics
LEILA A. COSTON, M.D. [From October 1, 1921]	Instructor in Surgery
LAWRENCE H. COTTER, M.D. [From November 1, 1922]	Instructor in Obstetrics and Gynecology
S. ELLSWORTH DAVENPORT, JR., D.M.D.	Lecturer in Operative Dentistry
EMMANUEL DE MARGERIE, D. ès S.	Visiting Professor in Engineering 1922-23
MORRIS DINNERSTEIN, M.D.	Instructor in Medicine
DAVID L. DODD, M.Sc.	Instructor in Economics
KATHERINE S. DOTY, A.M.	Assistant to Dean of Barnard College in charge of Employment
A. DONALD DOUGLAS, A.B.	Lecturer in English
NOEL T. DOWLING, LL.B.	Associate Professor of Law
FANNIE W. DUNN, Ph.D.	Assistant Professor of Education (Teachers College)
WILLIAM B. DUNNING, D.D.S.	Associate Director of the School of Dentistry
JAMES H. ENGLISH	Lecturer in French
SAWYER FALK, B.S.	Instructor in English
BRUNO FEDTER, Ph.D. [From November 1, 1922]	Lecturer in German
ALBERT B. FERGUSON, M.D.	Instructor in Orthopedic Surgery
COLIN G. FINK, Ph.D.	Lecturer in Chemical Engineering
CECIL G. FLETCHER, D.M.D.	Lecturer in Operative Dentistry
FREDERICK B. FLINN, A.B.	Instructor in Physiology
CECIL G. GASTON, A.M.	Assistant in Chemistry

<i>Name</i>	<i>Office</i>
ROBERT E. GOLDSBY, B.S.	Assistant in Legislation
CHARLES H. GRAY, A.B.	Assistant in English
JAMES GREENOUGH, M.D.	Instructor in Anatomy and Assistant in Surgery
WILLARD F. GREENWALD, B.S. [From February 1, 1922]	Assistant in Chemistry
ANDREW H. GUNN, D.D.S. [From February 1, 1922]	Instructor in Prosthetic Dentistry
WALDEMAR HANSEN, B.S. [From February 1, 1922]	Assistant in Chemistry
CLARENCE H. HARING, B.Litt. [From February 1, 1922]	Visiting Lecturer in History
EVELYN L. HARING, A.M.	Instructor in Physical Education (Barnard College)
MALCOLM M. HARING, A.M. [From February 1, 1922]	Assistant in Chemistry
CHARLES HATTAUER, D.D.S. [From January 1, 1922]	Assistant in Operative Dentistry
L. GRANT HECTOR, A.B. [From January 1, 1922]	Assistant in Physics
HATTIE L. HEFT, Ph.D.	Assistant Professor of Physiological Chemistry (Teachers College)
RAYMOND M. HERRICK, A.M.	Instructor in English
THOMAS M. HILL, A.M.	Assistant in Chemistry
FREDERIC C. HIRONS	Associate in Design
FREDERIC G. HOFFHERR	Instructor in French
JOSEPH L. HOLMES, A.M.	Assistant in Psychology (Barnard College)
HORACE H. HOPKINS, B.S.	Assistant in Chemistry
WILLIAM F. HOPKINS, D.D.S. [From January 1, 1922]	Assistant in Oral Surgery
HANNES HOVING, D.D.S. [From January 1, 1922]	Assistant in Oral Surgery
HERBERT B. HOWE, A.M., B.D. [From September 1, 1922]	Director of Earl Hall
ANNA V. HUGHES, D.M.D.	Assistant Professor of Dentistry
FREDERICK B. HUMPHREYS, M.D.	Associate in Bacteriology
JAMES M. INOUE, A.M. [From January 1, 1922]	Assistant in Biological Chemistry
FREDERIC B. JENNINGS, JR., M.D.	Instructor in Pathology
EDGAR JOHNSON, A.B. [To February 1, 1923]	Lecturer in English
H. HERBERT JOHNSON, A.M.	Assistant in Zoology
C. VICTOR JOHNSTON, D.M.D.	Lecturer in Operative Dentistry
HAROLD E. JONES, A.M.	Instructor in Psychology

<i>Name</i>	<i>Office</i>
JAMES B. LACKEY, A.M.	Assistant in Zoology
DONALD E. LANCEFIELD, A.M.	Assistant Professor of Zoology
NILS H. LARSON, D.D.S.	Assistant in Oral Surgery
[From January 1, 1922]	
SHALER U. LAWTON, M.D.	Assistant in Medicine
[From January 1, 1922]	
ROBERT M. LESTER, A.M.	Instructor in English
ROBERT L. LEVY, M.D.	Associate in Medicine
MARY V. LIBBY, A.B.	Assistant to the Dean of Barnard College in Charge of Admissions
WILLIAM E. LINGELBACH, Ph.D.	Lecturer in History
CARROLL B. LOW, LL.B.	Lecturer in Business Law
EUGENE W. LYMAN, D.D.	Lecturer in Religion (Barnard College)
[From February 1, 1923]	
THOMAS OLLIVE MABBOTT, A.M.	Assistant in English
FRANCIS S. MCCAFFREY, D.D.S.	Assistant in Oral Surgery
[From January 1, 1922]	
ELLA L. MCCOLLUM	Research Assistant in Food Chemistry
C. FRANKLIN MACDONALD, D.M.D.	Lecturer in Operative Dentistry
MARY S. MACDOUGALL, M.S.	Assistant in Zoology (Barnard College)
ARTHUR C. MCGIFFERT, D.D., LL.D.	Lecturer in Religion (Barnard College)
KATHERINE E. MACMAHON	Instructor in Journalism
ARTHUR S. MACMILLAN, D.D.S.	Assistant in Operative Dentistry
[From January 1, 1922]	
ORRIN K. McMURRAY, LL.B.	Visiting Professor of Law
ALEXANDER S. MANNE, M.D.	Assistant in Medicine
NELSON P. MEAD, Ph.D.	Lecturer in History
JOHN LLOYD MECHAM, A.M.	Instructor in History
ALBERT E. MEDER, JR., A.B.	Assistant in Mathematics
KATHERINE MERRITT, M.D.	Instructor in Diseases of Children
WESLEY C. MITCHELL, Ph.D.	Professor of Economics
PHILIP M. MOLT, Litt.B.	Instructor in French
CECIL D. MURRAY, A.B.	Instructor in Physiology
JOSEPHINE B. NEAL, M.D.	Assistant in Medicine
[From March 1, 1922]	
ROY F. NICHOLS	Instructor in History
GEORGE G. ORNSTEIN, M.D.	Assistant in Medicine
MAX PALINSKY, M.D.	Assistant in Medicine
[From Nov. 1, 1922]	
JULIA PATON, Ph.D.	Associate in Biological Chemistry
[From Dec. 1, 1921]	
EDWIN W. PATTERSON, LL.B.	Associate Professor of Law

<i>Name</i>	<i>Office</i>
FRANK H. PETERS, M.D. [From March 1, 1922]	Assistant in Medicine
HAROLD F. PIERCE, A.B.	Associate in Physiology
LEO G. POLLOCK, D.D.S.	Lecturer in Operative Dentistry
EUGEN P. POLUSHKIN, Met.E.	Assistant in Metallurgy
LUCIUS C. PORTER, A.M.	Dean Lung Professor of Chinese
ABRAHAM M. RABINER, M.D. [From October 1, 1922]	Instructor in Neurology
IRVING W. RAYMOND, A.M.	Instructor in History
THEODORE B. REED, M.D.	Instructor in Obstetrics and Gynecology
GEORGE T. RENNER, A.B.	Lecturer in Economic Geography
ELIZABETH REYNARD, A.B.	Assistant in Geology (Barnard College)
AUSTEN FOX RIGGS, M.D. [From January 1, 1922]	Clinical Professor of Neurology
RAY H. RULISON, Ph.B. [From Jan. 1, 1922]	Assistant in Medicine
ZACHARY SAGAL, M.D.	Assistant in Medicine
DAVID L. SATENSTEIN, M.D.	Instructor in Dermatology and Syphilology
OTTO P. SCHINNERER, A.M.	Lecturer in German
JOSEPH SCHROFF, M.D., D.D.S. [From January 1, 1922]	Assistant in Oral Surgery
MAX L. SCHÜSTER, B.Litt. [From February 1, 1922]	Associate in Journalism
CHARLES G. SEIBERT, D.D.S. [From January 1, 1922]	Assistant in Operative Dentistry
ALBERT SHIELS, A.M., Litt.D.	Professor of Education (Teachers College)
BENJAMIN SIEGEL, M.D. [From Nov. 1, 1922]	Assistant in Medicine
BEVERLY C. SMITH, M.D.	Instructor in Surgery
EDGAR F. SMITH, Ph.D.	Lecturer upon the Charles Frederick Chandler Foundation for 1921-22
ROBERT H. SNEDAKER, D.D.S. [From January 1, 1922]	Assistant in Operative Dentistry
WILLIAM F. SPAFFORD, A.M.	Lecturer in Banking
NATHANIEL W. STEPHENSON, A.B.	Lecturer in History
EDGAR STILLMAN, M.D.	Associate in Medicine
HORACE STRINGFELLOW, JR., U.S.A. [From October 4, 1922]	Assistant Professor of Military Science and Tactics
RICHARD H. STUCKLEN, D.M.D. [From February 1, 1922]	Instructor in Prosthetic Dentistry

<i>Name</i>	<i>Office</i>
ROBERT E. SWAIN, Ph.D.	Lecturer upon the Charles Frederick Chandler Foundation for 1922-23
PAUL S. TARLER, D.D.S. [From January 1, 1922]	Assistant in Operative Dentistry
VITO G. TOGLIA, A.M.	Assistant in Italian
MARTIN C. TRACY, D.M.D. [From January 1, 1922]	Assistant Professor of Prosthetic Dentistry
BENJAMIN M. VANCE, M.D.	Instructor in Surgery
FRANK T. VAN WOERT, M.D.S.	Director of the School of Dentistry
SCHUYLER C. WALLACE, A.M.	Instructor in Government
MABEL F. WEEKS, A.B.	Assistant to the Dean of Barnard College in Charge of Social Affairs
RANDOLPH WEST, M.D.	Instructor in Medicine
DEANE R. WHITE, B.S.	Assistant in Physics
EDGAR I. WILLIAMS	Associate in Design
ROBERT H. WILLIAMS, A.M.	Lecturer in Spanish
LOUIS A. WOLFANGER, A.B.	Lecturer in Economic Geography
J. FRANK WYNN, D.D.S. [From January 1, 1922]	Assistant in Oral Surgery
FREDERICK G. YEANDLE, A.M.	Lecturer in French
J. DONALD YOUNG, A.M.	Lecturer in Fine Arts

LEAVES OF ABSENCE

For the whole or part of the academic year 1921-22 were granted to the following officers:

REV. JOHN DOUGLAS ADAM, D.D.	Associate in Religion (Barnard College)
FELIX ADLER, Ph.D.	Professor of Social and Political Ethics
CHARLES P. BERKEY, Ph.D.	Professor of Geology
THOMAS H. BRIGGS, Ph.D.	Professor of Education (Teachers College)
WENDELL T. BUSH, Ph.D.	Associate Professor of Philosophy
JOHN B. CLARK, LL.D.	Professor of Political Economy
ARTHUR D. DEAN, B.S.	Professor of Education (Teachers College)
VIRGINIA C. GILDERSLEEVE, LL.D.	Dean of Barnard College and Professor of English
EMMA H. GUNTHER, A.M.	Assistant Professor of Household Arts (Teachers College)
THOMAS H. HARRINGTON, C.E.	Assistant Professor of Drawing
GRACE A. HUBBARD, A.M.	Associate Professor of English (Barnard College)

<i>Name</i>	<i>Office</i>
EMILIE J. HUTCHINSON, Ph.D.	Assistant Professor of Economics (Barnard College)
HAROLD JACOBY, Ph.D.	Rutherford Professor of Astronomy
EDWARD KASNER, Ph.D.	Professor of Mathematics (Barnard College)
REV. RAYMOND C. KNOX, S.T.D.	Chaplain
LOUIS A. LOISEAUX, B.S.	Associate Professor of French (Barnard College)
HERBERT G. LORD, A.M.	Professor of Philosophy
NELSON G. MCCREA, Ph.D.	Anthony Professor of the Latin Language and Literature
HENRY B. MITCHELL, A.M.	Professor of Mathematics
PAUL MONROE, LL.D.	Professor of the History of Education (Teachers College)
JOHN DYNELEY PRINCE, Ph.D.	Professor of Slavonic Languages
ARTHUR F. J. REMY, Ph.D.	Associate Professor of Germanic Philology
HERBERT M. RICHARDS, Sc.D.	Professor of Botany (Barnard College)
HENRY H. RUSBY, M.D.	Dean of the College of Pharmacy and Professor of Materia Medica
WILLIAM R. SHEPHERD, L. H. D.	Professor of History
JAMES T. SHOTWELL, Ph.D.	Professor of History
LEWIS P. SICELOFF, Ph.D.	Assistant Professor of Mathematics
DAVID E. SMITH, LL.D.	Professor of Mathematics (Teachers College)
KARL M. VOGEL, M.D.	Assistant Professor of Clinical Pathology
ALBERT P. WILLS, Ph.D.	Professor of Mathematical Physics
EDMUND B. WILSON, LL.D.	Da Costa Professor of Zoology
JOHN F. WOODHULL, Ph.D.	Professor of Physical Science (Teachers College)

REPRESENTATIVES OF THE UNIVERSITY DURING 1921-22

At the Installations of

President J. A. C. Chandler, College of William and Mary, Williamsburg, Va. [October 19, 1921]	Provost CARPENTER
Head Master Dr. Boyd Edwards, The Hill School, Pottstown, Pa. [May 20, 1922]	Professor ERSKINE
President Frank Aydelotte, Swarthmore College, Swarthmore, Pa. [October 22, 1921]	Provost CARPENTER

- President A. A. Brown, University of Chattanooga, Chattanooga, Tenn. [January 24 and 25, 1922] WILLIAM HATFIELD SEARS, '04 Fine Arts
- President Kinley, University of Illinois, Urbana, Ill. [December 1 and 2, 1921] Dean HAWKES
- President Kleinsmid, University of Southern California, Los Angeles, Cal. [April 27-29, 1921] Dr. WALTER JARVIS BARLOW, A.B., '89, M.D. '92
- President George Thomas, University of Utah, Salt Lake City, Utah [April 5, 1922] ROBERT HENRY BRADFORD, Ph.D. '02
- President Crossfield, William Woods College, Fulton, Mo. [May 31, 1922] JAMES P. McBAINE, LL.B. '04

At the Anniversary Celebrations of

- Beloit College, Beloit, Wis. (75th) [June 17-21, 1922] ROBERT K. RICHARDSON, A.M. '99
- Otterbein College, Westerville, O. (75th) [June 15, 1922] RAYMOND C. OSBURN, Ph.D. '06
- Perkiomen School, Pennsburg, Pa. (30th) [June 10, 1922] Professor CARMAN
- Royal University, Padua, Italy (700th) [May 14-17] Professor NELSON G. MCCREA
- Société Asiatique, Paris, France (100th) [July 10-13] Professor GOTTHEIL

Miscellaneous

- American Academy of Political and Social Science, Philadelphia, Pa. [May 12-13, 1922] Professor LINDSAY
- Association of American Universities, University of Missouri, Columbia, Mo. [November 4-5, 1921] Dean HAWKES
Professor A. H. THORNDIKE
- Association of Colleges and Preparatory Schools of the Middle States and Maryland, Swarthmore, Pa. [November 25-26, 1921] Dean HAWKES
Professor JONES
Professor KENDRICK
- Conference of Bar Association Delegates on Legal Education, Washington, D.C. [February 23-24, 1922] Dean STONE
- Conference on business training of the engineer and engineering training for students of business, Carnegie Institute of Technology, Pittsburgh, Pa. [May 1-2, 1922] Professor RAUTENSTRAUCH
- Service in commemoration of the signing of the Magna Charta, Cathedral of St. John the Divine, New York [June 18, 1922] Professor COSS

APPENDIX 2
REPORT OF THE APPOINTMENTS OFFICE
SEPTEMBER 25, 1921 TO SEPTEMBER 25, 1922

To the Secretary of the University

SIR:

It gives me pleasure to submit herewith a record of the activities of the Appointments Office for the year of September 25, 1921—September 25, 1922.

The business training of students has been added to the duties of the Appointments Office. During previous years many positions have been lost because registered applicants failed to look up work offered them. To eradicate this waste of effort the Appointments Office was obliged to start a campaign to arouse a sense of business obligation in those who were registered as applying for work. The result was that more men have been placed than even in the business boom that followed the Great War.

The total calls for employment for the year were 2,252, of which 1,822 were filled. The 370 which were lost to us were due largely to carelessness in answering summons from the office. We feel that this loss has been cut almost to a minimum, and that there will always be a certain percentage of wasted effort on this score. In some instances it will happen that the conditions of employment are unsatisfactory, as was evidenced by a call which came in recently, asking for a number of students to work at 20 cents an hour.

There was not much change in the demand for part time work last winter. In the summer some of the employment came back which had been dropped the previous summer because of bad financial conditions, such as Pullman car conductors, and research men in the advertising field. There are usually many more calls for camp councillors than we can fill, because these

positions offer little inducement in the way of remuneration.

There were 952 positions filled by the men during the winter, and 460 through the summer. The calls for part time work for the women students were 217 winter and 193 summer.

The total registration of students, both men and women for the entire year was 1,952.

Winter—Part Time		Summer—Part Time	
Men	874	Men	518
Women	309	Women	251

The permanent placements of graduate students made during the year were 125. Of this number, 26 men were placed in positions as follows—Assistant in Purchasing Dep't, Bond Runner, Chief Clerk, Civil Engineer, Clerical Workers, Demonstrators, Editorial Assistants, Educational Directors, Engineers, Lawyers, Office Managers, Salesmen, Secretaries, Statisticians, Stenographers.

Eighty-four women obtained full time positions, the largest number being that of 31 stenographers. The second largest was 26 secretaries, and the other positions were for cashiers, correspondents, employment assistants, librarians, with several placed in typing and clerical positions.

There was not as much demand as usual for teachers in colleges and universities, so that field offered less opportunity. Fifteen graduates were placed in teaching positions, including 7 in English, 3 in Modern Languages, 1 in Business Administration, 2 in Sciences, 1 in Law, and 1 in Sociology. The amount of these salaries totaled \$34,300.

May I take this opportunity to express my appreciation for the assistance which has been given the office by the various departments, and the Secretary of the University?

Respectfully submitted,

ETHEL A. BREED

In charge

October 1, 1922

PART TIME POSITIONS FILLED BY APPOINTMENTS OFFICE
 SEPTEMBER 25, 1921 TO JUNE 1, 1922

MEN

	Academic			Academic	
	Year Summer			Year Summer	
	1921-22	1922		1920-21	1922
Advertising	1	—	Messengers	7	2
Athletic Coach	—	3	Minister	—	1
Athletic Director	1	—	Miscellaneous	13	—
Attendant	4	—	Model	13	1
Bellboy	—	1	Musicians	72	4
Bookkeeper	1	1	Office Clerks	2	—
Camp Councillors	—	8	Proctors	51	47
Cashier	4	—	Proof Readers	3	7
Caretakers	—	2	Pullman Car Conductors	—	6
Chauffeur	2	1	Readers	3	2
Clerical	95	45	Recreational Leaders	13	6
Companions	—	12	Reporters	1	—
Companion Secretary	—	1	Research	2	1
Correcting Themes	1	—	Resident Companions	—	9
Custodians	—	11	Salesmen	27	25
Demonstrators	—	2	Settlement Workers	15	1
Drafting	4	5	Soda Dispensers	2	—
Editorial	1	1	Statistical Workers	1	1
Election Watchers	23	—	Stenographers	20	8
Elevator Operator	—	1	Telephone Operators	4	4
Employment Secretary	1	—	Translators	5	9
Guides	3	2	Tutors	127	121
Gymnasium Directors	2	—	Tutor-Companions	15	—
Inspectors	7	1	Typists	31	17
Investigators	1	3	Ushers	334	46
Laboratory Assistant	—	1	Waiters	16	18
Lawyer	1	—	Watchmen	—	8
Library Attendant	2	1			
Manager of Golf Club	—	2	Total	952	460
Manual Labor	12	12			

WOMEN

Attendant	1	—	Proofreaders	—	1
Care of Children	2	—	Readers	1	2
Cafeteria Assistant	1	—	Research	1	1
Chaperone	1	—	Saleswomen	4	1
Clerical	35	41	Seamstress	1	—
Companion	3	3	Secretaries	—	6
Cook	1	—	Settlement Workers	—	2
Councillor	—	1	Stenographers	40	28
Employment Assistant	—	1	Store Clerk	—	1
Filing	—	1	Translators	3	2
Governess	—	4	Tutors	41	29
Hostess	—	1	Tutor Companions	—	1
Investigator	5	—	Typists	74	61
Laboratory Ass't	—	1	Waitress	—	2
Mother's Helper	3	—			
Professional Packer	—	1	Total	217	193

REPORT OF THE REGISTRAR

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1922
AND FOR THE SUMMER SESSION OF 1922

To the President of the University

SIR:

I have the honor to submit the following report of the Registrar for the year ended June 30, 1922 and for the Summer Session of 1922.

During the year beginning July 1, 1921 there were enrolled at Columbia University 29,420 resident students as compared with 27,352 in 1920-21. This student body consists of three main divisions represented by the following groups:

	Men	Women	Total
Undergraduate, graduate and professional schools	5,906	5,045	10,951
University Extension	4,835	4,296	9,131
Summer Session	<u>3,938</u>	<u>7,871</u>	<u>11,809</u>
<i>Total</i>	<i>14,679</i>	<i>17,212</i>	<i>31,891</i>

The figure first mentioned above is the net total arrived at after deducting 2,471 duplications within these groups.

There were 3,678 others who received instruction as non-resident students in University Extension, divided as follows: 2,500 in Extramural courses; 893 in Special courses and 285 in Home Study courses.

The statistical material supplied in the tables and charts found in this report, similar to that published in other years, is intended to give in greater detail information as to the condition of the University viewed from the student records.

The office has passed through its most active year with respect to the number of records handled and volume of related work. Under the present organization the academic records of the several schools and faculties of the University are handled by departments in this office as indicated below.

Office Organization and Staff

1. Department of Undergraduate Records—Columbia College, University Undergraduates and School of Journalism (one senior clerk and two assistants)
2. Department of Graduate Records—Graduate Faculties (one senior clerk)
3. Department of Records of Professional Schools—Schools of Mines, Engineering and Chemistry, Law, Architecture and Business (one senior clerk and one assistant)
4. Department of University Extension and Summer Session Records (one senior clerk and three assistants)

Division of other related work is made on the following basis:

5. Department of Student Accounts (two senior clerks)
6. Department of Course Tickets and Class Rolls (one senior clerk)
7. Department of Diplomas (one senior clerk)
8. Department of Correspondence (two secretaries)
9. Department of Information and Student Directory (one clerk)

Inclusion of the School of Journalism in the group served by the Department of Records of Professional Schools would be a step in the right direction, and it is hoped that necessary provision may be made for such an arrangement. It would also be well to consider the advisability of placing the work of the Summer Session under a separate department in view of the increasing demands for service from that source. Frequent requests for transcripts and certificates for work done by Summer students, many inquiries with respect to credits and marks, and early registrations by mail—all these would easily fill the entire time of a permanent clerk.

Much of the management of the general routine of the office has been in the hands of the Assistant Registrar, Mr. Edward B. Fox, B.S., who has also closely associated himself with academic problems in connection with the records in Columbia College and with the assignment of class rooms. The following is a list of the names of those who also have shouldered the work of this office in their several capacities as members of the permanent staff:

Mrs. Nancy D. Baines	Miss Alice King
Mr. Walter L. Baker	Mr. Charles E. Kunz
Miss Marjorie L. Barrington	Mrs. Ellen Packer

Miss Ina Bell
 Miss Amilda Creifelds
 Miss Annie F. Currier
 Mrs. Gertrude Finan
 Miss Helene Gladwin
 Mr. George H. Kean
 Miss Iva Kempton

Miss Viola Reynolds
 Miss Edith H. Van Wagner
 Miss Beatrice Young

Mr. George L. Campbell (Resigned)
 Miss Gertrude Duncan (Resigned)
 Miss Beatrice Fear (Resigned)
 Mr. W. G. Jamison (Resigned)

Several new office methods and practices have been introduced during the year. Up to the beginning of this year the single account was made the basis of check with respect to student fees between the Bursar's office and the Registrar's office. Since then there has been put into operation a system of internal check on income by schools or faculties. With proper bookkeeping methods it has been made possible for the Registrar to show the correct total of tuition charges for each division, supplying a reliable basis of accounting for the Bursar.

Changes in
 System

We have for the first time tried the plan of keeping the office open Monday to Friday from 5 to 9 P. M. in addition to the regular hours from 9 A. M. to 5 P. M. The experiment has proved so beneficial to the student body in University extension that necessary provision has been made for continuation of the practice.

The newly adopted uniform transcript blank printed on safety paper has been so designed as to show the full credentials of a student taking work in any of the several faculties or schools of the University including University Extension and Summer Session. Previously ten different forms had been in use for the same purpose.

In our record keeping machinery the multiple sheet system has given way to the single sheet system. In Columbia College and in all but one of the professional schools the academic record of a student has heretofore been kept on a separate sheet for each succeeding year with the result that at the termination of a regular course of study there would be on file for each student two, three or four separate sheets. Under such a system credits, check on prescribed courses, deficiencies and

other matters had in each case to be carried forward from one year to another. This not only added to the clerical work but also increased chances of error. We now have a single record sheet which may be used from year to year so long as the student remains in residence.

An administrative office which has to keep pace with the rapid growth of the institution it is serving may drift into the tendency of building up an increasingly complex machinery seemingly in the interest of efficiency. To obtain larger results, however, it may sometimes become necessary for the organization to simplify an existing system rather than to elaborate it. Some of the changes in our office methods have been made with that end in view.

TABLE I

REGISTRATION AT COLUMBIA UNIVERSITY IN ALL FACULTIES, DURING THE
ACADEMIC YEAR, 1921-1922

Resident Students

FACULTIES	First Year	Second Year	Third Year	Fourth Year	Non-Candidates	Graduates	Total	New Students	Percentage of New Students
Undergraduate Students:									
Columbia College ¹	683	515	435	406	22		2,061	759	36.8
Barnard College	220	173	203	71	67		734	296	40.3
University Undergraduates							90	84	93.3
<i>Total Undergraduates</i>							2,885		
Graduate and Professional Students:									
Graduate Faculties ²						1,520	1,520	477	31.4
Law	312	166	164		48	4	604	245	35.3
Medicine	103	91	92	70	21		377	123	32.6
Mines, Engineering and Chemistry	61	56	49		26	14	206	97	47.1
Architecture		65			1	3	69	29	42.0
Journalism	77	61			4	4	146	86	59.0
Business	156	129			109	26	420	271	64.5
Dentistry	6	3	3	1			13	5	38.5
Teachers College ⁴									
Education					913	1,063	1,976	922	46.7
Practical Arts	203	142	326	321	699	262	1,953	606	31.0
Pharmacy	358	245	10	2	69		684	397	58.0
Unclassified University Students						245	245	127	51.8
<i>Total Graduate and Professional Students</i>							8,303		
Deduct Duplicates ⁴							237		
<i>Total</i>							10,951		
University Extension							9,131	5,666	62.1
<i>Total</i>							20,082		
Deduct Duplicates							151		
<i>Net Total Winter and Spring Sessions</i>							10,931		
Summer Session 1921							11,809	6,969	59.0
<i>Total</i>							31,740		
Deduct Duplicates							2,320		
<i>Grand Net Total, Winter, Spring and Summer Sessions</i>							20,420		
The above is exclusive of the following non-resident students in University Extension:									
Students in Extramural Courses (given with or without academic credit)							2,500		
Students in Home Study Courses (given without academic credit)							285		
Students in Special Courses (Given without academic credit)							893		

¹ The registration by years in Columbia College is according to the technical classification, based on the amount of credit earned.

For Footnotes 2, 3, and 4 see Page 278

TABLE IA

STATISTICS OF REGISTRATION BY SESSIONS 1921-1922

Resident Students

	1921 Summer Session	Winter Session	Spring Session	Gross Totals
Undergraduate Students				
Columbia College	401	1,886	1,874	4,161
Barnard College	75	689	692	1,456
University Undergraduates		84	54	138
Graduate and Professional Students				
Graduate Faculties	812	1,326	1,243	3,381
School of Law	166	645	613	1,424
School of Medicine	2	370	363	735
Schools of Mines, Engineering and Chemistry	36	202	194	432
School of Architecture	10	59	60	129
School of Journalism	21	138	122	281
School of Business	85	369	345	799
School of Dentistry		13	13	26
Teachers College { School of Education	1,659	1,576	1,506	4,741
School of Practical Arts	1,846	1,673	1,642	5,161
College of Pharmacy		684	684	1,368
Unclassified University Students	6,696	196	162	7,054
University Extension		7,041	5,614	12,655
<i>Gross Totals</i>	<i>11,809</i>	<i>16,951</i>	<i>15,181</i>	<i>43,941</i>
Duplicate Registrations				14,521
<i>Net Total for the Year</i>				<i>29,420</i>

² The total 1,520 does not include 31 college graduates; in Law (26), Medicine (2), Journalism (1), and Mines, Engineering and Chemistry (2), who are also candidates for the degree of A.M. or Ph.D. It likewise does not include 573 candidates for higher degrees enrolled in the Summer Session only.

³ Does not include 1,444 candidates for a higher degree enrolled in the Summer Session only.

⁴ 147 college seniors exercising a professional option are included in both the Columbia College total and those of the respective professional schools, distributed as follows: Law 68; Medicine 21; Mines, Engineering and Chemistry 43; Business 6; Journalism 4; Architecture 5. The 237 duplicates also include 90 who transferred at mid-year from one school of the University to another.

TABLE II

REGISTRATION AT COLUMBIA UNIVERSITY, IN ALL FACULTIES, DURING THE
ACADEMIC YEARS 1912-1913 to 1921-1922

Resident Students

FACULTIES	1912-1913	1913-1914	1914-1915	1915-1916	1916-1917	1917-1918	1918-1919	1919-1920	1920-1921	1921-1922
Undergraduate Students:										
Columbia College	877	941	1,116	1,256	1,453	1,315	1,486	1,901	1,963	2,061
Barnard College	618	666	730	694	734	697	715	755	748	734
University Undergraduates									6	90
<i>Total Undergraduates</i>	<i>1,495</i>	<i>1,607</i>	<i>1,846</i>	<i>1,950</i>	<i>2,187</i>	<i>2,012</i>	<i>2,201</i>	<i>2,656</i>	<i>2,717</i>	<i>2,885</i>
Graduate and Professional Students										
Graduate Faculties ¹	1,470	1,568	1,875	1,516	1,358	1,052	774	1,249	1,303	1,520
Law	478	467	453	485	474	219	233	451	584	694
Medicine	344	344	374	376	451	554	485	446	401	377
Mines, Engineering and Chemistry	669	675	481	375	276	81	92	136	191	206
Architecture	141	151	112	95	90	39	41	63	74	69
Music	16	19								
Journalism	76	115	143	144	155	76	65	123	137	146
Business					61	77	126	269	361	420
Dentistry								4	8	13
Teachers College										
Education	1,422	1,475	950	1,157	1,277	1,078	1,073	1,567	1,711	1,976
Practical Arts	262	335	1,057	1,065	1,167	1,307	1,290	1,551	1,700	1,953
Pharmacy	414	448	495	510	428	524	343	523	553	684
Unclassified Univ. Students	100	159	199	161	206	107	115	166	203	245
Deduct Duplicates	349	422	612							
<i>Total Graduate and Professional Students</i>	<i>5,043</i>	<i>5,334</i>	<i>5,527</i>	<i>5,884</i>	<i>5,043</i>	<i>5,114</i>	<i>4,637</i>	<i>6,548</i>	<i>7,226</i>	<i>8,303</i>
Deduct Double Registration	13	7	39	160	36	38	35	87	202	237
<i>Net Total</i>	<i>6,525</i>	<i>6,934</i>	<i>7,334</i>	<i>7,674</i>	<i>8,094</i>	<i>7,088</i>	<i>6,803</i>	<i>9,117</i>	<i>9,741</i>	<i>10,951</i>
Students in University Extension	2,025	2,623	3,411	4,503	6,062	5,895	6,425	11,564	9,913	9,131
Deduct Double Registration	410	572	761	880	1,216	1,203	1,572	2,398	165	151
<i>Total</i>	<i>8,144</i>	<i>9,985</i>	<i>9,982</i>	<i>11,297</i>	<i>12,940</i>	<i>11,780</i>	<i>11,656</i>	<i>18,283</i>	<i>19,489</i>	<i>19,931</i>
Summer Session	3,602	4,530	5,590	5,961	8,023	6,144	6,022	9,539	9,780	11,809
Deduct Double Registration	822	1,102	1,235	1,345	1,501	1,141	1,170	1,897	1,917	2,320
<i>Grand Net Total, Winter, Spring & Summer Sessions</i>	<i>10,024</i>	<i>12,422</i>	<i>14,339</i>	<i>15,013</i>	<i>16,462</i>	<i>16,783</i>	<i>16,502</i>	<i>25,025</i>	<i>27,352</i>	<i>29,420</i>

¹ In 1915-1916 candidates for the degree of Master of Arts whose subject of major interest was Education (654) were, for the first time, included only under the Faculty of Education. Since 1916-1917 all students engaged in graduate study with Education as their subject of major interest have been counted under the faculty of Education only.

THE PROPORTION OF MEN AND WOMEN FOR THE PAST TEN YEARS, EXCLUSIVE OF THE SUMMER SESSION AND UNIVERSITY EXTENSION, IS AS FOLLOWS:

Year	Men	Per Cent.	Women	Per Cent.	Total
1912-1913	4,072	62.40	2,453	37.60	6,525
1913-1914	4,277	61.68	2,657	38.32	6,934
1914-1915	4,466	60.89	2,868	39.11	7,334
1915-1916	4,524	58.96	3,150	41.04	7,674
1916-1917	4,682	57.84	3,412	42.16	8,094
1917-1918	3,797	53.57	3,291	46.43	7,088
1918-1919	3,523	51.79	3,280	48.21	6,803
1919-1920	4,945	54.24	4,172	45.76	9,117
1920-1921	5,316	54.57	4,425	45.43	9,741
1921-1922	5,906	53.93	5,045	46.07	10,951

TABLE III

PERCENTAGE OF INCREASE AND DECREASE OF REGISTRATION BY YEARS IN ALL FACULTIES, 1912-13 TO 1921-22

The minus sign indicates a decrease. Elsewhere an increase is to be understood.

FACULTIES	1912-1913	1913-1914	1914-1915	1915-1916	1916-1917	1917-1918	1918-1919	1919-1920	1920-1921	1921-1922
Undergraduate Students	6.95	7.29	18.59	12.54	15.68	-9.41	13.00	27.93	3.26	04.09
Columbia College	-3.44	7.76	9.60	-4.93	6.34	-5.04	2.58	5.59	-0.92	-01.87
Barnard College									New	1400.00
University Undergraduates										
Total undergraduates	2.40	7.49	14.87	5.63	12.15	-8.00	9.39	20.67	2.29	06.18
Graduate and Professional Students:										
Graduate Faculties ¹	9.56	10.00	20.09	-19.14	-10.42	-22.53	-26.42	61.36	4.32	16.65
Mines, Engineering and Chemistry	-0.29	0.89	28.74	22.03	-26.40	-70.65	13.58	47.82	21.32	07.85
Law	14.62	-2.30	-2.00	7.06	-2.27	-53.79	6.30	93.56	13.97	18.83
Medicine	-2.20	0.00	8.72	0.61	19.94	32.81	-12.45	-8.04	-10.00	-05.98
Journalism		51.45	24.34	0.09	7.64	-50.97	-14.48	89.23	9.76	06.57
Pharmacy	44.25	8.21	16.49	3.03	-10.08	22.43	-34.52	52.48	5.73	23.69
Education	3.76	7.48	10.88	16.81	9.99	-2.41	-0.96	31.99	9.39	15.19
Practical Arts } Teachers College										
Architecture	4.44	7.09			-5.26	-56.66	5.13	53.90	15.87	-06.75
Music	-20.00	18.75	-25.82	-17.85	New	26.23	63.63	113.49	30.11	16.34
Business								New	100.00	62.50
Dentistry									22.29	20.60
Unclassified									8.22	14.90
Total graduate and professional students	9.13	5.77	3.62	6.48	1.00	-13.95	-9.32	41.21	8.22	14.90
Net total	7.44	6.26	5.76	4.59	5.48	-12.43	-4.02	34.03	6.84	12.42
Students in University Extension	52.21	29.28	30.04	32.01	34.62	-2.75	8.99	79.99	8.15	-07.88
Net Total	14.93	22.01	-0.03	13.17	14.54	-3.97	-1.05	56.36	6.06	02.27
Students in Summer Session	21.12	26.01	23.15	6.63	34.59	-23.42	-1.98	58.40	2.53	20.75
Grand Net Total	17.09	13.71	15.42	10.98	23.30	-13.77	-1.07	57.10	5.50	07.56

In 1915-1916 candidates for the degree of Master of Arts whose subject of major interest was Education (654) were, for the first time, counted only under the Faculty of Education; since 1916-1917 all students engaged in graduate study with Education as their subject of major interest have been counted under the Faculty of Education only.

TABLE IV

DUPLICATE REGISTRATIONS BETWEEN THE SUMMER SESSION OF 1921 AND
THE ACADEMIC YEAR 1921-1922

*A. Students of the Summer Session Who Returned in the Winter or Spring Sessions
of 1921-1922*

SCHOOL OR FACULTY TO WHICH THEY RETURNED	Men	Women	Total
Architecture	6	2	8
Barnard College		81	81
School of Business	69	14	83
Columbia College	388		388
School of Dentistry			
Graduate Faculties (Political Science, Philosophy and Pure Science)	194	122	316
Journalism	12	5	17
Law	173		173
School of Medicine	32		32
Schools of Mines, Engineering and Chemistry	39		39
College of Pharmacy	2		2
Teachers College—Education and School of Practical Arts	156	472	628
University Undergraduate	15	1	16
University Extension	258	279	537
<i>Total</i>	<i>1,344</i>	<i>976</i>	<i>2,320</i>

*B. Matriculated Graduate Students of the Summer Session of 1921 Who Did or Who Did Not
Return in the Spring or Winter Sessions of 1921-1922*

FACULTIES	Returned	Did Not Return	Total
Political Science, Philosophy and Pure Science	239	573	812
Education and Practical Arts	215	1,444	1,659
<i>Total</i>	<i>454</i>	<i>2,017</i>	<i>2,471</i>

TABLE V

CLASSIFICATION OF STUDENTS IN THE SCHOOLS OF MINES,
ENGINEERING AND CHEMISTRY

DEPARTMENTS	First Year	Second Year	Third Year	Non-Candidates	Post-Graduate	Total 1921-1922	Total 1920-1921
Chemical Engineering	23	19	21	2		65	64
Civil Engineering	3	4	2	3		12	9
Electrical Engineering	9	9	9	8	8	43	44
Industrial Engineering	4	5				9	6
Mechanical Engineering	14	5	12	1	6	38	36
Metallurgy	5	6	3	5		19	14
Mining Engineering	3	8	2	7		20	18
<i>Total</i>	<i>61</i>	<i>56</i>	<i>49</i>	<i>26</i>	<i>14</i>	<i>206¹</i>	<i>191</i>

¹ The total 206 includes 43 College Students exercising professional option in Mines, Engineering and Chemistry, as follows: 2 C. E.; 11 M. E.; 7 E. E.; 3 Met. E.; 3 Ind. E.; 1 E. M.; Chem. E. 16 (Later corrected to 15).

TABLE VI

CLASSIFICATION OF SEMINARY STUDENTS

SEMINARIES	1921-1922	1920-1921	1919-1920
Union Theological Seminary	12	40	52
General Theological Seminary	5	8	5
Drew Theological Seminary	12	4	8
Jewish Theological Seminary	10	6	4
New Brunswick Theological Seminary	2		
<i>Total</i>	<i>41</i>	<i>58</i>	<i>69</i>

TABLE VII

CLASSIFICATION OF CANDIDATES FOR THE DEGREES OF MASTER OF ARTS,
MASTER OF LAWS, MASTER OF SCIENCE, AND DOCTOR OF PHILOSOPHY*A. By Primary Registration*

	1921-1922	1920-1921
Political Science, Philosophy and Pure Science	1,382	1,153
Architecture (M.S.)	1	3
Botanical Garden	1	1
Business (M.S.)	26	20
Education and Practical Arts	1,325	1,108
Journalism	1	
Journalism (M.S.)	4	
Law	26	27
Law (LL.M.)	4	5
Medicine	2	4
Mines, Engineering and Chemistry	2	1
Mines, Engineering and Chemistry (M.S.)	14	21
Officers	96	91
Philanthropy	1	
Summer Session	2,017	1,682
Theological Seminaries	41	58
<i>Total</i>	<i>4,943</i>	<i>4,174</i>

B. By Faculties, including the Summer Session

	1921-1922	1920-1921
Political Science, Philosophy and Pure Science	2,124	1,858
Architecture (M.S.)	1	3
Business (M.S.)	26	20
Education and Practical Arts	2,769	2,267
Journalism	1	
Journalism (M.S.)	4	
Law (LL.M.)	4	5
Mines, Engineering and Chemistry (M.S.)	14	21
<i>Total</i>	<i>4,943</i>	<i>4,174</i>

C. By Faculties, omitting students registered primarily for a degree in the Faculties of Architecture, Business Law, Medicine, Journalism, and Mines, Engineering and Chemistry, but including Summer Session

	1921-1922	1920-1921
Political Science, Philosophy and Pure Science	2,093	1,826
Education and Practical Arts	2,769	2,267
<i>Total</i>	<i>4,862</i>	<i>4,093</i>

D. By Faculties, omitting Summer Session and Students registered primarily for a degree in the Faculties of Architecture, Business, Journalism, Law, Medicine, Mines, Engineering and Chemistry

	1921-1922	1920-1921
Political Science, Philosophy and Pure Science	1,520	1,303
Education and Practical Arts	1,325	1,108
<i>Total</i>	<i>2,845</i>	<i>2,411</i>

TABLE VIII

A. SUBJECTS OF MAJOR INTEREST OF STUDENTS REGISTERED FOR THE HIGHER DEGREES, 1921-1922

SUBJECTS	Political Science, Philosophy and Pure Science	Law	Mines, Engineer- ing and Chemistry	Architecture	Business	Journalism	Education and Practical Arts	Total
Anatomy	1							1
Anthropology	4							4
Architecture				3				3
Bacteriology	13							13
Biological Chemistry	12							12
Botany	27							27
Business					26			26
Chemical Engineering	13							13
Chemistry	150							150
Economics	160							160
Education and Practical Arts							1,325	1,325
Electrical Engineering			8					8
English and Comparative Liter- ature	285							285
Geology	27							27
German	15							15
Greek	3							3
History	201							201
Indo-Iranian	4							4
Journalism						4		4
Latin	33							33
Mathematical Physics	3							3
Mathematics	35							35
Mechanical Engineering			6					6
Metallurgy	3							3
Pathology	3							3
Philosophy (incl. Ethics)	61							61
Physics	38							38
Physiology	12							12
Psychology	97							97
Public Law and Comparative Jurisprudence	44	4						48
Romance Languages	110							110
Semitic Languages	11							11
Slavonic Languages	9							9
Social Science	119							119
Zoology	27							27
<i>Total</i>	<i>1,520</i>	<i>4</i>	<i>14</i>	<i>3</i>	<i>26</i>	<i>4</i>	<i>1,325</i>	<i>2,806</i>

TABLE VIII—Continued

B. SUMMARY BY DIVISIONS

DIVISIONS	FACULTIES							Total
	Graduate Faculties	Law	Mines, Engineer- ing and Chemistry	Architecture	Business	Journalism	Education and Practical Arts	
Ancient and Oriental Languages	51			3				51
Architecture								3
Biology	95							95
Business					26			26
Chemistry	150							150
Education and Practical Arts							1,325	1,325
Engineering	13		14					27
Geology and Mineralogy	27							27
History, Economics, and Public Law	524							524
Law		4						4
Journalism						4		4
Mathematics and Physical Sci- ence	76							76
Mining and Metallurgy	3							3
Modern Languages and Litera- tures	419							419
Philosophy, Psychology, and Anthropology	162							162
<i>Total</i>	<i>1,520</i>	<i>4</i>	<i>14</i>	<i>3</i>	<i>26</i>	<i>4</i>	<i>1,325</i>	<i>2,806</i>

TABLE IX

RESIDENCE OF STUDENTS

1921-1922	College	Law	Medicine	Mines, Engineering and Chemistry	Architecture	Journalism	Business	Dentistry	Graduate Faculties	Unclassified Students	Barnard College	Education and Practical Arts	College of Pharmacy	University Undergraduates	Total
UNITED STATES															
North Atlantic Division (74.93 per cent.)	1,713	539	332	161	46	80	258	9	964	126	638	2,669	677	66	8,273
Connecticut	34	15	16	3	2	3	10		25	5	19	93	16	2	243
Maine	5						4		9		1	40	3	1	64
Massachusetts	12	11	7	1		6	10		27	4	12	125		3	218
New Hampshire	2		1		3				3		2	14			25
New Jersey	240	67	40	10		8	22	1	127	16	79	598	73	10	1,291
New York	1,362	426	259	141	41	49	185	7	702	96	506	1,563	582	46	5,965
Pennsylvania	51	19	5	6		13	19	1	63	5	16	209	3	2	412
Rhode Island	5	1	2				2		2		2	7		1	22
Vermont	2		2				1		6		1	20		1	33
South Atlantic Division (3.65 per cent.)	24	41	7	6	4	11	16		74	9	20	184	3	4	403
Delaware	1	2							2		1	6			12
District of Columbia	4	2		1		2			4	2	1	18	1	1	36
Florida	2					1			2			6			11
Georgia	2	12	3	1		2	8		12		6	23		1	70
Maryland	3	1		3			1		10		1	29		1	49
North Carolina	4	9	2		2	3	1		13	3	2	34			73
South Carolina	3	8			1	1			6	1	3	14		1	38
Virginia	3	5	1	1	1	2	5		16	3	5	37			79
West Virginia	2	2	1				1		9		1	17	2		35
South Central Division (3.23 per cent.)	33	26	9	4	4	12	20		75	11	30	132		1	357
Alabama	3	3	2	1		2	3		7		5	15			41
Arkansas	5	1	2	1		1	1		2		1	9			23
Kentucky	2	3	1			3	2		10	2	7	16			46
Louisiana	5	2			1	1			5		1	5			20
Mississippi	2	3	1				4		6	4	2	8			31
Oklahoma	1	2	1									9			13
Tennessee	3	3	1	1			2		10	2	2	16			40
Texas	12	9	1	1	2	5	8		35	3	12	54		1	143
North Central Division (9.63 per cent.)	64	60	10	7	8	25	64		205	34	30	547	1	8	1,063
Illinois	11	5	1	1	2	3	4		25	4	6	76		2	140
Indiana	7	10	2	1		6	4		32	1	4	35		2	104
Iowa	2	4	1	2	1	3	8		22	6	1	36			86
Kansas	4	2				2	4		9	4		38		1	64
Michigan	5	2				1	5		20	1	2	59		1	95
Minnesota	7	1				1	6		15	1	2	46	1	1	81
Missouri	4	4	1	1		6	5		16	4		62			103
Nebraska	2	8					1		9	1	3	23			47
North Dakota	1								1	1		6			9
Ohio	17	21	4	2	3	3	23		40	8	6	120			247
South Dakota	1					1	1		5		2	5			15
Wisconsin	3	3	1		2		3		11	3	4	41		1	72

TABLE IX—(Continued)

1921-1922		College	Law	Medicine	Mines, Engineering and Chemistry	Architecture	Journalism	Business	Dentistry	Graduate Faculties	Unclassified Students	Barnard College	Education and Practical Arts	College of Pharmacy	University Undergraduates	Total
				2												2
								4		6	3		6		1	20
		1														1
		2														2
													4			4
		2		2	2	1	1	6		18	25		13		1	78
		2											1			3
													1			1
		3			1					1	1		2		2	10
						1							2			2
			1							1	1		4			7
																1
		1												1		1
													2			2
										1	1		3			5
		1		1	1			1					1			1
		1	1						1							3
		1	1										5			8
		1	1										3			5
		1	1										10			14
										3			1			3
								3		1			3			7
											1		3			4
													2			2
			1	1				1		1			3			7
		3		1			1					1	3			9
		47	9	10	18	4	10	37	3	120	49	6	227	1	7	557
		(5.05 per cent.)														
		1,914 ¹	694	377	206	69	146	420	13	1,520	245	734	3,029	684	90	11,041
		Grand Total														
		Duplicates														
		Grand Total (Net)														
		10,951														

¹ Exclusive of seniors exercising the professional option, included elsewhere in this table.

TABLE X

RESIDENCE OF THE STUDENTS OF THE ENTIRE UNIVERSITY (EXCLUDING SUMMER SESSION AND UNIVERSITY EXTENSION) FOR THE PAST TEN YEARS

	1912-1913	1913-1914	1914-1915	1915-1916	1916-1917	1917-1918	1918-1919	1919-1920	1920-1921	1921-1922
UNITED STATES										
North Atlantic Division	5,200	5,515	5,004	6,128	6,325	5,514	5,286	6,704	7,174	8,273
Connecticut	134	110	125	143	153	143	135	183	214	243
Maine	24	31	29	15	32	36	23	30	49	64
Massachusetts	118	130	150	164	187	149	112	185	190	218
New Hampshire	17	16	23	21	20	18	19	34	30	25
New Jersey	636	627	752	752	864	742	709	938	1,028	1,201
New York	4,021	4,351	4,539	4,738	4,756	4,181	4,061	5,009	5,279	5,905
Pennsylvania	224	209	247	239	270	214	196	289	334	412
Rhode Island	19	18	16	19	17	7	11	20	23	22
Vermont	16	23	23	37	26	24	20	16	27	33
South Atlantic Division	284	280	240	272	288	257	242	425	454	403
Delaware	1	5	4	5	5	3	3	15	10	12
District of Columbia	28	23	17	22	29	24	20	35	47	36
Florida	12	15	13	11	7	7	5	26	13	11
Georgia	48	51	34	55	65	48	54	85	90	70
Maryland	38	33	39	52	44	40	39	47	49	49
North Carolina	51	51	30	28	28	40	23	56	76	73
South Carolina	24	26	30	26	33	20	30	47	42	38
Virginia	70	59	61	64	58	50	47	77	85	79
West Virginia	12	17	12	9	19	25	21	37	42	35
South Central Division	147	160	170	178	213	152	100	336	387	357
Alabama	28	25	20	23	26	22	18	36	37	41
Arkansas	5	6	14	12	17	6	16	22	23	23
Kentucky	16	19	25	30	33	30	31	44	42	46
Louisiana	7	9	11	9	9	8	13	23	22	20
Mississippi	11	13	15	9	8	8	11	17	37	31
Oklahoma	11	16	13	14	17	7	9	23	18	13
Tennessee	28	33	37	35	41	27	30	45	43	40
Texas	41	39	35	46	62	44	62	126	165	143
North Central Division	517	577	603	661	751	630	570	913	928	1,063
Illinois	58	76	74	87	87	59	75	129	136	140
Indiana	58	71	62	85	76	49	51	80	70	104
Iowa	36	41	45	58	65	68	57	84	74	86
Kansas	27	36	34	51	46	32	38	49	45	64
Michigan	49	52	65	76	66	65	59	86	76	95
Minnesota	44	34	51	45	58	51	44	74	75	81
Missouri	49	42	64	46	82	59	38	80	94	103
Nebraska	21	22	28	25	25	22	29	44	46	47
North Dakota	4	18	12	9	7	12	8	11	13	9
Ohio	130	139	134	136	162	144	118	194	212	247
South Dakota	4	7	5	7	14	9	11	13	10	15
Wisconsin	37	39	29	36	63	69	51	69	77	72
Western Division	168	194	182	182	271	228	161	300	320	336
Arizona	4	4	1	3	4	9	3	8	16	11
California	67	71	67	61	103	73	45	100	114	139
Colorado	28	29	28	29	30	35	30	42	43	51
Idaho	7	5	4	11	9	7	5	9	10	17
Montana	7	9	7	10	8	13	8	14	20	13
Nevada	3	2	1	1	2	1	1	3	4	2
New Mexico	3	4	8	6	4	9	2	6	4	3
Oregon	12	18	11	14	36	20	17	40	37	36
Utah	17	27	19	17	10	21	19	24	24	15
Washington	17	22	32	29	53	35	29	45	48	44
Wyoming	3	3	4	1	3	5	2	9	9	5

TABLE X—(Continued)

	1912-1913	1913-1914	1914-1915	1915-1916	1916-1917	1917-1918	1918-1919	1919-1920	1920-1921	1921-1922
Insular and Non-contiguous Territories	17	17	13	13	20	22	19	49	66	52
Alaska	1	2	1	1					1	1
Canal Zone							1	1	2	1
Hawaiian Islands	5	4	3	7	4	3	2	4	14	8
Philippine Islands	3	5	4	4	4	9	9	31	34	32
Porto Rico	8	6	5	5	11	6	7	12	14	10
Virgin Islands								1	1	
Totals (United States)	6,342	6,934	7,112	7,434	7,868	6,808	6,477	8,727	9,338	10,484
New York City	3,194	3,368	3,613	3,509	3,670	3,091	3,163	3,702	4,094	4,424
FOREIGN COUNTRIES										
Albania							1			
Argentina			2	2	5	1		1	2	3
Armenia					3	5	6	3	5	5
Australia	3	2	2	1	3	2	2	4	3	2
Austria-Hungary	1			1	2				2	4
Bavaria								1	1	1
Belgium		3	2		1	1		2	3	3
Bermuda and Bahamas				1	1		1	1	2	1
Bolivia										
Brazil	2	2	1	2	1			1	2	2
Bulgaria					2	1				
Canada	44	42	43	48	51	46	54	105	88	102
Central America								2	3	6
Chile	1			1	1	2	3	2	4	5
China	56	51	68	62	69	114	123	144	119	166
Colombia	1	2	2	1	1		3	3	3	3
Costa Rica	2	3	2	2	2	1				
Cuba	6	10	8	8	9	12	10	8	9	5
Czechoslovakia									4	2
Denmark			2		1	1	3	3	2	5
Dominican Republic									1	1
Ecuador						1			1	1
Egypt				2	1					1
Esthonia									1	1
Finland			2		1					
France		3	2	2	1	2	3	12	7	11
Germany	5	6	3	8	6	3	3	2	1	4
Great Britain	7	8	7	11	8	4	5	12	15	20
Greece	1	2	2		1	1		2	2	5
Guatemala						1		1		
Holland					4				2	2
Hungary										1
Iceland					1	1	2	1	1	2
India	4	6	12	5	12	3	8	10	16	20
Ireland								1	2	1
Isle of Cyprus								3	2	2
Italy	3	2	2	4	1	2	1	1	1	4
Japan	23	17	20	41	30	56	82	85	63	71
Korea			1			1	2	4	3	3
Liberia						1	1	2		1
Mexico	3	4	2	3	3	7	5	7	14	10
Newfoundland				2	1	1				
New Zealand		1	1					1		2
Nicaragua	2	2	1	2	1		1	2		
Norway	1	1		2	1	3	5	4	3	7
Palestine										1
Panama	2	2	4	4	3	4	3	3	1	1
Persia		1	1			3	3	1	1	1
Peru	1	2	3	5	2	1	1	4	9	2
Poland					2	1	2			5
Portugal					1	1			1	1

TABLE X—(Continued)

	1912-1913	1913-1914	1914-1915	1915-1916	1916-1917	1917-1918	1918-1919	1919-1920	1920-1921	1921-1922
Rumania			1		2	2		6	1	3
Russia		2	4	5	5	9	6	5	10	8
Santo Domingo					1	2	2	2		
Siam			2		1		2	2	2	5
Singapore						1	1	2		
South Africa	1	2	4	4	3	3	3	3	15	14
Spain				1	8	1	1	3	2	3
Sweden		2		2	2	2	2	4	7	7
Switzerland			1		1	1	2	2	11	4
Syria			3	1					2	2
Turkey	14	11	11	12	6	5	3	2	11	7
Uruguay				1	1		1			
Venezuela						2				
West Indies			1	1	2	5	2	4	3	9
Totals (Foreign Countries)	183	191	222	245	262	318	361	477	465	557
Grand Total	6,525	6,934	7,334	7,679	8,130	7,126	6,838	9,204	9,803	11,041
Duplicates								87	62	90
Grand Total (Net)								9,117	9,741	10,951

THE PERCENTAGE OF STUDENTS FROM THE SEVERAL GEOGRAPHICAL DIVISIONS
DURING THE LAST TEN YEARS

North Atlantic Division	79.84	79.53	80.51	79.86	78.14	77.38	77.30	72.84	73.18	74.93
South Atlantic Division	4.35	4.03	3.27	3.55	3.56	3.61	3.54	4.62	4.63	3.65
South Central Division	2.25	2.30	2.32	2.30	2.63	2.13	2.78	3.65	3.95	3.23
North Central Division	7.92	8.32	8.22	8.62	9.28	8.97	8.47	9.92	9.47	9.63
Western Division	2.58	2.79	2.48	2.37	3.34	3.19	2.35	3.26	3.36	3.04
Insular Territories	0.26	0.24	0.17	0.17	0.25	0.31	0.28	0.53	0.66	0.47
Foreign Countries	2.80	2.75	3.02	3.13	3.22	4.41	5.28	5.18	4.75	5.05
New York City	48.95	48.57	49.26	45.70	45.14	43.38	46.26	40.22	41.76	40.40
Out of town	51.05	51.43	50.74	54.30	54.86	56.62	53.74	59.78	58.24	59.60

TABLE XI

SOURCE OF HIGHER DEGREES HELD BY STUDENTS

Note: The inclusion of an institution in this Table does not necessarily signify the recognition of its degrees by Columbia University.

A. HIGHER INSTITUTIONS IN THE UNITED STATES

College	1921-1922										Total
	Law	Medicine	Mines, Engineering and Chemistry	Architecture	Journalism	Business	Dentistry	University Undergraduates	Graduate Faculties	Unclassified University Students		Education and Practical Arts
Adelphia College								13		7	20
Adrian College		1							1	1	3
Agnes Scott College										2	2
Agricultural and Mechanical College of Texas				1							1
Akron University								1			1
Alabama Polytechnic Institute	1								1		2
Albion College								1		1	2
Alfred University								2		3	5
Allegheny College		1						3		3	7
Amherst College	13	1		1			1	6		3	25
Antioch College	1										1
Ateneo de Manila		1				3					4
Athens College (P. I.)								1			1
Auburn Theological Seminary								1		1	2
Augustana College (South Dakota)								1		2	3
Augustana Seminary (Illinois)								1			1
Baker University								1	1	4	6
Baldwin Wallace College								2		1	3
Bates College								4		3	7
Baylor University						2		3		4	9
Beaver College					1						1
Beloit College						3		1	1	3	8
Berea College								1			1
Bethany College								2			2
Blue Ridge College											1
Boston College					1					1	1
Boston University								6	2	5	13
Bowdoin College		1						4		2	7
Brenau College								1		2	3
Brigham Young University								2			2
Brooklyn College of Pharmacy											1
Brooklyn Law School		1									2
Brooklyn Polytechnic Institute	1			1			1	4		1	7
Brown University		1						11		6	18
Bryn Mawr College			3				1	8	1	12	25
Bucknell University								3		9	12
Butler College		1						5		1	7
California Institute of Technology								2			2
Cambridge Episcopal Theological Seminary									1		1
Campbell College (Kansas)									1		1
Canisius College		1									1
Carleton College						1		3	1	2	7
Carnegie Institute of Technology								3		1	5
Carson and Newman College (Tenn.)									1		1
Carthage College									1		1
Case School of Applied Science						1			1		2
Cathedral College									2		2
Catholic University of America								2			2
Centre College		1						2	2	4	9
Central College of Missouri									1	2	3

TABLE XI—(Continued)

College	Law	Medicine	Mines, Engineering and Chemistry	Architecture	Journalism	Business	Dentistry	University Undergraduates	Graduate Faculties	Unclassified University Students	Education and Practical Arts	Total
1921-1922												
Florida State College for Women									1		2	3
Fordham University	2	3				1			2			8
Franklin College			1						5		3	3
Franklin and Marshall College									5		8	14
General Theological Seminary									1			1
Geneva College		1							1			2
Georgetown College (Ky.)		4							1			5
Georgetown University											1	1
George Washington University (D.C.)		1	1						4			8
Goucher College						3			5		8	16
Grand Island College (Nebraska)						1						1
Girnnell College					1				3		2	6
Grove City College		1									2	3
Hahnemann Medical College			1									1
Hamilton College		4	1						5		5	15
Hamline University									1		3	4
Hampden Sidney College											1	1
Hanover College										1		1
Hartford Theological Seminary											1	1
Harvard University	20	4	3	4	1	2			27		22	83
Haverford College		1							2		3	6
Hebrew Union College									1			1
Heidelberg University (Ohio)					1							1
Hendrix College									1		1	2
Hillsdale College									1			1
Hiram College									1	1	1	3
Hobart College											1	1
Hollins College			1			1			2			4
Holy Cross College		1	1									2
Hood College											2	2
Hope College					1				3			4
Howard College (Ala.)									2			2
Howard University		3										3
Hunter College			6		1				100	3	90	200
Huntington College		1										1
Huron College									1			1
Illinois College											1	1
Illinois Wesleyan College											4	4
Indiana State Normal School									3		4	7
Indiana University		1							13		11	25
Iowa College of Pharmacy			1									1
Iowa State College					1						5	6
Iowa State Teachers College									1			1
Iowa Wesleyan University											1	1
James Millikin University									1		2	3
Jamestown College		1										1
John B. Stetson University									1			1
Johns Hopkins University				2					5	2		9
Juniata College											1	1
Judson College											2	2
Kalamazoo College											2	2
Kansas City University										2		2
Kansas State Agricultural Coll.		1				2					4	7
Kansas State Normal College									1		6	7
Kansas Wesleyan University								1				2
Kentucky Wesleyan College									1			1
Kenyon College									1	1		2

TABLE XI—(Continued)

1921-1922	College	Law	Medicine	Mines, Engineering and Chemistry	Architecture	Journalism	Business	Dentistry	University Undergraduates	Graduate Faculties	Unclassified University Students	Education and Practical Arts	Total
Salem College												7	7
San Juan de Latran (P. I.)							1						1
Shorter College											1		1
Simmons College (Boston)										2			2
Simpson College					1					2			2
Sioux City Medical School			1										1
Smith College							4			30	4	35	73
South Dakota State Teachers College										1			1
Southern Baptist Theological Seminary										1	1		2
Southern Methodist Univ. (Texas)			1			2				4	1	5	13
Southwestern College (Kansas)										1		2	3
Southwestern University (Texas)						1				7			8
State College of South Dakota										1			1
State College of Washington										1			1
State University of Iowa		1		1			1			16	1	4	24
Stevens Institute of Technology		2								2		1	5
Straight University							1						1
Swarthmore College										5	5	5	10
Sweet Briar College										1		1	2
Syracuse University			6		1		2		1	25	1	22	58
Taylor University												1	1
Tennessee College							1						1
Texas Christian University		2									1		3
Thiel College		1											1
Toledo University												1	1
Transylvania College						1				1		1	3
Trinity College (Conn.)			3							2		4	9
Trinity College (Washington, D.C.)										3			3
Trinity College (North Carolina)			1			1				1			3
Trinity University (Texas)										2		1	3
Tri-State College		1							1				2
Tulane University										1			1
Tufts College										3		2	5
Tuscaloosa College										1			1
Union College		2	2	1						1	1	3	10
Union Theological Seminary										2	2	3	7
United States Naval Academy				14									14
University of Alabama		2	2			1				3		1	9
University of Arkansas			2										2
University of California		2			1	1	3			14		25	46
University of Chattanooga										2			2
University of Chicago		1					2			35	5	44	87
University of Cincinnati		1				1	1			5		5	13
University of Colorado		2				1				5	1	4	10
University of Denver				2			3			2		4	14
University of Georgia		10	1			1	2			4			18
University of Idaho										1		1	2
University of Illinois		2	1	1						9		14	27
University of Kansas		1								7	1	12	21
University of Kentucky		1											1
University of Maine				2						3		2	7
University of Maryland	1												1
University of Michigan		5					2			23	3	16	49
University of Minnesota		1					1			9	1	4	16
University of Mississippi		3								1			4
University of Missouri			1			1				13		20	35

TABLE XI—(Continued)

B. HIGHER INSTITUTIONS IN FOREIGN COUNTRIES

1921-1922	College	Law	Medicine	Mines, Engineering and Chemistry	Architecture	Journalism	Business	Dentistry	University Undergraduates	Graduate Faculties	Unclassified University Students	Education and Practical Arts	Total
Aberdeen University (Scotland)										1			1
Acadia University (Canada)												2	2
American College for Girls (Constantinople)												1	1
American College (Beirut, Syria)						1							1
Argentine Naval School (Argentina)											1		1
Baroda College (India)										1			1
Boone University (China)											1		1
Burgdorf Technical School (Switzerland)				1									1
Catholic University of Santiago (Chile)				2									2
Cauca University (Colombia, S. A.)							1						1
Chuo University (Japan)											2		2
College of Milau (France)										1			1
Dalhousie University (Canada)						1				1		1	3
Doshisha University (Japan)										1	4		5
Eadady College (Constantinople)			1										1
Elphinstone College (Bombay, India)										1			1
Fergusson College (Poona, India)											1		1
Governmental Medical College (Kanazawa, Japan)			1										1
Gregorian University (Rome, Italy)	1												1
Grey University (South Africa)										1			1
Guatemala National Institute (Guatemala City)	1		1										2
Gymnasium Kimpolung (Rumania)							1						1
Hang Chow College (China)										1			1
Higher Technical School (Tokio)											1		1
Hupeh Law School (Wuchang, China)	1												1
Imperial Military Medical Academy (Petrograd)			1										1
Imperial University (Moscow)										1			1
Instituto de Humanidades (Chile)				1									1
Instituto Nacional de Oriente (Granada, Nicaragua)	2												2
Japanese Woman's University (Nippon)											1		1
Keio University (Japan)										1		1	2
King's College (Windsor, N. S.)												1	1
Lyceo Santiago (Chile)										1			1
McGill University (Canada)			1									3	4
McMaster University (Canada)												1	1
Meiji Woman's Seminary (Japan)										1			1
Mount Allison University (Canada)												1	1
Nichirensu University (Japan)											1		1
Nippon University (Japan)							1			1			2
Pei Yang Medical College (Tientsin, China)			1										1
Pei Yang University (China)										1	1		2
Peking University (China)				1						13	3	1	18
Polytechnicum of Liberia							1						1

TABLE XI—(Continued)

1921-1922	College	Law	Medicine	Mines, Engineering and Chemistry	Architecture	Journalism	Business	Dentistry	University Undergraduates	Graduate Faculties	Unclassified University Students	Education and Practical Arts	Total
	Queen's University (Canada)					1				5	1	1	8
	Rio de Janeiro School of Law (Brazil)										1		1
	Robert College (Constantinople)									1			1
	Roman Catholic Gymnasium (Debreczin, Hungary)		1										1
	Royal Technical College (Copenhagen)										1		1
	Royal Technical School (Norway)									1			1
	St. John's University (China)									3	3		6
	St. Laurent's College (Canada)									1			1
	St. Xavier's College (Bombay, India)										2		2
	School of Engineering (Mexico City)										1		1
	Shanghai College (China)						1						1
	Soochow University (China)			1		1							6
	State Real School (Debreczin, Hungary)		1										1
	Tokio Imperial University (Japan)									3	1		4
	Transvaal University (Johannesburg, So. Africa)									1			1
	Trinity College (Toronto, Canada)									1			1
	University of Aix-Marseilles (France)												1
	University of Alberta (Canada)										1		1
	University of Allahabad (India)										2		2
	University of Berlin (Germany)										1		1
	University of Bombay (India)									1	1		2
	University of British Columbia (Canada)									1	1	1	3
	University of Brussels (Belgium)									1	1		2
	University of Cape Town (So. Africa)											4	4
	University of Constantinople (Turkey)		1										1
	University of Dublin (Ireland)										1		1
	University of Edinburgh (Scotland)									1	2		3
	University of Ghent (Belgium)	1											1
	University of Grenoble (France)									1			1
	University of Groningen (Holland)									1			1
	University of Havana (Cuba)		1				1						2
	University of Heidelberg (Germany)									1			1
	University of Hong Kong (China)									2			2
	University of Leeds (England)									1	1		2
	University of Lille (France)									1			1
	University of London (England)						1			1	1		3
	University of Manitoba (Canada)					1				1	4		6
	University of Nanking (China)									3	1		4
	University of New Brunswick (Canada)									1	1		2
	University of New Zealand (New Zealand)										1		1
	University of Oxford (England)		1										1
	University of Paris (France)									3			3
	University of Prague (Czechoslovakia)									1			1
	University of St. Francis Xavier (Canada)										1		1
	University of South Africa									1	1		2
	University of Stellenbosh (South Africa)										1		1

TABLE XI—(Continued)

1921-1922	College	Law	Medicine	Mines, Engineering and Chemistry	Architecture	Journalism	Business	Dentistry	University Undergraduates	Graduate Faculties	Unclassified University Students	Education and Practical Arts	Total
University of Toronto (Canada)			1							4	1	12	18
University of Utrecht (Holland)										1			1
University of Vienna (Austria)										1			1
University of Urbino (Italy)										1			1
Waseda University (Japan)							2			2	4		8
Wesleyan College (Montreal, Canada)												1	1
Western University (Canada)										3			3
Wilson College (India)										1			1
Woman's College of Zürich (Switzerland)											1		1

TABLE XI—(Continued)

SUMMARY

1921-1922	College	Law	Medicine	Mines, Engineering and Chemistry	Architecture	Journalism	Business	Dentistry	University Undergraduates	Graduate Faculties	Unclassified University Students	Education and Practical Arts	Total
Total graduates of domestic institutions	12	500	305	130	32	60	107	12	11	1,700	139	1,552	4,560
Total graduates of foreign institutions	5	3	11	6		6	8			78	32	57	206
Grand total graduates of higher institutions	17	503	316	136	32	66	115	12	11	1,778	171	1,609	4,766
Deduct for graduates of more than one institution		16	23	3	1		4	2	1	300	19	183	552
Total students holding degrees	17	487	293	133	31	66	111	10	10	1,478	152	1,426	4,214
Total students enrolled	2,061	694	377	206	69	146	420	13	90	1,520	245	3,929	9,770
Percentage holding degrees, 1922	0.82	70.11	77.71	64.56	44.91	45.20	26.43	76.92	11.11	97.23	62.04	36.29	43.13
Percentage holding degrees, 1921	0.81	72.94	61.34	73.82	48.65	31.38	18.55	62.50	33.33	97.62	59.60	35.94	41.67

TABLE XII

TITLE OF DEGREES HELD BY STUDENTS

DEGREES HELD 1921-1922	College	Law	Medicine	Mines, Engineering and Chemistry	Architecture	Journalism	Business	Dentistry	Univ. Undergraduates	Graduate Faculties	Unclassified University Students	Education and Practical Arts	Total
	Bachelier ès Lettres		2								2			4
Bachelier ès Science		2											2
Bachelor of Architecture					2					2			4
Bachelor of Architectural Engineering				1									1
Bachelor of Arts	2	388	161	73	19	59	74	3	3	1,109	97	881	2,860
Bachelor of Civil Engineering										1			1
Bachelor of Chemistry										3			3
Bachelor of Commerce							1				1		2
Bachelor of Commercial Science							2						2
Bachelor of Divinity			1							15	7	18	41
Bachelor of Education										1			1
Bachelor of Engineering											1		1
Bachelor of Journalism						1							1
Bachelor of Jurisprudence										1			1
Bachelor of Laws	3	12				1	3		2	14	11	9	55
Bachelor of Letters										8			9
Bachelor of Literature		10	2			3				10	1	3	29
Bachelor of Medicine			1										1
Bachelor of Music													5
Bachelor of Pedagogy			1										22
Bachelor of Philosophy		9	9	2	1		5			41	3	62	132
Bachelor of Sacred Theology										2			2
Bachelor of Science	3	70	121	35	8	4	29	7	4	268	31	449	1,029
Bachelor of Social Science										4			4
Chemical Engineer										7			7
Civil Engineer				4	1		1	1		2	1		10
Doctor of Divinity												1	1
Doctor of Jurisprudence										3	1		4
Doctor of Laws		1											1
Doctor of Letters										1			1
Doctor of Medicine			14					1	1	6	5	2	29
Doctor of Osteopathy	1												1
Doctor of Pharmacy	3												3
Doctor of Philosophy		2		1						4	11	5	23
Electrical Engineer				1						4	2		7
Engineer of Mines				6						10	2		18
Graduate Argentine Naval School											1		1
Graduate in Pharmacy				3								1	4
Graduate in Theology											1		1
Graduate United States Naval Academy					14								14
Licentiate in Sacred Theology										1			1
Master of Arts		20	3	3	3	4	5		1	383	19	263	704
Master of Business Administration										1			1
Master of Laws	1								1	1	1	1	5
Master of Mining Engineering										1			1
Master of Pedagogy						1				1		9	11
Master of Science		1	1	1			1			32	3	7	46
Master of Textile Engineering											1		1
Master of Theology										1			2
Mechanical Engineer		2					1			4	1	1	9
Metallurgical Engineer										1			1
<i>Total degrees held</i>	17	516	316	140	35	73	122	12	12	1,044	203	1,730	5,120
<i>Deduct for students holding more than one degree</i>		20	23	7	4	7	11	2	2	466	51	313	915
<i>Total students holding degrees, 1922</i>	17	487	293	133	31	66	111	10	10	1,478	152	1,426	4,214
<i>Total students holding degrees, 1921</i>	16	420	240	141	36	43	67	5	2	1,272	121	1,226	3,601

TABLE XIII

DEGREES AND DIPLOMAS GRANTED, 1921-1922

	Men	Women	Total
A. Degrees conferred in course			
Bachelor of Arts	315	151	466
Bachelor of Laws	174		174
Bachelor of Science	1	1	2
Bachelor of Science (Business)	99	21	120
Bachelor of Science (Practical Arts)	20	408	428
Bachelor of Science (Medicine)	25		25
Bachelor of Science (Pharmacy)	2		2
Bachelor of Science (Dentistry)	1		1
Bachelor of Science (University Course)	5	4	9
Bachelor of Architecture	12	1	13
Bachelor of Literature	30	25	55
Chemical Engineer	21		21
Civil Engineer	2		2
Electrical Engineer	9		9
Engineer of Mines	4		4
Doctor of Dental Surgery	1		1
Doctor of Medicine	62	6	68
Pharmaceutical Chemist	7	2	9
Master of Arts	244	204	448
Master of Arts (Education and Practical Arts)	206	329	535
Master of Laws	1		1
Master of Science (Applied Science)	15		15
Master of Science (Architecture)	2		2
Master of Science (Business)	8		8
Master of Science (Journalism)	1	1	2
Master of Science (Practical Arts)		10	10
Mechanical Engineer	11		11
Metallurgical Engineer	3		3
Doctor of Philosophy	60	21	81
<i>Total</i>	<i>1,341</i>	<i>1,184</i>	<i>2,525</i>
Deduct duplicates ¹	14	5	19
<i>Total individuals receiving degrees in course</i>	<i>1,327</i>	<i>1,179</i>	<i>2,506</i>
B. Honorary Degrees			
Doctor of Laws	7		7
Doctor of Letters	1	1	2
Doctor of Sacred Theology	2		2
Doctor of Science	2		2
<i>Total</i>	<i>12</i>	<i>1</i>	<i>13</i>
C. Certificates and Teachers College Diplomas Granted			
Certificate of Proficiency in Architecture	2		2
Certificate of Proficiency in Journalism	1		1
Certificate in Secretarial Studies (Business)		11	11
Certificate in Secretarial Studies (University Extension)		47	47
Certificate in Optometry	31	1	32
Bachelor's Diploma in Education	14	242	256
Master's Diploma in Education	114	193	307
Doctor's Diploma in Education	5		5
<i>Total</i>	<i>167</i>	<i>494</i>	<i>661</i>
<i>Total degrees and diplomas granted</i>	<i>1,520</i>	<i>1,679</i>	<i>3,199</i>
Deduct duplicates ²	143	422	565
<i>Total individuals receiving degrees and diplomas</i>	<i>1,377</i>	<i>1,257</i>	<i>2,634</i>

¹ Distributed as follows: A.B. and A.M., 1 man, 1 woman; B.S. (Bus.) and A.M., 1 man; B.S. and A.M. (Teachers College), 1 man, 4 women; LL.B. and A.M., 9 men; B.S. (Med.) and M.D., 1 man; Mech. E. and A.M., 1 man.

² In addition to those noted under Note 1 (19) the following duplications occur: (546) B.S., Diploma in Education, 2 women; A.B. and Teachers College Diploma, 1 man, 2 women; B.S. and Teachers College Diploma, 13 men, 229 women; A.M. and Teachers College Diploma, 110 men, 184 women; Ph.D. and Teachers College Diploma, 5 men.

TABLE XIV

NUMBER OF DEGREES AND DIPLOMAS GRANTED, 1912-1913 TO 1921-1922

	1912-1913	1913-1914	1914-1915	1915-1916	1916-1917	1917-1918	1918-1919	1919-1920	1920-1921	1921-1922
A. Degrees conferred in course										
Bachelor of Arts (men)	127	99	105	101	125	136	104	237	284	315
Bachelor of Arts (women)	136	113	141	112	136	142	137	139	168	151
Bachelor of Laws	137	140	135	134	165	54	44	98	108	174
Bachelor of Science (Columbia College)	61	77	85	75	110	76	49	28	9	1
Bachelor of Science (Barnard College)	3	7	8	6	20	15	4	5	2	1
Bachelor of Science (Teachers College)	235	218	357	} 337		345	330	399	452	428
Bachelor of Science in Practical Arts		5	19	}						
Bachelor of Science (Architecture)		1								
Bachelor of Science (Business)					2	4	13	45	73	99
Bachelor of Science (Dentistry)									2	1
Bachelor of Science (Pharmacy)					2			2	1	2
Bachelor of Science (Medicine)							31	34	28	25
Bachelor of Science (University Course)									1	9
Bachelor of Architecture	3	17	10	7	19	1	5	6	11	13
Bachelor of Music	1		3							
Bachelor of Literature	9	15	22	24	26	19	20	35	52	55
Chemist	2	3	4		1					
Chemical Engineer	20	18	20	18	36	3	7	17	17	21
Civil Engineer	37	27	37	33	33	8	4	8	2	2
Doctor of Dental Surgery										1
Electrical Engineer	15	8	15	17	25	3	1	4	6	9
Engineer of Mines	25	38	20	11	22	9	2	3	7	4
Mechanical Engineer	21	14	27	19	24			7	6	11
Metallurgical Engineer	5	8	6	5	3	1		3	2	3
Doctor of Medicine	100	71	85	73	90	118	138	101	117	68
Pharmaceutical Chemist	20	24	8	12	15	6	8	15	13	9
Doctor of Pharmacy	7	7	2	1						
Master of Arts	503	492	633	407	389	281	241	403	381	448
Master of Laws	1	3	1	2	3	3	3	1	1	1
Master of Arts (Teachers College)				226	305	306	257	423	442	535
Master of Science (Applied Science)				29	25	1		4	17	15
Master of Science (Architecture)					2			1	2	2
Master of Science (Business)					4	7	7	15	13	8
Master of Science (Journalism)										2
Master of Science (Practical Arts)					2	4	9	6	12	10
Doctor of Philosophy	67	65	71	88	82	83	52	69	82	81
Total	1,535	1,470	1,814	1,737	1,992	1,625	1,466	2,108	2,311	
Deduct duplicates	20	18	13	21	8	3	4	11	12	19
Total individuals receiving degrees	1,515	1,452	1,801	1,716	1,984	1,622	1,462	2,097	2,299	2,506
B. Honorary degrees										
Master of Arts	2	3	2	2	2	3	3			
Master of Science		12								
Doctor of Science	2	1	2		3	1			3	2
Doctor of Letters	2	1	1	1	1	1	2		1	2
Doctor of Sacred Theology	1	1	1	1	1	1	1		1	2
Doctor of Laws	3	5	5	2	8	5	2	7	3	7
Doctor of Music		1								
Total	10	24	10	6	15	10	8	7	7	13

TABLE XIV—(Continued)

	1912- 1913	1913- 1914	1914- 1915	1915- 1916	1916- 1917	1917- 1918	1918- 1919	1919- 1920	1920- 1921	1921- 1922
C. Certificates and Teachers										
College diplomas granted										
Certificate of Proficiency in Architecture	6	13	8	12	8	1	5	7	5	2
Consular Certificate			2							
Bachelor of Arts Certificate for Academic Record and National Service						58	69	17	3	
Certificate of Proficiency in Journalism										1
Certificate in Optometry							7	19	36	32
Certificate in Secretarial Studies (Business)						2	7	12	12	11
Certificate in Secretarial Studies (University Extension)									33	47
Bachelor's diploma in Education	277	253	323	268	238	226	199	236	253	256
Special diploma in Education	169	21								
Master's diploma in Education	148	174	226	199	199	187	162	240	267	307
Doctor's diploma in Education	10	13	5	5	4	7	3	12	2	5
<i>Total</i>	<i>610</i>	<i>474</i>	<i>564</i>	<i>484</i>	<i>440</i>	<i>481</i>	<i>452</i>	<i>543</i>	<i>611</i>	<i>661</i>
<i>Total degrees and diplomas granted</i>	<i>2,155</i>	<i>1,968</i>	<i>2,388</i>	<i>2,227</i>	<i>2,456</i>	<i>2,116</i>	<i>1,926</i>	<i>2,658</i>	<i>2,929</i>	<i>3,199</i>
Deduct duplicates	495	436	563	410	447	402	342	477	514	565
<i>Total individuals receiving degrees and diplomas</i>	<i>1,660</i>	<i>1,532</i>	<i>1,825</i>	<i>1,817</i>	<i>2,009</i>	<i>1,714</i>	<i>1,584</i>	<i>2,181</i>	<i>2,415</i>	<i>2,634</i>

TABLE XV

A. MAJOR INTEREST OF RECIPIENTS OF HIGHER DEGREES, 1921-1922,
EXCLUSIVE OF THE MASTER'S DEGREES IN EDUCATION
AND PRACTICAL ARTS

SUBJECTS OF MAJOR INTEREST	A.M.		Ph.D.		M.S.		LL.M.		Total	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Architecture					2				2	
Bacteriology	1	3	1						2	3
Biological Chemistry		3	2	1					2	4
Botany	2	5	3						5	5
Business					8				8	
Chemical Engineering	4	1	2						6	1
Chemistry	40	17	7	1					47	18
Education and Practical Arts			17	3					17	3
Electrical Engineering					9				9	
English and Compara- tive Literature	23	43	1						24	43
Geology	4		1						5	
Germanic Languages			2						2	
Greek and Latin	5	12							5	12
History	30	43	4	2					34	45
Journalism					1	1			1	1
Mathematics	5	1	1						5	2
Mechanical Engineer- ing					6				6	
Mining Engineering	1								1	
Pathology	1								1	
Philosophy	1	1	1	1					2	2
Physics	11				1				11	1
Physiology	2	1	1	1					3	2
Political Economy	41	17	4	2					45	19
Psychology	7	12	3	4					10	16
Public Law and Jurisprudence	24	3	2				1		27	3
Romance Languages	7	17	6	1					13	18
Semites	4								4	
Slavonic Languages	3		1						4	
Social Science	25	17	3	1					28	18
Zoology	4	7		1					4	8
<i>Total</i>	245	203	61	20	26	1	1		333	224

TABLE XV—(Continued)

B. HIGHER DEGREES GRANTED UNDER EACH FACULTY

FACULTIES	A.M.		Ph.D.		M.S.		LL.M.		Total	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Political Science, Philosophy and Pure Science	245	203	61	20					306	223
Applied Science					15				15	
Business					8				8	
Law							1		1	
Architecture					2				2	
Journalism					1	1			1	1
<i>Total 1922</i>	245	203	61	20	26	1	1		333	224
Education and Practical Arts	206	329					10		206	339
<i>Total 1922 (including Teachers College)</i>	451	532	61	20	26	11	1		539	563
<i>Total 1921 (including Teachers College)</i>	364	459	62	20	32	12	1		459	491
<i>Total 1920 (including Teachers College)</i>	346	480	51	18	20	6	1		418	504

TABLE XVI—(Continued)

1921-1922	1921-1922											
	College	Law	Medicine	Mines, Engineering, and Chemistry	Architecture	Journalism	Business	Dentistry	University Undergraduates	Graduate Faculties	Unclassified Univer- sity Students	Total
<i>Department</i>												
Pharmacology, Materia Medica and Therapeutics			161									161
Philosophy	311					5		4	127		34	481
Physical Education (incl. Hygiene)	1,257	7		2	1	13		6	15		3	1,305
Physics	392			89				15	87		8	591
Physiology	12		102						19		3	136
Practice of Medicine			253									253
Private Law	14	689				2	5	1	3			714
Psychology	94	153				1	4	4	118		11	232
Public Law and Jurisprudence							1	1	82		12	249
Religion	15							1				16
Romance Languages and Literatures												
Celtic									3		1	4
French	691	4			6	8	58	5	109		14	895
Italian	14								14		3	31
Spanish	267					5	77	1	81		9	440
Slavonic Languages and Literatures												
General Slavonic									5		1	6
Russian								1	10		1	13
Social Science	20	1				2	7	1	240		27	298
Surgery			253									253
Urology			162									162
Zoology	148							9	46		9	212

TABLE XVII

AGGREGATE ATTENDANCE IN ALL COURSES, 1921-1922 (EXCLUDING COURSES
IN SUMMER SESSION, UNIVERSITY EXTENSION, TEACHERS COLLEGE,
BARNARD COLLEGE AND THE COLLEGE OF PHARMACY)

1921-1922	Number of Half-Year Courses	Number of Registrations	Percentage of Total Enrollment
<i>Department</i>			
Anatomy (including Histology)	12	888	1.87
Anthropology	12	160	0.34
Architecture	68	668	1.41
Astronomy	2	126	0.27
Bacteriology	13	324	0.68
Biological Chemistry	15	259	0.55
Botany	27	105	0.35
Business (including Accounting)	76	3,280	6.92
Chemical Engineering	17	371	0.78
Chemistry	71	2,273	4.80
Civil Engineering	25	189	0.40
Classical Philology	2	6	0.01
Greek	21	70	0.15
Latin	23	223	0.47
Classical Civilization	4	18	0.04
Contemporary Civilization	4	1,140	2.41
Dermatology and Syphilology	3	324	0.68
Diseases of Children	7	600	1.27
Economics	30	2,121	4.48
Electrical Engineering	38	460	0.97
Engineering Drafting	9	227	0.48
English and Comparative Literature	75	4,714	9.95
Fine Arts	4	58	0.12
Geography	3	260	0.55
Geology	34	406	0.86
Germanic Languages and Literatures	35	482	1.02
Gynecology and Obstetrics	4	324	0.68
History	38	1,834	3.87
Hygiene and Preventive Medicine	2	140	0.29
Journalism	27	1,258	2.65
Laryngology (including Otology)	8	604	1.28
Mathematics	34	1,408	2.97
Mechanical Engineering	49	740	1.56
Metallurgy	25	290	0.61
Military Science	17	135	0.28
Mineralogy	8	70	0.15
Mining	14	110	0.23
Music	14	239	0.51
Neurology	15	1,060	2.24
Ophthalmology	2	162	0.34
Oriental Languages			
Indo-Iranian Languages	19	43	0.09
Semitic Languages	21	75	0.16
Pathology	10	499	0.99
Pharmacology, Materia Medica and Therapeutics	2	183	0.39
Philosophy (including Ethics)	35	798	1.68
Physical Education (including Hygiene)	9	2,948	6.22
Physics (including Mechanics)	47	1,338	2.82
Physiology	15	273	0.58
Practice of Medicine	17	1,199	2.53
Private Law	38	4,972	10.49
Psychology	19	540	1.14
Public Law, Government, and Comparative Jurisprudence:			
Constitutional and Administrative Law	7	237	0.50
Government	10	667	1.41
International Law and Diplomacy	6	203	0.43
Roman Law and Comparative Jurisprudence	6	51	0.11

TABLE XVII—(Continued)

1921-1922	Number of Half-Year Courses	Number of Registrations	Percentage of Total Enrollment
<i>Department</i>			
Religion	3	27	0.06
Romance Languages and Literatures			
Celtic	2	8	0.02
French	49	2,118	4.47
Italian	6	53	0.11
Spanish	16	713	1.50
Slavonic Languages			
General Slavonics	4	15	0.03
Russian	9	17	0.03
Social Science	24	821	1.73
Surgery	12	1,014	2.14
Zoology	25	416	0.88
<i>Total</i>	<i>1,304</i>	<i>47,384</i>	<i>100.00</i>

UNIVERSITY EXTENSION

A. STUDENTS CLASSIFIED ACCORDING TO SEX

	Morning- side	Extra- Mural	Home Study	Total
Men	4,835	337	127	5,299
Women	4,296	2,163	158	6,617
<i>Total</i>	<i>9,131</i>	<i>2,500</i>	<i>285</i>	<i>11,916</i>
Duplicate Registrations				537
Summer Session (1921)				11,379
<i>Total attendance in University Extension only</i>				

Note: Matriculated students taking courses in University Extension are not included above.

B. STUDENTS CLASSIFIED AS OLD AND NEW

	Morning- side	Extra- Mural	Total
Number of new students	5,666	1,698	7,364
Number of old students	3,465	802	4,267
<i>Total</i>	<i>9,131</i>	<i>2,500</i>	<i>11,631</i>

Note: Home Study students are not included in this table.

C. REGISTRATIONS IN SPECIAL CLASSES (NOT INCLUDED IN OTHER TABLES)

	Winter Session	Spring Session	Both Sessions	Total
Agriculture	13	23	3	39
Fine Arts	185	165	99	449
Spoken Languages	186	149	70	405
<i>Total</i>	<i>384</i>	<i>337</i>	<i>172</i>	<i>893</i>

D. STUDENTS CLASSIFIED ACCORDING TO FACULTIES

	Morning- side	Extra- Mural	Home Study	Total
1. Non-matriculated				
Columbia	8,547	2,500	285	11,332
Teachers College (exclusively)	584			584
2. Matriculated:				
Columbia College	715			715
Barnard College	24			24
Law School	56			56
Mines, Engineering and Chemistry	32			32
Architecture	34			34
Journalism	42			42
Business	334			334
Graduate Faculties	513			513
Unclassified University	69			69
University Undergraduate	71			71
Teachers College	596			596
<i>Total</i>	<i>11,617</i>	<i>2,500</i>	<i>285</i>	<i>14,402</i>

UNIVERSITY EXTENSION

E. STUDENTS CLASSIFIED ACCORDING TO RESIDENCE

	Morning- side	Extra- Mural	Home Study	Total
New York City:				
Manhattan and Bronx	4,688	40	30	4,758
Brooklyn	1,046	100	19	1,165
Queens	266	2	4	272
Richmond	65	1	1	67
New York State (outside New York City)	842	216	37	1,095
New Jersey	1,078	412	26	1,516
<i>Totals</i>	<i>7,985</i>	<i>771</i>	<i>117</i>	<i>8,873</i>
Other States:				
Alabama	14		5	19
Arizona	3			3
Arkansas	4			4
California	32		6	38
Colorado	10		3	13
Connecticut	164	527	17	708
Delaware	2			2
District of Columbia	14	145	1	160
Florida	10		2	12
Georgia	13		3	16
Idaho	1			1
Illinois	40		12	52
Indiana	18		4	22
Iowa	21		5	26
Kansas	7		2	9
Kentucky	11		2	13
Louisiana	12		1	13
Maine	19		2	21
Maryland	16	1	3	20
Massachusetts	97	405	6	508
Michigan	29		6	35
Minnesota	24		2	26
Mississippi	8		1	9
Missouri	22		2	24
Montana	4		3	7
Nebraska	9		3	12
New Hampshire	10			10
New Mexico			1	1
North Carolina	14		2	16
North Dakota	2		1	3
Ohio	50		15	65
Oklahoma	4		3	7
Oregon	3		1	4
Pennsylvania	136	650	13	799
Rhode Island	15		1	16
South Carolina	7		2	9
South Dakota	2			2
Tennessee	12		2	14
Texas	51		7	58
Utah	5		1	6
Vermont	9		2	11
Virginia	31	1	4	36
Washington	12		3	15
West Virginia	13		3	16
Wisconsin	22		2	24
<i>Totals</i>	<i>8,687</i>	<i>1,720</i>	<i>271</i>	<i>2,885</i>

UNIVERSITY EXTENSION

E. STUDENTS CLASSIFIED ACCORDING TO RESIDENCE—(Continued)

	Morning- side	Extra- Mural	Home Study	Total
Foreign Countries:				
Argentine	1			1
Bahama Islands	1			1
Bolivia	1			1
Brazil	1		2	3
British West Indies	1		1	2
Buenos Aires	1			1
Canada	22		3	25
Canary Islands	1		1	2
Chile			1	1
China	17			17
Colombia	4			4
Cuba	10			10
Czechoslovakia	1			1
Denmark	1			1
England	4			4
Finland	1			1
France	5		1	6
Greece	1			1
Guatemala	1			1
Honduras			1	1
India	2			2
Italy	1			1
Japan	32		1	33
Mexico	5			5
Newfoundland	1			1
Norway	1			1
Nicaragua	1			1
Peru	1			1
Philippines	4			4
Poland	1			1
Porto Rico	6		1	7
Russia	2			2
Scotland	2			2
South Africa	2			2
Sweden	6			6
Switzerland	1		1	2
Syria			1	1
Turkey	1			1
Venezuela	1			1
<i>Totals</i>	<i>144</i>		<i>14</i>	<i>158</i>
<i>Grand Totals</i>	<i>9,131</i>	<i>2,500</i>	<i>285</i>	<i>11,916</i>

UNIVERSITY EXTENSION

F. AGGREGATE ATTENDANCE ON COURSES

SUBJECT	No. of Half-Year Courses			No. of Registrations			Percentage of Total Enrollment
	Morning-side	Extra-Mural	Total	Morning-side	Extra-Mural	Total	
Administration	6		6	21		21	.05975
Advanced Dentistry	8		8	85		85	.24213
Agriculture	15		15	107		107	.30444
Anthropology	5		5	79		79	.22477
Architecture	45		45	722		722	2.05428
Armenian	1		1	1		1	.00284
Astronomy	4		4	87		87	.24753
Automobile Engineering	2		2	13		13	.03699
Biblical Literature	3		3	3		3	.00853
Biological Chemistry	2		2	1		1	.00284
Biology	7		7	28		28	.07966
Bookkeeping	2		2	123		123	.34996
Botany	2		2	173		173	.49223
Bulgarian	1		1	2		2	.00569
Business	118		118	5,719		5,719	16.29625
Business English	4		4	455		455	1.29451
Chemistry	22	4	26	624	208	832	2.36436
Chinese	7		7	42		42	.11950
Civil Engineering	4		4	41		41	.11668
Clothing	30		30	339		339	.96454
Comparative Literature	8	1	9	464	35	499	1.41971
Cookery	17		17	83		83	.23615
Czech	2		2	3		3	.00853
Danish-Norwegian	3		3	4		4	.01137
Drafting	7		7	86		86	.24469
Drawing	8		8	52		52	.14795
Economics	11	2	13	720	60	780	2.24494
Education	1	26	27	1	2,218	2,219	6.31361
Electrical Engineering	6		6	162		162	.46093
English	94	9	103	6,234	507	6,741	19.12654
Filing	2		2	37		37	.10527
Fine Arts	42		42	415		415	1.18002
French	30	4	34	1,764	105	1,869	5.31753
Geography	2		2	42		42	.11950
Geology	4		4	52		52	.14795
German	16	4	20	374	87	461	1.31166
Government	9		9	342		342	.97308
Greek	2		2	27		27	.07835
Hindustani	1		1	2		2	.00569
History	28	3	31	1,681	121	1,802	5.12718
Household Arts	1		1	16		16	.04552
Household Economics	1		1	1		1	.11284
Hygiene	2		2	38		38	.10812
Industrial Arts	6		6	6		6	.01707
Italian	4		4	92		92	.26204
Japanese	2		2	5		5	.01422
Journalism	2		2	144		144	.40971
Latin	14		14	177		177	.50361
Law	5		5	131		131	.37273
Mathematics	20		20	1,052		1,052	2.99607
Metalworking	4		4	7		7	.01991
Motion Pictures	2		2	49		49	.13941
Music	18		18	133		133	.37842
Neurology	2		2	53		53	.15079
Nursing	6		6	26		26	.07397
Nutrition	2		2	19		19	.05406
Optometry	19		19	658		658	1.87219

UNIVERSITY EXTENSION

F. AGGREGATE ATTENDANCE ON COURSES (*Continued*)

Subject	No. of Half-Year Courses			No. of Registrations			Percentage of Total Enrollment
	Morning-side	Extra-Mural	Total	Morning-side	Extra-Mural	Total	
Oral Hygiene	22		22	1,126		1,126	3.20377
Philosophy	16	2	18	648	75	723	2.05713
Phonetics	10		10	130		130	.36988
Photoplay Composition	4		4	151		151	.43969
Physical Education	25		25	255		255	.72839
Physical Training	8		8	94		94	.26540
Physics	3	2	5	219	119	338	.96113
Physiology	2		2	126		126	.35850
Polish	4		4	10		10	.02845
Psychology	16		16	889		889	2.52944
Public Law	9		9	79		79	.22474
Russian	12		12	73		73	.20770
Secretarial Correspondence	3		3	115		115	.32720
Serbian	3		3	7		7	.01991
Slavonic	1		1	1		1	.00284
Sociology	26		26	322		322	.91617
Spanish	33		33	1,421		1,421	4.04313
Speech	11		11	61		61	.17356
Stenography	15		15	595		595	1.69293
Structural Mechanics	6		6	84		84	.23900
Teachers College Chemistry	4		4	15		15	.04267
Teachers College Hygiene	4		4	5		5	.01422
Teachers College Mathematics	1		1	1		1	.00284
Teachers College Music	25		25	67		67	.19063
Teachers College Physics	1		1	2		2	.00569
Textiles	8		8	117		117	.33289
Typewriting	12		12	460		460	1.33727
Typography	2		2	162		162	.46095
Zoology	4	5	9	295	255	550	1.56507
<i>Total</i>	<i>981</i>	<i>62</i>	<i>1,043</i>	<i>31,347</i>	<i>3,799</i>	<i>35,146</i>	<i>100.00000</i>

UNIVERSITY EXTENSION

G. AGGREGATE ATTENDANCE ON HOME STUDY COURSES

Subject	Number of Courses	Number of Registrations
Agriculture	2	3
Business	9	57
Business English	1	4
Comparative Literature	1	1
Economics	1	3
English	11	71
French	9	22
Geography	1	1
German	1	1
Italian	1	4
Law	1	3
Mathematics	9	37
Photoplay Composition	1	11
Psychology	2	8
Russian	1	1
Secretarial Correspondence	1	5
Scouting	2	13
Sociology	1	1
Spanish	12	41
Typography	1	4
<i>Total</i>	<i>68</i>	<i>291</i>

SUMMER SESSION, 1922

SUMMER SESSION ENROLLMENT

1900-1922

Year	Total Enrollment	Percentage of Increase Over Preceding Year
1900	417	
1901	579	38.85
1902	643	11.05
1903	993	54.43
1904	961	- 3.22
1905	1,018	5.93
1906	1,041	2.26
1907	1,395	33.72
1908	1,532	10.05
1909	1,971	28.65
1910	2,632	33.54
1911	2,973	12.96
1912	3,602	21.16
1913	4,539	26.01
1914	5,590	23.14
1915	5,961	6.63
1916	8,023	34.59
1917	6,144	- 23.42
1918	6,022	- 1.99
1919	9,539	58.40
1920	9,780	2.52
1921	11,809	20.75
1922	12,567	6.42

SUMMER SESSION, 1922

Classification	Numbers	Percentages
A. STUDENTS CLASSIFIED ACCORDING TO SEX		
Men	4,272	33.99
Women	8,295	66.01
<i>Total</i>	<i>12,567</i>	<i>100.00</i>
B. STUDENTS CLASSIFIED AS OLD AND NEW		
Previously registered	5,463	43.47
New students	7,104	56.53
<i>Total</i>	<i>12,567</i>	<i>100.00</i>
C. STUDENTS CLASSIFIED ACCORDING TO FACULTIES		
I. Non-Matriculated	7,257	57.75
II. Matriculated	5,310	42.25
		<i>100.00</i>
1. Columbia		
a. Columbia College	404	
b. University Undergraduates	26	
2. Barnard College	99	
3. Mines, Engineering and Chemistry	55	
4. Law	212	
5. Medicine	10	
6. Architecture	17	
7. Political Science	309	
8. Philosophy	432	
9. Pure Science	206	
10. Ph.D. in Education	123	
11. Journalism	40	
12. Business	132	
13. Dentistry	2	
14. Teachers College		
a. Undergraduates	1,047	
b. Graduates	1,812	
c. Unclassified	384	
<i>Total I and II</i>	<i>12,567</i>	
D. STUDENTS CLASSIFIED ACCORDING TO TEACHING POSITIONS		
I. Not engaged in Teaching	4,347	34.59
II. Engaged in Teaching	8,220	65.41
		<i>100.00</i>
Elementary schools	3,320	
Secondary schools	2,551	
Higher educational institutions	682	
Normal schools	242	
Industrial schools	17	
Principals (school)	466	
Assistant principals (school)	43	
Supervisors	234	
Superintendents	216	
Special teachers	128	
Private school teachers	58	
Private teachers	31	
Librarians	11	
Technical schools	21	
Business schools	38	
Vocational schools	62	
Institutes	97	
<i>Total I and II</i>	<i>12,567</i>	

SUMMER SESSION, 1922

Classification	Numbers	Percentages
E. STUDENTS CLASSIFIED ACCORDING TO RESIDENCE		
North Atlantic Division:		
Connecticut	360	
Maine	102	
Massachusetts	384	
New Hampshire	64	
New Jersey	871	
*New York		
Outside of New York City	1,173	
Manhattan and Bronx	1,882	
Brooklyn	660	
Queens	179	
Richmond	29	
Pennsylvania	1,116	
Rhode Island	34	
Vermont	54	
*Total, 3,923		
<i>Total North Atlantic Division</i>	<i>6,908</i>	<i>54.06</i>
South Atlantic Division:		
Delaware	47	
District of Columbia	127	
Florida	60	
Georgia	316	
Maryland	272	
North Carolina	306	
South Carolina	160	
Virginia	302	
West Virginia	135	
<i>Total South Atlantic Division</i>	<i>1,725</i>	<i>13.72</i>
North Central Division:		
Illinois	203	
Indiana	298	
Iowa	142	
Kansas	133	
Michigan	201	
Minnesota	168	
Missouri	240	
Nebraska	95	
North Dakota	11	
Ohio	713	
South Dakota	21	
Wisconsin	149	
<i>Total North Central Division</i>	<i>2,434</i>	<i>19.37</i>
South Central Division:		
Alabama	133	
Arkansas	67	
Kentucky	133	
Louisiana	75	
Mississippi	60	
Oklahoma	52	
Tennessee	119	
Texas	204	
<i>Total South Central Division</i>	<i>843</i>	<i>6.71</i>

SUMMER SESSION, 1922

Classification	Numbers	Percentages
E. STUDENTS CLASSIFIED ACCORDING TO RESIDENCE—<i>Continued</i>		
Western Division:		
Arizona	11	
California	140	
Colorado	53	
Idaho	6	
Montana	11	
Nevada	4	
New Mexico	4	
Oregon	12	
Utah	14	
Washington	36	
Wyoming	5	
<i>Total Western Division</i>	<i>296</i>	<i>2.36</i>
Territories:		
Canal Zone	3	
Hawaiian Islands	5	
Philippine Islands	19	
Porto Rico	22	
<i>Total Territories</i>	<i>49</i>	<i>.39</i>
<i>Total (United States)</i>	<i>12,255</i>	<i>97.51</i>
Foreign Countries:		
Argentina	1	
Asia Minor	2	
Australia	3	
Austria	2	
Belgium	2	
Bolivia, S. A.	1	
British Columbia	3	
British West Indies	3	
Canada	98	
Central America	4	
Chili	3	
China	80	
Colombia, S. A.	3	
Costa Rica	3	
Cuba	8	
Czech	1	
Denmark	1	
Ecuador, S. A.	1	
England	10	
France	3	
Germany	1	
Greece	2	
India	10	
Italy	3	
Japan	39	
Korea	2	
Mexico	7	
Norway	1	
Peru	1	
Russia	3	
Siam	2	
South Africa	2	
Smyrna	1	
Spain	1	
Sweden	3	
Switzerland	1	
Turkey	2	
<i>Total Foreign Countries</i>	<i>312</i>	<i>2.49</i>

SUMMER SESSION, 1922

F. STUDENTS CLASSIFIED ACCORDING TO DEGREES HELD

6,314 degrees are held by 5,215 of the students as follows:

Degree	Number	Degree	Number	Degree	Number
A.A.	12	B.S.D.	4	M.Di.	4
A.B.	3,401	B.S.E.	5	M.E.	43
A.D.	1	B.S.G.	2	M.E.L.	1
A.M.	741	B.Th.	1	M.L.	1
A.Mus.	1	C.deF.	1	M.L.A.	1
B.B.A.	6	C.E.	12	M.Litt.	1
B.C.	1	Ch.E.	5	M.O.	2
B.C.E.	1	C.R.E.N.	1	M.S.	59
B.C.L.	2	C.R.M.	1	Pd.B.	80
B.C.S.	8	D.C.	1	Pd.D.	4
B.D.	30	D.D.	1	Pd.M.	6
B.Di.	3	D.D.S.	4	P.G.	5
B.E.	29	D.H.	1	Ph.B.	201
B.Ed.	1	D.Litt.	2	Ph.C.	2
B.H.	2	D.O.	1	Ph.Ch.	3
B.J.	3	D.S.	3	Ph.D.	36
B.L.	45	D.V.M.	1	Ph.G.	10
B.L.I.	1	E.E.	5	Ph.M.	5
B.Litt.	23	G.N.	1	R.N.	52
B.L.S.	1	H.C.	1	St.B.	3
B.M.	13	J.D.	9	St.D.	1
B.Mus.	8	L.A.	2	St.L.	1
B.O.	6	L.I.	27	St.M.	1
B.P.	4	L.L.A.	1	S.J.D.	3
B.P.E.	3	L.L.B.	60	T.I.	1
B.P.S.	2	L.L.D.	2	Th.M.	2
B.S.	1,227	L.L.M.	3	T.O.	1
B.S.A.	6	M.B.A.	1		
B.M.T.	1	M.C.S.	4		
B.S.C.	13	M.D.	22		
				<i>Total</i>	<u>6,314</u>

844 students hold 2 degrees
 130 students hold 3 degrees
 15 students hold 4 degrees
 5 students hold 5 degrees
 1 student holds 6 degrees

SUMMER SESSION, 1922

Subjects	No. of Courses	No. of Registrations	Percentage of Total Enrollment
G. AGGREGATE ATTENDANCE ON COURSES:			
Accounting	1	33	.101
Administration	8	164	.505
Agriculture	5	29	.089
Anatomy	1	11	.033
Anthropology	2	15	.046
Architecture	13	123	.379
Assyrian	3	7	.021
Astronomy	1	30	.092
Bacteriology	1	13	.040
Bio-Chemistry	6	72	.222
Biology	7	113	.348
Bookkeeping	1	26	.080
Botany	6	54	.164
Business	19	476	1.467
Business English	1	27	.083
Cancer Research	1	9	.027
Chemical Engineering	6	28	.086
Chemistry	53	601	1.853
Chinese	1	3	.009
Clothing	13	365	1.125
Comparative Literature	3	143	.441
Contemporary Civilization	2	39	.120
Cookery	15	372	1.147
Economics	7	406	1.252
Education	209	15,535	47.989
Electrical Engineering	4	77	.236
Engineering Drafting	3	22	.064
English	36	2,147	6.696
Fine Arts	33	1,008	3.220
French	25	1,003	3.109
Geography	7	162	.499
Geology	5	42	.128
German	10	157	.484
Government	4	157	.484
Greek	4	19	.058
History	25	1,123	3.508
Household Chemistry	1	5	.015
Household Economics	5	136	.419
Hygiene	4	169	.521
Industrial Arts	2	37	.114
Italian	5	63	.194
Japanese	2	2	.006
Journalism	2	63	.194
Latin	11	277	.854
Law	19	605	1.869
Library Economy	5	121	.373
Mathematics	16	653	2.113
Metallurgy	3	41	.129
Metalworking	1	24	.074
Mineralogy	1	4	.012
Music	10	235	.724
Neurology	1	11	.033
Nursing	9	153	.471
Nutrition	8	114	.351
Penmanship	1	90	.277
Philosophy	8	191	.589
Phonetics	2	27	.083
Photoplay Composition	2	45	.138
Physical Education	34	1,293	3.987
Physical Training	7	797	2.457
Physics	16	304	.937
Physiology	6	136	.419

SUMMER SESSION

Subjects	No. of Courses	No. of Registrations	Percentage of Total Enrollment
G. AGGREGATE ATTENDANCE OF COURSES (<i>Continued</i>):			
Portuguese	1	4	.012
Practice of Medicine	1	18	.055
Psychology	10	457	1.409
Public Health	1	20	.061
Public Law	4	60	.185
Religion	3	69	.212
Russian	2	2	.006
Secretarial Correspondence	2	35	.107
Social Science	3	83	.255
Sociology	5	148	.456
Spanish	11	428	1.224
Speech	4	292	.900
Statistics	1	38	.120
Stenography	4	144	.444
Surgery	2	4	.012
T. C. Chemistry	6	78	.240
T. C. Music	5	108	.333
Textiles	2	70	.215
Typewriting	3	124	.382
Zoology	2	37	.114
<i>Total</i>	792	32,426	100,000

Respectfully submitted,

EDWARD J. GRANT,

Registrar

September 1, 1922

REPORT OF THE ACTING LIBRARIAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1922

To the President of the University

SIR:

As Acting Librarian of the University, I have the honor to submit the following report for the year ending June 30, 1922.

In a review of the activities of the year in the General Library and its various departmental branches the apparent fact is its inability, and in many instances the growing inability, as a teaching force to take adequate care of the continually increasing number of persons who use it and depend upon it as a fundamental condition of instruction. The research equipment of the General Library, except for the overcrowded state of the Seminar rooms, is reasonably sufficient in books and working facilities to supply the needs of the graduate student in most fields of investigation as well as any single library of its own resources can supply them, and the Library is readily able to make up its own deficiencies in required material by the customary inter-library loans. No institutional library, it is scarcely necessary to add, can by any possibility have everything on its shelves on scarcely any subject, and the libraries of the future will need more and more, in the interest of the use of the whole, to direct their energies, and wholly apart from their essential general content, to the complete collection of material in special fields of knowledge that they will make notably their own. It is not meant that the research material of the General Library is static in its growth and is regarded as complete, for books are continually bought and in some instances beyond the capacity of the shelves to contain them in their proper context with material already at hand. The lack of shelf space in the General Library and elsewhere in many of the departmental libraries is a familiar fact that does not need to be accentuated and which must presently be relieved by the use

for legitimate library purposes, either of rooms now otherwise used or by the provision of space for the purpose in new buildings.

The inadequacy of the Library to fulfil its proper functions is more apparent in other directions, that are, however, in several important instances on the direct way to betterment. The provision of the great reading room in University Hall for the particular use of undergraduate, Extension, and Summer Session students will not only relieve the congestion that debar hundreds of students from the proper use of the facilities of the Main Reading Room and minimizes its usefulness, but it will restore that room to its legitimate place as a real reference library and the pivotal fact in this important phase of library economy. The new room, if properly equipped with open shelves, will have an influence in certain added directions that cannot be overestimated as an adjunct of the teaching capacity of the University where at the present time it is deficient. Under present conditions, to secure under supervision as wide a use as is possible of books largely in demand by undergraduate and Extension students, they are removed from the open shelves and are placed on reserve where they can only be individually demanded and used. A segregation of popular books is not, however, an unmixed good, as it inevitably diminishes the possible use of each book. A book on the reserved shelves is used only by the student who has been referred to it specifically either from some book or catalogue reference, or by his professor, or by the reference assistant who is helping him, whereas the same book on open shelves is used by these same students and also by many others, who in browsing around the shelves find this book hitherto unknown to them and use it without having to ask for it. In reading rooms such "self service" makes for the quick serving of a large number of persons and an added use of the library.

An important change during the year under review in the reference service was to place a trained assistant in charge of such service in the evening, and to give for the first time to the students using the library in the evening the opportunity

to have the expert service which is always available during the day time. Heretofore it has been necessary, in order to provide for the daytime work, to concentrate all the trained assistants on the day schedule, and to have the evening service carried on entirely by student help, which necessarily was neither trained nor sufficient. This would not have been a bad arrangement in libraries where the same students use the library day and evening. Here, however, while there are some students who use the library at all times, there are also distinct day and evening readers. The special evening clientèle, made up principally of candidates for a higher degree, and particularly for the Master's degree, who are teaching or otherwise employed during the day, and Extension students attending evening classes, seldom come to the library during the day and are forced to do their reading at a time when, until this year, there was no trained help at hand to give that expert assistance in using books which all users of the library, day or evening, have a right to expect.

The reference collection, on account of the limited shelving capacity of the room, has remained practically stationary in size and contains some 20,000 volumes. Changes in the collection, however, have been made and older material has been weeded out and newer titles and editions have been added. Two principal lines of development have been followed based upon the need of more foreign reference books which recent conditions have indicated. The collection of foreign encyclopedias has accordingly been enlarged by the purchase of Danish, Norwegian, Swedish, Polish and Czech encyclopedias, most of which were secured advantageously because of the conditions of foreign exchange. At the present time there is a demand for more Spanish and Portuguese material than we have, and Latin-American lexical and encyclopedic sets are needed to supply the demand for this material. A special reference collection which has been developing during the past year is a regional group of French biographical, bibliographical, topographical and historical dictionaries and encyclopedias.

Lack of adequate space for actual use is shared by many

of the department libraries. The most acute instance is the library of the School of Business where for 373 registered students in the present year there is provided a seating capacity for 18. The new Business building will fortunately remedy a condition which all along has been a serious handicap to the School, and the Library already planned will provide for an abundant expansion and the usefulness desired. Similar conditions are also at hand in the Chemistry Library, where the shelves are literally filled to overflowing and students are daily turned away for utterly inadequate reading accommodations. The extension of Havemeyer Hall will provide in this case enlarged library space and more efficient service in a subject of extraordinary importance in the program of the University. At the Medical School the library facilities, by the lack of adequate room, are also unduly restricted and the library must be greatly extended in space and content to care for a notable increase in recent years in its use. The great problem of the Medical Library is the centralization of the many separate departmental collections that at the present time are kept apart and in some cases are not readily accessible for any general use, and there is no central union catalogue of the whole. The departmental library here and elsewhere in the University has its merits and its defects. It is necessary under proper conditions of instruction and research to have close at hand in the departments laboratory material that is immediately accessible and can be readily used. The tendency, however, is almost invariably in many subjects toward an undue expansion at the expense of space, of custodianship, and of duplication of material that under the circumstance must also be purchased and contained elsewhere. It is impossible, as is perfectly apparent, completely to isolate any subject of instruction from its inter-relations, and the departmental library, for the good of the whole and in the interest of economy of space and of budget appropriations, should be restricted, and in the end must be restricted throughout the University, to the shelving of material that is fundamentally necessary for use and only by an undue expenditure of time and trouble can be obtained elsewhere. No provision of space in the exist-

ing buildings of the University can provide for the indefinite expansion of the departmental library as it is in many instances conceived, and the only way possibly to control the matter as a present, and above all a future procedure, is to realize and adopt in many instances a possible maximum of space and by weeding out and transferring to the General Library older and less necessary material to make room for new.

The library of a professional school is a different matter in some of its bearings. A chemistry library, a law library, and a medical library, from the nature of the case and to fulfil their particular purpose, should be complete and integral collections of their own special material apart from others, with, of course, the general collection of the main library back of them for wider reference. They, in their turn, should have, wherever it is necessary, laboratory material in departmental libraries, but only as wholly subsidiary to their general collection. Two new departmental libraries by the use of duplicates and transfers, in part from the Alumni Association Library, were established during the year at the School of Medicine, one in the department of histology, and one in the Sloane Hospital in the subjects of gynecology and obstetrics for the immediate use of the hospital staff. The particular problem, however, of the Medical School, as has already been stated, is not decentralization, but the centralization of its library facilities which can only be realized when the new buildings of the School are erected and the library properly housed with space provided to make it the great medical library that its added significance will demand. The combined medical libraries of the University, including the Janeway Library of the Presbyterian Hospital, contain, at the present time, 47,490 volumes with approximately the same number of pamphlets.

The Law Library, in accordance with carefully considered plans, has been strengthened during the year by the addition of important source books in Latin-American law, Continental law, British Colonial law and American Session laws. A new departure is the formation of a collection of legal biographies. The year records a maximum of use, 12,661 volumes having been loaned for home use and 52,867 volumes of reserved books

lent for use in the Reading Room. The Law Library has continually increased in usefulness under present conditions of administration, not only as an immediate adjunct of instruction of the classes in the Law School, but as a notable collection of material for reference and legal research. The Law Librarian, Mr. Frederick C. Hicks, who has been largely instrumental in shaping significant policies of expansion of purpose and indefatigable in carrying them out, has supplemented his library work by voluntary instruction to the students of the Law School in general lectures on the history of law books and practical work in legal bibliography in weekly seminars. At the beginning of the year as a recognition of this important work, it is a particular pleasure to note, he was given by the Trustees in addition to the title of Law Librarian the well merited rank of Associate Professor of Legal Bibliography in the Law School. Mr. L. H. Schmehl, who for a number of years has ably assisted the Law Librarian in the administration of the library, was given by the Trustees, to take effect at the beginning of the succeeding academic year, the title of Assistant Law Librarian. A condition of the Law Library that must be seriously taken into immediate consideration as a matter of economy is the binding and rebinding of a continually increasing number of books brought about by the current accessions and by the wear and tear of its much used material. In preparation for the Kent celebration to be held in June, 1923, provision should also be made for rebinding and repairing at a possible cost of \$1500 the 700 volumes in the Kent Collection. This amount, unless it is provided by gift, as well as the costs for the general binding indicated, must come from the budget appropriation of the Law Library. To control the matter, which presently will become uncontrollable, purchases of new material must be curtailed during the next year or two and the amounts as large as possible be diverted in the item "Books and Binding" of the Law Library budget to the specific purpose of binding.

Similar conditions in the matter of binding, in a way as acute, are at hand in the Avery Library, where the budget has not been large enough properly to care both for accessions

and the binding of new and the rebinding of older books. Here, as in the Law Library, purchases must be restricted until this important matter can be normally carried as an annual part disposition of the funds intended for books and binding. An accurate inventory of the volumes in the Avery Library was made as of March 1, 1922. With new books received to June 1, the total is 27,325. At the time of the publication of the Catalogue of the Avery Library in 1895 the total number of volumes was 15,556. The future problem of the Avery Library is, again, and like all the other libraries of the University, one of space, and plans must presently be made to solve it. Because of the needs of space for the activities of the new Department of Fine Arts, which called for immediate relief, and the fact that a large number of Avery reference books were necessarily to be used in its courses of instruction, one of the twelve alcoves of the Library was temporarily and somewhat reluctantly assigned to that department for its use until better quarters could be provided.

In general administration, in inter-library loans 308 volumes were loaned by the Library to 64 libraries, and 152 volumes were borrowed from 28 libraries, exclusive in either case of books loaned to or borrowed from the American Geographical Society, the Metropolitan Museum of Art, the American Museum of Natural History, the Rockefeller Institute, the Union Theological Seminary, and other local institutions. In addition to the regular list of exchanges, there were sent to the American University at Beirut 12 volumes from the duplicates of the Library; to Reed College 16 dissertations; to the Statistical Department of the Government of Roumania 17 dissertations, University bibliographies and annual reports; and to the Henry E. Huntington Library 10 dissertations. To the Texas College, Tyler, Texas, 84 books and 39 pamphlets were sent from the duplicates of the Library. By authorization of the Trustees 259 duplicate numbers of the Publications of the U. S. Geological Survey and Bureau of Mines were sent to Dr. Wong, Acting Director, for the purposes of the Geological Survey in Peking, China. Under the principle of the cooperative distribution to the libraries of the City of

incomplete sets of little used material, as authorized by the Trustees, 295 volumes of the Danish "Rigsdagstidende," Kjöbenhavn, 1850-1895, were sent to the New York Public Library, and volumes 44-47 of the Journal of the Russian Physical-Chemical Society to the Library of the Chemists' Club, needed in each case to complete their own files.

The Library distributed, in the usual way, doctoral dissertations, pamphlets and duplicate material not desired for preservation among the following institutions: New York Public Library, New York Botanical Garden, and the Union Theological Seminary. Thirty-eight mail sacks containing duplicates of U. S. Government documents were returned to the Superintendent of Documents, Washington.

Among the many gifts to the Library during the year were the following: From President Butler 703 books, pamphlets and maps; from Provost Carpenter, mainly from his working library, 550 books and pamphlets; from Professor Adolph Cohn, 2023 books and pamphlets; from Professor Douglas W. Johnson 3 atlases and 25 maps to add to the important map collection of the University; from Professor Charles P. Berkey the valuable "Nouvelle Carte de la France," by Maraldi and Casini, 1744, consisting of 175 feuilles, together a collection of 30 volumes. Thirty-eight books and pamphlets were received from Professor Charles S. Baldwin; from Professor Wendell T. Bush 41; from Professor John J. Coss 36; from Professor James C. Egbert 118; from the library of the late Professor Alfred J. Moses 40; from Professor Edwin R. A. Seligman 148. From Professor Clarence H. Young 15 French and German pamphlets were received; and from Professor Robert L. Schuyler 40 books on architecture. From Mr. Thomas F. Ryan the Library received volume XII and portfolio of "The North American Indian"; through Mr. Luigi Carnovale the valuable special fac-simile edition of Dante's "Divina Comedia," presented by the Italians of the U. S. in commemoration of the 600th anniversary of the birth of Dante; from Mr. George W. Hale the 12 volumes of "Luther Burbank, His Methods and Discoveries"; from Mrs. Michael Gavin and Commissioner Richard Enright sets of the "Catholic Ency-

clopedia"; from Messrs. Guthrie, Bangs and Van Sinderen 300 books and pamphlets; from Messrs. Harcourt, Brace and Co. 10 volumes of their publications; from Mr. E. S. Brownson 217 books and pamphlets, largely Columbiana. From Professor Max Farrand of Yale University was received a large number of letters by and to President Samuel Johnson which were gratefully added to the important Johnson collection of the University. From the American Museum of Natural History, was received the much appreciated gift of 143 of the Publications of the Museum to complete our files; from the American Association for International Conciliation 6 books and 204 pamphlets; from the Geological Survey 91 Survey maps and other items, 145 in all; from the National Committee on Prisons and Prison Labor 500 books and 750 pamphlets; from the New York Public Library 506 books and pamphlets; from the New York State Library 102 books and pamphlets; from the Journal of Philosophy 210 miscellaneous journals. Through Dr. R. Wettstein of Vienna from the Professor W. Ofenheim-Stiftung came a valuable collection consisting of 315 books, 770 pamphlets. From the Geologiska Föreningen, Stockholm, the Library received volumes 20-33 needed to complete the set of the "Förhandlingar" of that Society. From the French Government through the kind ministrations of the French Ambassador was received the set, in 42 volumes, of "Notices descriptives et statistiques" of various countries, prepared during the war by the French "Service géographique de l'armée," and the second volume, with accompanying atlas, of the "Travaux du Comité d'études." The earlier volume and atlas of this latter set had been previously received from M. de Martonne of the French Mission. From the Compagnie Universelle du Canal Maritime was received the valuable "Carte de l'Isthme de Suez"; from the Secretaria de Educacion Publica, Mexico, 22 volumes; from the Consulate General of Poland 24 books and pamphlets; from the Roumania Education Bureau 137 books, 136 in the Roumanian language; from H. R. H. the Patriarch of Siam 12 volumes; from the Direccion de Talleres Fiscales de Prisiones, Chili, 28 volumes; from the Guayaquil Biblioteca

Municipal 6 books and pamphlets. From Mr. Edward D. Adams 55 books and 17 pamphlets were received for the library of the School of Business; and from Mrs. E. G. Porritt 227 books for the School of Journalism. Important gifts of books received for the Law School Library were as follows: from Frederick W. Kobbé 64 volumes; from Judge William N. Cohen 44 volumes; from John B. Pine 227 volumes; from Gustavus T. Kirby, 5 volumes of rare colonial laws; from Professor David Eugene Smith a package of old deeds on vellum; from Roberts Walker the minute book of the "Moot," the law society which preceded the Columbia Law Review Association; from the American Law Book Company a set of Corpus Juris; from Sullivan and Cromwell 6 volumes. For the Medical School Library were received from Dr. Walter B. James 285 bound volumes and 35 unbound volumes, 185 journal numbers, 65 reprints; from Dr. Samuel W. Lambert 2 books, 38 journal numbers, 197 reprints; from Professor Adrian V. S. Lambert 12 books, 80 journal numbers, 184 reprints; from Professor Francis Huber 11 books, 63 journals, 166 reprints; from the estate of the late Dr. William S. Gottheil, 325 books, 20 pamphlets; from Dr. F. C. Yeomans 19 books; from Dr. Philip Van Ingen 55 books; from Dr. Henry E. Hale 18 books, 29 journals; from Dr. Simon Baruch 340 books; from the Breitenbach Company 38 journals, 43 numbers.

From Rev. Acton Griscom was received the sum of \$1000 to be expended on the collection of works on Joan of Arc; through Mrs. Theodore Blondel, in memory of Sarah Louise Disosway, \$65.71 to purchase books to add to the Shakespeare collection of the Library. From the Legislative Drafting Research Fund the sum of \$2000 was received for filling in gaps in the law collection; an annual gift of \$250 from Mr. William G. Low for the purchase of books in maritime and international law; and from Mr. James Loeb, an annual gift of \$175 for the purchase of books on labor problems. From the Class of 1923 of the School of Medicine the sum of \$81.25 was received which was applied to constitute an Apter Memorial Fund for the purchase of books for the

medical library. From the Presbyterian Hospital \$182 was received to add to the Janeway Library Fund.

Exhibitions in connection with the Library were held during the year as follows: In the Avery Library: Books, portraits, and works of art illustrating the life and times of Dante, August-October; Drawings for reconstruction in France by the Harvard Unit, December; Water-colors made in France and Italy by Mr. H. Sternfeld, Carnegie Institute of Technology, December; Peruvian decorative art: drawings and original objects, assembled by Dr. P. Goldsmith, April; Competition drawings for the Perkins Fellowship, and Envoi of the McKim Fellowship, and models for sculpture by Edward R. Smith, former Avery Librarian, May-June. On Alumni Day, February 12, a collection of the publications of the Columbia University Press was exhibited in the Columbiana Room of the Main Library. To supplement a notable exhibition at the New York Public Library in commemoration of the 300th anniversary of the birth of Molière a number of stage models, framed pictures, editions and translations of the works of the poet, and various books of French writers concerning him were loaned for a limited period by authorization of the Trustees.

The University Bibliography for 1921, compiled by the Reference Librarian, was issued as a pamphlet of 74 pages, containing 1470 titles. The list of Essays submitted for the Master's degree in 1921, compiled by the Supervisor of the Catalog Department, was printed as a pamphlet of 40 pages. The circular of information for Summer Session students, first printed in 1920, was reprinted in 1921, and again in 1922 with such changes and revision as were necessary, and an edition was also issued for the regular University students of the Winter and Spring Sessions. There is need in the Library of a handbook and bibliographical guide for the use of the graduate students of the University in all of its departments of instruction. One of the most important single results of graduate study in a large institution is the ability acquired to use intelligently and surely the resources in both books and bibliographical apparatus of a great library, and such ability,

once acquired, is a valuable asset for scholarly investigation wherever the student may go later. Many of our graduate students, especially those who come from smaller and less complex institutions, are entirely lacking in such ability and experience. When they are sent by their instructors to the Library for instruction in the use of its resources, or when they themselves realize this need and ask for help, the lack is readily remedied. Some, however, do not realize the need of such help and go on through their course of instruction without making an effective use of the opportunity at hand. A manual on the use of the bibliographical apparatus and reference collections of the Library which could be placed in the hands of every graduate student would be of sufficient service to warrant its compilation and issuance as a University publication.

The most important addition to the physical equipment of the Library during the year has been the installation of a visible filing system in the Accessions department for determining and controlling the actual status of all periodicals received or current at the present time, and to replace the old card file which had become cumbersome, unmanageable, and incorrect. The anticipated advantages of the new system have been abundantly realized. The necessary checking up is being done quicker, claims for missing numbers are being made more systematically, and any one without previous experience can find the recorded entries. With the making of the new record, steps not readily possible before are being taken to complete by exchange or purchase files of all periodicals where completion is possible, and the thorough overhaul that has taken place in the entire list will be of lasting benefit.

It is a satisfaction to state at the end of this report, the marked increase in the use of the College Study and its collection of books. During the year just ended, the use of books in the Study has increased from 130,000 volumes circulated in 1920-21, to 150,000 volumes circulated in 1921-22. This significant increase in the usefulness of the Study to the students of Columbia College is only partly accounted for in the increased enrollment in the College. Students registered

in 1920-21 were 1,906; in 1921-22, the number had increased only by 118 and now stands at 2,024. It is doubtful, however, that the College student at the present time uses the Study more and the General Library less, and neither should be considered as apart from the other as adjuncts of undergraduate instruction. The collections of the Study to fulfil their special purpose should still be increased. They are now growing with the restricted budget appropriation at the rate of about 1,500 per year. Unlike any other part of the Library system the Study shelves are in considerable part still empty, and room is at hand for some 2,500 volumes needed for the immediate and active use of College students in their own building.

In conclusion I would submit the following general statistics:

Accessions:

Volumes added:

General Library and Departments	24,320
School of Law	6,258
School of Medicine	3,750
Barnard College	1,655
Teachers College	3,390
College of Pharmacy	309
<hr/>	
Total	39,682
Total of volumes in Library, June 30, 1922	833,089
Estimated unbound pamphlets in Library	45,000
Gifts: 6, 915 volumes, 7,895 pamphlets, 12 maps	

Exchanges:

Pieces received (Dissertations, 2,172; others, 542)	2,714
Pieces exchanged	7,020
Orders sent out	13,628

Cataloguing:

Cards made and filed in the General Library and

Departments:

New cards	75,968
Cards replaced	13,490
Printed cards for Depository Catalogue:	
Library of Congress	29,644
Harvard University	4,480
<hr/>	
	34,124
<hr/>	
Total	123,582

Binding:

In Library:

Books and pamphlets bound	14,700	
Volumes repaired	6,249	
		20,949

Outside:

Volumes bound	8,358	
Volumes rebound	2,994	
		11,352

Total		32,301
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Circulation:

Volumes supplied from Loan Desk for outside use (including 28,305 renewals)	162,747	
For use in building	50,951	
Loaned from reading rooms for outside use	271,010	
Used in reading rooms	661,437	
		1,146,145
Total recorded use of libraries		1,146,145

Respectfully submitted,

WILLIAM H. CARPENTER,

*Acting Librarian**June 30, 1922*

REPORT

*To the Trustees of
Columbia University in the City of New York*

The Treasurer makes the following report of the financial affairs of the Corporation for the year ended June 30, 1922.

INDEX

Income and Expense Account	343
Income of the Corporation	346-347
Expenses—Educational Administration and Instruction	348-364
Expenses—Buildings and Grounds	365-366
Expenses—Library	367-370
Expenses—Business Administration	371
Expenses—Annuities	372
Expenses—Interest	373
Expenses—Summary	374
Students Loan Funds	375
Balance Sheet	376-377
Summary of Capital Account	378
Auditors' Certificate	379
Payments by Allied Corporations	380
Arrears of Rent	381
Receipts and Disbursements of Income of Special Endowments	382-389
Gifts and Receipts for Designated Purposes; Receipts and Disbursements	390-397
Securities Owned for Account of Special Endowments and General Funds	398-422
Summary of Investments	423
Redemption Fund	424-425
University Land, Buildings and Equipment	426-430
Other Property	431
Special Endowments	432-457
Permanent Funds	458-459
Gifts and Bequests received during 1921-1922	460-463

**INCOME AND EXPENSE ACCOUNT (GENERAL FUNDS)
FOR THE YEAR ENDING JUNE 30, 1922**

INCOME FROM ALL SOURCES

From Students:		
Fees (See Page 346).....	\$2,568,988.72	
Other Income (See Page 346).....	39,691.69	\$2,608,680.41
<hr/>		
From Endowments:		
Rents (See Page 347).....	760,911.90	
Income from Investments in Personal Property (See Page 347).....	72,600.14	
Investment of Redemption Fund (See Page 347).....	61,395.47	
Transferred from Principal of Special Endowments (See Page 347).....	1,250.00	
Transferred from Income of Special Endowments (See Page 347).....	941,583.59	1,837,741.10
<hr/>		
From Gifts and Receipts for Designated Purposes (See Page 347).....		178,087.04
From Allied Corporations (See Page 347).....		704,153.65
From Miscellaneous Sources (See Page 347).....		181,819.76
<hr/>		
Total Income (See Page 347).....		\$5,510,481.96

EXPENSES

Educational Administration and Instruction (See Page 364)		4,140,593.25
Buildings and Grounds—Maintenance (See Page 366)...		600,900.60
Library (See Page 370).....		217,651.69
Business Administration of the Corporation:		
Salaries and Office Expenses (See Page 371).....	105,041.67	
Insurance on Academic Buildings (See Page 371).....	23,934.21	128,975.88
<hr/>		
Annuities (See Page 372).....		20,960.00
Interest on Corporate Debt, etc. (See Page 373).....		144,770.00
<hr/>		
Total Expenses exclusive of provision for Redemption Fund.....		\$ 5,253,851.42
<hr/>		
Balance being excess of Income over Expenses before providing for Redemption Fund.....		256,630.54
Deduct: Amount transferred to Redemption Fund for retirement of 4 per cent Mortgage Bonds.....		100,000.00
<hr/>		
Balance, being excess of Income over Expenses for Maintenance for fiscal year ended June 30, 1922, after providing for Redemption Fund.....		\$ 156,630.54
<hr/> <hr/>		

INCOME OF THE CORPORATION, YEAR ENDED JUNE 30, 1922

FROM STUDENTS:

Fees:

Morningside:

University.....	\$ 56,185.26	
Entrance and Special Examinations.....	15,836.00	
Late Registration.....	3,384.00	
Graduation.....	32,886.67	
Tuition.....	841,689.30	
Rooms in Residence Halls.....	196,517.01	\$1,146,498.24

Summer Session:

Morningside.....	\$622,552.00	
Less Teachers College Proportion.....	303,766.00	318,786.00
Camp Columbia.....	1,074.00	
Excursions.....	2,132.00	321,992.00

University Extension:

University and Tuition.....	804,392.70	
Home Study.....	22,921.91	
School of Business.....	87,357.70	
Institute of Arts and Sciences.....	34,796.00	
American Institute of Banking.....	31,511.50	980,979.81

Medical School:

University.....	4,380.00	
Late Registration.....	24.00	
Tuition.....	113,021.67	
Graduation.....	1,380.00	
Examination.....	78.00	
B. S. Degree.....	635.00	119,518.67
		\$2,568,988.72

Other Charges:

Morningside:

Deposits for Breakage and Supplies	39,033.94	
Electric Light Breakage and Keys	298.75	39,332.69

Medical School:

Supplies and Materials furnished to Students.....		359.00	39,691.69
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FROM ENDOWMENT:

Rents:

Upper and Lower Estates.....	643,478.50
618 Fifth Avenue.....	22,400.61
620 Fifth Avenue.....	17,151.99
626 Fifth Avenue.....	16,666.67
2 West Fiftieth Street.....	7,186.81
19 West Fiftieth Street.....	5,122.50

Carried forward.....

\$2,608,680.41

Brought forward.....			\$2,608,680.41
6 West Fifty-first Street.....	\$2,191.18		
83 Barclay Street.....	1,720.00		
72 Murray Street.....	2,509.88		
41 West Forty-seventh Street.....	1,856.50		
18 East Sixteenth Street.....	4,208.33		
West 117th Street Houses.....	4,599.49		
Claremont Avenue Properties.....	31,819.44	760,911.90	
<hr/>			
INCOME FROM INVESTMENTS IN PERSONAL PROPERTY:			
Interest:			
On General Investments.....	23,984.66		
On Deposits of General Funds.....	4,249.19		
On Notes Receivable.....	4,251.84		
On Rents.....	322.10		
On Gifts and Receipts for Designated Purposes.....	2,755.12		
On 503-11 Broadway, etc.....	37,037.23	72,600.14	
<hr/>			
Investment of Redemption Fund.....		61,395.47	894,907.51
<hr/>			
FROM INCOME OF SPECIAL ENDOWMENTS.....		941,583.59	
FROM PRINCIPAL OF SPECIAL ENDOWMENTS.....		1,250.00	
FROM GIFTS AND RECEIPTS FOR DESIGNATED PURPOSES.....		178,087.04	
FROM PAYMENTS BY ALLIED CORPORATIONS:			
For Salaries and Annuities:			
Teachers College.....	366,680.00		
Barnard College.....	247,449.99		
Carnegie Foundation.....	65,923.66		
Harkness.....	24,100.00	704,153.65	1,825,074.28
<hr/>			
FROM MISCELLANEOUS SOURCES:			
University Commons.....		120,337.02	
Barnard College:			
Heat, Light and Power.....		19,595.43	
Civil Engineering:			
Receipts from Testing Laboratory.....		15,111.16	
Telephone Service.....		16,185.88	
Bureau of Purchases and Supplies.....		4,364.45	
Consents.....		1,871.75	
Income from Tennis Courts.....		1,322.00	
Post Office.....		1,000.00	
Rental of Typewriters.....		845.00	
Jobbing Account—Overhead.....		810.01	
Sundries.....		299.68	
Annual Catalogue.....		77.38	181,819.76
<hr/>			
			\$5,510,481.96
<hr/> <hr/>			

EXPENSES—EDUCATIONAL ADMINISTRATION AND INSTRUCTION

	Expenditures	Departmental Totals	From General Income	From Income of Special Endowments	From Gifts and Receipts for Designated Purposes
EDUCATIONAL ADMINISTRATION					
Salaries.....	\$188,706.93		\$167,109.54	\$3,597.39	\$18,000.00
Bureau of Supplies.....	19,448.90		19,448.90		
Budget.....	1,000.00		1,000.00		
President's Emergency Fund.....	6,101.30				6,101.30
President's Fund.....	12,000.00		12,000.00		
Printing.....	33,250.00		32,750.00	500.00	
Works of John Milton.....	357.75		357.75		
Public Ceremonies.....	2,300.00		2,300.00		
Alumni Records.....	2,479.16		2,479.16		
Columbia University Press.....	3,000.00		3,000.00		
Special Publication Fund.....	956.67		956.67		
Fund for Research.....	637.30		637.30		
Course in Contemporary Civilization.....	645.24		645.24		
Courses in Applied Science.....	1,334.89		1,334.89		
State Aid for Blind Pupils.....	900.00				900.00
Columbia Law Review.....	5,735.75			5,735.75	
Special Appropriation for Convocation.....	2,632.45		2,632.45		
American Council on Education.....	500.00		500.00		200.00
American University Unit n.....	500.00		500.00		900.00
British Peru Expedition.....	900.00				
New Edition of Statutes and By-Laws.....	495.48		495.48		
President's House Furnishing.....	1,805.52				1,805.52
EARL HALL					
Maintenance and Salaries.....	3,223.93		3,223.93		

OFFICE OF THE REGISTRAR					
Salaries.....	27,707.91	24,707.91	3,000.00		
Diplomas.....	5,750.00	5,750.00			
Conduct of Examinations.....	3,438.47	3,438.47			
Summer Session.....	4,900.00	4,900.00			
University Extension.....	10,420.00	10,420.00			
ADVISER TO GRADUATE WOMEN STUDENTS					
Departmental Appropriation.....	500.00	500.00			
OFFICE OF UNIVERSITY ADMISSIONS					
Departmental Appropriation.....	6,600.00	6,600.00			
Preparation and Rating of Examination Books.....	2,500.00	2,500.00			
OFFICE OF STUDENT APPOINTMENTS					
Departmental Appropriation.....	2,183.86	2,000.00	183.86		
OFFICE OF ALUMNI FEDERATION					
Departmental Appropriation.....	5,000.00		5,000.00		
UNIVERSITY MEDICAL OFFICER					
Supplies.....	1,792.69	1,792.69			
Residence Halls Service.....	4,019.28	4,019.28			
UNIVERSITY COMMONS					
Maintenance.....	116,461.78	116,461.78			
INTERNATIONAL RELATIONS					
Salaries.....	480,185.26				
	4,000.00	1,500.00	2,500.00		
COLUMBIA HOUSE					
Departmental Appropriation.....	1,611.23	1,611.23			
Americanization Work.....	200.00		200.00		
MAISON FRANCAISE					
Departmental Appropriation.....	2,691.30	2,344.96	346.34		

	Expenditures	Depart- mental Totals	From General Income	From Income of Special Endowments	From Gifts and Receipts for Designated Purposes
INSTITUTE OF CANCER RESEARCH					
Salaries.....	\$45,958.16			\$45,958.16	
Departmental Expenses.....	20,900.00			20,900.00	
		\$66,858.16			
ANTHROPOLOGY					
Salaries.....	8,333.33			6,333.33	\$2,000.00
Departmental Appropriation.....	50.00			50.00	
Research on the Indians of British Columbia.....	115.67				115.67
International Journal of American Linguistics.....	40.33			40.33	
		8,539.33			
ARCHITECTURE					
Salaries.....	34,900.00		\$34,900.00		
Equipment.....	2,670.00		2,670.00		
		37,570.00			
ASTRONOMY					
Salaries.....	6,470.00		6,470.00		
Departmental Appropriation.....	64.43			64.43	
Observatory: For Apparatus.....	9.07			9.07	
		6,543.50			
BOTANY					
Salaries.....	27,149.99		13,000.00		14,149.99
Departmental Appropriation.....	1,200.00		1,200.00		
Gardener.....	1,200.00		1,200.00		
		29,549.99			
BUSINESS (SCHOOL OF)					
Salaries.....	91,124.49		91,124.49		
Equipment.....	3,049.00		3,049.00		
		94,173.49			

CHEMICAL ENGINEERING

Engineering Chemistry Salaries.....	21,500.00		21,500.00	
Electro-Chemistry: Salaries.....	3,000.00		3,000.00	
Laboratory Servants.....	3,748.00		3,748.00	
Equipment.....	8,201.34	66.00	8,135.34	
Research.....	750.00		750.00	
		37,199.34		

CHEMISTRY

General and Inorganic: Salaries.....	53,599.96		53,599.96	
Organic: Salaries.....	14,700.00		14,700.00	
Physical: Salaries.....	6,000.00		6,000.00	
Analytical: Salaries.....	9,000.00		9,000.00	
Food: Salaries.....	13,999.96		12,799.96	1,200.00
Barnard: Salaries.....	15,000.00		15,000.00	
Research				
Salaries.....	10,329.30		10,329.30	
Supplies.....	702.71		702.71	
Laboratory Servants.....	3,612.00		3,612.00	
Equipment and Supplies.....	5,520.00		561.00	4,959.00
Breakage and Supplies.....	47,945.54		47,945.54	
Laboratory Costs.....	34,602.00		34,602.00	
		215,011.47		

CIVIL ENGINEERING

Salaries.....	17,000.00		17,000.00	
Departmental Appropriation.....	750.00		750.00	
For Research.....	2,106.46		2,106.46	
Testing Laboratory.....	13,865.76		13,865.76	
Fire Testing Station.....	291.96		291.96	
		34,014.18		

DENTISTRY (SCHOOL OF)

Salaries.....	6,100.00		6,100.00	
Laboratory and Infirmary Expenses.....	5,705.57		4,919.51	786.06
Equipment.....	1,012.30		1,012.30	
		12,817.87		

	Expenditures	Departmental Totals	From General Income	From Income of Special Endowments	From Gifts and Receipts for Designated Purposes
ECONOMICS					
Salaries.....	\$63,627.17	.....	\$50,627.17	.....	\$13,000.00
Departmental Appropriation.....	1,000.00	.....	1,000.00	.....	.....
Equipment.....	250.00	.....	250.00	.....	.....
		\$64,877.17			
ELECTRICAL ENGINEERING					
Salaries.....	25,700.00	.....	25,700.00	.....	.....
Equipment.....	3,250.00	.....	3,250.00	.....	.....
		28,950.00			
ENGINEERING DRAFTING					
Salaries.....	11,300.00	.....	11,300.00	.....	.....
Drawing Appropriation.....	200.00	.....	200.00	.....	.....
		11,500.00			
ENGLISH AND COMPARATIVE LITERATURE					
Salaries.....	122,637.50	.....	84,712.50	5,125.00	32,800.00
Departmental Appropriation.....	300.00	.....	300.00	.....	.....
		122,937.50			
FINE ARTS					
Salaries.....	3,600.00	.....	.....	3,600.00	.....
Equipment.....	2,489.82	.....	.....	2,489.82	.....
		6,089.82			
GEOLOGY AND MINERALOGY					
GEOLOGY					
Salaries.....	40,027.07	.....	27,152.07	5,375.00	7,500.00
Departmental Appropriation.....	2,000.00	.....	2,000.00	.....	.....
Summer Field Work.....	400.00	.....	400.00	.....	.....
Crosby Collection of Lantern Slides.....	68.50	.....	.....	68.50	.....

MINERALOGY						
Salaries.....	6,500.00	48,995.57	6,500.00	6,500.00		
GERMANIC LANGUAGES						
Salaries.....	28,475.00		17,332.08	17,332.08	2,642.92	8,500.00
Departmental Appropriation.....	200.00		200.00	200.00		
Lectures.....	62.54		62.54	62.54		
		28,737.54				
GREEK AND LATIN						
Salaries.....	47,600.00		28,300.00	28,300.00		19,300.00
Greek: American School at Athens.....	250.00		250.00	250.00		
Latin: American School at Rome.....	250.00		250.00	250.00		
Equipment.....	526.69		526.69	526.69		
Departmental Appropriation.....	75.00		75.00	75.00		
		48,701.69				
HISTORY						
Salaries.....	65,550.00		51,550.00	51,550.00		14,000.00
Departmental Appropriation.....	400.00		400.00	400.00		
		65,950.00				
INDO-IRANIAN LANGUAGES						
Salaries.....	8,000.00		6,825.00	6,825.00	675.00	500.00
Departmental Appropriation.....	50.00		50.00	50.00		
		8,050.00				
JOURNALISM						
Salaries.....	33,666.69		33,666.69	33,666.69		
Lectures.....	100.00		100.00	100.00		
Equipment.....	1,200.00		1,200.00	1,200.00		
Supplies.....	1,500.00		1,500.00	1,500.00		
Laboratory Costs.....	800.00		800.00	800.00		
		37,266.69				

	Expenditures	Departmental Totals	From General Income	From Income of Special Endowments	From Gifts and Receipts for Designated Purposes
LAW SCHOOL					
Salaries.....	\$91,600.00		\$85,600.00	\$6,000.00	
Departmental Appropriation.....	273.86		273.86		
Legislative Drafting Research Fund.....	7,293.30				\$7,293.30
Legislative Drafting Contingent Fund.....	300.00			300.00	
Intelligence Tests.....	951.46		951.46		
		\$100,418.62			
MATHEMATICS					
Salaries.....	60,058.34		43,958.34		16,100.00
Departmental Appropriation.....	125.00		125.00		
		60,183.34			
MECHANICAL ENGINEERING					
Salaries.....	36,312.50		36,312.50		
Laboratory Machinist.....	1,800.00		1,800.00		
Laboratory Helper.....	1,500.00		1,500.00		
Laboratory Laborer.....	1,200.00		1,200.00		
Departmental Appropriation.....	3,000.00		3,000.00		
Re-wiring Laboratory.....	2,000.00		2,000.00		
		45,812.50			
MINING AND METALLURGY					
MINING					
Salaries.....	16,800.00		16,800.00		
Departmental Appropriation.....	1,200.00		1,200.00		
Special Equipment.....	1,036.16				1,036.16
Ore Dressing Laboratory.....	4.34				4.34
METALLURGY					
Salaries.....	19,850.00		19,850.00		
Departmental Appropriation.....	750.00		750.00		

Summer Field Work.....	100.00		100.00		
Metallurgical Research Laboratory.....	138.96				138.96
Special Equipment.....	400.00				400.00
		40,279.46			
MUSIC					
Salaries.....	13,600.00		600.00	13,000.00	
Departmental Appropriation.....	1,188.91			1,188.91	
		14,788.91			
PHILOSOPHY AND PSYCHOLOGY					
PHILOSOPHY					
Salaries.....	49,895.80		24,675.00	6,720.80	18,500.00
Departmental Appropriation.....	125.00		125.00		
PSYCHOLOGY					
Salaries.....	13,000.00		7,000.00	6,000.00	
Laboratory Helper.....	500.00		500.00		
Departmental Appropriation.....	1,000.00		1,000.00		
		64,520.80			
PHYSICAL EDUCATION					
Salaries.....	45,900.00		31,700.00		14,200.00
Equipment.....	1,670.10		1,670.10		
Care of Swimming Pool.....	1,000.00		1,000.00		
		48,570.10			
MILITARY SCIENCE AND TACTICS					
Departmental Appropriation.....	1,358.54		1,358.54		
PHYSICS					
Salaries.....	77,200.00		68,700.00		8,500.00
Laboratory Helpers.....	6,800.00		6,200.00	600.00	
Departmental Equipment.....	1,075.00			1,075.00	
Apparatus and Equipment.....	5,055.00		4,205.00	850.00	
Research Laboratory.....	3,694.57				3,694.57
Physical Science Research.....	20.56				20.56
		93,845.13			

	Expenditures	Departmental Totals	From General Income	From Income of Special Endowments	From Gifts and Receipts for Designated Purposes
PUBLIC LAW AND JURISPRUDENCE					
GOVERNMENT AND POLITICS					
Salaries.....	\$15,246.00		\$7,646.00	\$6,100.00	\$1,500.00
PUBLIC LAW					
Salaries.....	33,600.00		27,600.00	6,000.00	
Departmental Appropriation.....	125.00		125.00		
Julius Beer Lectures.....	391.35			391.35	
		\$49,362.35			
RELIGION					
Salaries.....	7,300.00		5,500.00		1,800.00
Chapel Services.....	4,400.00		3,768.75	631.25	
Chapel Hymn Books.....	2,337.12				2,337.12
Y. M. C. A.....	50.00			50.00	
		14,087.12			
ROMANCE LANGUAGES					
Salaries.....	78,450.00		59,050.00		19,400.00
Departmental Appropriation.....	300.00		300.00		
Phonetic Laboratory.....	200.00		200.00		
		78,950.00			
SEMITIC LANGUAGES					
Salaries.....	7,000.00		6,000.00	700.00	300.00
Departmental Appropriation.....	50.00		50.00		
American School of Oriental Research in Jerusalem.....	25.00				25.00
		7,075.00			
SLAVONIC LANGUAGES					
Salaries.....	4,250.00		4,250.00		
Departmental Appropriation.....	1,040.00				1,040.00
		5,290.00			

SOCIAL SCIENCE							
Salaries.....	25,500.00	184,687.88	26,502.12	184,687.88	22,700.00	2,800.00	
Departmental Appropriation.....	500.00				250.00	250.00	
Bulletin of Social Legislation.....	502.12				502.12		
SUMMER SESSION							
Administration and Instruction.....	184,687.88			184,687.88			
CAMP COLUMBIA							
Administration and Instruction.....	2,862.94			2,862.94			
Equipment.....	750.00			750.00			
			188,300.82				
UNIVERSITY EXTENSION							
Administration and Instruction.....	394,243.88			394,243.88			
Fee Courses.....	140,130.32			140,130.32			
Institute of Arts and Sciences.....	26,998.05			26,998.05			
Agriculture.....	449.91					449.91	
School of Business.....	1,000.00					1,000.00	
			562,822.16				
ZOOLOGY							
Salaries.....	53,750.00			33,437.63	6,112.37	14,200.00	
Departmental Appropriation.....	3,098.03			98.03	3,000.00		
Marine Table, Wood's Hole.....	500.00			500.00			
Biological Research.....	516.20				516.20		
New Equipment.....	473.96			473.96			
			58,338.19				
Medical School							
ADMINISTRATION							
Salaries.....	27,500.00			27,000.00	500.00		
Alcohol.....	660.77			660.77			
Office Supplies and Sundries.....	3,710.85			3,710.85			
			31,871.62				

	Expenditures	Departmental Totals	From General Income	From Income of Special Endowments	From Gifts and Receipts for Designated Purposes
ANATOMY					
Salaries.....	\$35,560.00	.....	\$35,560.00	.....	.....
Departmental Appropriation.....	5,357.70	.....	5,357.70	.....	.....
Equipment.....	1,005.54	.....	1,005.54	.....	.....
		\$41,923.24			
BACTERIOLOGY					
Salaries.....	20,800.00	.....	20,800.00	.....	.....
Departmental Appropriation.....	4,279.07	.....	4,279.07	.....	.....
Interdepartmental Social Hygiene.....	93.78	.....	.....	.....	\$93.78
		25,172.85			
BIOLOGICAL CHEMISTRY					
Salaries.....	16,615.00	.....	14,025.00	.....	2,590.00
Departmental Appropriation.....	3,720.00	.....	3,720.00	.....	.....
Biochemical Research.....	490.00	.....	.....	.....	490.00
		20,825.00			
CLINICAL INSTRUCTION					
DERMATOLOGY AND SYPHILOLOGY					
Salaries.....	1,600.00	.....	1,600.00	.....	.....
Departmental Appropriation.....	1,492.98	.....	1,492.98	.....	.....
LARYNGOLOGY AND OTOTOLOGY					
Salaries.....	2,600.00	.....	2,600.00	.....	.....
OPHTHALMOLOGY					
Salaries.....	1,100.00	.....	1,100.00	.....	.....
HYGIENE AND PREVENTIVE MEDICINE					
Salaries.....	1,200.00	.....	1,200.00	.....	.....
Departmental Appropriation.....	297.63	.....	297.63	.....	.....

LIFE INSURANCE EXAMINATION					
Salaries.....	100.00	8,390.61	100.00	100.00	.....
DISEASES OF CHILDREN					
Salaries.....	11,033.28	.....	9,033.28	2,000.00	.....
Departmental Appropriation.....	643.01	.....	643.01	.....	.....
Additional Equipment.....	519.50	.....	519.50	.....	.....
		12,195.79			
NEUROLOGY					
Salaries.....	13,700.00	.....	13,700.00	.....	.....
Departmental Appropriation.....	982.97	.....	982.97	.....	.....
		14,682.97			
OBSTETRICS AND GYNECOLOGY					
Salaries.....	13,000.00	.....	9,566.67	3,433.33	.....
Departmental Appropriation.....	1,206.61	.....	1,206.61	.....	.....
Pathological Equipment.....	4,917.50	.....	4,917.50	.....	.....
		19,124.11			
PATHOLOGY					
Salaries.....	28,747.00	.....	23,747.00	5,000.00	.....
Departmental Appropriation.....	4,000.00	.....	4,000.00	.....	.....
Rickets Investigation.....	3,832.99	.....	.....	3,832.99	.....
		36,579.99			
PHARMACOLOGY					
Salaries.....	8,760.00	.....	8,760.00	.....	.....
Special Equipment.....	1,800.00	.....	1,800.00	.....	.....
Departmental Appropriation.....	2,500.00	.....	2,500.00	.....	.....
Special Instruments.....	1,146.50	.....	.....	1,146.50	.....
		14,206.50			
PHYSIOLOGY					
Salaries.....	25,286.60	.....	25,286.60	.....	.....
Departmental Appropriation.....	2,500.00	.....	2,500.00	.....	.....
Equipment.....	1,167.88	.....	.....	1,167.88	.....
Apparatus.....	193.32	.....	.....	193.32	.....
		29,147.80			

	Expenditures	Departmental Totals	From General Income	From Income of Special Endowments	From Gifts and Receipts for Designated Purposes
PRACTICE OF MEDICINE					
Salaries.....	\$79,281.44	.....	\$67,481.44	.....	\$11,800.00
Laboratory Appropriation (Clinical Pathology).....	1,300.00	.....	1,300.00	.....	.....
Departmental Appropriation (Bellevue Hospital).....	679.23	.....	679.23	.....	.....
Departmental Appropriation.....	1,500.45	.....	1,500.45	.....	.....
		\$82,761.12			
SURGERY					
Salaries.....	95,011.16	.....	76,457.50	.....	18,553.66
Departmental Appropriation.....	4,109.38	.....	3,000.00	.....	1,109.38
Supplies (Research Laboratory).....	2,210.00	.....	.....	.....	2,210.00
Surgical Research.....	1,321.09	.....	.....	\$1,321.09	.....
		102,651.63			
SLOANE HOSPITAL.....					
	40,498.22	40,498.22	.....	40,498.22	.....
VANDERBILT CLINIC.....					
	5,650.00	5,650.00	.....	5,650.00	.....
TEACHERS COLLEGE					
Salaries.....	361,460.00	361,460.00	.....	.....	361,460.00
EAST RIVER HOMES GIFT					
To be applied toward the work in Tuberculosis at the Medical School.....	11,000.00	11,000.00	.....	.....	11,000.00

Miscellaneous

RETIRING ALLOWANCES	60,515.71	60,515.71	7,452.05	4,000.00	49,063.66
WIDOWS' ALLOWANCES	20,060.00	20,060.00	3,200.00		16,860.00
ANNUITIES	2,678.65	2,678.65	2,678.65		
FELLOWSHIPS					
Adams (Ernest Kempton) Research.....	1,250.00			1,250.00	
Adams (Special).....	1,250.00			1,250.00	
Adams (Assistance for Fellowship).....	500.00			500.00	
Barnard (Physical Science).....	1,362.50			1,362.50	
Bridgham (Samuel W.) (Applied Science).....	1,092.46			1,092.46	
Cutting.....	1,200.00			1,200.00	
Du Pont.....	750.00				750.00
Garth (Political Economy).....	816.68			816.68	
Gilder (Political Science).....	1,800.00			1,800.00	
Goldschmidt (Chemistry).....	818.31			818.31	
Gottsberger.....	902.50			902.50	
Mitchell (William) (Letters or Science).....	500.00			500.00	
Perkins (Architecture).....	150.00				150.00
Proudfit (Letters).....	750.00			750.00	
Schermerhorn (F. Augustus) (Architecture).....	1,746.25			1,746.25	
Schiff (Political Science).....	750.00			750.00	
Trowbridge (Engineering).....	1,000.00			1,000.00	
University.....	9,000.00		9,000.00		
		25,638.70			
SCHOLARSHIPS					
Aldrich (James Herman) (College).....	250.00			250.00	
Alumni Association (College).....	1,000.00		1,000.00		
Alumni Competitive (College).....	1,000.00		1,000.00		
All American Cable Co.....	1,200.00				1,200.00
Beck (College).....	250.00		150.00	100.00	

	Expenditures	Depart- mental Totals	From General Income	From Income of Special Endowments	From Gifts and Receipts for Designated Purposes
Beck Prize (Law).....	\$ 400.00			\$ 400.00	
Benefactors' Fund for Student Aid.....	23,900.00		\$21,632.37	2,267.63	
Brooklyn (College).....	3,000.00			3,000.00	
Brooklyn (Barnard College).....	1,800.00		1,800.00		
Burgess (Annie P.) (College).....	250.00			250.00	
Burgess (Daniel M.) (College).....	250.00			250.00	
Butler (Richard).....	271.22			271.22	
Campbell (College).....	500.00		177.50	322.50	
Class of 1848 (College).....	500.00			500.00	
Class of 1885, School of Mines.....	527.97			527.97	
Class of 1892, Arts and Mines.....	390.00			390.00	
Class of 1896.....	600.00			600.00	
Collins (Perry McDonough) (College).....	31,000.00			31,000.00	
Curtis (University).....	960.00		960.00		
De Witt (George G.) (Law School).....	765.88			765.88	
Dunn (Gano) (Applied Science).....	350.00				\$350.00
Emergency Fund for Student Aid.....	6,200.00		2,700.00	3,500.00	
Faculty.....	4,240.00		4,240.00		
Hall (George Henry) (College).....	718.16			718.16	
Harper (College).....	500.00			500.00	
Hewitt (College).....	500.00			500.00	
Jones (John D.) (Pure Science).....	200.00				200.00
McClymonds (Louis K.) (College).....	1,300.00				1,300.00
Moffat (College).....	500.00		392.50	107.50	
Mutual Welfare League.....	500.00				500.00
New York State Scholarships.....	40,800.00				40,800.00
President's Scholarship.....	2,084.75		2,084.75		
Professors (Sons of).....	6,448.00		6,448.00		
Pulitzer Scholarship.....	12,570.00			12,570.00	

Pulitzer Scholars.....	10,000.00	.....	10,000.00	.....	300.00	.....
Saunders (Leslie M.) (College).....	300.00	.....	.....	.....	300.00	.....
Schermerhorn (College).....	1,250.00	.....	981.25	.....	268.75	.....
Society for Promotion of Religion and Learning.....	2,000.00	.....	2,000.00	.....	.....	.....
Stuart (College).....	500.00	.....	.....	.....	300.00	.....
Turner (Charles Wesley) (College).....	255.00	.....	.....	.....	255.00	.....
University.....	6,720.00	.....	6,720.00	.....	680.00	.....
Wheeler (John Visselier) College.....	680.00	.....	.....	.....	.....	.....
		167,430.98				
PRIZES AND MEDALS						
Alpha Kappa Psi Fraternity Prize.....	50.00	.....	.....	.....	.....	50.00
Brainard (Edward Sutliff).....	60.00	.....	.....	.....	60.00	.....
Butler (Nicholas Murray) Medals.....	25.00	.....	.....	.....	25.00	.....
Chandler Medal.....	442.46	.....	.....	.....	442.46	.....
Chandler Historical Prizes.....	654.36	.....	.....	.....	54.36	600.00
Columbia Hudson-Fulton Prizes.....	190.10	.....	.....	.....	190.10	.....
Convers Prize (Law).....	55.00	.....	.....	.....	55.00	.....
Curtis (George William) Medals.....	135.50	.....	.....	.....	135.50	.....
Darling (Edward A.) Prize.....	53.24	.....	.....	.....	53.24	.....
Deutscher Verein Prize.....	50.00	.....	.....	.....	50.00	.....
Earle Prize in Classics.....	65.14	.....	.....	.....	65.14	.....
Elsberg Prize.....	145.00	.....	.....	.....	145.00	.....
Green (Albert Asher) Prize.....	50.00	.....	.....	.....	50.00	.....
Illig Medals.....	250.00	.....	.....	.....	250.00	.....
Montgomery Prize.....	50.43	.....	.....	.....	50.43	.....
O'Neale (Jas. J. Jr.) Prize.....	50.00	.....	.....	.....	.....	50.00
Ordronaux Prize (Law).....	150.85	.....	.....	.....	150.85	.....
Phioloxian Prize.....	68.00	.....	.....	.....	68.00	.....
Pulitzer Prizes.....	15,949.00	.....	.....	.....	15,949.00	.....
Pulitzer Prizes (For Administration).....	2,000.00	.....	.....	.....	2,000.00	.....
Rolker (Charles M. Jr.) Prize.....	50.00	.....	.....	.....	50.00	.....
Toppan Prize.....	201.65	.....	.....	.....	201.65	.....
Van Amringe Mathematical Prize.....	252.38	.....	.....	.....	252.38	.....
Van Buren (John Dash, Jr.) Prize.....	274.80	.....	.....	.....	274.80	.....
		21,272.91				

	Expenditures	Departmental Totals	From General Income	From Income of Special Endowments	From Gifts and Receipts for Designated Purposes
FELLOWSHIPS, SCHOLARSHIPS, AND PRIZES AT THE MEDICAL SCHOOL					
Benefactors' Fund for Student Aid.....	\$9,700.00		\$9,469.99	\$230.01	
Blumenthal (George Jr.) Scholarships.....	700.00			700.00	
Devendorf (David M.) Scholarship.....	375.00			375.00	
Doughty (Francis E.) Scholarship.....	500.00			500.00	
Emergency Fund for Student Aid.....	2,500.00		2,500.00		
Faculty Scholarships.....	1,400.00		1,400.00		
Harsen Scholarships.....	1,566.63			1,566.63	
Hartley (Frank) Scholarship.....	220.61			220.61	
Huber (Francis) Scholarship.....	250.00			250.00	
Huber (Viola B.) Scholarship.....	250.00			250.00	
Jacobi (Abraham) Scholarship.....	1,000.00			1,000.00	
McAneny (Marjorie) Scholarship.....	250.00			250.00	
Meierhoff Prize.....	50.00			50.00	
Research Fellowships.....	2,400.00				\$2,400.00
Smith (Joseph Mather) Prize.....	166.35			166.35	
		\$21,328.59			
		\$4,140,593.25	\$2,918,899.61	\$394,050.96	\$827,642.68

EXPENSES—BUILDINGS AND GROUNDS

	Expenditures	Departmental Totals	From General Income	From Income of Special Endowments	From Gifts and Receipts for Designated Purposes
MORNINGSIDE HEIGHTS					
Salaries.....	\$15,500.00	.....	\$12,700.00	.....	\$2,800.00
Wages.....	109,250.00	.....	109,250.00	.....	.....
Care of Boat House.....	1,975.00	.....	1,975.00	.....	.....
Fuel.....	80,400.00	.....	80,400.00	.....	.....
Gas.....	3,000.00	.....	3,000.00	.....	.....
Maintenance of Buildings.....	39,572.00	.....	39,572.00	.....	.....
Supplies.....	20,000.00	.....	20,000.00	.....	.....
Water.....	7,000.00	.....	7,000.00	.....	.....
Telephone Service.....	17,500.00	.....	17,500.00	.....	.....
Maintenance of Residence Halls.....	108,250.00	.....	108,250.00	.....	.....
Maintenance of Journalism.....	13,397.00	.....	.....	\$13,397.00	.....
Public Ceremonies.....	1,500.00	.....	1,500.00	.....	.....
Summer Session: General Expense.....	14,000.00	.....	14,000.00	.....	.....
University Extension: Evening Attendants.....	1,350.00	.....	1,350.00	.....	.....
Urgent Repairs.....	17,940.00	.....	16,500.00	1,440.00	.....
Care of Jefferson Statue.....	76.94	.....	.....	76.94	.....
Care of Class of 1881 Flagpole.....	100.00	.....	.....	100.00	.....
Study of Building Program.....	398.72	.....	398.72	.....	.....
University Stadium.....	36,135.69	.....	.....	.....	36,135.69
		\$487,345.35			
MEDICAL SCHOOL					
Wages.....	43,284.00	.....	43,284.00	.....	.....
Fuel.....	27,434.66	.....	27,434.66	.....	.....
Gas.....	1,500.00	.....	1,500.00	.....	.....

	Expenditures	Departmental Totals	From General Income	From Income of Special Endowments	From Gifts and Receipts for Designated Purposes
Maintenance.....	\$5,224.00		\$5,224.00		
Supplies.....	5,186.00		5,186.00		
Water.....	2,665.00		2,665.00		
Urgent Repairs.....	4,840.00		4,840.00		
		\$90,133.66			
SPECIAL APPROPRIATIONS					
Gymnasium Exits—Urgent Repairs.....	5,376.29		5,376.29		
Restoration of the Organ.....	3,000.00		3,000.00		
Residence Halls—Equipment.....	7,725.00		7,725.00		
Renovation of Manor House—Baker Field.....	3,500.00		3,500.00		
Earl Hall—Repairs and Furnishings.....	195.45				\$195.45
Locker Room—Baker Field.....	3,500.00		3,500.00		
		23,296.74			
	124.85	124.85		\$124.85	
OTHER EXPENSES					
Galway Property.....					
		\$600,900.60	\$546,630.67	\$15,138.79	\$39,131.14

EXPENSES—LIBRARY

	Expenditures	Departmental Totals	From General Income	From Income of Special Endowments	From Gifts and Receipts for Designated Purposes
LIBRARY					
Salaries.....	\$73,921.00	\$73,921.00	\$73,921.00		
APPLIED SCIENCE READING ROOMS					
Salaries.....	5,226.08	5,226.08	5,226.08		
ARCHITECTURAL LIBRARY					
Salaries.....	349.92	349.92	349.92		
AVERY LIBRARY					
Salaries.....	7,340.00	7,340.00	7,340.00		
Purchase of Books.....	2,547.45	2,547.45		\$2,547.45	
BARNARD COLLEGE					
Salaries.....	2,400.00	2,400.00			\$2,400.00
BUSINESS (SCHOOL OF) READING ROOM					
Salaries.....	2,100.00	2,100.00	2,100.00		
CARPENTER LIBRARY					
Salaries.....	600.00	600.00	600.00		
COLLEGE STUDY					
Salaries.....	6,094.06	6,094.06	6,094.06		

	Expenditures	Departmental Totals	From General Income	From Income of Special Endowments	From Gifts and Receipts for Designated Purposes
JOURNALISM LIBRARY					
Salaries.....	\$5,981.78			\$5,981.78	
Books and Binding.....	1,494.57			1,493.32	\$1.25
Newspapers.....	133.64			133.64	
Incidentals.....	100.00			100.00	
		\$7,709.99			
Salaries.....	1,200.00	1,200.00	\$1,200.00		
KENT HALL READING ROOM					
LAW SCHOOL LIBRARY					
Salaries.....	11,853.19		11,553.19		300.00
Books and Binding.....	12,002.00			12,000.00	2.00
Special Appropriation for Purchase of Books and Binding.....	2,771.05			2,771.05	
		26,626.24			
MEDICAL SCHOOL LIBRARY					
Salaries.....	4,394.89		4,394.89		
Books and Binding.....	2,067.28		1,818.08	247.85	1.35
E. G. Janeway Library.....	1,932.39			1,932.39	
Purchase of Books.....	170.74			170.74	
		8,565.30			
PHILOSOPHY READING ROOMS					
Salaries.....	2,930.00	2,930.00	2,930.00		
PHYSICS LIBRARY					
Salaries.....	775.00	775.00	775.00		

SCHERMERHORN HALL READING ROOM						
Salaries.....	3,320.00	3,320.00	3,320.00			
BOOKS AND SERIALS.....	25,883.18	25,883.18	25,508.81	181.65	192.72	
BOOKS FOR COURSE IN CONTEMPORARY CIVILIZATION.....	500.00	500.00	347.27	152.73		
PURCHASES FROM SPECIAL FUNDS						
Art Professorship.....	180.72			180.72		
Barnard.....	5,161.35			5,161.35		
Cothel (Alexander).....	1,207.18			1,207.18		
Currier (Nathaniel).....	3,498.78			3,498.78		
Carpentier (J. S.).....	1,835.56			1,835.56		
Law Alumni.....	14.45			14.45		
Manners (Edwin).....	390.88			390.88		
Schurz (Carl).....	385.85			385.85		
Whelock (George G.).....	22.11			22.11		
		12,696.88				
PURCHASES FROM GIFTS						
American Law Reports.....	43.00					43.00
Butler Library—Furnishings.....	173.31					173.31
Currier (Nathaniel).....	4.40					4.40
Committee of Fifty.....	16.85					16.85
Crane (Charles R.).....	4.20					4.20
Griscom (Acton).....	1,000.00					1,000.00
Legislative Drafting.....	1,173.18					1,173.18
Loeb (James).....	301.80					301.80
Low (William G.).....	338.87					338.87
Montgomery (Robert H.).....	.92					.92
McCrea (N. F.).....	50.00					50.00
School of Business Books.....	654.12					654.12
		3,760.65				

	Expenditures	Depart- mental Totals	From General Income	From Income of Special Endowments	From Gifts and Receipts for Designated Purposes
EMERGENCIES.....	\$7,657.90	.....	\$5,850.00	.....	\$1,807.90
BINDING.....	9,278.98	.....	9,000.00	\$277.98	1.00
PRINTED CATALOGUE CARDS.....	1,669.06	.....	1,669.06	.....	.....
SUPPLIES.....	4,500.00	.....	4,500.00	.....	.....
		\$23,105.94			
		\$217,651.69	\$168,497.36	\$40,687.46	\$8,466.87

EXPENSES—BUSINESS ADMINISTRATION

	Expenditures	Departmental Totals	From General Income	From Income of Special Endowments	From Gifts and Receipts for Designated Purposes	From Principal of Special Endowments
Salaries.....	\$58,700.00		\$46,700.00		\$7,000.00	* \$5,000.00
Attorney's Office Expenses.....	1,500.00		1,500.00			
Extraordinary Legal Expenses.....	497.56		482.56	\$15.00		
Clerk's Office Sundries.....	1,617.09		1,617.09			
Treasurer's Office Sundries.....	1,000.00		1,000.00			
Auditing Accounts.....	5,000.00		5,000.00			
Special Corporation Expenses.....	3,185.00		3,185.00			
Office Rent.....	3,800.00		3,800.00			
Claremont Avenue Conduit—Franchise.....	164.60		164.60			
116th Street Tunnels—Franchises.....	539.59		539.59			
Insurance.....	23,934.21		23,934.21			
Interest on Temporary Loans.....	520.00		520.00			
Columbia Trust Co. Services.....	458.37			458.37		
New York Life Insurance & Trust Co. Services.....	50.26			50.26		
Chaplain's House (413 West 117th Street).....	579.60		579.60			
Dean's House (415 West 117th Street).....	579.60	1,159.20	579.60			
OFFICE OF THE BURSAR						
Clerical Assistance.....		23,100.00	23,100.00			
OFFICE OF THE PURCHASING AGENT.....		7,500.00	7,500.00			
		\$132,725.88	\$120,202.25	\$523.63	\$7,000.00	\$5,000.00
*Transferred to Litigation Accounts.....		3,750.00				3,750.00
		\$128,975.88	\$120,202.25	\$523.63	\$7,000.00	\$1,250.00

EXPENSES—ANNUITIES

	Expenditures	Depart- mental Totals	From General Income	From Income of Special Endowments	From Gifts and Receipts for Designated Purposes
John W. Burgess Fund.....	\$4,000.00	.....	.....	\$4,000.00	.....
Edward R. Carpenter Fund.....	2,700.00	.....	.....	2,700.00	.....
H. W. Carpenter Fund.....	7,500.00	.....	.....	7,500.00	.....
W. Bayard Cutting, Jr. Fellowship Fund.....	600.00	.....	.....	600.00	.....
Seidl Fund.....	660.00	.....	.....	660.00	.....
Waring Fund.....	5,500.00	.....	.....	5,500.00	.....
		\$20,960.00			
		\$20,960.00		\$20,960.00	

INTEREST ACCOUNT

INTEREST PAID;

On Columbia College Bonds.....	\$120,000.00	
On Ledoux Account.....	130.00	
On 503-11 Broadway	24,640.00	
	<u> </u>	\$144,770.00

DEDUCT INTEREST RECEIVED AS FOLLOWS:

503-11 Broadway.....	\$35,846.55	
620 Fifth Avenue.....	800.00	
George Crocker Research Fund.....	390.68	37,037.23
	<u> </u>	<u> </u>
		\$107,732.77
		<u> </u>

EXPENSES—SUMMARY

	Total	From General Income	From Income of Special Endowments	From Gifts and Receipts for Designated Purposes	From Principal of Special Endowments	From Allied Corporations
Educational Administration and Instruction	\$4,140,593.25	\$2,918,899.61	\$394,050.96	\$827,642.68		
Buildings and Grounds	600,900.60	546,630.67	15,138.79	39,131.14		
Library	217,651.69	168,497.36	40,687.46	8,466.87		
Business Administration	128,975.88	120,202.25	523.63	7,000.00	1,250.00	
Annuities	20,960.00		20,960.00			
Interest	144,770.00	144,770.00				
	\$5,253,851.42	\$3,898,999.89	\$471,360.84	\$882,240.69	\$1,250.00	
Transferred from Income of Special Endowments:		470,222.75				
Burgess (Annie P.)			3,168.25			
Carpentier (H. W.)			71,531.97			
Cheesman (T. M.)			1,200.00			
De Lamar (Joseph R.)			173,851.81			
Fire Insurance			2,000.00			
Harkness Funds			64,200.00			
Hepburn (A. Barton)			32,650.97			
Hoffman (Charles Frederick)			250.00			
Kennedy (John Stewart)			105,931.25			
Laugeloth (Jacob)			250.00			
Mower (Sara E.)			5,145.55			
Van Cortlandt (Robert B.)			9,992.95			
Webber (John)			50.00			
Transferred from Gifts and Receipts for Designated Purposes				704,153.65		704,153.65
	\$5,253,851.42	\$3,428,777.14	\$941,583.59	\$178,087.04	\$1,250.00	\$704,153.65

STUDENTS LOAN FUNDS

	Principal at June 30, 1921	Additions	Principal at June 30, 1922	Loans	Balance
Blumenthal (George) Jr.....	\$9,261.42	\$1,191.39	\$10,452.81	\$8,018.50	\$2,434.31
Class of 1879 School of Mines.....	3,785.16	79.65	3,864.81	1,979.90	1,884.91
Class of 1886.....	575.62	8.20	583.82	440.83	142.99
Class of 1887 School of Mines.....	8,222.97	107.78	8,330.75	4,647.58	3,683.17
Class of 1904.....	1,067.85	4.70	1,072.55	996.95	75.60
Class of 1908.....	.....	967.80	967.80	964.64	3.16
Class of 1910.....	.....	850.25	850.25	843.00	7.25
Collins (Perry McDonough).....	.....	4,286.17	4,286.17	4,286.17	.....
Kearney (Phil).....	1,908.46	26.43	1,934.89	2,064.13	.....
Law School.....	.....	.....	.....	.....	.....
Payne.....	81.36	.....	81.36	105.00	Dr. 23.64
Shoemaker (William Brock).....	2,441.81	110.63	2,552.44	2,447.00	108.44
Students.....	3,007.46	298.63	3,306.09	2,918.91	387.18
University Extension.....	11,038.32	1,650.51	12,688.83	12,145.91	542.92
	921.26	2,046.59	2,967.85	2,818.90	148.95
	\$42,314.69	\$11,628.73	\$53,943.42	\$44,677.42	\$9,266.00

LOANS TO STUDENTS

Special Funds, as above.....	\$44,677.42
General Funds (Special 1914-15 Loan Account).....	1,492.00
	46,169.42
Less Reserves.....	861.65
Net (See Page 376).....	\$45,304.77

BALANCE SHEET AT JUNE 30, 1922

ASSETS	General Funds	Special Endowments and Funds	Total
Cash at Banks and on Hand.....	\$ 27,258.77	\$ 71,265.20	\$ 98,523.97
Notes Receivable.....	27,871.06		27,871.06
Accounts Receivable:			
Sundry Debtors.....	\$ 102,789.12		
Accounts Receivable—Students, less Reserve.....	48,581.02		
Arrears of Rent (See Page 381)	12,272.75		
	<u>163,642.89</u>		<u>163,642.89</u>
Loans to Students less Reserve (See Page 375).....	1,333.69	43,971.08	45,304.77
Inventories of Materials and Supplies less Reserve	97,634.23		97,634.23
Rents Accrued—not due.....	111,390.15		111,390.15
Deferred Charges:			
Unexpired Insurance.....	8,920.05		
Miscellaneous.....	1,122.25	10,042.30	10,042.30
Joint Administrative Board Expenses—Deferred	13,608.75		13,608.75
Advances and Charges against Future Appropriations and Bequests, net.....	167,771.71		167,771.71
Advances on Account of Income of Special Endowments and Gifts (See Pages 388 and 396):			
Special Endowments.....	241,538.98		
Gifts.....	9,100.00	250,638.98	250,638.98
Securities Owned—Book Value less Reserve (See Page 423)	214,566.85	19,355,359.08	19,569,925.93
Investment of Contract Deposit—Book Value (See Contra \$29,500.00).....	29,474.40		29,474.40
Real Estate:			
University Land Buildings and Equip- ment—at Cost (See Page 430)	16,699,195.01		
Rental Properties:			
Upper and Lower Es- tates—at 1922 As- sessed Valuation	\$19,544,500.00		
Other Property at Book Values.....	3,267,258.09	22,811,758.09	39,510,953.10
Investment of Redemption Fund:			
Securities at Book Value (See Page 425)	1,296,845.01		
Cash at Bank (See Page 425).....	3,154.99	1,300,000.00	1,300,000.00
	<u>41,675,547.90</u>	<u>19,721,234.34</u>	<u>61,396,782.24</u>
Loans—Due from Special Endowments and Funds per contra	151,681.48		151,681.48
	<u>\$41,827,229.38</u>	<u>\$19,721,234.34</u>	<u>\$61,548,463.72</u>

BALANCE SHEET AT JUNE 30, 1922

LIABILITIES, FUNDS, RESERVES AND CAPITAL	General Funds	Special Endowments and Funds	Total
Accounts Payable.....	\$ 135,387.66		\$ 135,387.66
Deposits:			
Contract Deposit—(See Contra \$29,474.40) \$ 29,500.00			
Students Deposits.....	48,685.80		48,685.80
Payments Received in Advance:			
From Students—for Fees.....	41,996.74		
Prepaid Rentals—Rental Properties.....	17,761.36		
Miscellaneous.....	16.67	59,774.77	59,774.77
Accrued Interest:			
Mortgages Payable.....	7,588.54		
Columbia College Bonds.....	10,000.00	17,588.54	17,588.54
Reserves:			
Clearing Williamsbridge Site.....	3,000.00		
Stadium Site Expenses.....	3,813.60		
Contingent Items.....	1,000.00		
Requisitions Outstanding (Estimated):			
Vendors.....	\$77,386.33		
Interdepartmental.....	20,803.18	98,189.51	106,003.11
Deferred Income.....		1,500.00	1,500.00
Unexpended Income (See Page 388).....		340,928.22	340,928.22
Unexpended Gifts and Receipts for Designated Purposes (See Page 395).....		767,972.92	767,972.92
Mortgages—New York City Property:			
Loubat Fund Property.....	448,000.00		
Claremont Avenue Properties.....	862,500.00		
626 Fifth Avenue.....	352,000.00	1,662,500.00	1,662,500.00
Columbia College 4% Mortgage Bonds.....	3,000,000.00		3,000,000.00
Endowments and Funds:			
Special Endowments (See Page 457).....		18,405,208.30	18,405,208.30
Students Loan Endowments (See Page 375).....		53,943.42	53,943.42
Permanent—For Purchase of Land, Erection of Build- ings, Equipment, etc. (See Page 459).....	9,066,452.74		9,066,452.74
Capital Account (See Page 378).....	26,430,836.76		
Principal of Redemption Fund (See Page 425).....	1,300,000.00		27,730,836.76
	41,827,229.38	19,569,552.86	61,396,782.24
Loans due to General Funds per Contra.....		151,681.48	151,681.48
	<u>\$41,827,229.38</u>	<u>\$19,721,234.34</u>	<u>\$61,548,463.72</u>

CAPITAL ACCOUNT AS AT JUNE 30, 1922

Balance at July 1, 1921..... \$25,589,823.10

ADJUSTMENTS:

ADD:

Arrears of Rent less adjustments.....	\$ 12,268.17	
Accounts Receivable—previously written off, collected.....	1,147.33	
Sale of Old Material.....	125.00	
Alumni Fund for Deficit 1917-1918.....	454.14	
Transfer balance of Gift—Civil Engineering Testing Laboratory... .	3,557.70	
Increase in book value of Upper and Lower Estates based on 1922 assessed valuations.....	686,000.00	
Wages 1920-1921 unclaimed.....	437.80	
Old outstanding checks unclaimed written back.....	470.40	
Unexpended balance 1920-21 appropriation.....	207.00	
		<hr/>
Total additions.....	\$704,667.54	

DEDUCT:

Salaries of prior years less refunds.....	\$ 949.17	
Insurance premiums applicable to previous years (net) ..	3,373.01	
Retiring Allowances less refunds.....	10,747.79	
Extension Teaching Loan Fund.....	2,000.00	
Accounts Receivable written off.....	1,425.95	
Old outstanding check credited to capital—paid.....	14.00	
Gymnasium Locks.....	262.00	
Annuity Payments applicable to previous years.....	1,012.50	
Miscellaneous.....	500.00	20,284.42
		<hr/>
Net additions.....		684,383.12

Adjusted Balance at July 1, 1921..... \$26,274,206.22

ADD:

Excess of Income over Expenses for Maintenance for fiscal year ended June 30, 1922	156,630.54	
		<hr/>
Balance at June 30, 1922.....	\$26,430,836.76	
		<hr/> <hr/>

MEMBERS OF THE AMERICAN INSTITUTE OF ACCOUNTANTS

LINGLEY, BAIRD & DIXON
ACCOUNTANTS AND AUDITORS
NEW YORK AND LONDON

LONDON OFFICE
ELDON STREET HOUSE, ELDON STREET, E.C.2
CABLE ADDRESS "PROOF" LONDON

RICHARD T LINGLEY, C.P.A.
JOHN J BAIRD, C.A.
FRANK E DIXON, F.C.A.

CABLE ADDRESS "AUDITORS" NEW YORK

No. 120 Broadway, (EQUITABLE BUILDING)
New York October 11, 1922

C E R T I F I C A T E

We have examined the books and records of the Treasurer of Columbia University for the fiscal year ended June 30, 1922 and we are satisfied as to the general correctness of the accounts. The cash at Banks and on hand has been verified by us and the securities representing the invested endowments and funds have either been produced to us or verified by certificates received from the depositaries. The income receivable from invested endowments and funds and all other income shown by the books of the University has been duly accounted for and payments therefrom have been sufficiently vouched.

The securities owned are carried either at their purchase price or at the market value at the date of their acquisition by gift.

The Academic Properties, covering Land, Buildings and Equipment are carried in the accounts at cost. The properties known as The Upper and Lower Estates are carried at 1922 New York City Assessed Valuations. The other properties of the University, mainly rental properties, are carried either at cost or cost plus carrying charges, and in a few instances at nominal values. These valuations appear to us to be conservative. From the active rental properties, reserves for depreciation have been deducted.

On the basis stated above, WE HEREBY CERTIFY that the Balance Sheet submitted herewith is in accordance with the books, and in our opinion, fairly states the financial condition of the University at June 30, 1922.

Lingley, Baird & Dixon

Accountants and Auditors.

Payments by Allied Corporations

(1) Salaries Account Barnard College. Credited to the following Departments:

General University Administration.....	\$21,000.00	
Anthropology.....	2,000.00	
Botany.....	14,149.99	
Chemistry.....	15,000.00	
Economics.....	13,000.00	
English and Comparative Literature.....	32,300.00	
Geology.....	7,500.00	
Germanic Languages.....	8,500.00	
Greek and Latin.....	19,300.00	
History.....	14,000.00	
Mathematics.....	16,100.00	
Philosophy and Psychology.....	16,000.00	
Physical Education.....	14,200.00	
Physics.....	8,500.00	
Public Law and Jurisprudence.....	1,500.00	
Religion.....	1,400.00	
Romance Languages.....	19,400.00	
Zoology.....	14,200.00	
Library.....	2,400.00	
Business Administration.....	7,000.00	\$247,449.99

(2) Salaries Account Teachers College. Credited to the following Departments:

Food Chemistry.....	1,200.00	
Philosophy and Psychology.....	1,500.00	
Social Science.....	1,800.00	
Biological Chemistry.....	720.00	
Education and Practical Arts.....	361,460.00	366,680.00

(3) Harkness Fund. Credited to the following Departments:

Pathology.....	5,000.00	
Practice of Medicine.....	11,800.00	
Surgery.....	7,300.00	24,100.00

(4) Carnegie Endowment. Credited to the following:

Retiring Allowances.....	49,063.66	
Widows' Allowances.....	16,860.00	65,923.66

\$704,153.65

ARREARS OF RENT, JUNE 30th, 1922

UPPER ESTATE

39 West 49 Street.....	\$1,129.00	
62 West 51 Street.....	743.75	
	<u> </u>	\$1,872.75

LOWER ESTATE

239-243 Greenwich Street.....	1,500.00	
44-52 Park Place.....	8,800.00	
	<u> </u>	10,300.00

RENTAL PROPERTY

Williamsbridge.....		100.00
		<u> </u>
		<u><u>\$12,272.75*</u></u>

*This amount has been reduced since June 30th to \$1,500.00.

RECEIPTS AND DISBURSEMENTS OF INCOME OF SPECIAL ENDOWMENTS FOR THE YEAR ENDING
JUNE 30, 1922

	Debit Balances June 30, 1921	Credit Balances June 30, 1921	Received 1921-1922	Total Credits	Expended 1921-1922	Debit Balances June 30, 1922	Credit Balances June 30, 1922
Adams.....		\$ 637.38	\$ 2,100.00	\$ 2,737.38	\$ 3,000.00	\$ 262.62	\$ 25.00
Aldrich Scholarship.....		43.75	250.00	293.75	268.75		3.08
Alumni Federation of Columbia University.....			3.08	3.08			387.41
Anonymous for Church and Choral Music.....		195.95	5,191.46	5,387.41	5,000.00		9,592.57
Art Professorship.....		10,613.11	5,250.00	15,863.11	6,270.54		
Avery Architectural.....	\$34.09		2,300.00	2,265.91	2,547.45	281.54	
Baier.....					15.00	15.00	
Barker (Clarence) Musical Scholarship.....		695.28	1,395.34	2,090.62	4.37		2,086.25
Barnard Fellowship.....		2,511.31	500.00	3,011.31	1,362.50		1,648.81
Barnard Library.....	178.03		3,792.50	3,614.47	5,245.41	1,630.94	
Barnard (Margaret).....			812.50	812.50			
Beck Prize.....		377.36	400.00	772.36	400.00		377.36
Beck Scholarship.....		17.50	100.00	117.50	107.50		10.00
Beekman (Gerard).....		181.25	500.00	681.25	631.25		50.00
Beer Lecture.....		2,686.22	500.00	3,186.22	391.35		2,794.87
Bennett Prize.....		158.63	50.00	208.63			208.63
Bergh.....		6,415.88	5,000.00	11,415.88	6,038.25		5,377.63
Blumenthal.....		3,204.44	13,764.00	16,968.44	14,553.57		2,414.87
Bondy (Emil G.).....		12,126.57	5,000.00	17,126.57	7,787.68		9,338.89
Boring Fellowship.....			54.36	54.36			54.36
Brainard (Edward Suttif) Memorial.....		6.20	60.00	66.20	60.00		6.20
Bridgham Fellowship.....		518.62	1,100.00	1,618.62	1,092.46		526.16
Brunner Prize.....		151.48	62.35	213.83			213.83
Burgess (Annie P.).....			3,168.25	3,168.25	3,168.25		
Burgess (Annie P.) Scholarship.....		20.27	250.00	270.27	251.13		19.14
Burgess (Daniel M.) Scholarship.....		31.98	250.00	281.98	251.13		30.85

Burgess (John W.).....	3,949.15	3,949.15	4,021.85	72.70	98.11
Butler Scholarship.....	186.35	275.00	363.24	.....	201.30
Butler (N. M.) Medal.....	76.30	150.00	25.00	.....	30.00
Campbell Scholarship.....	52.50	300.00	322.50	.....	.....
Carpentier (E. R.).....	1,462.06	12,500.00	15,412.06	1,450.00	.....
Carpentier (H. W.).....	10,532.84	79,156.82	79,156.82	.....	3,659.96
Carpentier (J. S.).....	4,721.04	15,000.00	25,532.84	.....	4,532.13
Center Fund.....	1,523.35	9,000.00	13,721.04	.....	.....
Chamberlain (Joseph).....	208.65	7,500.00	5,976.65	323.35	.....
Chandler (C. F.).....	231.81	375.00	583.65	.....	141.19
Chanler Prize.....	155.56	55.00	286.81	.....	232.45
Chapel Music.....	700.00	52.50	208.06	.....	208.06
Cheesman (T. M.).....	87.50	500.00	1,200.00	.....	.....
Class of 1848 Scholarship.....	6.39	500.00	587.50	.....	50.00
Class of 1881 Arts and Mines.....	207.86	100.00	106.39	.....	6.39
Class of 1885 Mines.....	72.73	530.00	737.86	.....	54.80
Class of 1888 Arts and Mines.....	65.83	20.00	92.73	.....	92.73
Class of 1889 Medal.....	135.04	25.00	90.83	.....	90.83
Class of 1892 Arts and Mines.....	531.25	330.00	465.04	.....	75.04
Class of 1895 Arts and Mines.....	38.33	212.50	743.75	.....	743.75
Class of 1896 Arts and Mines.....	34.70	600.00	638.33	.....	38.33
Class of 1901 Decennial.....	54.79	70.00	104.70	.....	7.31
Collins (Perry McDonough).....	13,869.64	61.25	116.04	.....	116.04
Columbia Hudson-Fulton Prize.....	240.10	30,409.68	44,279.32	(*) 40,628.14	3,651.18
Columbia University Football Association.....	55.37	50.00	290.10	190.10	100.00
Convers Prize.....	763.15	295.28	295.28	(*) 295.28	.87
Cotheal.....	42,694.64	851.25	1,614.40	1,207.18	407.22
Crocker Research.....	139.61	67,314.77	110,009.41	(*) 71,858.16	38,151.25
Crosby Collection of Lantern Slides.....	1,906.30	85.00	224.61	68.50	156.11
Currier.....	261.94	2,500.00	593.70	3,498.78	.....
Curtis (Carlton C.).....	970.22	689.49	951.43	.....	951.43
Curtis Fellowship.....	262.72	500.00	1,420.22	.....	1,420.22
Curtis Medal.....	.....	65.00	327.72	135.50	192.22

	Debit Balances June 30, 1921	Credit Balances June 30, 1921	Received 1921-1922	Total Credits	Expended 1921-1922	Debit Balances June 30, 1922	Credit Balances June 30, 1922
Cutting.....		7,541.78		7,541.78	1,200.00		6,341.78
Cutting Jr. Fellowship.....			600.00	600.00	600.00		
Da Costa Professorship.....		734.46	4,330.00	5,064.46	6,112.37	1,047.91	
Darling Prize.....		77.13	53.50	130.63	53.24		77.39
Dean Luns.....		35,206.32	11,310.00	46,516.32	277.98		46,238.34
Deutscher Verein Prize.....		54.19	50.00	104.19	50.00		54.19
DeWitt Scholarship.....		134.53	765.09	899.62	823.92		75.70
Drisler Classical.....		1,126.73	537.50	1,664.23	526.69		1,137.54
Dyckman.....		1,044.75	525.00	1,569.75	516.20		1,053.55
Earle Prize.....		68.01	66.25	134.26	65.14		69.12
Eaton Professorship.....		1,510.48	5,000.00	6,510.48	6,000.00		510.48
Einstein.....		527.45	250.00	777.45			777.45
Elsberg.....		24.00	121.00	145.00	145.00		
Emmons Memorial.....		2,685.35	700.00	3,385.35			3,385.35
Ferguson Fellowship.....		134.72	451.37	586.09			586.09
Fire Arts Endowment.....		10,285.87	9,789.30	20,075.17	(^a) 20,075.17		
Fire Insurance.....			2,000.00	2,000.00	2,000.00		
Garth.....		992.88	825.00	1,817.88	816.68		1,001.20
Gebhard.....		175.00	1,000.00	1,175.00	1,075.00		100.00
Germanistic.....		942.92	700.00	1,642.92	1,567.92		75.00
German Lecture.....		115.66	62.50	178.16	62.54		115.62
Gilder.....		1,281.61	2,400.00	3,681.61	1,800.00		1,881.61
Goldschmidt Fellowship.....		366.93	825.00	1,191.93	818.31		373.62
Gottheil Lectureship.....		307.50	513.75	821.25	700.00		121.25
Gottsberger Fellowship.....		835.29	475.00	1,310.29	902.50		407.79
Green Prize.....		50.00	50.00	100.00	50.00		50.00
Hall Scholarship.....		125.67	718.16	843.83	718.16		125.67
Hamilton (Adelaide).....		202.73	50.00	252.73	152.73		100.00
Harriman.....			5,125.00	5,125.00	5,125.00		

	Debit Balances June 30, 1921	Credit Balances June 30, 1921	Received 1921-1922	Total Credits	Expended 1921-1922	Debit Balances June 30, 1922	Credit Balances June 30, 1922
Psychology.....		1,637.60	5,000.00	6,637.60	6,000.00		637.60
Pulitzer, for School of Journalism.....		11,543.23	56,139.86	67,683.09	67,812.43	129.34	
Pulitzer Prize.....		55,180.73	40,315.53	95,496.26	(18)38,106.76		57,389.50
Pulitzer Scholarship.....		7,224.78	14,104.34	21,329.12	16,570.00		4,759.12
Reisinger (Hugo).....		392.00	180.00	572.00	177.59		394.41
Rolker Prize.....		30.11	50.00	80.11	50.00		30.11
Sandham (Anna M.).....			235.62	235.62			235.62
Saunders Scholarship.....		52.50	300.00	352.50	300.00		52.50
Schermerhorn (F. Augustus) Fellowship.....		3,642.41	625.00	4,267.41	1,746.25		2,521.16
Schermerhorn Scholarship.....		43.75	250.00	293.75	268.75		25.00
Schiff.....		16,225.99	5,000.00	21,225.99	8,237.94		12,988.05
Schiff Fellowship.....		705.91	750.00	1,455.91	750.00		705.91
School of Dentistry.....	4,751.64		6,550.00	1,798.36	1,798.36		
Schurz Fellowship.....		386.27	500.00	886.27			886.27
Schurz Library.....		383.05	535.00	918.05	385.85		532.20
Seidl.....		60.00	600.00	660.00			
Shoemaker.....	419.57		500.00	80.43	(14) 433.86	353.43	
Social and Political Ethics Professorship.....		312.46	1,921.62	2,234.08	2,620.80		
Stokes Prize.....		757.64	1,000.00	1,757.64	563.87		1,193.77
Stuart Scholarship.....		52.50	300.00	352.50	300.00		52.50
Toppan Prize.....	13.10		210.00	196.90	201.65	4.75	
Trowbridge.....		2,542.04	500.00	3,042.04	1,000.00		2,042.04
Turner Scholarship.....		1,041.77	255.00	255.00	255.00		
Tyndall.....		81.07	255.00	336.07	252.38		1,616.77
Van Amringe.....			10,033.96	10,033.96	(15)10,033.96		
Van Cortlandt (Robert B.).....		1,290.28	250.00	1,540.28			1,540.28
Van Praag.....		250.00	2,500.00	2,750.00			
Waring (Mrs.).....		250.00	2,500.00	2,750.00			
Waring (Miss).....			2,750.00	2,750.00			

	Debit Balances June 30, 1921	Credit Balances June 30, 1921	Received 1921-1922	Total Credits	Expended 1921-1922	Debit Balances June 30, 1922	Credit Balances June 30, 1922
Smith Prize.....		331.14	175.00	506.14	166.35		339.79
Steers (James R.).....		450.00	450.00	900.00	900.00		
Stevens Prize.....		1,068.25	95.00	1,163.25			1,163.25
Swift Memorial.....		89.39	385.49	474.88	193.32		281.56
Vanderbilt Clinic.....			5,650.00	5,650.00	5,650.00		
Watson (Dr. William Perry).....			87.24	87.24			87.24
Weinstein Memorial.....		30.00	40.00	70.00	40.00		30.00
Wheelock.....	203.82		181.15	Dr. 22.67	22.11	44.78	
	\$193,373.12	\$387,665.97	\$920,143.84	\$1,114,436.69	\$1,015,047.45	\$241,538.98	\$340,928.22
Adjustment of Debit Balance							
Debit Balance	\$179,377.98						
Deduct: Adjustment July 1, 1921.....	45,597.95						
Balance June 30, 1922.....	\$133,780.03						
			Less Transfers.....		73,463.86		
					\$941,583.59		

NOTES

(1)	Transferred to Premium Account, Clarence Barker Fund.....	\$ 4.37
(2)	Transferred to Barnard Medal Fund.....	80.00
(4)	Transferred to Income Barnard Library Fund.....	812.50
(4)	Transferred to Principal George Blumenthal Endowment Fund.....	8,224.83
(6)	Transferred to Premium Account George Blumenthal Endowment Fund.	228.74
(8)	Transferred to Premium Account John W. Burgess Fund.....	21.85
(7)	Transferred to Principal Collins Loan Fund.....	4,286.17
(8)	Transferred to Investment C. U. Football Association Fund.....	295.28
(9)	Transferred to Principal Fine Arts Endowment Fund.....	20,075.17
(10)	Transferred to Premium Account Kennedy Fund.....	3,454.34
(11)	Transferred to Loubat Prize Fund.....	350.00
(12)	Transferred to President's Emergency Fund.....	20.00
(12)	Transferred to Pulitzer Fund for School of Journalism.....	20,157.76
(14)	Transferred to Principal Shoemaker Loan Fund.....	250.00
(16)	Transferred to Premium Account Van Cortlandt Fund	41.01
(16)	Transferred to Premium Account Special Investments..	768.63
(17)	Transferred to Principal Blumenthal Loan Fund.....	1,144.19
(18)	Transferred to University Land, Buildings and Equipment.....	7,787.68
(19)	Transferred to University Land, Buildings and Equipment.....	5,000.00
(20)	Transferred to Premium Account De Lamar Fund.....	461.29
		<hr/>
		<u>\$73,463.86</u>

**GIFTS AND RECEIPTS FOR DESIGNATED PURPOSES. RECEIPTS AND DISBURSEMENTS
FOR THE YEAR ENDING JUNE 30, 1922**

ACCOUNTS	Debit Balances, June 30, 1921	Credit Balances, June 30, 1921	Received 1921-1922	Total Credits	Expended 1921-1922	Debit Balances, June 30, 1922	Credit Balances, June 30, 1922
EDUCATIONAL ADMINISTRATION:							
Lectures.....		\$501.09		\$501.09			\$501.09
Alumni Fund Committee.....			\$454.14	454.14	(1) \$454.14		
President's Emergency Fund.....		6,304.06	20.00	6,324.06	6,101.30		222.76
Columbia Alumni Fund—Fales Gift.....			1,000.00	1,000.00			1,000.00
Columbia University War Hospital.....		2,944.60		2,944.60			2,944.60
Seligman (Isaac N.) Bequest.....		3,909.85		3,909.85			3,909.85
Columbia Service Bureau in Paris.....		475.60	11.28	486.88			486.88
American Council on Education.....			200.00	200.00	200.00		
State Aid to Blind Pupils.....		343.45	600.00	943.45	900.00		43.45
State Aid to Deaf Pupils.....		6.00		6.00			6.00
British Peru Expedition.....			900.00	900.00	900.00		
Alumni Federation.....			7,500.00	7,500.00	5,000.00		2,500.00
COLUMBIA HOUSE:							
Maintenance.....	\$227.84		300.00	72.16			72.16
Anonymous Gift for Americanization Work.....		200.00		200.00	200.00		
MAISON FRANCAISE:							
Maintenance.....		346.34		346.34	346.34		
INTERNATIONAL RELATIONS:							
Queen Wilhelmina Lectureship Gift.....		1,000.00	500.00	1,500.00	2,500.00	\$1,000.00	

DEPARTMENTAL:									
Anthropology: Research among Indians of British Columbia.....	961.78	.....	961.78	115.67	.....	846.11			
Astronomy: C. W. Bruce Fund.....	4,773.37	174.24	4,947.61	.....	.....	4,947.61			
Barnard College Salaries.....	500.00	500.00	1,500.00	500.00	.....	.....	
Chemistry: Borden's Condensed Milk Co. Gift for Research.....	9,718.15	14,000.00	23,718.15	11,032.01	.....	12,686.14			
Chemistry: Library Gift.....	.....	10.00	10.00	.....	.....	10.00			
Chemical Engineering: Consolidated Gas Co. Gift.....	750.00	.....	750.00	750.00	.....	.....	
Chinese Printing Equipment.....	2,464.53	.....	2,464.53	.....	.....	2,464.53			
Civil Engineering: Fire Testing Station.....	486.23	705.00	1,191.23	291.96	.....	899.27			
Civil Engineering: Testing Laboratory.....	3,557.70	.....	3,557.70	(4) 3,557.70	.....	.....	
History: Morrow Gift.....	5,000.00	5,000.00	5,000.00	.....	.....	5,000.00			
Indo-Iranian Languages: Publications.....	1,000.00	.....	1,000.00	.....	.....	1,000.00			
Indo-Iranian Languages: Salaries.....	.....	500.00	500.00	500.00	.....	.....	
Law School: Class of 1914 Law, for Medical Aid to Law Students.....	75.00	.....	75.00	.....	.....	75.00			
Law School: Richard H. Troy Gift.....	.....	3.00	3.00	(12) 3.00	.....	.....	
Mathematics: Promotion of Honor Work.....	99.78	.....	99.78	.....	.....	99.78			
Metallurgical Research Laboratory Equipment.....	2,716.67	422.15	3,138.82	138.96	.....	2,999.86			
Metallurgy: Sale of Furnaces.....	400.00	.....	400.00	400.00	.....	.....	
Miami Copper Co. Gift.....	1,284.53	.....	1,284.53	1,036.16	.....	248.37			
Ore Dressing Laboratory Gift.....	913.00	5.00	918.00	4.34	.....	913.66			
Music: Anonymous Gift for Choir.....	280.97	.....	280.97	.....	.....	280.97			
Philosophy: Medieval: Salaries.....	.....	1,000.00	1,000.00	1,000.00	.....	.....	
Physics: Experimental: Marcellus Hartley Research Laboratory.....	3,020.37	2,000.00	5,020.37	3,594.67	.....	1,425.70			
Physics: Research.....	2,791.70	.....	2,791.70	99.90	.....	2,691.80			
Physics: E. K. Adams Precision Laboratory.....	20.56	.....	20.56	20.56	.....	.....	

ACCOUNTS	Debit Balances, June 30, 1921	Credit Balances, June 30, 1921	Received 1921-1922	Total Credits	Expended 1921-1922	Debit Balances, June 30, 1922	Credit Balances, June 30, 1922
Poland, Government of: Gift.....		\$40.00	\$1,000.00	\$1,040.00	\$1,040.00		
Public Law and Jurisprudence: Legis- lative Drafting Research Fund.....		4,457.31	7,500.00	11,957.31	(^a) 9,305.51		\$2,651.80
Religion: Chaplain's Assistant: Gift.		10.00	500.00	510.00	400.00		110.00
Chapel Hymn Book.....		2,337.12		2,337.12	2,337.12		
Romance Languages: Appropriation for Lectures.....		40.00		40.00			40.00
School of Mines Engineering and Chemistry Gift.....		190.00		190.00			190.00
Semitic Languages: American School of Oriental Research in Jerusalem.			25.00	25.00	25.00		
Semitic Languages: Salaries.....			300.00	300.00	300.00		
Stanoyevicky Gift.....		3.90		3.90			3.90
Social Science: Departmental.....			250.00	250.00	250.00		
Social Science: Salaries.....	\$1,000.00			Dr. 1,000.00	1,000.00	\$2,000.00	
Social Science: Humane Education..		4,000.00		4,000.00			4,000.00
Zoology: Naples Zoological Station..		500.00		500.00			500.00
UNIVERSITY EXTENSION:							
Department of Agriculture.....		543.89	300.00	843.89	449.91		393.98
School of Business: Anonymous.....		3,500.00		3,500.00	500.00		3,000.00
School of Business: For Business Li- brary.....							
School of Business: Robert H. Mont- gomery Gift.....		354.12		354.12	354.12		
MEDICAL SCHOOL:							
General Support of the Medical School		294.54	1,722.80	2,017.34	1,300.00		717.34
Bacteriology: Interdepartmental		210.00	135.00	345.00			345.00
Social Hygiene.....		93.78		93.78	93.78		

Biological Chemistry: Biochemical Research Fund.....	2,299.85	2,500.00	4,799.85	2,240.00	.....	2,559.85
Biological Chemistry: Clerical Assistance.....	.....	300.00	300.00	120.00	.....	180.00
Biological Chemistry: Special Printing.....	.....	50.00	533.50	.....	.....	533.50
Oto-Laryngological Gift.....	483.50	.....	50.00	.....	.....	50.00
Pathology: Commonwealth Gift.....	50.00	.....	.....	.....	.....	.....
Pharmacology: Special Instrument Fund.....	498.10	4,000.00	4,498.10	3,832.99	.....	665.11
Physiology: Lee Gift.....	1,155.64	.....	1,155.64	1,146.50	.....	9.14
Surgery: Research Laboratory Assistance.....	247.35	.....	247.35	.....	.....	247.35
Surgery: Mackay Fund for Surgical Research.....	.....	500.00	500.00	500.00	.....	.....
Vanderbilt Clinic: East River Homes Gift.....	963.66	6,000.00	6,963.66	12,963.66	6,000.00	.....
Vanderbilt Clinic: Salaries.....	.....	11,000.00	11,000.00	11,000.00	.....	.....
	.....	2,800.00	2,800.00	2,800.00	.....	.....
FELLOWSHIPS, SCHOLARSHIPS AND PRIZES:						
Apter (Abram) Memorial Prize.....	.....	100.00	100.00	100.00	.....	100.00
All America Cables Scholarships.....	.....	1,200.00	1,206.00	1,200.00	.....	6.00
Alumni Association Prize.....	100.00	.....	.....	.....	100.00	.....
Alpha Kappa Psi Fraternity Prize.....	.....	100.00	100.00	50.00	.....	50.00
Bakelite Research Fellowship.....	1,000.00	.....	1,000.00	.....	.....	1,000.00
Barnard Medal.....	.....	80.00	80.00	.....	.....	80.00
Chanler Historical Prize.....	.....	600.00	600.00	600.00	.....	.....
DuPont Fellowship.....	.....	1,500.00	1,500.00	750.00	.....	750.00
Barzkowski Research Fellowship.....	.....	.....	.....	.....	.....	.....
Chemical Engineering.....	1,200.00	.....	1,200.00	.....	.....	1,200.00
Industrial Research Fellowship.....	.....	.....	.....	.....	.....	.....
Chemical Engineering.....	414.83	.....	414.83	.....	.....	414.83
Dunn, (Gano) Scholarship.....	150.00	500.00	350.00	350.00	.....	.....
Jones Scholarship.....	.....	200.00	400.00	200.00	.....	200.00
Loubat Prizes.....	5,091.82	350.00	5,441.82	.....	.....	5,441.82

FELLOWSHIPS, SCHOLARSHIPS AND PRIZES:

ACCOUNTS	Debit Balances, June 30, 1921	Credit Balances, June 30, 1921	Received 1921-1922	Total Credits	Expended 1921-1922	Debit Balances, June 30, 1922	Credit Balances, June 30, 1922
McClymonds Scholarship.....		\$101.25	\$1,300.00	\$1,401.25	\$1,300.00		\$101.25
Mutual Welfare League.....			500.00	500.00	500.00		
Meierhoff Memorial Prize.....		1,000.00		1,000.00	(7) 1,000.00		
New York Diocesan Fellowship.....		250.00		250.00			250.00
New York State Scholarships.....		50.00	40,800.00	40,850.00	40,800.00		50.00
O'Neale (Jr.) Prize.....		50.00		50.00	50.00		
Perkins Fellowship.....			950.00	950.00	150.00		800.00
Research Fellowship in Physiology.....		1,000.00		1,000.00			1,000.00
Research Fellowship in Medicine.....		2,541.68		2,541.68	2,400.00		141.68
Sackett Scholarship.....			300.00	300.00			300.00
Special Alumni Association Scholar- ships.....							
Special Scholarships.....		6.25		6.25			6.25
Special University Scholarship in History.....		52.00		52.00			52.00
		150.00		150.00			150.00
BUILDINGS AND GROUNDS:							
Medical and Surgical Equipment Fund.....	\$36.00		1,377.42	1,341.42	1,109.38		232.04
Baker Gift for Baker Field.....			646,940.59	646,940.59	(8) 646,940.59		
Gift for Stadium.....		176.12	2.40	178.52			178.52
School of Business Building Construc- tion Fund.....		439,244.83	28,938.93	468,183.76			468,183.76
Van Amringe Memorial.....		1,277.96		1,277.96	(6) 700.00		577.96
Barnard Memorial Windows.....		4,700.00		4,700.00			4,700.00
Schermerhorn Gift.....			248,291.28	248,291.28	(8) 49,805.32		198,485.96
Earl Hall Furnishings.....			1,100.00	1,100.00	195.45		904.55

Class of '97 Boathouse.....	8,000.00	(2) 7,201.24	798.76
Trophy Room Furniture.....	980.00	(11) 980.00	10.00
University Hall Fund Gift.....	10.00		
LIBRARY:			
Purchase of Books and Serials.....	200.67	192.72	7.95
Butler Library Furnishings.....	275.00	173.31	101.69
American Law Reports Fund.....	225.46	43.00	182.46
Committee of Fifty Fund.....	237.24	16.85	220.39
Comparative Literature Dramatic Museum.....	198.00		267.25
Crane (Chas. R.) Fund.....	16.01	4.20	11.81
Currier: Sale of Books.....	4.40	4.40	
Emergency Fund.....	1,879.56	1,807.90	150.04
Griscom Gift.....	1,010.00	1,000.00	10.00
Janeway Gift.....	182.00		182.00
Journalism Library: Books and Bind- ings.....	1.25	1.25	
Loeb (James) Fund.....	175.00	301.80	197.11
Law Library Association.....	200.00		200.00
Low (William G.) Fund.....	250.00	338.87	219.47
McCrea (F. N.) Gift.....	50.00	50.00	
Medical School Library Gift.....	10.00		10.00
Medical School Library: Books and Bindings.....	1.35	1.35	
Law Library Books and Bindings.....	300.00	303.00	
Library: Legislative Drafting Fund.....	2,000.00	1,160.97	839.03
Montgomery (Robert H.) Gift for Purchase of Books for the Library.....	234.93	(10) 223.72	11.21
Shakespeare Class of 1893.....	65.69		65.69

ACCOUNTS	Debit Balances, June 30, 1921	Credit Balances, June 30, 1921	Received 1921-1922	Total Credits	Expended 1921-1922	Debit Balances, June 30, 1922	Credit Balances, June 30, 1922
Anonymous Gift for Current Needs...		15,512.19		15,512.19	1,805.52		13,706.67
Chandler Museum.....		702.21		702.21			702.21
Crane Gift for Lectures in Summer Session.....		200.00		200.00			200.00
Flagler Gift for University Orchestra.		50.00		50.00			50.00
	\$1,513.84	\$550,416.70	\$1,065,286.20	\$1,614,189.06	\$855,316.14	\$9,100.00	\$767,972.92
			Less transfers.....		677,229.10		
					\$178,087.04		

NOTES

	\$
(1) To Capital Account.....	454.14
(2) To University Land Buildings and Equipment.....	7,201.24
(3) To University Land Buildings and Equipment.....	610,804.90
(4) To General Income.....	3,557.70
(5) To University Land Buildings and Equipment.....	700.00
(6) To Law Library.....	2,000.00
(7) To Principal Meierhof Fund.....	1,000.00
(8) To University Land Buildings and Equipment.....	49,805.32
(9) To Montgomery Gift.....	500.00
(10) To School of Business Gift.....	222.80
(11) To University Land Buildings and Equipment.....	980.00
(12) To General Income.....	3.00
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	\$677,229.10
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**SECURITIES OWNED FOR ACCOUNT OF SPECIAL ENDOWMENTS, GENERAL ENDOWMENTS
AND DESIGNATED FUNDS**

	At June 30, 1921	Increase 1921-1922	Decrease 1921-1922	At June 30, 1922
Bonds				
SCHEDULE I—RAILROAD				
\$100,000 Atchison, Topeka & Santa Fé Ry. Co.'s California Arizona Lines 4½ per cent First and Refunding 50 Year Gold Bonds, due 1962.	\$ 98,500.00			\$ 98,500.00
33,000 Atchison, Topeka & Santa Fé Ry. Co.'s 4 per cent 100 Year Adjustment Bonds, due 1995.	26,215.00			26,215.00
57,000 Atchison, Topeka & Santa Fé Ry. Co.'s 4 per cent General Mortgage 100 Year Bonds, due 1995.	46,351.25			46,351.25
30,000 Atlantic Coast Line R. R. Co.'s 4 per cent First Consolidated 50 Year Mortgage Bonds, due 1952.	27,475.00			27,475.00
10,000 Augusta-Aiken Ry. & Electric Corp.'s 5 per cent Sinking Fund Bonds, due 1935.	6,000.00			6,000.00
1,500 Augusta-Aiken Ry. & Electric Corp.'s 5 per cent Gold Coupon Notes, due 1924.	1,500.00			1,500.00
23,000 Baltimore & Ohio R. R. Co.'s 3½ per cent Prior Lien Bonds, due 1925.	21,307.50			21,307.50
2,000 Baltimore & Ohio R. R. Co.'s 4 per cent First Mortgage 50 Year Bonds, due 1948.	2,000.00			2,000.00
50,000 Baltimore & Ohio R. R. Co.'s 4 per cent Refunding Mortgage Bonds, due 1941 (Pittsburgh, Lake Erie & West Virginia System).	44,687.50			44,687.50

3,000 Baltimore & Ohio R. R. Co.'s 5 per cent Refunding & General Mortgage Bonds, Series A, due 1995.....	1,882.50			1,882.50
50,000 Baltimore & Ohio R. R. Co.'s 6 per cent Equipment Trust Gold Notes, due 1933.....		50,811.25		50,811.25
25,000 Baltimore & Ohio R. R. Co.'s 6 per cent Equipment Trust Gold Notes, due 1934.....		25,438.46		25,438.46
25,000 Baltimore & Ohio R. R. Co.'s 6 per cent Equipment Trust Gold Notes, due 1935.....		25,468.93		25,468.93
4,000 Belleville & Carondelet R. R. Co.'s 6 per cent First Mortgage Bonds, due 1923.....	3,571.80			3,571.80
18,000 Buffalo, Rochester & Pittsburgh R. R. Co.'s 5 per cent General Mortgage Bonds, due 1937.....	17,940.32			17,940.32
127,000 Central Pacific Ry. Co.'s 4 per cent First Refunding Mortgage Bonds, due 1949.....	106,932.50			106,932.50
2,000 Central R. R. Co. of New Jersey 5 per cent 100 Year General Mortgage Bond, due 1987.....	1,945.00			1,945.00
26,000 Central R. R. Co. of New Jersey 5 per cent Consolidated Mortgage Bonds, due 1987.....	27,318.57		19.98	27,298.59
1,000 Chesapeake & Ohio R. R. Co.'s 5 per cent First Mortgage Bonds, due 1940 (Craig Valley Branch).....	1,000.00			1,000.00
50,000 Chesapeake & Ohio R. R. Co.'s 4½ per cent General Mortgage Bonds, due 1992.....	53,673.41		51.74	53,621.67
1,000 Chesapeake & Ohio R. R. Co. 5 per cent First Consolidated Mortgage Bonds, due 1939.....	878.75			878.75
10,000 Chesapeake & Ohio R. R. Co.'s 4 per cent First Consolidated Mortgage Bonds, due 1989 (Richmond & Allegheny Division).....	10,000.00			10,000.00
250,000 Chicago & Northwestern Ry. Co.'s 5 per cent Sinking Fund Debenture Bonds, due 1933.....	250,000.00			250,000.00
12,000 Chicago & Northwestern Ry. Co.'s 4 per cent Extension Bonds, due 1926.....	11,685.00			11,685.00

	At June 30, 1921	Increase 1921-1922	Decrease 1921-1922	At June 30, 1922
1,000 Chicago & Northwestern Ry. Co.'s 5 per cent General Mortgage Gold Bonds, due 1987.....	\$1,048.75			\$1,048.75
10,000 Chicago & Northwestern Ry. Co.'s 6½ per cent 15 Year Secured Gold Notes, due 1936.....	9,925.00			9,925.00
50,000 Chicago, Milwaukee & Puget Sound Ry. Co.'s 4 per cent First Mortgage Bonds, Series A, due 1949.....	48,059.92			48,059.92
50,000 Chicago, Milwaukee & St. Paul Ry. Co.'s 4 per cent 25 Year Gold Bonds, due 1934.....	46,040.00			46,040.00
2,000 Chicago, Milwaukee & St. Paul Ry. Co.'s 4 per cent General Mortgage Gold Bonds, due 1989.....	1,200.00			1,200.00
1,000 Chicago, Milwaukee & St. Paul Ry. Co.'s 5 per cent General Refunding Mortgage Conv. Gold Bonds, due 2014.....	967.50			967.50
67,000 Chicago, Rock Island & Pacific Railroad Co.'s 4 per cent General Mortgage Gold Bonds, due 1988.....	53,668.75			53,668.75
50,000 Cincinnati, Indianapolis, St. Louis & Chi- cago Railway Co.'s 4 per cent 50 Year General First Mortgage Bonds, due 1936.....	48,000.00			48,000.00
1,000 Cincinnati, Indianapolis & Western Rail- road Co.'s 5 per cent 50 Year First Mortgage Gold Bonds, due 1965.....	800.00			800.00
2,000 Cleveland, Columbus, Cincinnati & Indian- apolis Ry. Co.'s 6 per cent General Mortgage Cons. Gold Bonds, due 1934.....	1,900.00			1,900.00
50,000 Cleveland & Mahoning Valley Ry. Co.'s 5 per cent 50 Year Gold Bonds, due 1938.....	50,000.00			50,000.00

6,000 Columbus & Toledo Railroad Co.'s 4 per cent First Mortgage Sinking Fund Bonds, due 1955.....	4,515.00				4,515.00
30,000 Denver & Rio Grande Railroad Co.'s 4 per cent First Consolidated Mortgage Gold Bonds, due 1936.....	30,000.00				30,000.00
15,000 Des Moines & Fort Dodge Railroad Co.'s 4 per cent 30 Year First Mortgage Gold Bonds, due 1935.....	15,000.00				15,000.00
100,000 Des Plaines Valley Railroad Co.'s 4½ per cent First Mortgage Gold Bonds, due 1947 (Guaranteed by Chicago & Northwestern Ry. Co.).....	100,000.00				100,000.00
85,000 Duluth & Iron Range Ry. Co.'s 5 per cent First Mortgage Bonds, due 1937.....	85,188.23			11.77	85,176.46
6,000 Georgia Pacific Railroad Co.'s 6 per cent First Mortgage Bonds, due 1922.....	6,073.75			6,073.75	
10,000 Grand Trunk Railway Co.'s 6½ per cent Equipment Trust Certificates, due 1936.....	9,515.00				9,515.00
35,000 Grand Trunk Railway Co.'s 7 per cent 20 Year Debenture Bonds, due 1940.....	35,262.24			13.81	35,248.43
100,000 Great Northern Ry. Co.'s 5½ per cent General Mortgage Gold Bonds, Series B, due 1952.			96,425.00		96,425.00
24,000 Illinois Central Railroad Co.'s 4 per cent Gold Bonds, due 1953.....	21,950.67				21,950.67
25,000 Illinois Central Railroad Co.'s 7 per cent Bonds, due 1933.....	26,342.32			111.87	26,230.45
22,000 Illinois Central Railroad Co.'s 7 per cent Bonds, Series F, due 1935.....	22,396.00			99.00	22,297.00
2,000 International Great Northern Railroad Co.'s 7 per cent Purchase Money First Mortgage Gold Bonds, due 1922.....			1,905.00		1,905.00

	At June 30, 1921	Increase 1921-1922	Decrease 1921-1922	At June 30, 1922
25,000 Kansas City, Fort Scott and Memphis Railroad Co.'s 6 per cent Consolidated Mortgage Bonds, due 1928.....	\$26,499.31		\$214.19	\$26,285.12
7,000 Lake Erie & Western Railroad Co.'s 5 per cent First Mortgage 50 Year Gold Bonds, due 1937.....	5,600.00			5,600.00
28,000 Lehigh Valley Railroad Co.'s 4½ per cent First Mortgage Bonds, due 1940.....	28,000.00			28,000.00
9,000 Lehigh Valley Railroad Co.'s 4 per cent General Consolidated Mortgage Gold Bonds, due 2003.....	2,352.00			2,352.00
10,000 Lehigh Valley Terminal Ry. Co.'s 5 per cent First Mortgage Gold Bonds, due 1941.....	10,000.00			10,000.00
25,000 Louisville & Nashville Railroad Co.'s 6½ per cent Equipment Trust Certificates, due 1933.....	25,158.07		13.18	25,144.89
52,000 Louisville & Nashville Railroad Co.'s 7 per cent Bonds, due 1930.....	52,989.21		109.91	52,879.30
225,000 Michigan Central Railroad Co.'s 5 per cent First Mortgage Gold Bonds, due 1931 (Detroit & Bay City Division).....	225,000.00			225,000.00
2,000 Minneapolis & St. Louis Railroad Co.'s 4 per cent First Refundin? Mortgage Gold Bonds, due 1949.....	850.00			850.00
3,000 Missouri Pacific Railroad Co.'s 5 per cent First and Refunding Gold Bonds, due 1965.....	2,685.00			2,685.00
100,000 Missouri Pacific Railroad Co.'s 6 per cent Equipment Trust Notes, due 1934 and 1935.....		\$101,380.64		101,380.64
100,000 Montana Central Railroad Co.'s 6 per cent First Mortgage Bonds, due 1937.....	119,333.36		1,208.33	118,125.03

107,000 Nashville, Chattanooga & St. Louis Ry. Co.'s 5 per cent First Consolidated Mortgage Gold Bonds, due 1928.	106,345.00			106,345.00
50,000 New Orleans, Texas & New Mexico Railroad Co.'s 6 per cent First Mortgage Bonds, due 1925.	47,293.75			47,293.75
50,000 New Jersey Junction Railroad Co.'s 4 per cent First Mortgage Bonds, due 1986.	39,494.45			39,494.45
3,000 New York Central & Hudson River Railroad Co.'s 6 per cent Conv. Debenture Bonds, due 1935.	2,805.00			2,805.00
25,000 New York Central Railroad Co.'s 7 per cent Equipment Trust Gold Bonds, due 1933.	24,875.00			24,875.00
36,000 New York Central & Hudson River Railroad Co.'s 3½ per cent First Mortgage Bonds, due 1997.	32,940.00			32,940.00
3,000 New York, Chicago & St. Louis Railroad Co.'s 4 per cent First Mortgage Gold Bonds, due 1937.	2,265.00			2,265.00
1,000 New York, Lackawanna & Western Ry. Co.'s 5 per cent Construction Mortgage Bonds, due 1923.	955.00			955.00
50,000 New York, New Haven & Hartford Railroad Co.'s 6 per cent Conv. Debenture Bonds, due 1948.	50,000.00			50,000.00
10,000 New York, Ontario & Western Railroad Co.'s 4 per cent Refunding Mortgage Gold Bonds, due 1992.	10,000.00			10,000.00
1,000 New York, Susquehanna & Western Railroad Co.'s 5 per cent First Mortgage Gold Refunding Bonds, due 1937.	500.00			500.00
50,000 Norfolk & Western Railroad Co.'s 4 per cent Divisional First Lien and General Mortgage Gold Bonds, due 1944.	46,222.50			46,222.50

	At June 30, 1921		Increase 1921-1922	Decrease 1921-1922	At June 30, 1922
13,000 Norfolk & Western Railway Co.'s 4 per cent First Consolidated Mortgage Gold Bonds, due 1996.....	\$12,632.50				\$12,632.50
5,000 Norfolk Terminal & Transportation Co.'s 5 per cent Terminal First Mortgage Gold Bonds, due 1948.....	5,092.45			\$3.43	5,089.02
413,000 Northern Pacific Great Northern (C. B. & Q. Coll.) 6½ per cent Joint Bonds, due 1936..	350,295.00				350,295.00
590,000 Northern Pacific Railway Co.'s 3 per cent General Lien Ry. Land Grant Gold Bonds, due 2047.....	421,111.67				421,111.67
137,000 Northern Pacific Railway Co.'s 4 per cent Prior Lien Railway Land Grant Gold Bonds, due 1997.....	135,789.56		9.14		135,780.42
25,000 Northern Pacific Railway Co.'s 7 per cent Railway Equipment Bonds, due 1929.....	25,000.00				25,000.00
50,000 Oregon & California Railroad Co.'s 5 per cent First Mortgage Gold Bonds, due 1927....	45,077.50				45,077.50
50,000 Oregon Short Line Railroad Co.'s 5 per cent Consolidated First Mortgage Gold Bonds, due 1946.....	54,897.83			195.92	54,701.91
75,000 Pennsylvania Railroad Co.'s 5 per cent General Mortgage Gold Bonds, Series B, due 1968.....	41,437.50		\$24,968.75		66,406.25
5,000 Pennsylvania Railroad Co.'s 4½ per cent General Mortgage Bonds, Series A, due 1965..	4,456.25				4,456.25
50,000 Pennsylvania Railroad Co.'s 7 per cent Secured Gold Bonds, due 1930.....	50,958.64			113.46	50,845.18
30,000 Pennsylvania Railroad Co.'s 6½ per cent Secured Gold Bonds, due 1936.....	29,750.00				29,750.00

1,000 Pennsylvania Railroad Co.'s 4½ per cent First Mortgage Bonds, due 1921.....	960.00	960.00		
8,000 Peoria & Eastern Railway Co.'s 4 per cent Mortgage Non-Cumulative Income Bonds, due 1990.....	1,440.00	1,440.00		
20,000 Pittsburgh & Lake Erie Railroad Co.'s 6½ per cent Equipment Trust Certificates, due 1933.....	19,572.00	19,572.00		19,572.00
37,000 Reading Co. & Philadelphia & Reading Coal & Iron Co.'s 4 per cent General Mortgage Gold Bonds, due 1997.....	30,549.45	30,549.45		30,549.45
2,000 Rome, Watertown & Ogdensburg Railroad Co.'s 5 per cent First Consolidated Conv. Mortgage Bonds, due 1922.....	1,900.00	1,900.00		1,900.00
5,000 St. Louis & San Francisco Ry. Co.'s 5 per cent General Mortgage Bonds, due 1931.....	4,600.00	4,600.00		4,600.00
13,000 St. Louis, Iron Mountain & Southern Ry. Co.'s 4 per cent (River & Gulf Division) First Mortgage Gold Bonds, due 1933.....	9,815.00	9,815.00		9,815.00
15,000 St. Louis, Iron Mountain & Southern Ry. Co.'s 4 per cent Unifying and Refunding Gold Bonds, due 1929.....	15,000.00	15,000.00		15,000.00
50,000 St. Louis, Peoria & Northwestern Ry. Co.'s 5 per cent First Mortgage Gold Bonds, due 1948.....	51,627.23	51,627.23	60.27	51,566.96
29,000 St. Paul, Minneapolis & Manitoba Railroad Co.'s 4½ per cent Consolidated Mortgage Bonds, due 1933.....	28,857.50	28,857.50		28,857.50
150,000 St. Paul, Minneapolis & Manitoba Railroad Co.'s 6 per cent Consolidated Mortgage Bonds, due 1933.....	175,200.00	175,200.00	2,100.00	173,100.00
33,000 San Antonio & Aransas Pass Ry. Co.'s 4 per cent First Mortgage Gold Bonds, due 1943.....	20,501.25	20,501.25		20,501.25

	At June 30, 1921	Increase 1921-1922	Decrease 1921-1922	At June 30, 1922
70,000 Scioto Valley & New England Railroad Co.'s 4 per cent Gold Bonds, due 1989,	\$70,000.00			\$70,000.00
6,000 Southern Pacific Railroad Co.'s 7 per cent Temporary Certificates, Series E, due 1929....	6,015.15		\$1.90	6,013.25
15,000 Southern Pacific Railroad Co.'s 7 per cent Bonds, due 1934.....	15,071.22		5.48	15,065.74
3,000 Southern Pacific Company (Central Pacific Stock Collateral) 4 per cent Gold Bonds, due 1949.....	2,099.33			2,099.33
6,000 Southern Railway Co.'s 5 per cent First Mortgage Gold Bonds, due 1996 (Memphis Division).....	6,000.00			6,000.00
14,000 Southern Railway Co.'s 5 per cent First Consolidated Mortgage Bonds, due 1994.....	12,011.39			12,011.39
12,000 Texas & Pacific Railroad Co.'s 5 per cent First Mortgage Bonds, due 2000.....	12,000.00			12,000.00
25,000 Toledo, Peoria & Western Ry. Co.'s 4 per cent First Mortgage Gold Bonds, due 1917....	25,000.00			25,000.00
21,000 Union Pacific Railroad Co.'s 4 per cent First Mortgage Railway and Land Grant Gold Bonds, due 1947.....	19,640.98		1.87	19,639.11
50,000 Union Pacific Railroad Co.'s 4 per cent 20 Year Conv. Gold Bonds, due 1927.....	50,000.00			50,000.00
79,000 Wabash Railroad Co.'s 5 per cent 50 Year First Mortgage Bonds, due 1939.....	75,675.72		1.78	75,673.94
116,000 Wabash Railroad Co.'s 5 per cent 50 Year Second Mortgage Bonds, due 1939.....	117,303.12		134.61	117,168.51
30,000 Wabash Railroad Co. (Omaha Division) 3½ per cent First Mortgage Gold Bonds, due 1941.....	30,000.00			30,000.00

	At June 30, 1921	Increase 1921-1922	Decrease 1921-1922	At June 30, 1922
16,000 Milwaukee Gas Light Co.'s 4 per cent First Mortgage Gold Bonds, due 1927.....	\$14,240.00			\$14,240.00
1,666.66 New England Investment & Security Co.'s Certificate of Indebtedness.....	166.67			166.67
5,000 New York & East River Gas Co.'s 5 per cent First Mortgage Gold Bonds, due 1944.....		\$4,200.00		4,200.00
100,000 New York Gas, Electric Light, Heat & Power Co.'s 4 per cent Purchase Money Mortgage Bonds, due 1949.....	88,702.50			88,702.50
2,000 New York Railways Co.'s 5 per cent Adjustment Mortgage Income Gold Bonds, due 1942	480.00		\$480.00	
125,000 New York Telephone Co.'s 4½ per cent First and General Mortgage Sinking Fund Bonds, due 1939.....	97,250.00	22,437.50		119,687.50
25,000 Niagara Falls Power Co.'s 5 per cent First Mortgage Bonds, due 1932.....	22,500.00			22,500.00
15,000 Public Service Corporation of New Jersey 6 per cent Perpetual Interest Bearing Certificates.....		13,200.00		13,200.00
5,000 Rhode Island Suburban Railway Co.'s 4 per cent First Mortgage Bonds, due 1950.....	5,000.00		5,000.00	
3,000 St. Louis Transit Co.'s 5 per cent 20 Year Improvement Gold Bonds, due 1924.....	1,575.00			1,575.00
2,000 United Electric Railways Co.'s 4 per cent Prior Lien Mortgage Bonds, Series B, due 1946		2,000.00		2,000.00
2,500 United Electric Railways Co.'s 4 per cent General Refunding Mortgage Bonds, Series B, due 1951.....		2,500.00		2,500.00
	\$661,166.17	\$44,337.50	\$5,499.91	\$700,003.76

	At June 30, 1921	Increase 1921-1922	Decrease 1921-1922	At June 30, 1922
10,000 Bush Terminal Building Co.'s 5 per cent First Mortgage Sinking Fund Bonds, due 1960	\$7,525.00			\$7,525.00
20,000 Bush Terminal Company's 4 per cent First Mortgage 50 Year Gold Bonds, due 1952.....	20,000.00			20,000.00
36,500 Columbia University Club's 5 per cent Mortgage Bonds, due 1942.....	26,100.00	\$10,400.00		36,500.00
4,000 Consolidation Coal Co.'s 6 per cent 10 Year Conv. Secured Gold Bonds, due 1923.....	4,000.00			4,000.00
29,000 Goodyear Tire & Rubber Co.'s 8 per cent First Mortgage 20 Year Sinking Fund Gold Bonds, due 1941.....		33,346.01		33,346.01
1,500 The Lenox Club, Second Mortgage Income Bonds, due 1934.....		300.00		300.00
3,000 Liggett & Meyers Tobacco Co.'s 7 per cent Gold Bonds, due 1944.....	3,000.00			3,000.00
3,000 P. Lorillard Company's 7 per cent Gold Bonds, due 1944.....	3,100.63		\$4.37	3,096.26
10,000 Pacific Fruit Growers Express 7 per cent Equipment Trust Bonds, due 1934.....	10,000.00			10,000.00
10,000 Pacific Fruit Growers Express 7 per cent Equipment Trust Bonds, due 1929.....	10,000.00			10,000.00
4,000 Park & Tilford's 6 per cent Debenture Gold Bonds, due 1936.....	3,160.00			3,160.00
25,000 Standard Oil Company of California 7 per cent Gold Debenture Bonds, due 1931.....	25,000.00			25,000.00
25,000 Standard Oil Company of New York 7 per cent Temporary Gold Debenture Bonds, due 1929.....	24,937.50			24,937.50
8,000 Union Iron Works Dry Dock Co.'s 6 per cent Sinking Fund Bonds, due 1929.....	7,122.67			7,122.67

1,000 United States Steel Corporation 5 per cent 10 to 60 Year Sinking Fund Gold Bonds, due 1963.....	1,000.00					1,000.00
25,000 J. H. Williams Co.'s 7 per cent Sinking Fund Bonds, Series A, due 1925.....	24,000.00				\$956.87	24,000.00
	\$178,103.30	\$ 67,782.01				\$244,928.44
	\$49,281.25					\$49,281.25
	740.00					740.00
	73,031.25				\$73,031.25	
	\$123,052.50	\$25,615.24				25,615.24
	\$123,052.50	\$25,615.24				\$75,636.49
	\$15,750.00					\$6,370.00
	14,203.98	\$300.00				14,503.98
		4,873.00				4,873.00
	103,555.00				8,613.20	94,941.80
	1,205,197.07					1,304,577.07
	638,103.51	99,380.00				877,525.01
		239,421.50				

Bonds

SCHEDULE V—FOREIGN GOVERNMENT

- \$ 50,000 Dominion of Canada 5 per cent Gold Bonds, due 1926.....
- 974 Imperial Japanese Government Bonds, 4½ per cent Sterling Loan, due 1924.....
- 75,000 United Kingdom of Great Britain and Ireland, 5½ per cent 5 Year Notes, due 1921....
- 25,000 United Kingdom of Great Britain and Ireland 5½ per cent Bonds, due 1937.....

Bonds

SCHEDULE VI

UNITED STATES GOVERNMENT

- \$7,000 United States of America First Liberty Loan 3½ per cent Bonds, due 1947.....
- 16,300 United States of America First Liberty Loan 4¼ per cent Bonds, due 1947.....
- 5,000 United States of America Second Liberty Loan 4 per cent Bonds, due 1942.....
- 105,800 United States of America Second Liberty Loan 4¼ per cent Conv. Bonds, due 1942....
- 1,422,600 United States of America Third Liberty Loan 4¼ per cent Bonds, due 1928.....
- 962,950 United States of America Fourth Liberty Loan 4¼ per cent Bonds, due 1938.....

	At June 30, 1921	Increase 1921-1922	Decrease 1921-1922	At June 30, 1922
150 United States of America Victory Loan 4¼ per cent Notes, due 1923.....	\$1,939.00		\$4,789.00	\$150.00
507,300 United States of America 4¼ per cent Treasury Notes, due 1926.....	\$1,978,748.56	\$511,243.50		511,243.50
	\$1,978,748.56	\$855,218.00	\$19,782.20	\$2,814,184.36
Stocks				
SCHEDULE I—RAILROAD				
32 shares Albany & Susquehanna Railroad Co. Capital.....	\$2,000.00	\$2,160.00		\$4,160.00
50 shares Atchison, Topeka & Santa Fé Railroad Co. Preferred.....	3,975.00			3,975.00
300 shares Atlanta & Charlotte Air Line Railroad Co. Capital.....	51,337.50			51,337.50
510 shares Baltimore & Ohio Railroad Co. Common.....	46,690.00			46,690.00
51 shares Baltimore & Ohio Railroad Co. Preferred.....	2,743.75			2,743.75
145 shares Boston & Albany Railroad Co. Capital.....	3,840.00	14,690.00		18,530.00
1,333 shares Canada Southern Railway Co. Capital.....	67,983.00			67,983.00
19 shares Catawissa Railroad Co. Preferred (\$50. par value).....	475.00	608.00		1,083.00
1,000 shares Central Railroad Co. of New Jersey Capital.....	295,000.00			295,000.00
366 shares Chicago Great Western Railroad Co. Preferred.....	11,620.50			11,620.50

166 shares Chicago, St. Paul, Minneapolis & Omaha Railway Co. Common.....	16,268.00				16,268.00
20 shares Cincinnati, Indianapolis & Western Railroad Co. Common.....	100.00				100.00
20 shares Cincinnati, Indianapolis & Western Railroad Co. Preferred.....	300.00				300.00
234 shares Delaware & Hudson Co. Capital....	13,560.59		10,200.00		23,760.59
2,622 shares Delaware, Lackawanna & Western Railroad Co. Capital.....	228,242.50		28,080.00		256,322.50
2,090 shares Great Northern Railway Co. Preferred.....	264,100.00				264,100.00
445 shares Illinois Central Railroad Co. Capital	30,367.40		17,430.75		47,798.15
45 shares Illinois Central Railroad Co. Preferred.....				4,503.90	4,503.90
21 shares Lackawanna Railroad Co. of New Jersey. Capital.....	2,117.50				2,117.50
500 shares Louisville & Nashville Railroad Co. Capital.....	64,750.00				64,750.00
83 shares Minneapolis & St. Louis Railroad Co. Capital.....	1,265.75				1,265.75
33 shares Missouri, Kansas & Texas Railway Co. Capital.....	198.00				198.00
40 shares Morris & Essex Railroad Co. Capital	2,680.00				2,680.00
138 shares New York, New Haven & Hartford Railroad Co. Capital.....	11,002.50		1,089.00		12,091.50
50 shares Norfolk & Western Railroad Co. Adjustment Preferred.....				3,650.00	3,650.00
3,200 shares Northern Pacific Railway Co. Capital.....	407,200.00				407,200.00
5,000 shares Pennsylvania Railway Co. Capital (\$50. par value).....	315,362.50				315,362.50
83 shares Peoria & Eastern Railway Co. Capital.....	664.00				664.00

	At June 30, 1921	Increase 1921-1922	Decrease 1921-1922	At June 30, 1922
12 shares Pere Marquette Railway Co. Common.....	\$120.00			\$120.00
48 shares Pere Marquette Railway Co. Preferred.....	2,688.00			2,688.00
126 shares Pittsburgh, Fort Wayne & Chicago Railroad Co. Capital.....	14,325.00	\$3,960.00		18,285.00
206 shares Reading Company, First Preferred (\$50. par value).....	7,931.00			7,931.00
38 shares Rensselaer & Saratoga Railroad Co. Capital.....	4,330.91	1,818.00		6,148.91
70 shares Southern Railway Co. Common.....	1,942.50			1,942.50
6 shares Southern Railway Co. Preferred....	339.00			339.00
33 shares Texas & Pacific Railway Co. Capital	561.00			561.00
1,000 shares Union Pacific Railway Co. Preferred	93,525.00			93,525.00
304 shares United New Jersey Railroad & Canal Co. Capital.....	37,054.88	16,561.55		53,616.43
15 shares Wabash Railway Co. Common.....	166.87			166.87
16 shares Wabash Railway Co. Preferred....	784.00			784.00
	\$2,007,611.65	\$104,751.20		\$2,112,362.85
				\$2,112,362.85
Stocks				
SCHEDULE II—PUBLIC UTILITY				
3.032½ shares American Light & Traction Co. Common.....	\$348,842.40	\$10,639.80		\$359,482.20
714 shares Consolidated Gas Co. Capital.....	193.53	66,442.50		66,636.03
127 shares Denver Union Water Co. Preferred	1.00			1.00
32 shares Denver Union Water Co. Common	1.00			1.00
5 shares Lenox Water Co. Preferred.....		500.00		500.00
1,000 shares Manhattan Railway Co. Capital....	129,312.50			129,312.50

21 shares Milwaukee Electric Railroad & Light Co. Preferred.....				1,344.00		1,344.00
12 shares Third Avenue Railroad Co. Common.....				204.00		204.00
33 shares Tri-City Railway & Light Co. Preferred.....	2,796.75					2,796.75
5 shares United Electric Railways Co. Capital.....				500.00		500.00
25 shares Wells Fargo & Co. Capital.....	1,337.50					1,337.50
166 shares Worcester Consolidated Street Railway Co. First Preferred.....	8,326.26					8,326.26
	\$490,810.94	\$490,810.94	\$79,630.30			\$570,441.24
Stocks						
SCHEDULE III—INDUSTRIAL						
590 shares American Smelters Securities Co. Preferred, Series "B".....	\$49,666.67				\$49,666.67	
30 shares American Smelting & Refining Co. Preferred.....	2,426.25					\$2,426.25
166 shares American Sugar Refining Co. Preferred.....	19,422.00					19,422.00
39 shares Central Syndicate Building Co. Capital.....	3,705.00					3,705.00
88- ² / ₃ shares Consolidation Coal Co. of Maryland. Capital.....	7,034.90					7,034.90
100 shares Cuba Cane Sugar Co. Preferred.....	8,000.00					8,000.00
45 shares Delaware, Lackawanna & Western Coal Co. Capital.....	3,200.00					3,200.00
1,311 shares Glen Alden Coal Co. Capital.....	6,555.00					6,555.00
290 shares B. F. Goodrich Co. Preferred.....	7,377.20					7,377.20
1,300 shares Great Northern Iron Ore Certificates.....	81,250.00					81,250.00

570,441.24

	At June 30, 1921	Increase 1921-1922	Decrease 1921-1922	At June 30, 1922
13 shares The Hutchins Securities Co. Preferred.....		\$1,300.00		\$1,300.00
280 shares Jewel Tea Co. Preferred.....	\$7,122.80			7,122.80
10 shares Lawyers Mortgage Co. Capital.....		1,500.00		1,500.00
10 shares Manati Sugar Co. Common.....	971.43			971.43
9 shares National Sugar Refining Co. Capital.....				
10 shares Samuel Parsons Inc. Preferred.....	909.00			909.00
4 shares Samuel Parsons Inc. Common.....		2,170.00		2,170.00
400 shares F. W. Woolworth Co. Preferred.....	50,450.00	868.00		868.00
	\$248,090.25	\$5,838.00	\$49,666.67	\$204,261.58
	\$86,608.00			\$86,608.00
		\$8,050.00		8,050.00
	3,680.00	18,900.00		22,580.00
	448,000.00			448,000.00
	39,000.00			39,000.00
	3,242.50	2,321.00		5,563.50
		3,000.00		3,000.00
	\$580,530.50	\$32,271.00		\$612,801.50

Stocks

SCHEDULE IV—BANK AND TRUST COMPANY

266 shares Bankers Trust Co. Capital.....
35 shares Bank of Manhattan Co. Capital.....
50 shares Bank of New York, Capital.....
1,050 shares Chase National Bank in the City of New York and Chase Securities Corporation in the City of New York, Capital.....
100 shares Columbia Trust Co. in the City of New York, Capital.....
34 shares National Bank of Commerce in New York, Capital.....
5 shares New York Life Insurance & Trust Co. Capital.....

	At June 30, 1921		Increase 1921-1922	Decrease 1921-1922	At June 30, 1922
On 32 East Broadway, New York, at 5½ per cent, due 1922.....	\$25,000.00				\$25,000.00
On property at East Marion, Suffolk County, L. I., at 6 per cent, Open Mortgage.....		\$3,000.00			3,000.00
On 2949 Eighth Ave., New York, at 5½ per cent, due 1922.....	35,000.00			\$35,000.00	
On 158-160 Eldridge Street and 62 Delancey Street, New York, at 6 per cent, due 1926.....	32,000.00				32,000.00
On 580 Fifth Avenue, New York, at 4½ per cent, due 1923.....	400,000.00				400,000.00
On 582 Fifth Avenue, New York, at 4½ per cent, due 1927.....	233,000.00				233,000.00
On 584 Fifth Avenue, New York, at 4½ per cent, due 1927.....	252,000.00				252,000.00
On 586 Fifth Avenue, New York, at 4½ per cent, due 1927.....	215,000.00				215,000.00
On 626 Fifth Avenue, New York, at 6 per cent, due 1937.....		352,000.00			352,000.00
On 1006 Fifth Avenue, New York, at 7 per cent to 1925, 6 per cent thereafter, due 1927.....		120,000.00			120,000.00
On 1026 Fifth Avenue, New York, at 5½ per cent, due 1923.....	234,000.00			234,000.00	
On 1045 Fifth Avenue, New York, at 6 per cent, due 1924.....	80,000.00				80,000.00
On 12 Gold Street and 14-20 Platt Street, New York, at 6 per cent, due 1927.....		292,500.00			292,500.00
On 18 Gramercy Park, New York, at 6 per cent, Open Mortgage.....	30,000.00			3,475.00	26,525.00
On 609-13 Greenwich Street, 120-128 Leroy Street, New York at 5 per cent, due 1924.....	225,000.00				225,000.00

On 644-654 Greenwich Street, New York, at 6 per cent, due 1923.....	150,000.00				150,000.00
On 2157 Hughes Avenue, New York, at 5 per cent, due 1921.....	3,250.00			3,250.00	
On 26 John Street, New York, at 5 per cent, due 1921	50,000.00			50,000.00	
On southeast corner of Lenox Avenue and 117th Street, New York, at 5½ per cent., due 1923....	155,000.00				155,000.00
On southeast corner of Lenox Avenue and 130th Street, New York, at 5½ per cent, due 1923.....	49,000.00			1,000.00	48,000.00
On 712 Madison Avenue, New York, at 5½ per cent, due 1923.....	30,000.00				30,000.00
On 1723 Matthews Avenue, Bronx, New York, at 6 per cent, Open Mortgage.....	2,800.00				2,800.00
On 136 Monroe Street, New York, at 5½ per cent, due 1922.....	15,000.00			15,000.00	
On 195 Monroe Street, at 6 per cent, Open Mortgage..	2,100.00				2,100.00
On 57 Morton Street, New York, at 6 per cent, Open Mortgage.....	19,000.00				19,000.00
On 91-93 Ninth Avenue, New York, at 6 per cent, due 1923.....	22,250.00			1,500.00	20,750.00
On 29-33 Park Place, New York, at 6 per cent, due 1923.....	180,000.00			7,500.00	172,500.00
On property at Pralls Island, New York, at 6 per cent, Open Mortgage.....			15,000.00		15,000.00
On southwest corner of Prince and Thompson Streets, New York, at 5½ per cent, due 1924.....	49,125.00			1,250.00	47,875.00
On Railroad and 26th Streets, Pittsburgh, Pa., at 6 per cent, due 1923.....	14,500.00			1,000.00	13,500.00
On 136-138 Rivington Street, New York, at 6 per cent, due 1923.....	39,000.00				39,000.00
On 117-125 Seventh Avenue, New York, at 6 per cent, due 1927.....			200,000.00		200,000.00
On 46-50 West Street, New York, at 5½ per cent, due 1924.....	200,000.00				200,000.00

	At June 30, 1921	Increase 1921-1922	Decrease 1921-1922	At June 30, 1922
On 745-747 East 6th Street, New York, at 6 per cent, due 1926.....	\$40,000.00	.....	\$2,800.00	\$37,200.00
On 607 East 14th Street, at 5 per cent, Open Mortgage due 1922.....	2,363.56	.....	70.34	2,293.22
On 238 East 15th Street, New York, at 5½ per cent, due 1922.....	17,000.00	.....	.....	17,000.00
On 220 East 24th Street, New York, at 6 per cent, Open Mortgage.....	8,000.00	.....	.....	8,000.00
On 1 East 64th Street, New York, at 6 per cent, due 1923.....	346,250.00	.....	7,500.00	338,750.00
On 518 East 139th Street, New York, at 5½ per cent, due 1922.....	23,000.00	.....	23,000.00	.....
On 746-8 East 180th Street, New York, at 5½ per cent, due 1922.....	19,000.00	.....	750.00	18,250.00
On 753 East 187th Street, New York, at 5½ per cent, due 1922.....	19,000.00	.....	19,000.00	.....
On 421 West 18th Street, New York, at 6 per cent, Open Mortgage.....	.....	\$6,000.00	.....	6,000.00
On 549-557 West 23rd Street, New York, at 6 per cent, due 1927.....	.....	350,000.00	.....	350,050.00
On 124 West 42nd Street, New York, at 6 per cent, due 1923.....	150,000.00	.....	.....	150,000.00
On 4 to 16 West 43rd Street, New York, at 5½ per cent, due 1930.....	34,000.00	.....	10,825.00	23,175.00
On 2 East 46th Street, New York, at 5½ per cent, due 1925.....	142,500.00	.....	5,000.00	137,500.00
On 7-11 West 47th Street, New York, at 4 per cent, due 1924.....	180,000.00	.....	.....	80,000.00
On 17 West 47th Street, New York, at 6 per cent, Open Mortgage.....	41,500.00	.....	1,000.00	40,500.00

On 47 West 47th Street, New York, at 6 per cent, due 1924.....	60,000.00	.....	.....	1,200.00	58,800.00
On 67 West 47th Street, New York, at 5½ per cent, due 1924.....	32,250.00	.....	.....	500.00	31,750.00
On 69 West 47th Street, New York, at 5½ per cent, due 1924.....	32,250.00	.....	.....	500.00	31,750.00
On 12 West 48th Street, New York, at 5½ per cent, due 1922.....	53,000.00	.....	.....	.....	53,000.00
On 30 West 48th Street, New York, at 6 per cent, Open Mortgage.....	30,000.00	.....	.....	.....	30,000.00
On 38 West 48th Street, New York, at 6 per cent, Open Mortgage.....	33,750.00	.....	.....	1,000.00	32,750.00
On 40 West 48th Street, New York, at 6 per cent, Open Mortgage.....	34,350.00	.....	.....	1,000.00	33,350.00
On 56 West 48th Street, New York, at 6 per cent, due 1924.....	32,000.00	.....	.....	500.00	31,500.00
On 61 West 48th Street, New York, at 6 per cent, due 1923.....	6,000.00	.....	.....	1,500.00	4,500.00
On 62 West 48th Street, New York, at 5½ per cent, due 1922.....	20,000.00	.....	.....	20,000.00	.....
On 66 West 48th Street, New York, at 5 per cent, due 1922.....	24,500.00	.....	.....	.....	24,500.00
On 3 West 50th Street, New York, at 6 per cent, due 1922.....	6,000.00	.....	.....	6,000.00	.....
On 5 West 50th Street, New York, at 6 per cent, due 1923.....	10,000.00	.....	.....	4,000.00	6,000.00
On 245 West 50th Street, New York, at 6 per cent, due 1924.....	34,000.00	.....	.....	.....	34,000.00
On 27-31 West 55th Street, New York, at 5½ per cent, due 1923.....	7,306.05	.....	.....	.....	7,306.05
On northeast corner 69th Street and Columbus Avenue, New York, at 5½ per cent, due 1922.....	95,000.00	.....	.....	.....	95,000.00
On 131 West 85th Street, New York, at 6 per cent, Open Mortgage.....	.....	.....	6,000.00	.....	6,000.00

	At June 30, 1921	Increase 1921-1922	Decrease 1921-1922	At June 30, 1922
On 106 West 90th Street, New York, at 5 per cent, due 1925.....		\$22,000.00		\$22,000.00
On 205 West 104th Street, New York, at 6 per cent, Open Mortgage.....	\$105,000.00			105,000.00
On Southwest Cor. 106th Street and West End Ave- nue, New York, at 6 per cent, due 1924.....	105,000.00		\$105,000.00	
On north side 108th Street, 125 feet east of Broadway, New York, at 4½ per cent, due 1921.....	141,000.00		141,000.00	
On 542 West 114th Street, New York, at 6 per cent, due 1925.....		4,000.00		4,000.00
On Northwest Cor. Morningside Avenue and 115th Street, New York, at 6 per cent, due 1924.....	140,000.00			140,000.00
On 417 West 117th Street, New York, at 5½ per cent, Open Mortgage.....	4,000.00		4,000.00	
On 232 West 135th Street, New York, at 5 per cent, due 1921.....	1,400.00		1,400.00	
On 508-510 West 180th Street, at 5½ per cent, due 1924.....		38,000.00		38,000.00
On 163-173 Sterling Place, Brooklyn, at 5½ per cent, due 1923.....	33,000.00			33,000.00
On property at Wakefield, New York, at 5 per cent, Open Mortgage.....	140,000.00		19,800.00	120,200.00
On property at Wakefield, New York, at 6 per cent, due 1926.....		19,800.00		19,800.00
On property at Whitestone, Long Island, at 6 per cent, Open Mortgage.....	\$6,361,644.61			1,500.00
	\$17,560,504.24	\$1,800,800.00	\$765,320.34	\$7,397,124.27
Totals.....				\$19,585,925.93
Less Reserve Wakefield Mortgage.....				16,000.00
				\$19,569,925.93

SECURITIES—SUMMARY

	At June 30, 1921	Increase 1921-1922	Decrease 1921-1922	At June 30, 1922
BONDS				
Schedule I—Railroad.....	\$4,396,059.54	\$313,442.64		\$4,709,502.18
Schedule II—Public Utility.....	661,166.17	38,837.59		700,003.76
Schedule III—State and Municipal.....	494,441.35		\$353,600.92	140,840.43
Schedule IV—Industrial.....	178,103.30	66,825.14		244,928.44
Schedule V—Foreign Government.....	123,052.50		47,416.01	75,636.49
Schedule VI—United States Government.....	1,978,748.56	835,435.80		2,814,184.36
	\$7,831,571.42			\$8,685,095.66
STOCKS				
Schedule I—Railroad.....	2,007,611.65	104,751.20		2,112,362.85
Schedule II—Public Utility.....	490,810.94	79,630.30		570,441.24
Schedule III—Industrial.....	248,090.25		43,828.67	204,261.58
Schedule IV—Bank and Trust Co.....	580,530.50	32,271.00		612,801.50
	3,327,043.34		36,406.04	3,499,867.17
	40,244.87			3,838.83
MISCELLANEOUS				
BONDS AND MORTGAGES, Less Reserve.....	6,361,644.61	1,035,479.66		7,381,124.27
Total.....	\$17,560,504.24	\$2,506,673.33	\$497,251.64	\$19,569,925.93
DISTRIBUTION				
Special Endowments—Principal.....	\$16,771,667.93	\$1,580,796.73		\$18,353,089.66
Special Endowments—Income.....	158,088.75	77,696.78		235,785.53
Student Loans.....	5,782.52		2,772.52	3,060.00
Gifts.....	536,762.94	\$227,285.95		763,423.89
General Endowment.....	88,202.10	126,364.75		214,566.85
Total.....	\$17,560,504.24	\$2,012,144.21	\$2,722.52	\$19,569,925.93

REDEMPTION FUND

Balance in Fund at June 30, 1921.....	1,200,000.00
Add: Securities deposited with Trustees of Fund.....	100,000.00
	<hr/>
Balance in Fund at June 30, 1922.....	<u>\$1,300,000.00</u>

Composed of:

BONDS

\$ 10,000.00 American Telephone and Telegraph Co.'s 6 per cent. Gold Bonds, due 1924.....	\$ 10,000.00	
30,000.00 Baltimore & Ohio R. R. Co.'s (P., L. E. & W. Va. System) 40-year 4 per cent. Refund- ing Bonds, due 1941.....	27,450.00	
50,000.00 Baltimore & Ohio R. R. Co.'s (S. W. Division) 3½ per cent. First Mortgage Bonds, due 1925.....	44,937.50	
40,000.00 Central New England Ry. Co.'s 50-year 4 per cent. First Mortgage Bonds, due 1961....	37,211.25	
50,000.00 Chicago Union Station Co.'s 4½ per cent. First Mortgage Gold Bonds, due 1963.....	49,875.00	
25,000.00 Grand Trunk Ry. Co.'s 7 per cent. Debenture Bonds, due 1940.....	25,000.00	
50,000.00 Northern Pacific-Great Northern (C. B. & Q. Collateral) 6½ per cent. Bonds, due 1936.	48,250.00	
30,000.00 St. Louis, Southwestern Ry. Co.'s 4 per cent. First Mortgage Bonds, due 1989.....	27,750.00	
700.00 United States of America First Liberty Loan 4¼ per cent. Converted Bonds, due 1947..	700.00	
20,600.00 United States of America Second Liberty Loan 4¼ per cent. Converted Bonds, due 1942..	20,600.00	
128,700.00 United States of America Third Liberty Loan 4¼ per cent. Bonds, due 1928.....	116,786.51	
150.00 United States of America Fourth Liberty Loan 4¼ per cent. Bonds, due 1938.....	150.00	
69,000.00 United States of America 4¾ per cent. Treasury Notes, due 1926.....	68,440.80	477,151.06

BONDS AND MORTGAGES

On 90-92 Avenue B, New York, at 5¼ per cent., due 1924.....	50,000.00
On 18 Gramercy Park, New York, at 6 per cent. Open mortgage.....	100,000.00
On 212 Grand Street, New York, at 5½ per cent., due 1922.....	24,000.00
On 136 Monroe Street, New York, at 5½ per cent., due 1922.....	15,000.00
On 93 Park Row, New York, at 5½ per cent., due 1923	30,000.00
On Northwest corner Second Avenue and 12th Street, New York, at 5½ per cent., due 1922.....	80,000.00

Carried Forward.....

477,151.06

Brought Forward.....		\$477,151.06
On 1-5 West 47th Street, New York, at $4\frac{1}{2}$ per cent., due 1924.....	220,000.00	
On 14 West 48th Street, New York, at 6 per cent. Open mortgage.....	58,000.00	
On 62 West 48th Street, New York, at $5\frac{1}{2}$ per cent., due 1922.....	20,000.00	
On 27-31 West 55th Street, New York, at $5\frac{3}{4}$ per cent., due 1923.....	30,000.00	
On 534-550 West 58th Street, New York, at 6 per cent., due 1924.....	95,000.00	
On 106th Street corner West End Avenue, New York, at 6 per cent., due 1924.....	105,000.00	827,000.00
Cash.....		3,154.99
		<hr/> 1,307,306.05
Less deposit with the United States Trust Co.....		7,306.05
		<hr/> <hr/> \$1,300,000.00

UNIVERSITY LAND, BUILDINGS AND EQUIPMENT

	At June 30, 1921		Additions 1921-22	Deductions 1921-22	At June 30, 1922	
Land: 114th to 116th Streets, Amsterdam Avenue and Broadway.....	\$2,022,440.06				\$2,022,440.06	
Improvements to Grounds.....	53,239.90	\$2,075,679.96			53,239.90	\$2,075,679.96
116th to 120th Streets, Amsterdam Avenue and Broadway.....	2,000,000.00				2,000,000.00	
Improvements to Grounds.....	429,601.17	2,429,601.17			429,601.17	2,429,601.17
116th Street, north side, Morningside Drive to Amsterdam Avenue.....		563,193.40				563,193.40
117th Street, south side, Morningside Drive to Amsterdam Avenue.....		503,656.95	\$610,608.15			503,656.95
Baker Field.....						610,608.15
Avery Library Building: Construction.....		339,021.42				339,021.42
Crocker Research Building: Construction.....	39,525.85				39,525.85	
Interest.....	9,155.94		390.68		9,546.62	
Charged off to Income Crocker Research Fund.....	48,681.79			\$5,000.00	49,072.47	
	40,000.00				45,000.00	
X-Ray Equipment.....	8,681.79				4,072.47	
	10,677.85	19,359.64	7,787.68		18,465.53	22,538.00

Earl Hall: Construction and Equipment.....	164,844.65	.....	.....	164,844.65
Trophy Room Equipment.....	980.00	.....	.....	980.00
Engineering Building: Construction.....	284,075.50	.....	.....	284,075.50
Equipment.....	20,775.47	.....	.....	20,775.47
Faculty House: Construction.....	304,850.97	.....	.....	304,850.97
Fayerweather Hall: Construction.....	274,113.67	.....	.....	274,113.67
Equipment.....	18,550.43	.....	.....	18,550.43
Furnald Hall: Construction.....	352,666.66	.....	.....	352,666.66
Equipment.....	22,333.34	.....	.....	22,333.34
Hamilton Hall: Construction.....	486,572.26	.....	.....	486,572.26
Equipment.....	24,156.49	.....	.....	24,156.49
Hartley Hall: Construction.....	335,173.67	.....	.....	335,173.67
Equipment.....	16,799.20	.....	.....	16,799.20
Havemeyer Hall: Construction.....	516,488.62	.....	.....	516,488.62
Equipment.....	54,074.86	.....	.....	54,074.86
Kent Hall: Construction.....	570,563.48	.....	.....	570,563.48
Library Building: Construction.....	530,692.42	.....	.....	530,692.42
Equipment.....	1,108,213.09	.....	.....	1,108,213.09
Alterations.....	97,257.96	.....	.....	97,257.96
Livingston Hall: Construction.....	46,600.00	.....	.....	46,600.00
Equipment.....	1,252,071.05	.....	.....	1,252,071.05
Model of Buildings and Grounds.....	333,520.98	.....	.....	333,520.98
Philosophy Building: Construction.....	17,008.63	.....	.....	17,008.63
	350,529.61	.....	.....	350,529.61
	19,972.70	.....	.....	19,972.70
	349,694.66	.....	.....	349,694.66

	At June 30, 1921		At June 30, 1922	
	Additions 1921-22	Deductions 1921-22	Additions 1921-22	Deductions 1921-22
President's House:				
Construction.....	\$196,830.82		\$196,830.82	
Furnishing.....	24,410.17		24,410.17	
	\$221,240.99		\$221,240.99	
St. Paul's Chapel:				
Construction.....	266,676.54		266,676.54	
Equipment.....	29,846.62		29,846.62	
	296,523.16		296,523.16	
Schermernhorn Hall:				
Construction.....	\$457,658.17		\$457,658.17	
Equipment.....	35,786.35		35,786.35	
	493,444.52		493,444.52	
School of Business:				
Construction.....	297.89		297.89	
School of Journalism:				
Construction.....	534,863.38		534,863.38	
Equipment.....	28,637.83		28,637.83	
	563,501.21		563,501.21	
School of Mines Building:				
Construction.....	305,506.29		305,506.29	
Equipment.....	19,760.85		19,760.85	
	325,267.14		325,267.14	
University Hall:				
Construction.....	983,657.05		983,657.05	
Equipment.....	17,214.26		17,214.26	
Power House Equipment..	118,828.52		118,828.52	
Gymnasium Equipment..	43,149.23		43,149.23	
Commons Equipment.....	16,418.14		16,028.06	\$390.08
	1,179,267.20		1,178,877.12	
No. 411 West 117th Street, New York (Maison Francaise).....				
	33,291.39			33,291.39
No. 413 West 117th Street, New York.....				
	23,439.12			23,439.12
No. 415 West 117th Street, New York.....				
	23,439.12			23,439.12
No. 419 West 117th Street, New York (Columbia House).....				
	30,000.00			30,000.00
Class of 1880 Gates.....				2,000.00
Class of 1881 Flagstaff.....				4,600.00

Class of 1897 Boat-house.....	.....	\$7,201.24	.....	.....	7,201.24
Class of 1893 Chapel Bell.....	.....	.....	5,114.84	.....	5,114.84
Class of 1906 Clock.....	.....	.....	1,159.16	.....	1,159.16
Fountain of the God Pan.....	.....	.....	12,013.50	.....	12,013.50
Granite Posts for Gate at 119th Street and Amsterdam Avenue.....	.....	.....	2,563.00	.....	2,563.00
Hamilton Statue.....	.....	.....	10,900.00	.....	10,900.00
Lighting University Grounds.....	.....	.....	1,035.00	.....	1,035.00
Pylons (Class of 1890 Arts and Mines Gift).....	.....	.....	8,598.72	.....	8,598.72
Setting Bust of Professor Egleston (Class of 1883, Mines, Gift).....	.....	.....	390.00	.....	390.00
Seth Low Memorial Tablet.....	.....	.....	1,010.00	.....	1,010.00
Van Amringe Memorial.....	.....	700.00	20,038.34	.....	20,738.34
Repairs and Equipment of Old Buildings:					
East Hall.....	5,113.34	.....	.....	.....	5,113.34
South Hall.....	4,490.42	.....	.....	.....	4,490.42
West Hall.....	11,452.67	.....	.....	.....	11,452.67
South Court Fountains.....	.....	.....	21,056.43	.....	21,056.43
Students Army Training Corps Equipment.....	.....	.....	4,932.88	.....	4,932.88
.....	.....	.....	850.00	.....	850.00
Assessments:					
Boulevard Sewer.....	2,579.90	.....	.....	.....	2,579.90
129th Street Sewer.....	749.25	.....	.....	.....	749.25
Opening and acquiring title to Addition to Riverside Park.....	8,168.98	.....	.....	.....	8,168.98
Opening 116th Street.....	2,882.77	.....	.....	.....	2,882.77
Opening 120th Street.....	38,033.59	.....	.....	.....	38,033.59
Opening Riverside Drive and Parkway.....	4,814.55	.....	.....	.....	4,814.55
Expenses During Construction and Removal to New Site—(Net).....	.....	.....	372,058.68	.....	372,058.68
Outside Street Work.....	.....	.....	107,140.39	.....	107,140.39
			57,229.04		57,229.04

	At June 30, 1921		Additions 1921-22	Deductions 1921-22	At June 30, 1922	
Vaults: East.....	\$30,382.79				\$30,382.79	
West.....	37,316.40	\$67,699.19			37,316.40	\$67,699.19
Medical School:						
Buildings.....	628,969.31				628,969.31	
Equipment.....	14,950.26				14,950.26	
Library.....	1,400.00				1,400.00	
Roof Laboratory.....	14,938.07				14,938.07	
School of Dentistry.....	39,084.92				39,084.92	
Sloane Hospital for Women.....	399,263.14				399,263.14	
		1,098,605.70				1,098,605.70
		39,765.27				39,765.27
Camp Columbia, Morris, Conn.....						
		\$16,032,569.68	\$677,473.07	\$5,390.08		16,704,652.67
		3,698.46				5,457.66
Less Reserve for Depreciation of Commons Equipment.....		\$16,028,871.22				\$16,699,195.01

OTHER PROPERTY

	At June 30, 1921	Increase	Decrease and Depreciation	At June 30, 1922
83 Barclay Street.....	1.00			1.00
503/11 Broadway (Less Reserve \$794.91).....	674,445.41	4,794.35	7,011.85	679,239.76
21 Claremont Avenue.....	371,074.41	2,656.71		364,062.56
21 Claremont Avenue Equipment.....		3,247.10	9,081.17	2,656.71
29/35 Claremont Avenue (Less Reserve \$43.00).....	500,410.22			491,329.05
29/35 Claremont Avenue Equipment.....	39,096.19			42,343.29
39/41 Claremont Avenue.....	462,117.05		2,711.48	459,405.57
18 East 16th Street.....	167,109.75			167,109.75
618 Fifth Avenue.....	138,263.12		6,599.31	131,663.81
620 Fifth Avenue.....	114,970.04	352,008.77	5,847.93	109,122.11
626 Fifth Avenue.....				352,008.77
72 Murray Street.....	7,443.60		240.12	7,203.48
41 West 47th Street.....	61,750.72			61,750.72
2 West 50th Street.....	22,323.51		1,313.15	21,010.36
19 West 50th Street.....	11,240.78			11,240.78
6 West 51st Street.....	1.00			1.00
407 West 117th Street.....	23,125.76		262.12	22,863.64
421 West 117th Street.....	22,735.72		249.54	22,486.18
431 West 117th Street.....	24,594.96		309.51	24,285.45
433 West 117th Street.....	23,683.58		280.11	23,403.47
Williamsbridge Property.....	273,582.37	488.26		274,070.63
Galway Property.....	1.00		1.00	
	\$2,937,970.19	\$ 363,195.19	\$ 33,907.29	\$3,267,258.09

SPECIAL ENDOWMENTS

	At June 30, 1921	Additions, 1921-1922	At June 30, 1922
(A) For General Purposes			
BURGESS (ANNIE P.) FUND: Bequest of the late Annie P. Burgess to the general endowment of the University. Established 1913.....	\$63,365.00		\$63,365.00
BURGESS (JOHN W.) FUND: Gift of Anonymous Donors to the general endowment of the University. Established 1910..	100,000.00		100,000.00
CARPENTIER (H. W.) ENDOWMENT FUND: Legacy of the late Horace W. Carpenter, the income to be expended in such manner and for such purposes as the Trustees may from time to time direct. Established 1918.....	1,288,834.29	\$716.49	1,289,550.78
CHEESMAN (T. M.) FUND: Bequest of the late Dr. T. M. Cheesman, formerly a trustee of the University, for the general purposes of the University. Established 1920.....	10,000.00		10,000.00
CLASS OF 1895 ARTS AND MINES FUND: Gift of the Class of 1895 Arts and Mines to inaugurate the Columbia University Permanent Alumni Fund, the income to be expended in such manner and for such purposes as the Trustees may from time to time direct. Established 1919.....	5,000.00		5,000.00
COLUMBIA UNIVERSITY PERMANENT ALUMNI FUND: Gift of the Alumni Federation of Columbia University, the income to be expended in such manner and for such purposes as the Trustees may from time to time direct. Established 1922.....		7,500.00	7,500.00
DE LAMAR (JOSEPH R.) FUND: Bequest of the late Joseph R. De Lamar, the income to be expended in such manner as the Trustees may from time to time direct in accordance with the terms of the bequest. Established 1919.....	2,773,022.45		2,773,022.45
		793,651.34	3,566,673.79

HARRIMAN (REVEREND ORLANDO) FUND:	Gift of the children of the late Reverend Orlando Harriman, of the Class of 1835, as a memorial to their father, the income, until further action by the Trustees, to be applied to the salary of the Professor of Rhetoric and English. Established 1908.	102,500.00		102,500.00
HEPBURN (A. BARTON) ENDOWMENT FUND:	Gift of A. Barton Hepburn, the income of which shall be applied, as the Trustees may from time to time provide, to the maintenance and conduct of the School of Business. Established 1918	480,000.00		480,000.00
HOFFMAN (CHARLES FREDERICK) FUND:	Bequest of Charles Frederick Hoffman, for the general purposes of the University. Established 1921.	5,000.00		5,000.00
JAMES (D. WILLIS) FUND:	Bequest of D. Willis James, the income to be applied, until further action by the Trustees, to the salary of the Professor of Geology. Established 1908.	100,000.00		100,000.00
KENNEDY (JOHN STEWART) ENDOWMENT FUND:	Bequest of the late John Stewart Kennedy, a Trustee of Columbia University 1903 to 1909. Established 1910.	2,220,000.00		2,220,000.00
LANGELOTH (JACOB) FUND:	Bequest of the late Jacob Langeloth. Established 1915.	5,000.00		5,000.00
MANNERS (EDWIN) FUND:	Legacy of the late Edwin Manners to establish this Fund. Established 1914.	3,000.00		3,000.00
MILLER (GUY B.) FUND:	Bequest of the late Guy B. Miller, of the Class of 1898, College of Physicians and Surgeons, for general purposes of the Medical School. Established 1904.	10,000.00		10,000.00
MOWER (SARA E.) FUND:	Bequest of the late Sara E. Mower as a memorial to Mandeville Mower. The principal and income to be expended in such manner and for such purposes as the Trustees may from time to time direct. Established 1919.	83,613.56	5,479.08	89,092.64

	At June 30, 1921	Additions, 1921-1922	At June 30, 1922
PELL (MARY B.) LEGACY: Bequest of the late Mary B. Pell, the income to be expended in such manner and for such purposes as the Trustees may from time to time direct.	\$400.00	.....	\$400.00
PHOENIX LEGACY: On account of two-thirds part of the residuary estate of the late Stephen Whitney Phoenix, bequeathed to Columbia College in 1881, for the purpose of Scientific Instruction and Research	136,931.26	\$226,831.39	363,762.65
VAN CORTLANDT (ROBERT B.) FUND: Bequest of the late Robert B. Van Cortlandt, the income to be expended in such manner and for such purposes as the Trustees may from time to time direct. Established 1918.	196,450.00	324,997.91	521,447.91
WEBBER FUND: Bequest of the late John Webber, for the general purposes of the University. Established 1918	1,000.00	.....	1,000.00
(B) For Designated Purposes	7,584,116.56	1,359,176.21	8,943,292.77
ADAMS (ERNEST KEMPTON) FUND FOR PHYSICAL RESEARCH: Gift of Edward D. Adams, in memory of his son, the late Ernest Kempton Adams. Such part of the income as shall be designated by the Trustees to be applied to the stipend of the Research Fellow pursuing researches in the Physical Sciences or in their practical applications; the income received in excess of such stipend to be used in the publication and distribution of the results of the investigation carried on by such Fellows. Established 1904	50,000.00	.....	50,000.00
ALDRICH (JAMES HERMAN) SCHOLARSHIP FUND: Gift of James H. Aldrich, of the Class of 1863, to establish this fund in commemoration of the fiftieth anniversary of his graduation. Established 1913.	5,000.00	.....	5,000.00
ANONYMOUS FUND FOR CHURCH AND CHORAL MUSIC: Gift of an Anonymous donor to establish this fund; the income to be used to maintain a Professorship in Church and Choral Music. Established 1913.	100,859.36	.....	100,859.36
ART PROFESSORSHIP FUND: Bequest of Hugo Reisinger to found a professorship of the History of Arts. Established 1916.	105,000.00	.....	105,000.00

AVERY ARCHITECTURAL FUND:

Gift of Samuel P. Avery and Mary Ogden Avery in memory of their deceased son, Henry Ogden Avery. The income of the fund to be applied to the purchase of books relating to architecture, decorations and allied arts. Established 1890, and augmented in 1910 by \$20,000.

50,000.00

BARKER (CLARENCE) MUSICAL SCHOLARSHIP FUND:

Bequest of the late Mrs. Virginia Purdy Bacon, to be used in establishing a graduate scholarship in the Department of Music. Established 1921.

20,173.75

BARNARD FELLOWSHIP FUND:

Legacy from the late President Barnard to establish the 'Barnard Fellowship for encouraging Scientific Research.' Established 1889.

10,000.00

BARNARD LIBRARY FUND:

The residuary estate of the late President Barnard was left to the Trustees of Columbia College to constitute a fund under the name of the 'Barnard Fund for the Increase of the Library', the income of which is to be devoted to the purchase of books, especially those relating to physical and astronomical science; but out of the income of this fund so much as may be necessary is to be applied in procuring a gold medal of the bullion value of not less than \$200, to be styled the 'Barnard Medal for Meritorious Service to Science', to be awarded every five years on the judgment of the National Academy of Science of the United States. The medal will be next awarded in June, 1925. Established 1889.

59,600.00

BARNARD (MARGARET) FUND:

The residuary estate of the late Margaret Barnard, widow of the late President Barnard, was left to the Trustees of Columbia College, 'to augment the sum left by my late husband', Established 1892.

16,250.00

BECK FUNDS:

The late Charles Bathgate Beck bequeathed the sum of \$10,000 to be applied as follows: \$2,000 to found one free scholarship, the income to be applied 'to the free yearly tuition and education in said College of one student forever, under such terms and conditions as the rules of said College and said Trustees shall prescribe'. The income of the remaining \$8,000 to be used for an annual prize 'to the student in the Law School who shall pass the best examination in Real Estate Law'. Established 1899.

Beck Scholarship Fund..... \$2,000.00

Beck Prize Fund..... 8,000.00

10,000.00

	At June 30, 1921	Additions, 1921-1922	At June 30, 1922
BEEKMAN (GERARD) FUND: Bequest of the late Gerard Beekman, formerly a Trustee of Columbia University, the income to be used in connection with the work of the Chaplain. Established 1920.	\$10,000.00	.....	\$10,000.00
BEER (JULIUS) LECTURE FUND: Bequest of the late Julius Beer, the income of which is to be applied to providing lectures at intervals not exceeding three years, by lecturers nominated by the Faculty of Political Science and confirmed by the Trustees. Established 1903.	10,000.00	.....	10,000.00
BENNETT PRIZE FUND: Gift of James Gordon Bennett, the income, or a medal of equal value, to be given for 'an essay in English prose upon some subject of contemporaneous interest in the domestic or foreign policy of the United States'. Established 1893.	1,000.00	.....	1,000.00
BERGH (HENRY) FUND: Anonymous Gift, the income to be used for the inculcating of a spirit of kindness and consideration toward the lower animals. Established 1907.	100,000.00	.....	100,000.00
BLUMENTHAL ENDOWMENT FUND: Gift of George Blumenthal for the endowment of a Chair of Politics. Established 1906.	100,200.00	\$8,224.83	108,424.83
BLUMENTHAL (GEORGE, JR.) SCHOLARSHIP FUND: Gift of Mr. and Mrs. George Blumenthal, the income to be awarded to students of Medicine to cover the cost of tuition, or for other purposes. Established 1909.	19,667.50	.....	19,667.50
BONDY (EMIL C.) FUND: Bequest of the late Emil C. Bondy, the income of which is to be applied, first, toward investigation into the cause, prevention and cure of cancer, and second, toward general research in medicine and surgery and their allied subjects. Established 1916.	100,000.00	.....	100,000.00
BORING FELLOWSHIP FUND: Gift of Mr. Edward C. Moore, Jr., to establish a Fellowship in the School of Architecture. Established 1922. ....	.....	6,200.00	6,200.00

<p>BRAINARD (EDWARD SUTLIFF) MEMORIAL PRIZE FUND: Gift of Miss Phoebe T. Sutliff in memory of her nephew Edward Sutliff Brainard of the Class of 1921. The income to be awarded annually to that student in the graduating class of Columbia College who is adjudged by his classmates, according to such rules as the Faculty may prescribe, as most worthy of distinction on the ground of his qualities of mind and character. Established 1920.</p>	<p>1,200.00</p>	<p>1,200.00</p>
<p>BRIDGHAM (SAMUEL WILLARD) FUND: Gift of Mrs. Fanny Bridgham to establish this fund, in memory of the late Samuel Willard Bridgham, of the Class of 1867, School of Mines, the income to be applied to the support of a Fellowship to be awarded annually by the Faculty of Applied Science. Established 1915.</p>	<p>22,000.00</p>	<p>22,000.00</p>
<p>BULL (WILLIAM T.) MEMORIAL FUND: From the William T. Bull Memorial Fund Committee in honor of the late William T. Bull, M. D., the income to be applied to meet the cost of conducting original research under the direction of the Department of Surgery. Established 1911.</p>	<p>32,250.00</p>	<p>32,250.00</p>
<p>BUNNER PRIZE FUND: Gift of friends of the late Henry Cnyler Bunner, the income to be used to provide every year the 'H. C. Bunner Medal', to be given to the student who shall present the best essay on an assigned subject in American literature. Established 1896.</p>	<p>1,247.00</p>	<p>1,247.00</p>
<p>BURGESS (ANNIE P.) SCHOLARSHIP FUND: Bequest of the late Annie P. Burgess to establish this fund; the income to be applied to the tuition and expenses each year of a worthy and deserving young man of good habits and Christian character. Established 1913.</p>	<p>5,000.00</p>	<p>5,000.00</p>
<p>BURGESS (DANIEL M.) SCHOLARSHIP FUND: Bequest of the late Annie P. Burgess to establish this fund; the income to be applied to the tuition and expenses each year of a worthy and deserving young man of good habits and Christian character. Established 1913.</p>	<p>5,000.00</p>	<p>5,000.00</p>
<p>BUTLER (NICHOLAS MURRAY) MEDAL FUND: Gift of Archer M. Huntington to establish this fund; the income to be used in providing a gold medal every five years for the most distinguished contribution made anywhere in the world to Philosophy, or to educational theory, practice or administration. Established 1914.</p>	<p>3,000.00</p>	<p>3,000.00</p>

	At June 30, 1921	Additions, 1921-1922	At June 30, 1922
BUTLER (RICHARD) SCHOLARSHIP FUND: Gift of Mrs. Richard Butler in memory of her deceased husband, Richard Butler. Open to students born in the State of Ohio. Established 1903.	\$5,500.00	.....	\$5,500.00
CAMPBELL SCHOLARSHIP FUND: Gift of \$3,000 each from Miss Maria L. Campbell and Miss Catherine B. Campbell for the establishment of two scholarships in the College, in memory of Robert B. Campbell, of the Class of 1844, and Henry P. Campbell, of the Class of 1847. Established 1900.	6,000.00	.....	6,000.00
CARPENTIER (EDWARD R.) FUND: Gift of Mrs. Maria H. Williamson for the endowment of a 'Professorship, or an endowed lectureship, on the origins and growth of civilizations among men'. Established 1906.	250,000.00	.....	250,000.00
CARPENTIER (JAMES S.) FUND: Gift from General H. W. Carpentier to establish a fund in memory of his brother, James S. Carpentier, for the benefit of the Law School. Established 1903.	300,000.00	.....	300,000.00
CARPENTIER (R. S.) FUND: Gift from General H. W. Carpentier towards a professorship in the Medical School, in memory of Reuben S. Carpentier. Established 1904.	100,000.00	.....	100,000.00
CENTER FUND: Gift of Mary E. Ludlow, in memory of her son, the late Robert Center, the income to be applied either to the salary of a Professor of Music, or of other Instructors of Music, or to Fellowships or Scholarships in Music, or to be used in any one or more of these or such other ways as shall, in the judgment of the Trustees, tend most effectually to elevate the standard of musical instruction in the United States, and to afford the most favorable opportunity for acquiring instruction of the highest order.	180,000.00	.....	180,000.00
CHAMBERLAIN (JOSEPH P.) ENDOWMENT FUND: Gift of Mr. Joseph P. Chamberlain for the endowment of a chair of legislation. Established 1917.	150,000.00	.....	150,000.00

CHANDLER (CHARLES FREDERICK) FUND:

From the Alumni of Columbia University to establish this fund in honor of Professor Charles Frederick Chandler; the income to be applied to the delivery and publication of at least one public lecture each year on some phase of the science of Chemistry, etc. Established 1910..

7,500.00

.....

7,500.00

CHANLER PRIZE FUND:

Bequest of J. Winthrop Chanler, of the Class of 1847, to found an annual prize for the best original manuscript essay in English prose on the History of Civil Government of America, or some other historical subject'. Established 1877

1,100.00

.....

1,100.00

CHAPEL MUSIC FUND:

Gift of Gerard Beekman of the Class of 1864 to establish this fund; the income to be applied to the purchase of suitable music for use in the services in St. Paul's Chapel. Established 1913.

1,050.00

.....

1,050.00

CLARK SCHOLARSHIP FUND:

Bequest of the late Alonzo Clark, M. D., formerly President of the College of Physicians and Surgeons, for the purpose of promoting the discovery of new facts in medical science. First prize bestowed October 1, 1894.....

15,250.00

.....

15,250.00

CLASS OF 1848 SCHOLARSHIP FUND:

Gift of an anonymous friend, 1902.....

10,000.00

.....

10,000.00

CLASS OF 1881 ARTS AND MINES FUND:

Gift of the Class of 1881 Arts and Mines in commemoration of the fortieth anniversary of their graduation, for the maintenance of the class of 1881 flagpole and for the purchase of Columbia flags. Established 1921

2,000.00

.....

2,000.00

CLASS OF 1885 SCHOOL OF MINES FUND:

Gift of the Class of 1885 School of Mines in celebration of the twenty-fifth anniversary of their graduation; the income to be applied to the maintenance of a Scholarship in the Schools of Mines, Engineering and Chemistry. Established 1910.....

10,600.00

.....

10,600.00

CLASS OF 1888 ARTS AND MINES FUND:

For the maintenance of the Class of 1888 Gates. Established 1917

400.00

.....

400.00

	At June 30, 1921	Additions, 1921-1922	At June 30, 1922
CLASS OF 1889 MEDAL FUND: Gift of the Class of 1889 School of Mines to establish this fund in celebration of the twenty-fifth anniversary of their graduation, the income to be applied to the cost of striking a medal to be awarded triennially. Established 1915.....	\$500.00	.....	\$500.00
CLASS OF 1892 ARTS AND MINES FUND: Gift of the Class of 1892 Arts and Mines for the endowment of rooms 633 Hartley and 431 Furnald, the occupancy thereof to be awarded as provided in the deed of gift. Established 1917.....	6,600.00	.....	6,600.00
CLASS OF 1896 ARTS AND MINES SCHOLARSHIP FUND: Gift of the Class of 1896 Arts and Mines, in commemoration of the twenty-fifth anniversary of their graduation. Established 1921.....	12,000.00	.....	12,000.00
CLASS OF 1901 DECENNIAL FUND: Gift of the Class of 1901 College and Applied Science to establish this fund, the income of which is to be used for the purpose of defraying, or assisting to defray, the expenses of maintaining the work of the Committee on Employment of Students. Established 1911..	1,400.00	.....	1,400.00
CLASS OF 1905 FUND: Gift of the Class of 1905 College and Science to establish this fund, the income to be disposed of yearly by direction of the Class, the accumulated interest being added to the principal if the Class make no direction. In 1930 the entire fund with accumulations and additions shall be applied to some University, athletic or alumni, activity as directed by the Class and if the Class make no direction, the entire fund with accumulations and additions shall become the property of the University, as a gift from the Class. Established 1915.....	1,225.00	.....	1,225.00
COCK (THOMAS F., M. D.) PRIZE FUND: Bequest of the late Augustus C. Chapin, the income to be used to provide an annual prize to be known as the "Thomas F. Cock, M. D., Prize" for the best thesis on puerperal fever. Established 1915.....	1,125.00	.....	1,125.00

COLLINS (PERRY McDONOUGH) SCHOLARSHIP FUND:

Bequest of the late Kate Collins Brown; the annual income to be divided into amounts of Three hundred dollars (\$300) to be paid annually under such rules and regulations as the Board of Trustees of the College may from time to time establish, to each of those undergraduates in the academic and scientific courses of the College whose pecuniary condition and resources are, in the judgment of the Board of Trustees, insufficient to defray the expenses of his college education; and if the College is unable in any year to use the entire income of the said Fund for the purposes aforesaid, after making every proper effort so to do, the balance of the income from the Fund in that year, not needed for the aforesaid purposes, shall be applied to the general purposes of the academic and scientific departments of the College. Established 1918.

563,975.00

25.00

Decrease

564,000.00

COLUMBIA HUDSON-FULTON PRIZE FUND:

Gift of the representatives of the various Committees having charge of the reception given on the University grounds in October, 1909, under the auspices of the Hudson-Fulton Celebration Commission, the income to be used for an annual prize, or prizes, to be known as the Columbia Hudson-Fulton Prize, or Prizes, for an athletic event. Established 1909.

1,000.00

1,000.00

COLUMBIA UNIVERSITY FOOTBALL ASSOCIATION FUND:

From the Trustees of the trust created by the Columbia University Football Association, the income to be applied towards the support of athletic teams or crews representing Columbia University in intercollegiate sports. Established 1911.

10,037.72

10,037.72

CONVERS (E. B.) PRIZE FUND:

Gift of Miss Alice Convers and Miss Clara B. Convers to endow, in memory of their brother, Ebenezer Buckingham Convers, of the Class of 1866, a prize in the Columbia Law School. Established 1906.

1,100.00

1,100.00

COTHEAL FUND:

Gift of Mrs. James R. Swords and Mrs. Samuel Lawrence as a memorial to their brother, Alexander I. Cotheal, the income to be used for the purchase of books in the Oriental Languages, or relating to Oriental countries. Established 1896.

17,025.00

17,025.00

	At June 30, 1921	Additions, 1921-1922	At June 30, 1922
CRAGIN (E. B.) ENDOWMENT FUND: Gifts of various donors to establish this fund in memory of the late Dr. Edwin B. Cragin, the net income to be applied to the support of the Social Service work of the Sloane Hospital for Women, or, in the event that the Social Service work of the said Hospital is otherwise provided for or is discontinued, then such net income shall be expended in such other manner as the Board of Managers of the Hospital may from time to time direct. Established 1919.	\$60,409.05	.....	\$60,409.05
CROCKER (GEORGE) SPECIAL RESEARCH FUND: Bequest of the late George Crocker, the income to be used in Cancer Research. Established 1911.	1,455,000.00	.....	1,455,000.00
CROSBY (WILLIAM O.) COLLECTION OF LANTERN SLIDES FUND: Gift of \$1,800 from friends of Professor William O. Crosby, of Boston, to establish and maintain the collection of geological lantern slides in the Department of Geology known by above title. One hundred dollars was made immediately available and \$1,700 is to constitute a permanent fund, the income only to be used for above purposes. Established 1913	1,700.00	.....	1,700.00
CURRIER (NATHANIEL) FUND: Bequest of Lura Currier, to establish the Nathaniel Currier Fund, the income to be used for the purchase of books for the Library. Established 1908.	50,000.00	.....	50,000.00
CURTIS, (CARLTON C.) FUND: Gift of Carlton C. Curtis for the endowment of a branch of creative investigation under the terms and conditions as set forth in the Deed of Gift. Established 1921.	13,577.72	.....	13,577.72
CURTIS FELLOWSHIP FUND: Gift of the George William Curtis Memorial Committee to establish a fellowship in the School of Political Science in Columbia University, to bear the name and to perpetuate the memory of the late George William Curtis; the holder of the fellowship to devote himself to the study of the science of government, with a special view to its application to the then existing condition of the United States, or of the State or City of New York, and to publish a monograph on some subject relating to the then existing condition of the United States, etc. Established 1899.	10,000.00	.....	10,000.00

CURTIS (GEORGE WILLIAM) MEDALS FUND: Gift from an associate of George William Curtis in the Civil Service Reform work. Established 1902.....	1,300.00	.....	1,300.00
CUTTING (W. BAYARD) FUND: Gift of Mrs. W. Bayard Cutting and her children to establish this fund in memory of the late W. Bayard Cutting, of the Class of 1869; the income to provide traveling fellowships. Established 1913.....	200,000.00	.....	200,000.00
CUTTING (W. BAYARD, JR.) FELLOWSHIP FUND: Gift of W. Bayard Cutting, to establish the 'W. Bayard Cutting, Jr. Fellowship Fund'. The income of the fund (to be not less than \$600) is payable to the Graf Erwein von Wurmbbrand and the Gräfin Eva von Wurmbbrand during their lifetime; thereafter, the income shall be used to provide a fellowship in International Law, to be awarded annually at the pleasure of the Trustees, to that student, who, in their judgment, shall have attained a standard of excellence to justify the award. Established 1912.....	15,000.00	.....	15,000.00
DACOSTA PROFESSORSHIP FUND: The late Charles M. DaCosta, a member of the Class of 1855, bequeathed to the Trustees of Columbia College \$100,000. Of this sum, the Trustees, on October 6, 1891, for the endowment of a chair in the Department of Biology, set apart \$80,000, which has been increased by the profits of certain investments to.....	86,600.00	.....	86,600.00
DARLING (EDWARD A.) PRIZE FUND: Bequest of the late Edward A. Darling, formerly Superintendent of Buildings and Grounds, the income to be awarded as a prize each year at Commencement to that student of the senior class in Engineering whose work during his course of study is voted by his classmates to have been the most honest and thorough. Established 1903.....	1,070.00	.....	1,070.00
DEAN LUNG PROFESSORSHIP OF CHINESE FUND: Gift of an anonymous friend to found a department of Chinese Languages, Literatures, Religion and Law, and especially for the establishment of a Professorship to be known as the Dean Lung Professorship of Chinese. Established 1901.....	226,200.00	.....	226,200.00
DEUTSCHER VEREIN PRIZE FUND: Gift of the Deutscher Verein in Columbia University to establish an annual prize in German. Established 1917.....	1,000.00	.....	1,000.00

	At June 30, 1921	Additions, 1921-1922	At June 30, 1922
DEVENDORF (DAVID M.) SCHOLARSHIP FUND: Gift of Mrs. David M. Devendorf, to establish the 'David M. Devendorf Scholarship Fund' as a memorial to her deceased husband, David M. Devendorf; the income of which is to provide a scholarship in the College of Physicians and Surgeons. Established 1911.....	\$6,500.00	.....	\$6,500.00
DEWITT (GEORGE C.) SCHOLARSHIP FUND: Gift of Mrs. George C. Dewitt of New York to establish this fund, the net annual income to be awarded as a scholarship by the Faculty of Law to any graduate of Columbia College, of Christian parentage and of good mental and moral standing in his class, who may need such assistance to enable him to pursue the three-years' course at the Law School and who, in the judgment of the Faculty of Law, shall be worthy of such privilege; provided that the holder of this scholarship shall reside in one of the Residence Halls of the University during his period of study. Established 1917.....	15,301.75	.....	15,301.75
DOUGHTY (FRANCIS E., M.D.) SCHOLARSHIP FUND: Bequest of Phebe Caroline Swords to establish the 'Francis E. Doughty, M. D., Scholarship Fund' in the College of Physicians and Surgeons, open to members of any class. Established 1912.....	10,000.00	.....	10,000.00
DRISLER CLASSICAL FUND: Gift of Seth Low, formerly President of the University, for the endowment of the 'Henry Drisler Classical Fund' for the purchase of books, maps, charts, busts and such other equipment as will tend to make instruction in the classics more interesting and effective. Established 1894.....	10,750.00	.....	10,750.00
DU BOIS (DR. ABRAM) MEMORIAL FUND: Gift of William A. Du Bois, Matthew B. Du Bois and Katharine Du Bois, in memory of their father, Doctor Abram Du Bois, the income to be applied to the maintenance of a fellowship to be known as the Doctor Abram Du Bois Fellowship, to be open to a graduate of the College of Physicians and Surgeons devoting himself to the subject of diseases of the eye. Established 1910.....	18,000.00	.....	18,000.00

DYCKMAN FUND: Gift of Isaac Michael Dyckman in memory of his uncles, Dr. Jacob Dyckman and Dr. James Dyckman, both of the College of Physicians and Surgeons, to establish the 'Dyckman Fund for the Encouragement of Biological Research', the interest derived therefrom to be devoted annually to such object consistent with the purposes of the gift, as shall be recommended by the Department of Zoology and approved by the President.' Established 1899..	10,500.00	10,500.00
EARLE PRIZE FUND: Gift of the Earle Memorial Committee to establish the Earle Prize in Classics. Established 1907.....	1,325.00	1,325.00
EATON PROFESSORSHIP FUND: Bequest of the late Dorman B. Eaton to endow and maintain a Professorship of Municipal Science and Administration in the College. Established 1903.....	100,000.00	100,000.00
EINSTEIN FUND: Gift of Dr. and Mrs. Charles Waldstein, as a memorial to Mrs. Waldstein's parents, Mr. and Mrs. D. L. Einstein; the income of which is to be awarded annually to that graduate student doing the best and most original work in the field of American Diplomacy. Established 1911	5,000.00	5,000.00
ELSBURG (ALBERT MARION) PRIZE FUND: Gift of Mrs. Albert Elsborg to establish this fund as a memorial to her son, Albert Marion Elsborg, of the Class of 1905. The income to provide the 'Albert Marion Elsborg Prize in Modern History'. Established 1912.....	2,000.00	2,000.00
EMMONS (SAMUEL FRANKLIN) MEMORIAL FUND: Amount collected by the Committee of the Emmons Memorial Fund for a fellowship in Scientific Research. Established 1913.....	14,000.00	14,000.00
FERGUSON (DAVID W. AND ELLEN A.) FELLOWSHIP FUND: Gift of William C. Ferguson of the Class of 1887 School of Mines to establish a fellowship in the Department of Chemistry, the holder of the fellowship to devote himself to investigation upon the subject of synthetic drugs and medicines. Established 1921.....	10,000.00	10,000.00
FINE ARTS ENDOWMENT FUND: Gift of an anonymous donor to establish this fund for the benefit of the School of Architecture. Established 1913.....	262,731.67	20,075.17
		282,806.84

	At June 30, 1921	Additions, 1921-1922	At June 30, 1922
GARTH MEMORIAL FUND: Gift of Horace E. Garth to establish a fellowship in Political Economy in memory of his son, the late Granville W. Garth. Established 1904.....	\$16,500.00	.....	\$16,500.00
GEBHARD FUND: Bequest of Frederick Gebhard to found a Professorship of German Language and Literature. Established 1843.....	20,000.00	.....	20,000.00
GERMANISTIC FUND: Gift of the Germanistic Society and other donors, the income to be applied to the maintenance of instruction and research in matters relating to the German peoples. Established 1920....	14,700.00	.....	14,700.00
GERMAN LECTURE FUND: Gifts for an endowment for Public Lectures in German at the University, the income to be used for advertising, printing, slides, etc. Established 1901.....	1,250.00	.....	1,250.00
GILDER (RICHARD WATSON) FUND FOR THE PROMOTION OF GOOD CITIZENSHIP: Contributions by the friends of the late Richard Watson Gilder to establish this fund in his honor, the income to be used to enable succeeding classes of students to devote themselves as 'Gilder Fellows' to the investigation and study of political and social conditions in this country and abroad, etc. Established 1911.....	48,000.00	.....	48,000.00
GOLDSCHMIDT (SAMUEL ANTHONY) FELLOWSHIP FUND: Gift of George B. Goldschmidt, to establish this fund, as a memorial to Samuel Anthony Goldschmidt, of the Class of 1871, the income to be used for the maintenance of a fellowship in Chemistry. Established 1908.....	16,500.00	.....	16,500.00
GOTTHEIL (GUSTAV) LECTURESHIP FUND: Gift from Temple Emanu-El to establish this lectureship, the holder of which is to be non- inated by the Professors in the Department of Semitic Languages, subject to confirmation by the Trustees. Established 1903.....	10,275.00	.....	10,275.00
GOTTSBERGER (CORNELIUS HEENEY) FELLOWSHIP FUND: Bequest of Ellen Josephine Banker to establish a fellowship to bear the name and be in mem- ory of her deceased brother, Cornelius Heeney Gottsberger. Established 1904.....	9,500.00	.....	9,500.00

GREEN PRIZE FUND: Gift of Mr. and Mrs. Asher Green to establish this fund, in memory of their son, a member of the Class of 1914, the income to provide the Green Prize in the College. Established 1913.	1,000.00	1,000.00	1,000.00
GROSVENOR (ROBERT) MEMORIAL FUND: Gift of Mr. William Grosvenor of Providence, R. I., in behalf of his mother and her family, in memory of Robert Grosvenor, deceased, a former member of the Class of 1918 in the Medical School. The income to be used for the purchase of books for the Library at the Medical School. Established 1920.	2,500.00	2,500.00	2,500.00
HALL (GEORGE HENRY) FUND: Bequest of the late George Henry Hall to establish this fund, the income of which is to be used to maintain continuously one scholar in the University for the full term of four years, such scholar to be selected by the Trustees. Established 1913.	14,363.22	14,363.22	14,363.22
HAMILTON (ADELAIDE) BEQUEST: Gift of Miss Adelaide Hamilton to be set apart as a fund for the purchase of books, as a memorial of her father, John Church Hamilton, a son of Alexander Hamilton, a proper book-plate to be set in each volume purchased with the income of the fund. Established 1917.	1,000.00	1,000.00	1,000.00
HARSEN SCHOLARSHIP FUND: Founded by the late Jacob Harsen, M. D., in 1859, the income to be given in prizes. Under an order of the N. Y. Supreme Court in 1903, the income is thereafter to be used for scholarships in the Medical School, to be known as the Harsen Scholarships.	31,332.73	31,332.73	31,332.73
HARTLEY (FRANK) SCHOLARSHIP FUND: Gifts from friends of the late Frank Hartley, M. D., to endow a Scholarship in the College of Physicians and Surgeons, as a memorial. Established 1914.	4,425.00	4,425.00	4,425.00
HEPBURN (A. BARTON) PROFESSORSHIP FUND: Bequest of the late A. Barton Hepburn to found or aid in founding a Professorship in either Economics or History. Established 1922.	75,000.00	75,000.00	75,000.00
HUBER (FRANCIS) SCHOLARSHIP FUND: Gift of Francis Huber to establish a scholarship to be awarded to a student entering the Medical School from an institution other than Columbia College, Barnard College or Hunter College. Established 1921.	5,000.00	5,000.00	5,000.00

	At June 30, 1921	Additions, 1921-1922	At June 30, 1922
HUBER (VIOLA B.) SCHOLARSHIP FUND: Gift of Francis Huber to establish a scholarship to be awarded to a student entering the Medical School from Hunter College. Established 1921.....	\$5,000.00	.....	\$5,000.00
ILLIG FUND: Bequest of William C. Illig, of the Class of 1882 School of Mines the income to be applied to the purchase of prizes to be awarded to students of the graduating class of the School of Mines, who shall, in the judgment of the Faculty, have merited the same by commendable proficiency in such scientific subjects as the Faculty may designate. Established 1898.....	2,400.00	\$100.00 Decrease	2,300.00
INDO-IRANIAN FUND: Gift of an anonymous donor to found this Fund, the income to be used for the maintenance of the Department of Indo-Iranian Languages. Established 1908.....	15,000.00	.....	15,000.00
JACOBI (ABRAHAM) LIBRARY FUND: Gift of Francis Huber, the income thereof to be expended for the purchase of books and journals on pediatric subjects for the Library of the Medical School. Established 1921.....	4,021.28	.....	4,021.28
JACOBI (ABRAHAM) SCHOLARSHIP FUND: Gift of Francis Huber to establish four scholarships, two of which shall be awarded to students entering the Medical School from Columbia College and two to students entering the Medical School from the College of the City of New York. Established 1921.....	20,000.00	.....	20,000.00
JANEWAY (E. G.) LIBRARY ENDOWMENT FUND: Gift of Mrs. Russell Sage to establish the E. G. Janeway Library Endowment Fund, the income of which is to be devoted to the maintenance and extension of the Janeway Library in the College of Physicians and Surgeons. Established 1912.....	26,750.00	.....	26,750.00
JEFFERSON STATUE MAINTENANCE FUND: For the care and repair of the Statue of Thomas Jefferson. Established 1917. Original gift \$1,589.92, to which has been added the accrued income of the Fund.....	1,800.00	.....	1,800.00

LASHER (JOHN K.) FUND: Bequest of the late John K. Lasher, Jr., the income to be applied toward the support of the work of the Columbia University Christian Association. Established 1920.....	1,000.00	1,000.00
LAW ALUMNI LIBRARY FUND: The income to be applied, as the Trustees may from time to time determine, for the improvement of the Law Library. Established 1916.....	1,500.00	1,500.00
LAW LIBRARY FUND: Created by act of the Trustees on March 5, 1900, by the consolidation of the Alexander Cole gift (\$1,500), John J. Jenkins Legacy (\$500); John McKeon Fund (\$1,000), Samson Simpson Fund (\$1,000); and Edgar J. Nathan Gift (\$250), the income to be applied to the purchase of law books. Augmented by act of the Finance Committee, October 2, 1907, by adding the Pyne Law Gift (\$1,000).....	5,250.00	5,250.00
LEE (THE) FUND: Gift of Dr. and Mrs. Frederic S. Lee to establish this fund, the income to be used to meet the cost of equipment and research in the Department of Physiology. Established 1914..	20,000.00	20,000.00
LOUBAT FUND: Gift of Joseph F. Loubat for prizes to be given every five years for works in the English Language on the History, Geography, Archeology, Ethnology, Philology or Numismatics of North America. First prize, \$1,000; second prize, \$400. Established 1892.....	7,000.00	7,000.00
LOUBAT PROFESSORSHIP FUND: Gift of Joseph F. Loubat to establish the Loubat Professorship in American Archaeology. Established 1903.....	100,000.00	100,000.00
MAISON FRANCAISE ENDOWMENT FUND: Gift of Robert Bacon, the income to be used in defraying the running expenses of the Maison Francaise. Established 1913.....	5,000.00	5,000.00
MARTIN (FREDERICK TOWNSEND) FUND: Bequest of the late Frederick Townsend Martin, the income to be applied to the care and cure of tuberculosis cases through the medium of the Vanderbilt Clinic. Established 1919.....	10,000.00	10,000.00
MATHEMATICAL PRIZE FUND: Gift of Mrs. Louis T. Hoyt, to establish this fund in memory of her nephew John Dash Van Buren, Jr., of the Class of 1905. Established 1906.....	5,500.00	5,500.00

	At June 30, 1921	Additions, 1921-1922	At June 30, 1922
MCANENY (MARJORIE) SCHOLARSHIP FUND: Gift of Francis Huber to establish a scholarship to be awarded to a student entering the Medical School from Barnard College. Established 1921.	\$5,000.00	.....	\$5,000.00
McKIM FELLOWSHIP FUND: Gift of Charles F. McKim for two traveling fellowships in the Department of Architecture. The fellowships are awarded in odd-numbered years. Established 1889.	20,000.00	.....	20,000.00
MEIERHOF (DR. HAROLD LEE) MEMORIAL PRIZE FUND: Gift of Dr. and Mrs. Edward Lee Meierhof, as a memorial to their son, Dr. Harold Lee Meierhof, the income of which is to be awarded annually, in recognition of some meritorious piece of research accomplished in the Department of Pathology. Established 1921. ....	.....	\$1,000.00	1,000.00
MEMBER OF CLASS OF 1885 FUND: Gift of Grant Squires, of the Class of 1885, the income to be awarded every five years to defray the expenses of a sociological investigation that promises results of a scientific value. Established 1895.	1,050.00	.....	1,050.00
MITCHELL (WILLIAM) FELLOWSHIP FUND: Bequest of the late Benjamin D. Silliman to establish, in honor and memory of his friend, William Mitchell, deceased, the William Mitchell Fellowship Fund in Letters or Science. Established 1908.	10,000.00	.....	10,000.00
MOFFAT SCHOLARSHIP FUND: Bequest of William B. Moffat, M. D., of the Class of 1838, for the purpose of one or more scholarships for the education and instruction of one or more indigent students'. Established 1862.	2,000.00	.....	2,000.00
MONTGOMERY (ROBERT H.) PRIZE FUND: Gift of Robert H. Montgomery to establish this fund, the income to be awarded as a prize to the member of the graduating class of the School of Business who has specialized in accounting and who is deemed by the staff of the School of Business to be most proficient in all courses. Established 1916.	1,010.00	.....	1,010.00

<p>MOSENTHAL FELLOWSHIP FUND: Gift of the friends of the late Joseph Mosenthal, to found a fellowship in Music. Established 1898.</p>	7,500.00	7,500.00
<p>ORDRONAUX (JOHN) FUND: Bequest of Dr. John Ordronaux, to establish prizes in the Law School, to be presented annually. Established 1909.</p>	3,050.00	3,050.00
<p>PERKINS FELLOWSHIP FUND: Bequest of Willard B. Perkins, the income to be expended every four years for a traveling fellowship in the Architectural Department. Established 1898.</p>	5,700.00	5,700.00
<p>PETERS (WILLIAM RICHMOND, JR.) FUND FOR ENGINEERING RESEARCH: Gift of Mr. and Mrs. William R. Peters to establish this fund as a memorial to their son, William Richmond Peters, Jr., of the Class of 1911, Civil Engineering, the income of which is to be applied to the work of research in the Department of Civil Engineering. Established 1912.</p>	50,000.00	50,000.00
<p>PHILOLEXIAN CENTENNIAL WASHINGTON PRIZE FUND: Gift to the Philolexian Society from J. Ackerman Coles, of the Class of 1864, the accumulated income to be expended every four years for a duplicate of the life-size bronze bust of George Washington, modeled from life at Mount Vernon, by Jean Antoine Houdon. Bust to be cast at the Barbadienne Foundry, Paris, France, and to be given to that member of the Philolexian Society, who, in the opinion of the President of the University, the President of the Society and a third man of their choosing, shall be deemed most worthy, upon his delivery of an original patriotic address. Established 1902.</p>	1,000.00	1,000.00
<p>PHILOLEXIAN PRIZE FUND: From the Philolexian Society, the income to be paid to the Society for prizes. Established 1903-1904.</p>	1,400.00	1,400.00
<p>PROUDFIT (ALEXANDER MONCRIEF) FELLOWSHIP FUND: Bequest of the late Alexander Moncrief Proudfit, of the Class of 1892, to found a fellowship for the encouragement of study in English Literature, to be known as the 'Alexander Moncrief Proudfit Fellowship in Letters,' to be held only by such persons as, being the sons of native-born American parents, shall have taken the degree of Bachelor of Arts after a three years' residence in Columbia College, and shall, while enjoying such fellowship, or the income thereof, remain unmarried. Established 1899.</p>	15,000.00	15,000.00

	At June 30, 1921	Additions, 1921-1922	At June 30, 1922
PROUDFIT (MARIA McLEAN) FELLOWSHIP FUND IN MEDICINE: Bequest of the late Alexander Moncrief Proudfit, of the Class of 1892, to found a fellowship to be known as the 'Maria McLean Proudfit Fellowship', to be held only by such persons as, being the sons of native-born American parents, shall, under the direction of the Medical Faculty of Columbia College, pursue advanced studies in Medicine, and shall, while enjoying such fellowship, or the income thereof, remain unmarried. Established 1899.	\$15,000.00	.....	\$15,000.00
PSYCHOLOGY FUND: Gift of John D. Rockefeller, as an endowment of the head professorship of the Psychological Department of Columbia University. Established 1899.	100,000.00	.....	100,000.00
PULITZER (JOSEPH) FUND FOR SCHOOL OF JOURNALISM: Gift from Joseph Pulitzer to establish and endow a School of Journalism in Columbia University. Established 1903.	1,796,206.07	.....	1,796,206.07
PULITZER SCHOLARSHIP FUND: Gift of \$100,000 by Joseph Pulitzer to found thirty scholarships for graduates of City Grammar Schools; one-half the sum to be used on improvements on the new site at 116th Street. Established 1893. Augmented in 1912.	302,000.00	.....	302,000.00
REISINGER (HUGO) FUND: Bequest of the late Hugo Reisinger. The income to be applied in the discretion of the Trustees to the purchase of books, periodicals and other material for instruction and research in matters relating to the German peoples. Established 1919.	3,600.00	.....	3,600.00
ROLKER (CHARLES M., JR.) PRIZE FUND: Gift of Mrs. Charles M. Rolker, the annual income to constitute a prize to be publicly awarded on Class Day of each year to that member of the graduating class in Columbia College who, in the judgment of his classmates, has proven himself most worthy of special distinction as an undergraduate student, either because of his industry and success as a scholar, or because of his helpful participation in student activities, or because of pre-eminence in athletic sports. Established 1909.	1,000.00	.....	1,000.00

<p>ROMAINE (BENJAMIN F.) PRIZE FUND: Gift of Benjamin F. Romaine to establish a prize for proficiency in the Greek language and literature. Established 1922.</p>	<p>1,500.00</p>	<p>1,500.00</p>
<p>SANDHAM (ANNA M.) SCHOLARSHIP FUND: Bequest of the late Anna M. Sandham to establish a scholarship at Barnard College. Established 1922.</p>	<p>10,000.00</p>	<p>10,000.00</p>
<p>SAUNDERS (LESLIE M.) ENDOWMENT FUND: Bequest of the late Alexander Saunders to purchase a perpetual scholarship in Columbia University in the literary or scientific department at the choice of, and for the benefit of the youth nominated therefor by the principal and teachers of the Yonkers High School in Yonkers, or a majority of them, in the first instance, and thereafter to fill a vacancy as it may occur from time to time perpetually; and upon such conditions as such principal and teachers, or a majority of them, may determine with such power and authority to them to fill such scholarship for a term of either one year, two years, three years, or four years, as they may from time to time determine. Established 1917.</p>	<p>6,000.00</p>	<p>6,000.00</p>
<p>SCHERMERHORN (F. AUGUSTUS) FUND: Established by the Trustees for a traveling fellowship in the Department of Architecture in recognition of the liberality of Mr. F. Augustus Schermerhorn of the Class of 1868, to this Department. This fellowship is awarded in even-numbered years. (Name changed from Columbia Fellowship Fund). Principal reduced from \$13,000.00 to \$12,500.00. Established 1889.</p>	<p>12,500.00</p>	<p>12,500.00</p>
<p>SCHERMERHORN SCHOLARSHIP FUND: Bequest of John J. Schermerhorn, of the Class of 1825, for the purpose of free scholarships, the nomination to which shall vest in my nearest male relative in each generation during his lifetime'. Established 1877.</p>	<p>5,000.00</p>	<p>5,000.00</p>
<p>SCHIFF FELLOWSHIP FUND: Gift of Jacob H. Schiff to found a fellowship in the School of Political Science, to be annually awarded by the Faculty on the nomination of the donor or his eldest living male descendant, etc. Established 1898.</p>	<p>15,000.00</p>	<p>15,000.00</p>

	At June 30, 1921	Additions, 1921-1922	At June 30, 1922
SCHIFF (JACOB H.) ENDOWMENT FUND: Gift of Jacob H. Schiff for the endowment of a Professorship of Social Economy in order to make possible a close affiliation between Columbia University and the New York School of Philanthropy. Established 1905.....	\$100,000.00	.....	\$100,000.00
SCHOOL OF DENTISTRY ENDOWMENT FUND: Gift of James N. Jarvie for the partial endowment of a Dental School. Original gift \$100,000 to which has been added \$5,000 on account of interest on the above principal to April 15, 1917. Gifts of Anonymous Donors, \$26,000. Established 1916.....	131,000.00	.....	131,000.00
SCHURZ (CARL) FELLOWSHIP FUND: From the Carl Schurz Fund Committee in honor of Carl Schurz. Established 1900.....	10,000.00	.....	10,000.00
SCHURZ (CARL) LIBRARY FUND: From the Carl Schurz Fund Committee in honor of Carl Schurz, the income to be devoted to the purchase of books, maps, pamphlets and the like, in the field of the German Language and Literature. Established 1900.....	10,700.00	.....	10,700.00
SEIDL FUND: The proceeds of a memorial performance held at the Metropolitan Opera House on March 23, 1899, in honor of the late Anton Seidl, the income of the fund to be paid to Mrs. Seidl during her lifetime, and thereafter 'to be awarded at least every second year to the most promising candidate, either man or woman, prepared to devote himself, or herself, to the study of musical composition at Columbia University, or elsewhere in this country, or abroad'.....	12,000.00	.....	12,000.00
SHOEMAKER (WILLIAM BROCK) FUND: Gift as a memorial to the late William Brock Shoemaker, of the Class of 1902, in Columbia College, established jointly by his wife, Ella de Peyster Shoemaker, and his father, Henry F. Shoemaker, the income to be used for the benefit of self-supporting students. Established 1908.....	10,000.00	.....	10,000.00
SLOANE HOSPITAL FOR WOMEN FUND: Gift of William D. Sloane and Emily Thorn Sloane, his wife, as an endowment to the Sloane Hospital for Women. Established 1889.....	757,000.00	.....	757,000.00

SMITH PRIZE FUND, SCHOOL OF MEDICINE:	3,500.00		3,500.00
Gift of relatives, friends and pupils of the late Joseph Mather Smith, M. D., as a memorial of his services as Professor in the College of Physicians and Surgeons from 1826 to 1866. An annual prize of \$100 is to be awarded for the best essay on the subject for the year by an alumnus of the College. Established 1894.			
SOCIAL AND POLITICAL ETHICS PROFESSORSHIP FUND:	45,315.64		45,315.64
To endow a chair of Social and Political Ethics. Established 1918.			
STEERS (JAMES R.) FUND:	10,000.00		10,000.00
Bequest of the late James R. Steers of the Class of 1863 Law, to found a free bed in the Sloane Hospital for Women in the name of his daughter, Fannie Steers Reeve. Established 1919.			
STEVENS PRIZE FUND, SCHOOL OF MEDICINE:	1,900.00		1,900.00
Established by the late Alexander Hodgson Stevens, formerly President of the College of Physicians and Surgeons. The income of the fund is to be awarded every three years for the best medical essay covering original research as determined by the committee in charge of the prize. Established 1891.			
STOKES (CAROLINE PHELPS) FUND:	20,000.00		20,000.00
Bequest of the late Caroline Phelps Stokes, the income to be used for lectures, prizes or essays by the students of Columbia, Barnard and Teachers Colleges. Established 1910.			
STUART SCHOLARSHIP FUND:	6,000.00		6,000.00
The gift of Mrs. Cornelia A. Atwill, in memory of her grandsons, Sidney Barcelo Stuart, of the Class of 1880, and Eugene Tolman Stuart, of the Class of 1881, to found two scholarships in the College, to be known as 'Stuart Scholarships'. Established 1895.			
SWIFT MEMORIAL FUND:	6,589.00		6,589.00
Gift from the Trustees of the Association of the Alumni of the College of Physicians and Surgeons, representing the principal sum and accrued income as of December 31, 1920 of the Swift Memorial Fund, created in 1883 by Dr. James T. Swift as a memorial to his brother, Dr. Forest Swift, of the Class of 1857. Established 1921.			

	At June 30, 1921	Additions, 1921-1922	At June 30, 1922
TOPPAN PRIZE FUND:			
Gift of Mrs. Sarah M. Toppan, to establish this fund in memory of her late husband, Robert Noxon Toppan; the income to be used annually in providing the Robert Noxon Toppan Prize in the School of Law. Established 1904.....	\$4,200.00	.....	\$4,200.00
TROWBRIDGE FELLOWSHIP FUND:			
Gift of the Alumni Association of the School of Mines as a Memorial of the late Professor Trowbridge, to establish the 'William Petit Trowbridge Fellowship in Engineering'. Established 1893.....	10,000.00	.....	10,000.00
TURNER (CHARLES W.) SCHOLARSHIP FUND:			
Gift of Wallis S. Turner, of the Class of 1900, to establish in memory of his father, Charles W. Turner, a scholarship in Columbia College, to aid the education of a needy or deserving student, to the end that through the advantages of such education the recipient may aspire to the highest type of American Citizenship. Established 1920.....	6,000.00	.....	6,000.00
TYNDALL FELLOWSHIP FUND:			
Gift of the late Professor John Tyndall, of London, the income to be applied to the support of 'American pupils who may have shown decided talent in Physics', etc. Established 1885	11,500.00	.....	11,500.00
VAN AMRINGE (PROFESSOR) MATHEMATICAL PRIZE FUND:			
Gift of George G. DeWitt, of the Class of 1867, to establish this fund, the annual income to constitute the Professor Van Amringe Mathematical Prize in Columbia College. Established 1910.....	5,100.00	.....	5,100.00
VANDERBILT CLINIC ENDOWMENT FUND:			
Gift of Cornelius, William K., Frederick W., and George W. Vanderbilt, as a perpetual memorial to their father, the late William H. Vanderbilt, as an endowment for the Vanderbilt Clinic. Established 1896.....	115,000.00	.....	115,000.00
VAN PRAAG (L. A.) FUND:			
Bequest of L. A. Van Praag to be used by the Trustees, at their discretion for research into the causes and cure of cancer. Established 1915.....	5,000.00	.....	5,000.00

WARING FUND:

The Chamber of Commerce of the State of New York, in the latter part of the year 1898, raised by public subscription the sum of \$100,000 to perpetuate the memory of the late George E. Waring. The income of the fund (to be not less than \$4,000 per year) is to be paid semi-annually to the widow and daughter of Colonel Waring during their lifetime, and thereafter the income shall be devoted to the purpose of instruction in municipal affairs in such manner as the President and Board of Trustees of such College may direct.

For Mrs. Waring.....\$50,000.00
 For Miss Waring..... 50,000.00

100,000.00

WATSON (DR. WILLIAM PERRY) FOUNDATION IN PEDIATRICS:

Gift of Dr. William Perry Watson, to establish a permanent fund, the annual income of which shall be given in cash to that member of the graduating class showing the most efficient work in the study of the Diseases of Infants and Children. Established 1921.....

5,000.00

WEINSTEIN (ALEXANDER) MEMORIAL FUND:

Gift of the classmates and friends of the late Alexander Weinstein, a member of the Class of 1921 College of Physicians and Surgeons to establish this fund, the income from which is to be used in purchasing annually for the library of the Medical School additional copies of those reference books which are in greatest demand among the students. Established 1921.....

800.00

WHEELER (JOHN VISSCHER) SCHOLARSHIP FUND:

Bequest of the late Susan E. Johnson Hudson to establish this fund the income to provide a scholarship in the University. Established 1914.....

12,000.00

WHEELOCK (GEORGE G.) FUND:

Gift of Mrs. George G. Wheelock and William H. Wheelock, to establish this fund in memory of the late Dr. George G. Wheelock, the income to be used to meet the needs of the Department of Physiology. Established 1907.....

5,027.07

FIRE INSURANCE FUND:

For the purpose of meeting the cost of repairing damage due to fire in those academic buildings which are not specifically insured.....

50,000.00

\$16,919,157.09

\$1,486,051.21

\$18,405,208.30

PERMANENT FUNDS

ESTABLISHED BY GIFT FOR THE PURCHASE OF LAND AND EQUIPMENT
AND ERECTION OF BUILDINGS

	At June 30, 1921	Additions during the year	At June 30, 1922
Adams (Edward D.), Deutsches Haus.....	\$ 30,000.00		\$ 30,000.00
Additions to the Medical School.....	117,842.07		117,842.07
Alumni Fund for the General Purposes of the University.....	198,464.22		198,464.22
Alumni Memorial Hall, University Hall Enlargement.....	100,756.41		100,756.41
Anonymous, toward erection of Philosophy Building.....	350,000.00		350,000.00
Anonymous, for Hamilton Statue.....	1,000.00		1,000.00
Anonymous, for Trophy Room Equipment.....		\$980.00	980.00
Association of the Alumni of Columbia College, Hamilton Statue.....	10,000.00		10,000.00
Avery (Samuel P.), Avery Architectural Library Building.....	339,250.00		339,250.00
Babcock and Wilcox, Steam Boilers for Power House.....	3,250.00		3,250.00
Baker (George F.), Baker Field.....		610,804.90	610,804.90
Clark (Edward Severin), Fountain of Pan.....	12,013.50		12,013.50
Class of 1874, Marble Columns in Library.....	1,678.00		1,678.00
Class of 1880, Hamilton Hall, Gates.....	2,020.00		2,020.00
Class of 1881, Flagstaff.....	4,600.00		4,600.00
Class of 1881, Gemot in Hamilton Hall.....	1,000.00		1,000.00
Class of 1882, 120th Street Gates.....	1,500.00		1,500.00
Class of 1883, Torcheres, St. Paul's Chapel.....	5,280.00		5,280.00
Class of 1883, Mines, Torcheres for School of Mines Building.....	1,000.00		1,000.00
Class of 1883, Mines, Setting of Bust of Professor Egleston.....	390.00		390.00
Class of 1884, Arts, Marble Clock, Hamilton Hall.....	1,913.90		1,913.90
Class of 1884, Mines, Grading South Field.....	5,000.00		5,000.00
Class of 1890, Arts and Mines, Pylons.....	8,598.72		8,598.72
Class of 1893, Chapel Bell.....	5,120.84		5,120.84
Class of 1897, Arts and Mines, Boathouse.....		7,201.24	7,201.24
Class of 1899, Grading South Field.....	5,000.00		5,000.00
Class of 1906, Class of 1906 Clock.....	1,159.64		1,159.64
Class of 1909, College, Class Shield in Hamilton Hall.....	20.00		20.00
Contributions to Bloomingdale Site.....	331,150.00		331,150.00
Contributions to Buildings, Medical School.....	71,551.05		71,551.05
Contributions to Medical School, Removal and Rebuilding Fund.....	53,000.00		53,000.00
Cragin (Mrs. E. B.) Publications.....	1,400.00		1,400.00
Crocker Research Laboratory, X-ray Equipment	10,677.85	7,787.68	18,465.53
Dodge (Marcellus Hartley) and Mrs. Helen Hartley Jenkins, Hartley Hall.....	350,000.00		350,000.00
Dodge (William E.), Earl Hall.....	164,950.82		164,950.82
Carried Forward.....	\$2,189,587.02	\$626,773.82	\$2,816,360.84

	At June 30, 1921	Additions during the year	At June 30, 1922
Brought forward.....	\$2,189,587.02	\$626,773.82	\$2,816,360.84
Duriron Castings Co., Castings.....	75.00	.....	75.00
East Field, 116th Street and Amsterdam Avenue.....	420,000.00	.....	420,000.00
Faculty House (F. Augustus Schermerhorn).....	.....	49,805.32	49,805.32
Fayerweather Legacy, Fayerweather Hall.....	330,894.03	.....	330,894.03
Furnald (Estate of Francis P. Furnald and Mrs. S. Ella Furnald), Furnald Hall.....	350,000.00	.....	350,000.00
Hamilton Hall, Anonymous.....	507,059.16	.....	507,059.16
Havemeyer Gift, Havemeyer Hall.....	414,206.65	.....	414,206.65
Havemeyer Hall Laboratory.....	600.00	.....	600.00
Hepburn (A. Barton), Maison Française.....	33,300.00	.....	33,300.00
Kent Hall:			
Anonymous.....	\$100,000.00		
Charles Bathgate Beck.....	385,672.57		
Francis Lynde Stetson.....	10,000.00		
	495,672.57	.....	495,672.57
Lengwitz (E. G.), Apparatus (Engineering)....	450.00	.....	450.00
Lewisohn (Adolph), School of Mines Building...	250,000.00	.....	250,000.00
Long Island College Hospital, Apparatus.....	3,500.00	.....	3,500.00
Low (Seth), Library Building.....	1,100,639.32	.....	1,100,639.32
Livingston (Edward de Peyster), Memorial Window, Livingston Hall.....	1,124.00	.....	1,124.00
Medical and Surgical Equipment Fund.....	14,912.80	.....	14,912.80
Memorial Windows.....	9,600.00	.....	9,600.00
Model of Buildings and Grounds.....	19,972.70	.....	19,972.70
Morgan (William Fellowes), Illuminating Uni- versity Grounds.....	1,035.00	.....	1,035.00
Oliver Continuous Filter Co., Rotary Filter....	1,000.00	.....	1,000.00
Optical Instruments.....	2,830.00	.....	2,830.00
President's House, Furnishing, Anonymous.....	14,410.17	.....	14,410.17
St. Paul's Chapel, Anonymous.....	250,000.00	.....	250,000.00
St. Paul's Chapel Furniture, Anonymous.....	2,846.62	.....	2,846.62
St. Paul's Chapel Organ and Case.....	27,000.00	.....	27,000.00
Schermerhorn Gift, Schermerhorn Hall.....	458,133.18	.....	458,133.18
School of Business Building Construction Fund..	297.89	.....	297.89
School of Dentistry Building Fund.....	33,500.00	.....	33,500.00
School of Dentistry Equipment.....	5,584.92	.....	5,584.92
School of Journalism Building (Pulitzer).....	563,501.21	.....	563,501.21
Sloan Torcheres, Library Building.....	6,000.00	.....	6,000.00
Sloane (Mr. and Mrs. William D.), Additions and Alterations to Sloane Hospital for Women.....	399,263.14	.....	399,263.14
South Court Fountain.....	4,932.88	.....	4,932.88
South Field Fund.....	54,707.00	.....	54,707.00
South Field Grading, Anonymous.....	1,500.00	.....	1,500.00
Stabler (Edward L.).....	1,200.00	.....	1,200.00
Stephens (Mrs. W. B. and daughter), Dufourcq collection of mineral specimens.....	300.00	.....	300.00
Van Amringe Memorial.....	19,538.34	700.00	20,238.34
Vanderbilt Gift, Vanderbilt Clinic.....	350,000.00	.....	350,000.00
Villard (Henry) Legacy.....	50,000.00	.....	50,000.00
	\$8,389,173.60	\$677,279.14	\$9,066,452.74

GIFTS AND BEQUESTS RECEIVED DURING 1921-1922

PERMANENT FUNDS:

Anonymous for purchase of Furniture for the Trophy Room.....	\$	980.00	
Baker (George F.) for the purchase of an Athletic Field..		646,940.59	
Class of 1897 Arts and Mines for the Boathouse.....		8,000.00	
Columbia University Press Book Store for the Stadium..		2.40	
Alumni Fund Committee for the 1917-18 deficit.....		454.14	\$ 656,377.13
			<hr/>

PRINCIPAL OF SPECIAL ENDOWMENTS:

Alumni Fund Committee for the Columbia University Alumni Fund.....	\$	7,500.00	
Executors of the Estate of Joseph R. DeLamar for the DeLamar (Joseph R.) Fund.....		794,987.49	
Executors of the Estate of A. Barton Hepburn for the Hepburn (A. Barton) Professorship Fund.....		75,000.00	
Executors of the Estate of Sara E. Mower for the Mower (Sara E.) Fund		6,949.42	
Estate of S. Whitney Phoenix to be added to the Phoenix Legacy.....		226,921.35	
Executors of the Estate of Anna M. Sandham for a Scholarship at Barnard College.....		10,000.00	
Executors of the Estate of Robert B. Van Cortlandt for the Van Cortlandt (Robert B.) Fund.....		325,752.00	
Moore (Edward C., Jr.) for a Fellowship in the School of Architecture to be known as the Boring Fellowship.		6,200.00	
Romaine (Benjamin F.) for the Romaine (Benjamin F.) prize in Greek.....		1,500.00	
Watson (Dr. William Perry) for the Doctor William Perry Watson Foundation in Pediatrics.....		5,000.00	1,459,810.26
			<hr/>

DESIGNATED GIFTS:

(a) For the General Purposes of the University:			
Alumni Fund Committee for the general purposes of the University.....	\$	7,500.00	
Executors of the Estate of F. Augustus Schermerhorn for the general purposes of the University		229,536.52	
Alumni Fund Committee for the general support of the Medical School.....		135.00	
Fales (Haliburton) for Columbia Alumni Fund....		1,000.00	238,171.52
			<hr/>
(b) For Special Purposes:			
All American Cables, Inc. for Scholarships in Cable Telegraphy—University Extension....	\$	1,200.00	
Alumni Federation for the Class of 1908 Loan Fund.....		967.80	
Alumni Federation for the Class of 1910 Loan Fund.....		850.00	
			<hr/>
Carried forward.....			\$2,354,358.91

<i>Brought forward</i>		\$2,354,358.91
Anonymous for the Students Loan Fund.....	\$ 44.28	
Anonymous for the Hartley Scholarship.....	29.39	
Anonymous for Research Work in the Department of Biological Chemistry.....	2,500.00	
Anonymous for the Surgical Research Laboratory	6,000.00	
Anonymous for the salary of the Gustav Gottheil Lecturer in Semitic Languages.....	300.00	
Alpha Kappa Psi Fraternity for a prize in the School of Business.....	100.00	
Biological Chemistry Association for the Biological Chemistry Special Printing Account.....	50.00	
Bok (Edward W.) for the Queen Wilhelmina Professorship.....	500.00	
Borden's Condensed Milk Co. for Research in Food Chemistry and Nutrition.....	14,000.00	
Chaloner (John Armstrong) for the Chanler Historical Prize.....	600.00	
Chamberlain (Joseph P.) for the Legislative Drafting Research Fund.....	7,500.00	
Class of 1922 Medical School for purchase of books for Medical School Library.....	100.00	
Columbia University Biochemical Association for the Department of Biological Chemistry..	300.00	
Columbia University Club for Chemistry Library	10.00	
Commonwealth Fund for carrying on investigations in the disease of Rickets in the Department of Pathology.....	4,000.00	
Coudert (Frederic. R.) for Mediæval Philosophy Salaries.....	250.00	
Cummings (B. Ray) for the principal of the Class of 1879 Mines Loan Fund.....	30.00	
Davies (J. Clarence) original seal of the College of Physicians and Surgeons.....		
Department of Philosophy for furnishings for the Butler Library of Philosophy.....	275.00	
Dodge (M. Hartley) to send a representative of the Department of Medicine with the British Peru Expedition.....	300.00	
Dunn (Gano) for the Dunn (Gano) Scholarship.	500.00	
duPont (E. I.) de Nemours Co. for the duPont Fellowships in Chemistry.....	1,500.00	
East River Homes for tuberculosis work in the Vanderbilt Clinic.....	11,000.00	
Famous Players-Lasky Corporation five reel motion picture.....		
Grace (Joseph P.) for Mediæval Philosophy Salaries.....	250.00	
Griscom (Mrs. Clement A.) for the purchase of books for the Library.....	1,000.00	
Griscom (Acton) for purchase of books for the Library.....	10.00	
<i>Carried forward</i>		\$2,354,358.91

<i>Brought forward</i>	\$2,354,358.91
Hartley (The) Corporation for the Marcellus Hartley Research Laboratory.....	2,000.00
Hubbard (Grace) for salaries in the Department of English—Barnard College.....	500.00
Jackson (A. V. Williams) for Indo-Iranian Lan- guages Salaries.....	500.00
James (Dr. Walter B.) to send a representative of the Department of Medicine with the British Peru Expedition.....	600.00
Kalvin (Solomon) for the Students' Loan Fund..	500.00
Kane (Mrs. John Innes) for the religious work of the University.....	500.00
Lindenthal (Dr. G.) for the Perkins Fellowship..	150.00
Loeb (James) for the Loeb Library Fund.....	175.00
Low (William G.) for the upkeep of books on International and Maritime Law.....	250.00
Mackay (Clarence H.) for Mediæval Philosophy Salaries.....	250.00
Mastick (Mrs. S. C.) for the Students' Loan Fund	69.15
Matthews (Prof. Brander) for the Dramatic Museum.....	93.00
Members of the Department of Social Science to be added to the Department of Social Science Departmental Appropriation.....	150.00
Montgomery (Prof. Robert H.) for the School of Business.....	1,000.00
Moore (Prof. Underhill) for the Law Library Association.....	100.00
Moore (Edward C. Jr.) for the Perkins Fellowship	800.00
Morgan (Prof. O. S.) for the University Extension Agricultural Fund.....	300.00
Morrow (Dwight W.) for publication of Professor Osgood's History of the American Colonies...	5,000.00
McClymonds (Mrs. L. K.) for the Louis K. Mc- Clymonds Scholarship.....	1,300.00
McCrea (Prof. Nelson G.) for services in the Classics Reading Room during the Summer Session 1921.....	50.00
Nies (Rev. James B.) for the School of Archæ- ology in Jerusalem.....	25.00
Polish Minister for the support of the work in Polish.....	1,000.00
Pratt & Whitney Co. of Hartford, Conn. exhibi- tion cabinet of small tools.....	
Presbyterian Hospital for the Janeway Library Endowment Fund—Medical School Library..	182.00
Price (Walter W.) for Mediæval Philosophy Sal- aries.....	250.00
Sackett (Henry W.) for a scholarship in the School of Journalism.....	300.00
<i>Carried forward</i>	\$2,354,358.91

<i>Brought forward</i>		\$2,354,358.91
Shakespeare Class of 1893 in memory of Sarah Louise Disosway, founder of the Shakespeare Class.....	65.69	
Shenton (Herbert N.) for the Departmental Appropriation—Social Science.....	100.00	
Stone (Harlan F.) for the Law Library Association.....	100.00	
Stout (Andrew V.) for Laboratory Assistance in Surgery.....	500.00	
Strauss (Lester W.) for the Ore Dressing Laboratory.....	5.00	
Students of Summer Session 1921 for Earl Hall furnishings.....	1,100.00	
Troy (Richard H.) for the benefit of the Law School.....	3.00	
Wawepex Society for the John D. Jones Scholarship.....	200.00	
Welcher (Miss Emma Avery and Miss Alice Lee) bronze bust for the Avery Architectural Library		
Whitney (Harry Payne) for the Surgical Departmental Appropriation.....	1,377.42	73,661.73
		<hr/>
		\$2,428,020.64
		<hr/> <hr/>

FREDERICK A. GOETZE

Treasurer

NEW YORK, June 30, 1922

FINANCIAL REPORT
OF
BARNARD COLLEGE
1921-1922

BARNARD COLLEGE—BALANCE SHEET—JUNE 30, 1922

ASSETS	FUNDS AND LIABILITIES
Land, Buildings, and Equipment \$2,653,248.28	Principal of Permanent Funds \$2,598,644.31
Investment of Special Funds 4,103,693.41	Principal of Special Funds 4,327,964.73
	Unexpended Moneys for Designated Purposes 7,489.55
Cash at Banks:	
New York Trust Company \$22,538.79	Income from Fiske Fund in excess of Expenditure for Care,
Corn Exchange Bank 10,286.79	Maintenance, and Improvement 27,663.87
United States Trust Co. 174,939.02	
207,764.60	
Prepaid Insurance 813.18	Accounts Payable: Students' Deposits for Rooms 3,222.50
Advance Summer Session 1,374.69	Surplus 1,894.44
Overexpenditure of Trust Funds Income 5.21	
<u>\$6,666,899.40</u>	<u>\$6,666,899.40</u>

BARNARD COLLEGE—INCOME AND EXPENSE ACCOUNT—1921-1922

Schedule I

RECEIPTS

Balance, July 1, 1921:	
New York Trust Company . . .	\$25,774.25
Corn Exchange Bank	8,595.93
U. S. Trust Company	4,027.63
	<u>\$38,397.81</u>
Dividends	211,798.72
Miscellaneous Sources	471,399.89
Fees	270,405.92
Gifts for Designated Purposes	4,808.73
Gifts for Permanent Funds	206,990.73

Schedule II

DISBURSEMENTS

General Purposes:	
Educational Administration . . .	\$274,851.33
Buildings and Grounds	122,455.68
Ella Weed Library	9,441.37
Business Administration	9,250.00
Residence Halls	4,744.56
	<u>\$420,742.94</u>
Annuities	13,900.00
Investments	300,332.12
Miscellaneous	261,062.14
Balance, June 30, 1922:	
New York Trust Company	\$22,538.79
Corn Exchange Bank	10,286.79
United States Trust Company	174,939.02
	<u>207,764.60</u>

\$1,203,801.80\$1,203,801.80

BARNARD COLLEGE

PRINCIPAL OF SPECIAL FUNDS JUNE 30, 1921

A. For General Endowment

ANDERSON (MRS. ELIZABETH MILBANK) FUND:	
Legacy from the estate of Mrs. Elizabeth Milbank Anderson. Established 1922	\$40,000.00
BURGESS (ANNIE P.) FUND:	
Legacy from the estate of Mrs. Annie P. Burgess. Established 1913	60,098.33
CARPENTER (HENRIETTA) FUND:	
Gift of General H. W. Carpentier, in memory of his mother toward the Endowment Fund of Barnard College. The income of the fund is to be used for the payment of three annuities. Established 1898, 1900, 1911, 1913, 1914, and 1915	452,607.06
CARPENTIER (H. W.) ENDOWMENT FUND:	
Legacy from the estate of General H. W. Carpentier. Established 1919	1,290,799.24
CHOATE (MRS. JOSEPH H.) ENDOWMENT FUND:	
Gift of Mrs. Joseph H. Choate for endowment. Established 1918	35,000.00
GENERAL ENDOWMENT FUND	420,471.41
FISKE FOUNDERSHIP FUND:	
Gift of the late Mrs. Martha T. Fiske-Collord, in memory of Mr. Josiah M. Fiske. The income of the fund to be applied to the running expenses of the College	5,188.08
FISKE HALL FUND:	
Legacy from the late Mrs. Martha T. Fiske-Collord, the income of which is to be applied to the care, maintenance, and improvement of Fiske Hall. Established 1910	165,870.58
GEER FUND:	
A memorial to Helen Hartley Jenkins Geer made by the Class of 1915. Established 1920	4,882.00
GIBBES FUND:	
a. Legacy of the late Emily O. Gibbes. The income of the fund is to be used for the general needs of the College. Established 1908	246,958.49
b. Legacy of the late Emily O. Gibbes. The income of the fund is paid for life to Edwina M. Post. Established 1908	100,000.00
HARRIMAN FUND:	
Gift of Mrs. E. H. Harriman to establish a fund, the income therefrom to be used for physical education and development, or to meet the deficit in running expenses. Established 1914	98,800.00
HERRMAN FOUNDERSHIP FUND:	
Gift of the late Mrs. Esther Herrman. The income of the fund is to be applied to the general needs of the College	4,818.75
KENNEDY (JOHN STEWART) FUND:	
Legacy from the estate of the late John Stewart Kennedy. Established 1910	49,918.90

MUNN (ANNE ELDER) MEMORIAL FUND: Gift of Mrs. I. Sheldon Tilney in memory of her mother. The income is to be used at the discretion of the Trustees. Established 1918	\$7,280.40
ROCKEFELLER (JOHN D.) ENDOWMENT FUND: Gift of Mr. John D. Rockefeller toward the permanent endowment of Barnard College. Established 1901	244,678.11
SAGE FUND: Legacy from the Estate of Margaret Olivia Sage. Established 1920 .	429,045.44
SANDERS (ELEANOR BUTLER) FOUNDERSHIP FUND: Legacy from the estate of the late Mrs. Henry M. Sanders. The income of the fund is used for the current needs of the College. Established 1908	5,000.00
SMITH (ANNA E.) FUND: Legacy from the estate of Anna E. Smith. Established 1916	10,048.00
STRAIGHT FUND: Gift of Mrs. Willard Straight. Established 1920	5,000.00
TILLOTSON (EMMA A.) ENDOWMENT FUND: Legacy from the estate of Emma A. Tillotson. Established 1910 . .	5,000.00
WOERISHOFFER FUND: Gift of Mrs. Charles Woerishoffer for endowment. Established 1913, 1917	10,000.00
Total . . .	\$3,691,564.79

B. For Designated Purposes

ALDRICH (MARY GERTRUDE EDSON) SCHOLARSHIP FUND: Gift of Mrs. James Herman Aldrich. Established 1916	\$1,004.80
BARNARD (ANNA E.) SCHOLARSHIP FUND: Gift of Miss Emily H. Bourne in honor of the late Mrs. John G. Barnard, for a scholarship to be awarded annually at the discretion of the founder in conference with the representatives of the College. Established 1899	3,078.72
BARNARD SCHOOL SCHOLARSHIP FUND: Gift of the Alumnae of the Barnard School for girls. Established 1916	4,019.20
BOGERT (ANNA SHIPPEN YOUNG) SCHOLARSHIP FUND: Legacy from the estate of Mrs. Annie P. Burgess. The annual income is to defray the tuition and expenses of a worthy pupil who is unable to pay her own expenses. Established 1913	4,739.64
BOGERT (CHARLES E.) SCHOLARSHIP FUND: Legacy from the estate of Mrs. Annie P. Burgess. The annual income is to defray the tuition and expenses of a worthy pupil who is unable to pay her own expenses. Established 1913	2,999.25
BREARLEY SCHOOL SCHOLARSHIP FUND: Gift of pupils of the Brearley School for a scholarship to be awarded annually to a student who deserves assistance. Established 1899	3,000.00
BRENNER (MARTHA ORNSTEIN) SCHOLARSHIP FUND: Gift in memory of Martha Ornstein Brenner, Class of 1899, by her friends. Established 1915	4,000.00
BROOKS (ARTHUR) MEMORIAL FUND: Gift of Miss Olivia E. Phelps Stokes as a memorial of the late Reverend Arthur Brooks, D.D., Rector of the Church of the Incarnation, and Chairman of the Board of Trustees of Barnard College during the first six years of the existence of the College. The income of the fund is to aid needy and deserving students of the College. Established 1897	5,976.25

CARPENTIER SCHOLARSHIP FUND:

Legacy from the estate of General H. W. Carpentier for scholarships.
Established 1919 \$200,000.00

CHISHOLM (ELIZA TAYLOR) MEMORIAL SCHOLARSHIP FUND:

Gift of the Alumnae Association of Miss Chisholm's School for a scholarship, to be awarded annually by the Committee on Scholarships of the Faculty to a student in need of assistance, said Alumnae Association reserving the privilege of precedence for such candidates as they may recommend. Established 1901 1,556.75

CLARKSON (JENNIE B.) SCHOLARSHIP FUND:

Gift of the late Mrs. W. R. Clarkson for a scholarship to be awarded annually to a student who deserves assistance. Established 1898 2,969.33

COE (MRS. HENRY CLARKE) SCHOLARSHIP FUND:

Gift of the National Society of New England Women for a scholarship to be awarded on the nomination of the Chairman for the Scholarship Committee of the above society, to a student from New England or of New England parentage. Established 1904 3,600.00

ENGLISH SCHOLARSHIP FUND:

An anonymous gift. Established 1920 5,000.00

FISKE SCHOLARSHIP FUND:

Gift of the late Mrs. Martha T. Fiske-Collord, the income of which is to be placed at the disposal of the Dean of Barnard College. Established 1895 5,698.32

FISKE (MARTHA T.) SCHOLARSHIP FUND:

Gift of Miss Anna E. Smith for a non-resident scholarship in memory of Mrs. Martha T. Fiske-Collord. Established 1911 2,895.00

GALWAY FUND:

Gift of an anonymous donor for a scholarship. Established 1912 2,555.33

GOLDFRANK (IRMA ALEXANDER) FUND:

Gift of friends of Mrs. Irma Alexander Goldfrank, the income of which is to help deserving students in time of special need. Established 1919 2,105.55

GRAHAM SCHOOL SCHOLARSHIP FUND:

Gift of the Alumnae Association of the Graham School. The income of the fund is to be applied to the tuition of a student. Established 1907 3,000.00

HEALTH FUND:

Gift from an anonymous donor to promote the physical health of the students and officers of the College. Established 1917 5,000.00

HERRMAN BOTANICAL PRIZE FUND:

Gift of the late Mrs. Esther Herrman, for a prize to be awarded annually to the most proficient student in Botany 1,000.00

HERTZOG (EMMA) SCHOLARSHIP FUND:

Gift to establish a scholarship in memory of Miss Emma Hertzog, who for a long period of years was prominently identified with the intellectual life of Yonkers. The income is awarded annually to a graduate of the Yonkers High School. Established 1904 3,000.00

KAUFMANN (JESSIE) SCHOLARSHIP FUND:

Gift of Mr. Julius Kaufmann to establish a scholarship in memory of his daughter, Jessie Kaufmann. The annual income of the fund is awarded on the merits of the entrance examinations to a student who, after careful investigation, is found to have no relative able to assist her financially. Established 1902 4,000.00

KINNICUTT (ELENORA) SCHOLARSHIP FUND:	
Gift of friends of the late Mrs. Francis P. Kinnicutt, a trustee of the College, to establish a scholarship. The income is awarded to a student who needs assistance. Established 1911	\$5,000.00
KOHN MATHEMATICAL PRIZE FUND:	
Gift of Mrs. S. H. Kohn for a prize to be awarded annually to a senior for excellence in Mathematics	1,062.08
McLEAN (MRS. DONALD) SCHOLARSHIP FUND:	
Gift of the New York Chapter of the Daughters of the American Revolution. The income of the fund is awarded in conference with a representative of the Chapter to a deserving student who agrees to pursue the study of history (chiefly that of the United States) continuously throughout her college course. Established 1906	2,739.23
MOIR (WILLIAM) SCHOLARSHIP FUND:	
Legacy from the estate of Mrs. Emily H. Moir in memory of her husband. Established 1912	10,000.00
MURRAY (CAROLINE CHURCH) FUND:	
Gift of Mr. George Welwood Murray in memory of his wife, Caroline Church Murray. The income of this fund is to be used in aid of needy and deserving students. Established 1918	5,000.00
OGILVIE (CLINTON) MEMORIAL FUND:	
Gift of Mrs. Clinton Ogilvie. The income of this fund is to be applied to the salaries of assistants in the Department of Geology. Established 1914	10,000.00
POPE (MARY BARSTOW) SCHOLARSHIP FUND:	
Gift in memory of Miss Mary Barstow Pope, sometime teacher in Miss Chapin's School, by her friends, her fellow teachers, and her pupils. Established 1913	4,318.15
PRINCE (HELEN) MEMORIAL PRIZE FUND:	
Gift of Mr. Julius Prince in memory of his daughter, Helen C. Prince, Class 1922. The income of this fund is to be awarded to an undergraduate student for excellence in English composition. Established 1922	1,200.00
PULITZER (LUCILLE) SCHOLARSHIP FUND:	
Gift of the late Mr. Joseph Pulitzer in memory of his daughter, Lucille Pulitzer. The income of the fund is to be used for scholarships. Established 1899 and 1903, 1915 and 1916	172,085.59
REED (CAROLINE GALLUP) PRIZE FUND:	
Gift of Mrs. William Barclay Parsons. Established 1916	1,004.80
SANDERS (ELEANOR BUTLER) SCHOLARSHIP FUND:	
A legacy from the estate of the late Reverend Henry M. Sanders, in memory of his wife Eleanor Butler Sanders, to establish scholarships. Established 1922	10,000.00
SCHOLARSHIP FUND:	
Gift of friends of Barnard College. The income of the fund is applied toward helping deserving students through college. Established 1901	9,698.75
SHAW FUND:	
A memorial gift to Anna Howard Shaw. Established 1920	5,704.30

SMITH (EMILY JAMES) SCHOLARSHIP FUND:	
Gift of Miss Emily H. Bourne in honor of Miss Smith, Dean of Barnard College. The income of the fund is awarded in conference with the founder. Established 1899	\$3,029.43
SMITH (GEORGE W.) SCHOLARSHIP FUND:	
Gift of the late Mrs. Martha T. Fiske-Collord, in memory of Mr. George W. Smith, a Trustee of Barnard College. The income of the fund is placed at the disposal of the Dean of Barnard College. Established 1906	5,435.19
SPERANZA (CARLO L.) PRIZE FUND:	
Gift from an anonymous donor for the founding of a prize in memory of Professor Carlo Leonardo Speranza, to be awarded annually to a student in Barnard College for excellence in Italian. Established 1911	1,000.00
TALCOTT (JAMES) FUND:	
Gift of Mr. James Talcott, to found a professorship for Religious instruction. Established 1915	100,000.00
TATLOCK PRIZE FUND:	
Gift in memory of Jean Willard Tatlock, Class of 1895, by her friends to found a prize to be awarded annually to the undergraduate student most proficient in Latin. Established 1917	1,250.00
TILLOTSON (EMMA A.) SCHOLARSHIP FUND:	
Legacy from the estate of Emma A. Tillotson. Established 1910	4,242.54
VELTIN SCHOOL SCHOLARSHIP FUND:	
Gift of the Alumnae of Mlle. Veltin's School. Established 1905	2,739.23
VON WAHL PRIZE FUND:	
Gift from the friends of Constance Von Wahl, 1912, to found a prize to be awarded annually to a senior who has rendered the highest type of service to the College. Established 1915	1,300.00
WEED (ELLA) SCHOLARSHIP FUND:	
Gift of the pupils of Miss Anne Browne's School, in memory of Miss Ella Weed, who was Chairman of the Academic Committee of the Board of Trustees of Barnard College during the first five years of its existence. Established 1897	3,392.51
WHITMAN MEMORIAL FUND:	
Gift of Mr. Malcolm Whitman, in memory of his wife, Janet McCook Whitman, a former student and graduate of Barnard College. The income of the fund is to be used towards the support of a chair of Philosophy. Established 1920	5,000.00
Total	<u>\$636,399.94</u>

FINANCIAL REPORT
OF
TEACHERS COLLEGE
1921-1922

TEACHERS COLLEGE, FINANCIAL STATEMENT 1921-1922

Having audited the Accounts of Teachers College for the year ended June 30, 1922, we hereby certify that the following Statement of Funds and Revenue Account with accompanying Schedules, show the true financial condition of the Corporation at June 30, 1922.

LESLIE, BANKS & CO.
Auditors

STATEMENT OF FUNDS AT JUNE 30, 1922
(INCLUDING DORMITORIES)

FUNDS:			
I. Income Producing:			
Applicable to General Purposes	.....		\$1,843,700.51
Restricted to Special Purposes	.....		641,752.56
Applicable to Administrative and Library Building (Less amount expended)	.....		968,805.82
Applicable to Liquidation of Mortgages on Dormitories	.....		402,568.71
Applicable to Teachers' Retirement Fund	.....		61,832.41
<i>Total Income Producing Funds</i>	.....		<u>\$3,923,660.01</u>
II. Other Funds:			
For Designated Purposes	.....	\$115,095.28	
For Student Loans	.....	24,893.00	
Surplus Income on Funds restricted to Special Purposes	.....	14,402.10	154,390.98
			<u>\$4,078,050.99</u>
ASSETS:			
I. Income Producing:			
Stocks and Bonds	.....		\$2,500,804.79
Dormitories (Cost, less Mortgages \$1,092,500.00)	.....		1,106,873.32
Uninvested—Due by General Fund	.....		315,891.90
			<u>\$3,923,660.01</u>
II. Other Funds:			
Uninvested—Due by General Fund	.....		154,390.98
III. General Fund:			
Cash	.....	\$478,312.00	
Accounts Receivable	.....	36,381.66	
Supplies and Prepaid Expenses	.....	23,681.11	
		<u>\$538,374.77</u>	
<i>Deduct:</i>			
Accounts Payable	.....	\$42,280.11	
Prepaid Rentals, etc.	.....	12,212.32	
			<u>54,501.43</u>
Net Liquid Funds	.....		\$483,873.34
Applicable to:			
Income Producing Funds	.....		\$315,891.90
Other Funds	.....		154,390.98
General Fund (Surplus)	.....		13,590.46
			<u>483,873.34</u>
			<u>\$4,078,050.99</u>

Note: The College Property, Land and Buildings are not included herein.

FUNDS AND INVESTMENTS

AS PER STATEMENT OF FUNDS AT JUNE 30, 1922

	At June 30, 1921	Additions During Year	At June 30, 1922
GENERAL FUND	\$1,834,654.81	\$11,045.70	\$1,845,700.51
FUNDS RESTRICTED TO SPECIAL PURPOSES:			
Anderson (General Robert) Scholarship Fund		\$5,000.00	\$5,000.00
Army and Navy Scholarship Fund	3,156.92	2.64	3,159.56
Bryson Library Fund	83,915.52	70.45	83,985.97
Bryson Library—Avery Collection Fund	2,102.21	1.81	2,104.02
Caroline Scholarship Fund	5,032.32	4.22	5,036.54
Darche Kimber Scholarship Fund	1,785.96	3,841.90	5,627.86
Dodge (Grace H.) Welfare Fund	60,423.49	50.69	60,474.18
Hartley (Helen) Endowment Fund	150,144.18	126.05	150,270.23
Household Administration Fund		1,230.00	1,230.00
Hoadley Scholarship Fund	3,003.03	2.54	3,005.57
Hoe (Margaret) Memorial Scholarship Fund	5,010.46	4.20	5,014.72
Kemp Estate Legacy Fund	34,418.43	28.83	34,447.26
Kingsland (Mary J.) Bequest	50,000.00	40.05	50,040.05
Macy (Caroline L.) Bequest	197,743.59	165.86	197,909.45
Morrey Scholarship Fund	5,010.96	4.26	5,015.22
Norsworthy (Naomi) Memorial Fund	3,321.75	518.81	3,840.56
Nursing and Health Department Fund		11,811.40	11,811.40
Runyan Scholarship Fund	1,130.00	.92	1,130.92
Sachs (Julius) Library Fund	10,020.94	8.42	10,029.36
Tennyson (Alfred) Prize Fund	100.61	.11	100.72
Tileston Scholarship Fund	2,516.84	2.13	2,518.97
	\$618,837.21	\$22,915.35	\$641,752.56
FUND FOR ADMINISTRATION AND LIBRARY BUILDING	\$508,274.13	*\$460,531.69	\$968,805.82
FUND FOR MORTGAGE RESERVES	\$314,606.97	**\$87,961.74	\$402,568.71
TEACHERS' RETIREMENT FUND	\$100,354.73	***\$35,522.32	\$64,832.41
<i>Total</i>	\$3,376,727.85	\$546,932.16	\$3,923,660.01
INVESTMENT OF ABOVE FUNDS			
Stocks and Bonds		\$2,500,894.79	
Dormitories (Net)		1,106,873.32	3,607,768.11
UNINVESTED FUNDS AT JUNE 30, 1922			\$315,891.90

* Less \$52,979.87 expended in 1921-2 and previously.

** Less \$5,000.00 applied in part liquidation of Mortgages.

*** Decrease.

TEACHERS COLLEGE, FINANCIAL STATEMENT 1921-1922

Having audited the Accounts of Teachers College for the year ended June 30, 1922, we hereby certify that the following statements of Funds and Revenue Account with accompanying Schedules, show the true financial condition of the Corporation at June 30, 1922.

LESLIE, BANKS & COMPANY
Auditors

BALANCE SHEET—JUNE 30, 1922

ASSETS	Total	LIABILITIES AND FUNDS	Total
Cash at Banks and on Hand	\$478,312.00	Accounts Payable: Sundry Creditors	\$42,289.11
Accounts Receivable:		Unexpended Income from Funds for Special Purposes	14,402.10
Students' Fees Receivable, less Reserve	\$7,610.90	Unexpended Gifts for Designated Purposes	115,093.28
Sundry Debtors	28,779.76	Mortgages on College Dormitories	1,092,509.00
	<u>36,381.66</u>	Funds (Principal):	7,783,276.00
Supplies, Equipment, and Prepaid Expenditure (less Pre- paid Income)	11,468.79	Permanent—For Purchase of Land and Erection of Buildings	\$4,794,057.56
Loans to Students	9,471.25	Special Funds	1,109,153.68
Securities Owned (Book Value)	2,500,894.79	General Funds	1,845,790.51
		Students' Loans	34,364.85
Real Estate:		Surplus of Income from General Funds	13,590.46
Academic Properties: Land, Buildings and Equipment	\$3,825,251.74		
Rental Properties	2,199,373.32		
	<u>6,024,625.06</u>		
	\$9,061,153.55		\$9,061,153.55

FINANCIAL REPORT
OF
COLLEGE OF PHARMACY
1921-1922

COLLEGE OF PHARMACY—BALANCE SHEET—JUNE 30, 1922

ASSETS		LIABILITIES	
Real Estate:		Plaut Fellowship	\$17,800.00
Land	\$147,500.00	Seabury Scholarship	5,800.00
Building	150,000.00	Breitenbach Prize	5,000.00
	<u>\$297,500.00</u>	Breitenbach Fund	21,100.00
Equipment:		Depreciation	62,000.00
Library	\$50,000.00	Excess of Assets over Liabilities	399,705.11
Herbarium	10,000.00		
Furniture	12,721.20		
Fixtures	18,229.75		
Apparatus & Chemicals:			
Materna Medica	\$22,781.54		
Chemistry	9,195.23		
Analytical Chemistry	12,012.64		
Pharmacy	9,743.92		
Dispensing Pharmacy	57,783.85		
	<u>\$148,734.80</u>		
Investments:			
Interborough R. T. Bonds	\$5,000.00		
New York Central R. R. Bonds	5,000.00		
Baltimore & Ohio R. R. Bonds	5,000.00		
Chicago, Milwaukee, & St. Paul R. R. Bonds	5,000.00		
Northern Pacific R. R. Bonds	3,600.00		
U. S. Liberty Bonds	26,100.00		
	<u>\$49,700.00</u>		
Cash:			
Lincoln Trust Co.	\$7,525.64		
Garfield National Bank	577.21		
American Savings Bank	371.05		
West Side Savings Bank	4,447.43		
Union Square Savings Bank	947.48		
Undeposited	1,551.50		
Petty Cash	50.00		
	<u>\$15,470.31</u>		
	<u>\$511,405.11</u>		<u>\$511,405.11</u>

COLLEGE OF PHARMACY—INCOME AND EXPENSE ACCOUNT—1921-1922

RECEIPTS

Schedule I

Balance, July 1, 1921:	
Lincoln Trust Company	\$27,210.68
Garfield National Bank	541.73
American Savings Bank	242.13
West Side Savings Bank	4,274.75
Union Square Savings Bank	806.90
Petty Cash	50.00
	<u>\$33,126.19</u>

Schedule II

Bequests and Gifts	\$25,108.00
Dividends and Bank Interest	3,145.48
Fees	127,126.64
Miscellaneous Sources	1,389.33
	<u>156,769.45</u>

DISBURSEMENTS

General Purposes:	
Educational Administration	\$66,073.43
Business Administration	8,595.06
Building Maintenance	13,765.71
Library	695.89
Mortgage (Principal & Interest)	20,334.73
Miscellaneous	1,563.65
	<u>\$111,028.47</u>

Fellowship Payment	\$901.50
Investments	25,011.41
Refunds of Fees	2,483.95
Real Estate Purchase	35,000.00
	<u>63,396.86</u>

Balance, June 30, 1922:

Lincoln Trust Co.	\$7,525.64
Garfield National Bank	577.21
American Savings Bank	371.05
West Side Savings Bank	4,447.43
Union Square Savings Bank	947.48
Cash Undeposited	1,551.50
Petty Cash	50.00
	<u>15,470.31</u>

\$189,895.64

\$189,895.64

COLLEGE OF PHARMACY

PRINCIPAL OF SPECIAL FUNDS, JUNE 30, 1922

INHERITANCE FUND:

Legacies from estates of Robert W. Johnson and Ernst Molwitz. Es-
tablished 1910 \$4,447.43

STUDENTS' LOAN FUND:

Gifts of Max J. Breitenbach, V. Chapin Daggett and Student Body.
Established 1915 947.48

ISAAC PLAUT FELLOWSHIP:

Legacy from the Estate of Albert Plaut in memory of his father,
Isaac Plaut. Established 1916 17,860.00

GEORGE J. SEABURY SCHOLARSHIP:

Gift of Henry C. Lovis, in memory of his uncle, George J. Seabury.
Established 1915 5,800.00

MAX J. BREITENBACH PRIZE FUND:

Set aside from the Breitenbach bequest to provide for annual Breiten-
bach Prize 5,000.00

MAX J. BREITENBACH FUND:

Legacy from the estate of Max J. Breitenbach. Established 1920 21,100.00

\$55,094.91

FINANCIAL REPORTS
OF
VANDERBILT CLINIC
AND
SLOANE HOSPITAL FOR WOMEN
1921-1922

VANDERBILT CLINIC—INCOME AND EXPENSE ACCOUNT—1921-1922

RECEIPTS		EXPENSES	
VANDERBILT CLINIC		VANDERBILT CLINIC	
Balance, June 30, 1921	\$14,788.99	Furniture	\$1,718.31
Sale of Prescriptions, Surgical Dressings, etc.	\$90,783.09	Salaries and Wages	55,742.03
Interest on Investments	5,887.51	Drugs, etc.	9,605.62
	96,676.60	Medical and Surgical Appliances, etc.	9,810.65
		Apothecaries Dept.	1,349.09
		Washing and Cleaning	1,881.59
		X-Ray	5,046.92
		Stationery	2,524.29
		Glasses	2,759.34
		Current Repairs and Improvements	3,044.64
		Electric Current and Gas	504.43
		Insurance	252.54
		Telephone	261.62
		Appropriation to Ladies' Auxiliary	1,000.00
		Other Expenses	1,519.67
			\$97,114.34
		Balance, June 30, 1922,	10,261.08
		With Treasurer in Irving National Bank	4,081.17
		With Superintendent	14,345.25
			\$111,459.59
		VANDERBILT CLINIC DAY CAMP	
		Pay Roll	\$5,846.31
		Food	3,319.98
		Other Expenses	1,553.79
			\$10,720.08
		Balance, June 30, 1922, with Superintendent	1,804.26
			\$12,524.34
		VANDERBILT CLINIC TUBERCULOSIS CAMP FUND	
		Appropriation to Ladies' Auxiliary	\$4,600.00
		Physicians' Services and Salaries	5,034.12
		Sundry Supplies, etc.	617.87
			\$10,341.99
		Balance, June 30, 1922:	\$11,650.50
		With Treasurer in Irving National Bank	226.11
		With Superintendent	11,876.61
			\$22,218.60
		VANDERBILT CLINIC TUBERCULOSIS CAMP FUND	
		Balance, June 30, 1921	\$11,107.83
		College of Physicians & Surgeons—Gift from	
		East River Homes Co.	\$11,000.00
		Interest on Balances in Irving National Bank	
		(2 1/2%) June 20, 1921, to June 25, 1922	110.77
			11,110.77
		Balance, June 30, 1922	\$22,218.60

SLOANE HOSPITAL FOR WOMEN—INCOME AND EXPENSE ACCOUNT—1921

RECEIPTS		EXPENSES	
Balance, January 1, 1921:		Salaries	\$42,548.22
Cash in Bank	\$5,539.31	Wages	42,289.29
Petty Cash	18.54	Medical Supplies	6,490.46
New York City Account	2,210.45	House Supplies	10,710.55
		Ward Supplies	21,481.59
		Groceries	33,953.15
		Meats	28,125.00
Received for Board, Care, etc.:		Bread	3,593.67
Pay Patients	\$133,970.63	Milk	10,900.44
New York City Patients	1,878.85	Ice	3,496.81
		Gas	1,493.34
Endowment Interest	37,006.81	Coal and Wood	335.42
Maintenance Interest	1,806.27	Stationery	4,781.42
United Hospital Fund	16,665.32	Repairs—Ordinary	10,203.75
Sundry Receipts	1,695.39	Machinery	4,497.43
Interest on Deposits	140.07	Liability Insurance	807.02
Less Exchange on Checks	6.11		\$225,617.59
Loan M. D. Sloane	10,000.00		
Donations:		<i>Social Service Department</i>	
Mrs. H. White	30,000.00	Salaries	\$9,370.30
M. D. Sloane	10,000.00	Expenses	1,516.04
			10,895.94
		Construction	\$6,134.12
		Equipment	2,259.59
			8,393.71
			\$244,997.24
<i>Social Service Department</i>		Paid on 1920 Accounts	10,358.33
Donations	\$7,000.00	Cash on Hand	\$7,556.02
Interest on Investments	3,950.47	Cash Petty	29.16
Babies Alumni	\$24.00	New York City Account	138.00
Sundries	678.75		7,723.18
			\$262,988.75
Amounts owed, Dec. 31, 1921			
Accounts payable	\$11,695.22		
Pay Patients prepaid	2,343.15		
Mrs. W. D. Straight	4.23		
	\$14,042.60		
Less Cash on hand as above	7,723.18		
Deficit—Dec. 31, 1921	\$6,319.42		

